

As of September 16, 2021

Market Implementation Committee (MIC) WebEx Only September 9, 2021 9:00 a.m. – 3:00 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 August 11, 2021 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Nicholas DiSciullo provided an update on the Reactive Power Compensation Plan.

Endorsements/Approvals

 Manual 15 Revisions - Incremental & No Load Energy Offer Tom Hauske provided an overview of the Manual 15: Cost Development Guidelines revisions that were developed in the CDS. The committee endorsed the Manual 15 revisions by acclamation with 0 objections and 0 abstentions.
Regional Transmission and Energy Scheduling Practices Revisions Chris Pacella provided an overview of revisions to the Regional Transmission and Energy Scheduling Practices document. The committee endorsed the revisions to the Regional Transmission and Energy Scheduling Practices document by acclamation with 0 objections and 0 abstentions.
RPM Capacity Transfer Rights Kevin Zemanek, Buckeye Power, reviewed the Buckeye proposal addressing RPM Capacity Transfer Rights. The committee did not endorse the proposal with 55 (28%) in favor, 141 (72%) opposed, and 37 abstentions.

A second vote showed stakeholders did not prefer the proposal over status quo with 43 (23%) in favor, 144 (77%) opposed, and 46 abstentions. <u>Issue Tracking: Capacity Transfer Rights in RPM</u>

5. Undefined Regulation Mileage Ratio Calculation

- a) Michael Olaleye reviewed the PJM proposal addressing Undefined Regulation Mileage Ratio Calculation.
- b) Joe Bowring, IMM, reviewed the IMM proposal addressing Undefined Regulation Mileage Ratio Calculation.





As of September 16, 2021

The committee endorsed the PJM proposal with 152 (64%) in favor, 85 (36%) opposed, and 7 abstentions.

A second vote showed stakeholders preferred the PJM proposal over status quo with 147 (67%) in favor, 72 (33%) opposed, and 31 abstentions.

The committee did not endorse the IMM proposal with 100 (44%) in favor, 129 (56%) opposed, and 21 abstentions.

A second vote showed stakeholders did not prefer the IMM proposal over status quo with 102 (47%) in favor, 116 (53%) opposed, and 26 abstentions.

The PJM proposal moves to the Market and Reliability Committee (MRC) as the primary motion.

Issue Tracking: Undefined Regulation Mileage Ratio Calculation

First Readings

6. Peak Shaving Plan: Performance Rating

Ed Rich provided a first read of the Problem Statement and Issue Charge and solution addressing the Peak Shaving Adjustment shortfall calculation.

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.

7. Energy Efficiency (EE) Addback

- a) Jeff Bastian provided a first read of the IMM/PJM proposal addressing the calculation of the EE Addback.
- b) Lisa Morelli facilitated a discussion on the CBIR matrix. Stakeholders were given an opportunity to offer additional design components, solution options and proposals during the meeting. None were provided.

The committee will be asked to endorse the IMM/PJM proposal during its next meeting. <u>Issue Tracking: Energy Efficiency Addback</u>

8. ARR/FTR Market Task Force Update

- Brian Chmielewski provided an overview of the activities of the task force and proposals developed through the ARR/FTR Market Task Force. Brian provided additional detail on the PJM/Joint Stakeholder proposal.
- b) Joe Bowring and Howard Haas, IMM, provided additional detail on the IMM proposal.
- c) Erik Heinle, DC OPC, provided additional detail on the DC OPC proposal.
- d) Jau Guo, AEP, provided additional detail on the AEP proposal.

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

Working Items

9. **Regulation for Virtual Combined Cycles**



As of September 16, 2021

Becky Robinson, Vistra, provided an overview of the design components and solution options in the Regulation for Virtual Combined Cycles matrix.

Lisa Morelli facilitated a discussion to identify additional design components and solution options. None were provided.

The committee will continue working the Consensus Based Issue Resolution (CBIR) process on this issue during its next meeting.

Issue Tracking: Regulation for Virtual Combined Cycles

Additional Items

10. Parameter Limited Schedules / Real-Time Values

Keyur Patel and Lauren Strella Wahba provided an update on PJM's approach for a response to FERC on Parameter Limited Schedules and Real Time Values. Stakeholders provided feedback on the draft Tariff redlines related to submission of real time values that PJM intends to propose as part of its Answer to the Show Cause Order.

11. 2022 PJM Project Budget

Jim Snow provided an update on the preliminary 2022 project budget.

12. nGEM Project Update

Ray Fernandez provided an update on the Next Generation Energy Market (nGEM) Software replacement project.

13. Capacity Market Seller Offer Cap Order and Revised Auction Timelines

Chen Lu provided an overview of the Capacity Market Seller Offer Cap order FERC recently issued in Docket Nos. EL-19-47, EL19-63 and ER21-2444. Pete Langbein presented and solicited feedback on draft timelines for the pre-auction activities for the upcoming December Base Residual Auction which are impacted by this order and the timing of the auction itself.

Pete noted that the posted materials contained incorrect information regarding auctions that will need to change if the BRA is delayed. The proposed delay in the BRA will not result in any delay to the capacity auctions getting back to the normal schedule.

A Post-Meeting version of the Proposed 23-24 BRA Auction Schedule has been posted to the meeting materials.

