

Market Implementation Committee (MIC)

WebEx Only

August 11, 2021

9:00 a.m. – 4:00 p.m. EPT

Administration

Nicholas 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 July 14, 2021 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Endorsements/Approvals

2. Manual 11 Revisions – 5-Minute Dispatch and Pricing

Aaron Baizman provided an overview of revisions to Manual 11: Energy & Ancillary Services Market Operations. The changes address Five Minute Long Term Changes and Transparency.

The committee endorsed the Manual 11 Revisions addressing Five Minute Long Term Changes and Transparency by acclamation with 0 objections and 0 abstentions.

3. Manual 11, Manual 18, and Manual 28 Revisions – Fast Start Pricing

a) Phil D'Antonio provided an overview of revisions to Manual 11: Energy & Ancillary Services Market Operations, Manual 18: PJM Capacity Market, and Manual 28: Operating Agreement Accounting. The changes address the implementation of Fast Start Pricing.

b) Catherine Tyler provided an overview of IMM concerns with the formation of Ancillary Service Market Clearing Prices under some Fast Start conditions.

c) Zhenyu Fan and Phil D'Antonio reviewed Fast Start implementation and metrics.

The committee endorsed the Manual 11, Manual 18, Manual 28 revisions for Fast Start Pricing with 228 (94%) in favor, 14 (6%) opposed, and 8 abstentions.

4. Solar-Battery Hybrid Resources

a) Andrew Levitt provided an overview of Package A that was developed in the DER and Inverter-based Resources Subcommittee (DIRS).

b) Jim Davis, Dominion Energy, provided an overview of Package C that was developed in the DIRS.

The committee endorsed Package A with 235 (99%) in favor, 3 (1%) opposed and 5 abstentions.

A second vote showed stakeholders preferred Package A over status quo with 204 (100%) in favor, 0 (0%) opposed, and 2 abstentions.

The committee did not endorse Package C with 69 (34%) in favor, 135 (66%) opposed and 16 abstentions.

A second vote showed stakeholders did not prefer Package C over status quo with 99 (43%) in favor, 129 (57%) opposed, and 3 abstentions.

Package A moves to the Market and Reliability Committee (MRC) as the primary motion.

[Issue Tracking: Solar-Battery Hybrid Resources](#)

5. Energy Efficiency (EE) Addback

- a) Joe Bowring, IMM, reviewed the Problem Statement and Issue Charge addressing the calculation of the EE Addback.
- b) Jeff Bastian provided education on RPM Auction Participation by EE Resources.
- c) Lisa Morelli facilitated a discussion to review the interests and design components on the EE Addback Matrix. A Post-Meeting version of the matrix has been posted to the meeting materials.

Because this issue is being worked through the Consensus Based Issue Resolution (CBIR) Lite process, the IMM and PJM will be working offline to create a joint proposal. A first read of the proposal will be provided during the next MIC meeting and stakeholders will have opportunity to suggest revisions or provide alternate options and proposals. Stakeholders are encouraged to contact the IMM or PJM if they are interested in being a part of the offline discussions, or if they have additional interests or design components to offer.

The committee approved the Energy Efficiency (EE) Addback Issue Charge by acclamation with 0 objections and 0 abstentions.

[Issue Tracking: Energy Efficiency Addback](#)

First Readings

6. Manual 15 Revisions - Incremental & No Load Energy Offer

- a) Heather Reiter reviewed the Cost Development Subcommittee (CDS) work plan.
- b) Tom Hauske provided a first read of the Manual 15: Cost Development Guidelines revisions that were developed in the CDS. OA and OATT revisions were provided as an informational only update. The committee will be asked to endorse the Manual 15 revisions at its next meeting.

7. Regional Transmission and Energy Scheduling Practices Revisions

Chris Pacella provided a first read of revisions to the Regional Transmission and Energy Scheduling Practices document. The committee will be asked to endorse the revisions at its next meeting.

8. RPM Capacity Transfer Rights

- a) Kevin Zemanek, Buckeye Power, provided a first read of the Buckeye proposal.
- b) Jeff Bastian reviewed the MW quantity of qualified requests by zone to assist participants in evaluating the impact of the Buckeye proposal.
- c) Lisa Morelli facilitated a discussion to gather solution options from the committee and develop packages. The IMM offered an alternate package for the committee's consideration in advance of the meeting. Following discussion, Morelli ruled the package to be beyond the scope of the approved issue charge. The IMM indicated they will consider bringing a separate issue charge

to address their broader concerns with the consistency of the MWs used to allocate capacity costs versus those used to allocate Capacity Transfer Rights.
 The committee will be asked to endorse the Buckeye proposal at its next meeting.
[Issue Tracking: Capacity Transfer Rights in RPM](#)

Working Items

9. Regulation for Virtual Combined Cycles

- a) Michael Olaley provided education on the causes of virtual combined cycle units not clearing equally in the regulation market, how this issue differs from regulation awards for combined cycles that are modeled differently, and education on prior-used solutions.
- b) Lisa Morelli facilitated a discussion to review the interests and design components on the matrix. The committee will continue working the CBIR process by providing solution options at its next meeting. Stakeholders are encouraged to provide additional interests and design components in advance of the next meeting. A Post-Meeting version of the matrix has been posted to the meeting materials.

