

## Market Implementation Committee (MIC)

WebEx Only

July 14, 2021

9:00 a.m. – 3:30 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 June 9, 2021 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Chen Lu provided an update on the forthcoming MOPR filing and invited stakeholders to provide feedback on the draft MOPR Tariff language.

### Endorsements/Approvals

#### 2. Regulation Mileage Ratio

- a) Michael Olaleye reviewed the Problem Statement, Issue Charge, and the PJM solution addressing Regulation Mileage Ratio.
- b) Joe Bowring, IMM, reviewed the IMM's solution addressing Regulation Mileage Ratio.

The Issue Charge was amended during the meeting to specify that the issue will be worked through the "CBIR Lite" process, as defined in M34, Section 8.6.2, instead of the "Quick Fix" process. The Issue Charge was updated to start in August, 2021, and the Duration of Work Timeline was updated to 2 months.

A post-meeting version of the amended Issue Charge has been posted to the meeting materials. Discussion will continue on this issue during the next MIC meeting.

**The committee approved the amended Issue Charge with 204 (100%) in favor, 0 (0%) opposed, and 12 abstentions.**

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

#### 3. Manual 6 Revisions

Emmy Messina reviewed revisions to Manual 6: Financial Transmission Rights as part of the periodic review.

**The committee endorsed the Manual 6 revisions by acclamation with 0 objections and 0 abstentions.**

#### 4. Manual 28 Revisions

Rebecca Stadelmeyer reviewed revisions to Manual 28: Operating Agreement Accounting as part of the periodic review.

**The committee endorsed the Manual 6 revisions by acclamation with 0 objections and 0 abstentions.**

## First Readings

### 5. **Manual 11 Revisions – 5-Minute Dispatch and Pricing**

Aaron Baizman provided a first read of revisions to Manual 11: Energy & Ancillary Services Market Operations. The changes address Five Minute Long Term Changes and Transparency. The committee will be asked to endorse the revisions at its next meeting.

### 6. **Manual 11, Manual 18, and Manual 28 Revisions – Fast Start Pricing**

Vijay Shah and Rebecca Stadelmeyer provided a first read 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. The committee will be asked to endorse the revisions at its next meeting.

### 7. **Solar-Battery Hybrid Resources**

- a) Scott Baker provided a summary of the Solar-Battery Hybrid Resources issue that has been worked through the DER and Inverter-based Resources Subcommittee (DIRS).
- b) Andrew Levitt provided a first read of Package A that was developed in the DIRS.
- c) Jim Davis, Dominion Energy, provided a first read of Package C that was developed in the DIRS.

Stakeholders discussed the difference between the two proposals regarding how a hybrid resource would provide Regulation to PJM.

The committee will be asked to endorse the proposals at its next meeting.

### 8. **Energy Efficiency (EE) Addback**

Joe Bowring, IMM, provided a first read of a Problem Statement and Issue Charge addressing the calculation of the EE Addback used in capacity market clearing.

Stakeholders suggested that this issue should be worked through the “CBIR Lite” process, as defined in M34, Section 8.6.2, instead of the “Quick Fix” process. Additional education will be provided on this issue and the committee will be asked to approve the Issue Charge during the next MIC meeting.

## Working Items

### 9. **RPM Capacity Transfer Rights**

- a) Lisa Morelli facilitated a discussion to gather solution options from the committee and develop packages.
- b) Jeff Bastian provided a hypothetical example of the proposed CTR allocation currently in the matrix vs. the status quo. Bastian also requested that stakeholders that have generation resources that satisfy the proposed eligibility requirements and for which the LSE seeks designation as a historic generation resource for purposes of the proposed CTR allocation method email PJM with a list of such resources in advance of the August MIC meeting. PJM will then post the MW quantity of qualified requests by zone with August meeting materials to assist participants in evaluating the impact of the Buckeye proposal.

A post-meeting version of the matrix has been posted to the meeting materials. Additional interests, design components, solution options, and packages can be provided in advance of the next meeting.

[Issue Tracking: Capacity Transfer Rights in RPM](#)

## 10. Regulation for Virtual Combined Cycles

- a) Tom Hauske provided education on virtual modeling of combined cycles and how it is handled in energy and ancillary service dispatch and settlements.
- b) Ron Cremeans, Vistra, provided education on operational/technical challenges resulting from unequal regulation assignments.
- c) Due to time constraints, 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 was not presented during the July MIC meeting. It will be included on the August meeting agenda.

The committee will begin Issue Identification and creating Design Components as part of the Consensus Based Issue Resolution (CBIR) process for this issue during its next meeting.

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

## 11. Behind the Meter Generation Business Rules on Status Changes

Terri Esterly provided an informational update on the Behind the Meter Generation Business Rules on Status Changes Issue and the proposed Manual 14D, Manual 14G, and OATT revisions coming out of the MIC Special Session meetings.

