



Market Implementation Committee (MIC) WebEx Only February 10, 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 January 12, 2021 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Endorsements/Approvals

2. RPM Capacity Transfer Rights

Kevin Zemanek, Buckeye Power reviewed the Problem Statement and Issue Charge addressing RPM Capacity Transfer Rights. Some stakeholders requested that additional clarity be added to the Issue Charge for historic resources and Incremental Capacity Transfer Rights (ICTRs). The committee vote for approval of the Issue Charge was deferred. The committee will be asked to approve the Issue Charge at its next meeting.

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

Aaron Baizman provided an update on the Long-Term timeline and reviewed the solution package from the Long-Term Five Minute Dispatch & Pricing Matrix that was worked in MIC Special Session meetings. The endorsement vote on the PJM/IMM proposal was removed from the agenda prior to the meeting. Additional discussion will continue on this issue during the March MIC meeting, including a second first read of the PJM/IMM proposal on Long-Term Design. The committee will be asked to endorse the PJM/IMM proposal at its next meeting.

Issue Tracking: Five Minute Dispatch and Pricing

First Readings

4. Manual 11 Revisions

Nikki Militello provided a first read of revisions to Manual 11: Energy & Ancillary Service Market Operations as part of the biennial cover-to-cover review. The committee will be asked to endorse the revisions at its next meeting.

5. Capital Recovery Factor for Avoidable Project Investment Cost Determinations Jeff Bastian provided a second first read of the Problem Statement and Issue Charge addressing Capital Recovery Factor for Avoidable Project Investment Cost Determinations. The committee will be asked to approve the issue charge and endorse the solution as part of the Quick Fix process outlined in Section 8.6.1 of Manual 34 at its next meeting.





Working Items

6. Market Suspension

- a) Stefan Starkov reviewed PJM's proposed solution option updates on the Market Suspension matrix and provided education to support the proposed updates.
- b) Lisa Morelli facilitated a discussion on the Market Suspension matrix. The committee provided additional design components and solution options. This issue will continue to be worked at the next MIC meeting.

Issue Tracking: Rules Related to Market Suspension

7. Transparency in Performance Assessment Interval Settlements

Susan Kenney reviewed draft Manual 18: PJM Capacity Market clarifying language associated with two of the areas identified as needing additional transparency in PAI Settlements, both related to resource modeling. Additional discussion on this issue will continue after the conclusion of the Capacity Market Workshops.

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

Additional Items

8. PPL Dynamic Line Ratings

Shaun Murphy provided an update on recent Dynamic Line Ratings discussions and PJM's plans to track and coordinate future stakeholder discussions.

9. **2021/22 ARR/FTR Update**

Emmy Messina reviewed the ARR/FTR modeling processes completed to date and upcoming deadlines for the 2021/2022 planning year.

10. Incremental Auction Revenue Rights for RTEP Upgrades

Xu Xu provided an update on Incremental Auction Revenue Rights for upgrades in the Regional Transmission Expansion Plan for the 2021/2022 planning year.

11. Elgin Energy Center and Kincaid SPS/RAS Retirement

Alan Engelmann, ComEd, reviewed the retirement of the Elgin Energy Center and Kincaid Special Protection Systems (SPS) and Remedial Action Schemes (RAS).

12. Cost Development Subcommittee

Nicole Scott provided an overview of the work plan for the recently re-chartered Cost Development Subcommittee.

13. Fast Start Pricing Order Overview

Vijay Shah and Rebecca Stadelmeyer provided details of PJM's Fast Start Pricing compliance filing for docket ER19-2722.

14. Reactive Power in PJM





Thomas DeVita provided an overview of Reactive Power compensation in PJM, its history and comparison to practices at other ISOs and RTOs.

Informational Section

Q4 2020 Net Energy Injections Quarterly Report

Materials are posted as informational only.

CP Unit Specific Parameter Update

Materials are posted as informational only.

Interregional Coordination Update

Materials are posted as informational only.