[Issue Tracking: Regulation for Virtual Combined Cycles](#)

10. Undefined Regulation Mileage Ratio Calculation

- a) Michael Olaley provided education on the Undefined Regulation Mileage Ratio Calculation issue.
- b) Joe Bowring, IMM, provided education on the Undefined Regulation Mileage Ratio Calculation issue.
- c) Lisa Morelli facilitated a discussion to review the interests, design components, and solution options and solution packages on the matrix. Given the packages reviewed during this discussion were largely consistent with the PJM and IMM solutions presented at prior meetings, Morelli proposed that this meeting be treated as the first read of these packages. No stakeholder objections were voiced.

The committee will be asked to vote on the packages at its next meeting.

[Issue Tracking: Undefined Regulation Mileage Ratio Calculation](#)

Additional Items

11. Real-Time Values / Parameter Limited Schedules

- a) Lauren Strella Wahba reviewed a straw proposal for Real-Time Values.
- b) Keyur Patel discussed options for Parameter Limited Schedules and solicited stakeholder feedback on the tradeoffs of potentially reducing optionality that is currently available in the structure of energy market offers.

Discussions on this issue will continue during the next MIC meeting.

Informational Section

PJM Manual 03 Attachment E Automatic Sectionalizing Schemes

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 [CDS website](#).

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 and Materials			Materials Due to Secretary 	Materials Published
Date	Time	Location	5 p.m.	4 p.m.
September 9	9 a.m.	WebEx	August 30	September 2
October 6	9 a.m.	WebEx	September 24	September 29
November 3	9 a.m.	WebEx	October 22	October 27
December 1	9 a.m.	WebEx	November 19	November 24

Author: Nicholas DiSciullo

WebEx Meeting Attendees

Names	Company Name	Sector
Morelli, Lisa (Chair)	PJM Interconnection, LLC	Not Applicable
DiSciullo, Nicholas (Secretary)	PJM Interconnection, LLC	Not Applicable
Adams, Chris	East Kentucky Power Cooperative, Inc.	Transmission Owner
Aguilar, Fabiano Silveira	Strom Power, LLC	Other Supplier
Alfano, Melissa	Solar Energy Industries Association	None
Anders, David	PJM Interconnection, LLC	None
Anderson, Jared	S&P Global Inc.	None
Baizman, Aaron	PJM Interconnection, LLC	None
Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Bastian, Jeff	PJM Interconnection, LLC	None
Beban, Madalyn	PJM Interconnection, LLC	None
Bernabeu, Emanuel	PJM Interconnection, LLC	None
Bowring, Joe	Monitoring Analytics, LLC	None