[Issue Tracking: Behind the Meter Generation Business Rules on Status Changes](#)

## Additional Items

### 12. Parameter Limited Schedules Show Cause Order

Chen Lu and Keyur Patel provided an overview of FERC's June 17 order to show cause on Parameter Limited Schedules and Real Time Value. Additionally, there was an initial discussion with stakeholders on next steps and possible options to address Real Time Values and Parameter Limited Schedules through the Order to Show Cause.

## Informational Section

### Pricing Interface Deletions

Materials are posted as informational only.

### Q2 2021 Net Energy Injections Quarterly Report

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.
August 11	9 a.m.	WebEx	July 30	August 4
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
Afelumo, Foluso	PJM Interconnection, LLC	None
Aguilar, Fabiano Silveira	Strom Power, LLC	Other Supplier
Anders, David	PJM Interconnection, LLC	None
Baizman, Aaron	PJM Interconnection, LLC	None
Baker, Scott	PJM Interconnection, LLC	None
Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Bastian, Jeff	PJM Interconnection, LLC	None
Benckek, Jim	American Transmission Systems, Inc.	Transmission Owner
Bloczynski, Nigeria	PJM Interconnection, LLC	None
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Borgatti, Michael	Gabel and Associates	None
Bowring, Joseph	Monitoring Analytics, LLC	None
Boyle, Glen	PJM Interconnection, LLC	None
Bresler, Stu	PJM Interconnection, LLC	None
Bruno, Joshua	PJM Interconnection, LLC	None
Bruno, Patrick	PJM Interconnection, LLC	None

Bryson, Michael (Mike)	PJM Interconnection, LLC	None
Callen, Zachary (Zac)	Illinois Commerce Commission	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
Chen, Hong	PJM Interconnection, LLC	None
Chmielewski, Brian	PJM Interconnection, LLC	None
Christopher, Mahila	Public Utilities Commission of Ohio (The)	None
Chu, George	PJM Interconnection, LLC	None
Ciabattoni, Joseph	PJM Interconnection, LLC	None
Coyle, Billy	Dominion Virginia Power	None
Coyne, Suzanne	PJM Interconnection, LLC	None
Cremeans, Ron	Dynegy Marketing and Trade, LLC	Generation Owner
Croop, Danielle	PJM Interconnection, LLC	None
D'Alessandris, Lou	FirstEnergy Corporation	Transmission Owner
D'Antonio, Phil	PJM Interconnection, LLC	None
Davis, James (Jim)	Dominion Energy Generation Marketing, Inc.	Generation Owner
DeVita, Thomas	PJM Interconnection, LLC	None
Domian, Christin	Duquesne Light Company	Transmission Owner
Douglass, Robert	Exelon Generation Co., LLC	Generation Owner
Drom, Richard	Eckert Seamans	None
Duensing, Allison	Saracen Energy East LP	Other Supplier
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Dumitriu, Nicolae	PJM Interconnection, LLC	None
Egan, Amanda	PJM Interconnection, LLC	None
Elkins, Rachel	FirstEnergy Corporation	Transmission Owner
Esterly, Theresa	PJM Interconnection, LLC	None
Farhat, Michelle	PJM Interconnection, LLC	None
Fereshetian, Damon	PJM Interconnection, LLC	None
Fernandez, Ray	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	Generation Owner
Ford, Adrien	Old Dominion Electric Cooperative	Electric Distributor
Frogg, Darrell	PJM Interconnection, LLC	None
Fuess, Christian	PBF Power Marketing, LLC	Generation Owner
Gahimer, Michael	IN Office of Utility Consumer Counselor	End-Use Customer
Garnett, Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Gates, Terry	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier
Graf, Walter	PJM Interconnection, LLC	None
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
Harris, Makenna	Adapt2 Solutions, Inc.	None