ARR FTR Market Task Force (AFMTF)

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

Cost Development Subcommittee (CDS)

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

Demand Response Subcommittee (DRS)

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

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

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	
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Morelli, Lisa (Chair)

DiSciullo, Nicholas (Secretary)

Afelumo, Foluso

Aguilar, Fabiano Silveira

Ali, Shadab Anders, David

Anderson, Jared

Baizman, Aaron

Barker, Jason

Bastian, Jeff

Benchek, Jim

Bernabeu, Emanuel

Bleiweis, Bruce

Bloom, David

Bowring, Joseph

Boyle, Glen

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

Company Name

PJM Interconnection, LLC

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.

Direct Energy Business, LLC PJM Interconnection, LLC

Shell Energy North America (US), LP

PJM Interconnection, LLC

PJM Interconnection, LLC

PJM Interconnection, LLC

PJM Interconnection, LLC

Old Dominion Electric Cooperative

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

Sector

Not Applicable

Not Applicable

Not Applicable

Other Supplier

Transmission Owner

Not Applicable

Not Applicable

Not Applicable

Transmission Owner

Not Applicable

Transmission Owner

Not Applicable

Other Supplier

Transmission Owner

Not Applicable

Not Applicable

Other Supplier

Generation Owner

Not Applicable

Not Applicable

Other Supplier

Not Applicable

Other Supplier

Not Applicable

Other Supplier

Not Applicable

Not Applicable Not Applicable

Not Applicable

Electric Distributor

Not Applicable

Not Applicable

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





Esterly, Theresa
Everngam, Scott
Fabiano, Janell
Fan, Zhenyu
Fazio, Danielle
Fereshetian, Damon
Fernandez, Raymond
Filomena, Guy
Fishback, Luke
Foladare, Kenneth
Ford, Adrien
Christian

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

Horning, Lynn Ma Horstmann, John Hsia, Eric Hudis, Gabriella Hull, Gerit Hurwich, Mark Hyzinski, Tom Iler, Art Janicki, Diane

Jens, Thomas Jett, William Johnson, Carl Johnston, David Josyula, Siva Kauffman, Brian Keenan, Matthew

Jardot, Gina

Keenan, Matthew Kelly, Gwen Kelly, Stephen Kenney, Susan Kilgallen, Kevin Kimmel, David Kogut, George Konowal, Richard PJM Interconnection, LLC

The Federal Energy Regulatory Commission

PJM Interconnection, LLC 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

Not Applicable

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





Kothakapu, Rakesh
Kozhuharov, Dimitar
Langbein, Pete
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
Propuniar Jacon

Kothakapu, Rakesh
Kozhuharov, Dimitar
Langbein, Pete
Lejcar, Jamie
Levitt, Andrew
Li, Kanning
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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
Purdie, Michael
Rainey, John
Robinson, Becky
Rodriguez, Tomas
Rohrbach, John
Sasser, Jonathan
Scarpignato, David
Scheirer, Alexandra
Schisler, Ken
Schmatz, Peter
Schuyler, Ken
Seirig, Bahaa
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Fellon McCord
Delaware Municipal Electric Corporation, Inc.
PJM Interconnection, LLC
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.

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

PSEG Energy Resources and Trade LLC

PJM Interconnection, LLC Enel X North America, Inc.

PJM Interconnection, LLC

Con Edison Co. of NY





Shah, Vijay Shanker, Roy Smith, Kara 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 Wadsworth, Joseph Walter, Laura Ward, Michael Warshel, Kim Whitehead, Jeffrey Widom, Stuart Wilson, James Wisersky, Megan Yeaton, Andrea Yoder, Michael

Zemanek, Kevin

Zhao, Tong

PJM Interconnection, LLC H.Q. Energy Services (U.S.), Inc. Buckeye Power, Inc. 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. **GT Power Group** PJM Interconnection, LLC PJM Interconnection, LLC Pierce Atwood PJM Interconnection, LLC Monitoring Analytics, LLC Illinois Commerce Commission Vitol Inc. 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

Not Applicable Other Supplier Electric Distributor 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 Electric Distributor Not Applicable