Boyle, Glen	PJM Interconnection, LLC	None
Brodbeck, John	EDP Renewables North America, LLC	Generation Owner
Bruce, Susan	McNees Wallace & Nurick LLC	None
Bruno, Patrick	PJM Interconnection, LLC	None
Callen, Zachary (Zac)	Illinois Commerce Commission	None
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier
Canchi, Devendra	Monitoring Analytics, LLC	None
Canter, David	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Cao, Roger	PJM Interconnection, LLC	None
Carmean, Gregory	OPSI	None
Carroll, Rebecca	PJM Interconnection, LLC	None
Chang, Sean	Shell Energy North America (US), L.P.	Other Supplier
Chmielewski, Brian	PJM Interconnection, LLC	None
Christopher, Mahila	Public Utilities Commission of Ohio (The)	None
Ciabattoni, Joseph	PJM Interconnection, LLC	None
Coscia, Carl	Constellation Energy Commodities Group, Inc.	None
Coyle, Billy	Dominion Virginia Power	None
Coyne, Suzanne	PJM Interconnection, LLC	None
Croop, Danielle	PJM Interconnection, LLC	None
Crystle, Gil	UGI Development Company	Generation Owner
Curtis, Kenneth	Drilling Info, Inc.	None
D'Alessandris, Lou	FirstEnergy Corporation	Transmission Owner
D'antonio, Phil	PJM Interconnection, LLC	None
Davis, Elizabeth (Becky)	PJM Interconnection, LLC	None
Davis, James (Jim)	Dominion Energy Generation Marketing, Inc.	Generation Owner
Davis, Mike	Northern Virginia Electric Cooperative	Electric Distributor
Dhuri, Bhushan	PJM Interconnection, LLC	None
Di Iorio, Michelle	PSEG Energy Resources & Trade LLC	Other Supplier
Dillon, Matthew	UGI Development Company	Generation Owner
DiNicola, Laura	FirstEnergy Corporation	Transmission Owner
Dolan, James	PJM Interconnection, LLC	None
Domian, Christin	Duquesne Light Company	Transmission Owner
Dumitriu, Nicolae	PJM Interconnection, LLC	None
Ejebe, Gabriel	OATI Energy Trading	None
Elkins, Rachel	FirstEnergy Corporation	Transmission Owner
Fabiano, Janell	PJM Interconnection, LLC	None
Fan, Zhenyu	PJM Interconnection, LLC	None
Fereshetian, Damon	PJM Interconnection, LLC	None
Filomena, Guy	Customized Energy Solutions, Ltd.*	None
Fink, Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Fishback, Luke	Affirmed Energy LLC	Other Supplier
Fitzpatrick, Brian	PJM Interconnection, LLC	None
Foladare, Kenneth	Geenex Solar LLC	Other Supplier
Ford, Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fox, Angela	Wylan Energy, L.L.C.	None
Fuess, Christian	PBF Power Marketing, LLC	Generation Owner
Gagen, Rod	Dominion Virginia Power	None
Gates, Terry	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier
Graham, Sophie	Adapt2 Solutions, Inc.	None

Granstrand, Luke	Dominion Virginia Power	None
Greening, Michele	PJM Interconnection, LLC	None
Greiner, Gary	PSEG Energy Resources & Trade LLC	Other Supplier
Guntle, Vince	American PowerNet Management	End-Use Customer
Hanser, Erik	Michigan Public Service Commission	None
Hastings, David	Market Interconnection Consulting Services (MICS)	None
Hauske, Thomas	PJM Interconnection, LLC	None
Heisey, Bradley	Wolf Hills Energy, LLC	Generation Owner
Herel, Suzanne	PJM Interconnection, LLC	None
Hoatson, Tom	Riverside Generating, LLC	Generation Owner
Hohenshilt, Jennifer	Talen Energy Marketing, LLC	Generation Owner
Holdbrook, Ruth	Northern Virginia Electric Cooperative	Electric Distributor
Horger, Tim	PJM Interconnection, LLC	None
Horning, Lynn Marie	Customized Energy Solutions, Ltd.*	None
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hudis, Gabriella	Jersey Green Energy LLC	Other Supplier
Hugee, Jacquelynn (Jacqui)	Dominion Energy Generation Marketing, Inc.	Generation Owner
Hull, Gerit	American Municipal Power, Inc.	Electric Distributor
Hurwich, Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Hyzinski, Tom	GT Power Group	None
Iler, Arthur (Art)	Indiana Office of Utility Consumer Counsel	End-Use Customer
Janicki, Diane	Boston Energy Trading & Marketing, LLC	Other Supplier
Jardot, Gina	Essential Power Rock Springs, LLC	Generation Owner
Jett, William (Bill)	Duke Energy Business Services LLC	Transmission Owner
Johnson, Carl	Customized Energy Solutions, Ltd.*	None
Kalle, Ibrahima	Tibiri Energies	None
Kauffman, Brian	Enel X North America, Inc.	Other Supplier
Kazerooni, Hamid	PJM Interconnection, LLC	None
Keech, Adam	PJM Interconnection, LLC	None
Keegan, John (Jack)	PJM Interconnection, LLC	None
Keenan, Matthew	Jpower USA	None
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier
Kenney, Susan	PJM Interconnection, LLC	None
Khan, Bakhtawar	Gabel and Associates	None
Kilgallen, Kevin	Avangrid Renewables LLC	Generation Owner
Kimmel, David	PJM Interconnection, LLC	None
Kogut, George	New York Power Authority	Other Supplier
Kothakapu, Rakesh	Fellon McCord	None
LaRocque, Matthew	PJM Interconnection, LLC	None
Lejcar, Jamie	Allegheny Electric Cooperative, Inc.	Electric Distributor
Levitt, Andrew	PJM Interconnection, LLC	None
Li, Kanning	PJM Interconnection, LLC	None
Liang-Nicol, Cecilia	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Libbos, Robin	FirstEnergy Corporation	Transmission Owner
Lieberman, Steven	American Municipal Power, Inc.	Electric Distributor
Lu, Chenchao	PJM Interconnection, LLC	None
Marcino, Angelo	PJM Interconnection, LLC	None
Mariam, Yohannes	Office of the Peoples Counsel for the District of Columbia	End-Use Customer
Martin, Valerie	The Federal Energy Regulatory Commission	None
Matuszak, Alex	UGI Energy Services, LLC	Other Supplier