Hastings, David	Market Interconnection Consulting Services (MICS)	None
Hauske, Thomas	PJM Interconnection, LLC	None
Heinle, Frederick	Office of the Peoples Counsel for the District of Columbia	End-Use Customer
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
Horger, Tim	PJM Interconnection, LLC	None
Horning, Lynn Marie	Customized Energy Solutions, Ltd.*	None
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hsia, Eric	PJM Interconnection, LLC	None
Hudis, Gabriella	Jersey Green Energy LLC	Other Supplier
Hugee, Jacquelynn (Jacqui)	Dominion Energy Generation Marketing, Inc.	Generation Owner
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
Jens, Thomas	Black Oak Energy, LLC	Other Supplier
Jett, William	Duke Energy Business Services LLC	Transmission Owner
Johnson, Carl	Customized Energy Solutions, Ltd.*	None
Johnston, David	Indiana Utility Regulatory Commission	None
Kauffman, Brian	Enel X North America, Inc.	Other Supplier
Kayne, Samuel	State of Delaware	None
Keech, Adam	PJM Interconnection, LLC	None
Keenan, Matthew	Jpower USA	None
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier
Kenney, Susan	PJM Interconnection, LLC	None
Kettler, Kolby	Vitol Inc.	Other Supplier
Khan, Bakhtawar	Jersey Green Energy LLC	Other Supplier
Kimmel, David	PJM Interconnection, LLC	None
Kogut, George	New York Power Authority	Other Supplier
Kothakapu, Rakesh	Fellon McCord	None
Kozhuharov, Dimitar	Delaware Municipal Electric Corporation, Inc.	Electric Distributor
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
Lowenthal-Savy, Danielle	Monitoring Analytics, LLC	None
Lu, Chenchao	PJM Interconnection, LLC	None
Lynch, Vicki	Dynegy Marketing and Trade, LLC	Generation Owner
Mabry, David	McNees Wallace & Nurick LLC	None
Marcino, Angelo	PJM Interconnection, LLC	None
Markiewicz, Cindy	FirstEnergy Corporation	Transmission Owner
Matuszak, Alex	UGI Energy Services, LLC	Other Supplier
McArdle, Brian	NextEra Energy Power Marketing, LLC	Other Supplier
McCormick, Katharine	Illinois Commerce Commission	None
McGlynn, Paul	PJM Interconnection, LLC	None
Messina, Emmy	PJM Interconnection, LLC	None



Midgley, Sharon	Exelon Business Services Company, LLC	Transmission Owner
Monzon, Stephanie	PJM Interconnection, LLC	None
Mooney, Jeff	FirstEnergy Corporation	Transmission Owner
Nix, Emma	Gable and Associates	None
Okenfuss, James	Savion, LLC	None
Olaleye, Michael	PJM Interconnection, LLC	None
Ondayko, Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
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
Pilong, Christopher	PJM Interconnection, LLC	None
Pilong, Melissa	PJM Interconnection, LLC	None
Poulos, Greg	CAPS	None
Powers, Sean	Linde Energy Services, Inc.	None
Pratt, Nicholas (Nick)	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Procutniar, Jason	Dayton Power & Light Company (The)	Transmission Owner
Pungaliya, Rajat	Pine Gate Renewables, LLC	None
Purdie, Michael	Dominion Virginia Power	None
Rahimi, Farrokh	Open Access Technology International, Inc.	None
Rainey, John	Northern Virginia Electric Cooperative	Electric Distributor
Redwine, Arlo	The Federal Energy Regulatory Commission	None
Robinson, Becky	Vista Energy Marketing, L.P.	Other Supplier
Robinson, Paul	The Federal Energy Regulatory Commission	None
Rodriguez, Tomas	OPSI	None
Rohrbach, John	Southern Maryland Electric Cooperative, Inc.	Electric Distributor
Salaneck, Alexandra	Monitoring Analytics, LLC	None
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	None
Scarpignato, David	Calpine Energy Services, L.P.	Generation Owner
Scheidecker, Paul	PJM Interconnection, LLC	None
Schuyler, Ken	PJM Interconnection, LLC	None
Schweizer, David	PJM Interconnection, LLC	None
Shah, Vijay	PJM Interconnection, LLC	None
Shanker, Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Smith, Kara	Buckeye Power, Inc.	Electric Distributor
Sotkiewicz, Paul	E-Cubed Policy Associates	None
Souder, Michelle	PJM Interconnection, LLC	None
Squibb, Bill	Ohio Valley Electric Corp	Transmission Owner
Stadlmeyer, Rebecca	PJM Interconnection, LLC	None
Stefanowicz, Vincent	PJM Interconnection, 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
Sun, Haibin	Constellation Energy Services, Inc.	Other Supplier
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, Sharon	Energy Storage Association	None



# Draft Minutes

Tibbetts, Maeve  
Tribulski, Jennifer  
Tutino, Joseph  
Tyler, Catherine  
Wadsworth, Joseph  
Warshel, Kim  
Whitehead, Jeffrey  
Widom, Stuart  
Wilson, James  
Wisersky, Megan  
Yoder, Michael  
Zemanek, Kevin  
Zhang, Michael (Mike)  
Zhao, Tong

K & L Gates  
PJM Interconnection, LLC  
PJM Interconnection, LLC  
Monitoring Analytics, LLC  
Vitol Inc.  
PJM Interconnection, LLC  
GT Power Group  
PJM Interconnection, LLC  
Wilson Energy Economics  
Madison Gas & Electric Company  
RTO Insider  
Buckeye Power, Inc.  
PJM Interconnection, LLC  
PJM Interconnection, LLC

None  
None  
None  
None  
Other Supplier  
None  
None  
None  
None  
Other Supplier  
None  
Electric Distributor  
None  
None