McArdle, Brian	NextEra Energy Power Marketing, LLC	Other Supplier
McGlynn, Paul	PJM Interconnection, LLC	None
McLaughlin, Jeffrey	PJM Interconnection, LLC	None
Mendelsohn, Mark	Noble Americas Gas & Power Corp.	Other Supplier
Midgley, Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller, John	Commonwealth Edison Company	Transmission Owner
Mooney, Jeff	FirstEnergy Corporation	Transmission Owner
Mulhern, Molly	PJM Interconnection, LLC	None
Nix, Emma	Gable and Associates	None
Norton, Chris	American Municipal Power, Inc.	Electric Distributor
Okenfuss, James	Savion, LLC	None
Olaley, Michael	PJM Interconnection, LLC	None
Ondayko, Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Pacella, Chris	PJM Interconnection, LLC	None
Pakela, Greg	DTE Energy Trading, Inc.	Other Supplier
Patel, Keyur	PJM Interconnection, LLC	None
Pelletier, Eveline	Hydro-Quebec	None
Peoples, John	Duquesne Light Company	Transmission Owner
Phillips, Darlene	PJM Interconnection, LLC	None
Pilong, Christopher	PJM Interconnection, LLC	None
Poulos, Greg	CAPS	None
Pratt, Nicholas (Nick)	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Price, Ruth	Division of the Public Advocate of the State of Delaware	End-Use Customer
Proconiar, Jason	Dayton Power & Light Company (The)	Transmission Owner
Purdie, Michael	Dominion Virginia Power	None
Rahimi, Farrokh	Open Access Technology International, Inc.	None
Reiter, Heather	PJM Interconnection, LLC	None
Robinson, Becky	Vista Energy Marketing, L.P.	Other Supplier
Rodriguez, Tomas	OPSI	None
Rohrbach, John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Rooney, Alexa	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Ruck, Andrew	PSEG Energy Resources & Trade LLC	Other Supplier
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	None
Scarpignato, David	Calpine Energy Services, L.P.	Generation Owner
Schreim, Morris	Maryland Public Service Commission	None
Schuyler, Ken	PJM Interconnection, LLC	None
Shanker, Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Shields, Jeffrey	PJM Interconnection, LLC	None
Smith, Kara	Buckeye Power, Inc.	Electric Distributor
Sorrels, James	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Sotkiewicz, Paul	E-Cubed Policy Associates	None
Souder, Michelle	PJM Interconnection, LLC	None
Souder, Richard	PJM Interconnection, LLC	None
Squibb, Bill	Ohio Valley Electric Corp	Transmission Owner
Steele, Robert	Acorn Energy Trading, LLC	None
Stern, Alexander (Alex)	Public Service Electric & Gas Company	Transmission Owner
Stone, Andy	PJM Interconnection, LLC	None
Strella, Lauren	PJM Interconnection, LLC	None
Sturgeon, John	Duke Energy Carolinas, LLC	Other Supplier
Suh, Jung	Calpine Energy Services, L.P.	Generation Owner

Svenson, Heather	Public Service Electric & Gas Company	Transmission Owner
Swalwell, Brad	Tangent Energy Solutions, Inc.	Other Supplier
Sweeney, Rory	GT Power Group	None
Tangirala, Subha	ABB Enterprise Software Inc.	None
Terranova, Chris	PJM Interconnection, LLC	None
Thomas, Jack	PJM Interconnection, LLC	None
Tibbetts, Maeve	K & L Gates	None
Tutino, Joseph	PJM Interconnection, LLC	None
Tyler, Catherine	Monitoring Analytics, LLC	None
Ward, Michael	PJM Interconnection, LLC	None
Wehnes, Kathleen	Maryland Public Service Commission	None
Wei, Jane	Monitoring Analytics, LLC	None
White, Brett	Other	None
Whitehead, Jeffrey	GT Power Group	None
Widom, Stuart	PJM Interconnection, LLC	None
Wisersky, Megan	Madison Gas & Electric Company	Other Supplier
Yoder, Michael	RTO Insider	None
Zemanek, Kevin	Buckeye Power, Inc.	Electric Distributor
Zhang, Michael (Mike)	PJM Interconnection, LLC	None
Zhao, Tong	PJM Interconnection, LLC	None