Informational Section

ARR FTR Market Task Force (AFMTF)

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

Cost Development Subcommittee (CDS)

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

Demand Response Subcommittee (DRS)

Meeting materials are posted to the DRS website.



As of September 16, 2021

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.
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
Abdur-Rahman, Muhsin	ABB Enterprise Software Inc.	None
Aguilar, Fabiano Silveira	Strom Power, LLC	Other Supplier
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
Bearden, Joel	Cargill Power Markets LLC	Other Supplier
Beban, Madalyn	PJM Interconnection, LLC	None
Benchek, Jim	American Transmission Systems, Inc.	Transmission Owner
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
Brodbeck, John	EDP Renewables North America, LLC	Generation Owner
Bruno, Joshua	PJM Interconnection, LLC	None
Bruno, Patrick	PJM Interconnection, LLC	None
Bryson, Michael (Mike)	PJM Interconnection, LLC	None
Callaghan, Chris	PJM Interconnection, LLC	None
Callen, Zachary (Zac)	Illinios Commerce Commission	None
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier



As of September 16, 2021

Canchi, Devendra Canter. David Cao, Roger Carmean, Gregory Carroll, Rebecca Chang, Sean Chappelle, Laura Chmielewski. Brian Chu, George Ciabattoni, Joseph Cocco, Michael Coyle, Billy Coyne, Suzanne Croop, Danielle Davis, Elizabeth (Becky) Davis, James (Jim) Davis, Mike DeVita, Thomas Dillon, Matthew DiNicola, Laura Dolan, James Dossin, Sophia Douglass, Robert Drivas, Christina Drom, Richard Duensing, Allison Dugan, Chuck Egan, Amanda Ejebe, Gabriel Elkins, Rachel Fabiano, Janell Fan, Zhenyu Fazio, Danielle Fereshetian. Damon Fernandez, Ray Filomena, Guy Fink, Regan Fink, Sari Fishback. Luke Fitch. Neal Fitzpatrick, Brian Flagler, Grant Foladare, Kenneth Ford, Adrien Fox, Angela Fuess. Christian Gates, Terry Gilani, Rehan Gluck, Jim Graf, Walter

Monitoring Analytics, LLC AEP Appalachian Transmission Company, Inc. PJM Interconnection, LLC OPSI PJM Interconnection, LLC Shell Energy North America (US), L.P. Chappell Consulting PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection. LLC Old Dominion Electric Cooperative **Dominion Virginia Power** PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC Dominion Energy Generation Marketing, Inc. Northern Virginia Electric Cooperative PJM Interconnection, LLC UGI Development Company FirstEnergy Corporation PJM Interconnection, LLC Invenergy, LLC Exelon Generation Co., LLC Lightsource bp Eckert Seamans Saracen Energy East LP East Kentucky Power Cooperative, Inc. PJM Interconnection. LLC OATI Energy Trading FirstEnergy Corporation PJM Interconnection, LLC PJM Interconnection, LLC Noble Americas Gas & Power Corp. PJM Interconnection. LLC PJM Interconnection, LLC Customized Energy Solutions, Ltd.* Pine Gate Mid-Atlantic, LLC American Clean Power Association Affirmed Energy LLC NRG Power Marketing LLC PJM Interconnection, LLC ConEdison Energy, Inc. Geenex Solar LLC Old Dominion Electric Cooperative Wylan Energy, L.L.C. PBF Power Marketing, LLC AEP Appalachian Transmission Company, Inc. ConEdison Energy, Inc. PJM Interconnection, LLC PJM Interconnection, LLC

None Transmission Owner None None None Other Supplier None None None None **Electric Distributor** None None None None Generation Owner **Electric Distributor** None Generation Owner Transmission Owner None Generation Owner Generation Owner None None Other Supplier Transmission Owner None None Transmission Owner None None Other Supplier None None None Other Supplier None Other Supplier Generation Owner None Other Supplier Other Supplier Electric Distributor None Generation Owner Transmission Owner Other Supplier None None



As of September 16, 2021

Graham, Sophie Greening, Michele Greiner, Gary Guntle. Vince Guo, Jau Haas, Howard Haley, Alina Hanser. Erik Hastings, David Hauske, Thomas Hayik, Seth Heinle, Frederick Heisey, Bradley Hepplewhite. Peter Herbert, Sebastian Herel. Suzanne Hicks, Dave Hoatson, Tom Hohenshilt, Jennifer Horger, Tim Horning, Lynn Marie Hudis. Gabriella Hudson, Alex Hull, Gerit Hurwich, Mark Hyzinski, Tom Iler, Arthur (Art) Janicki. Diane Jardot, Gina Jett, William (Bill) Johnson, Carl Kalle, Ibrahima Kauffman, Brian Kazerooni. Hamid Keech, Adam Keenan, Matthew Kelly, Stephen Kenney, Susan Khan, Bakhtawar Kilgallen, Kevin Kimmel, David Kogut, George Kothakapu, Rakesh Lambert, Andrew Langbein, Pete LaRocque. Matthew Lejcar, Jamie Libbos, Robin Lieberman, Steven Litchfield, Matthew

Adapt2 Solutions, Inc. PJM Interconnection. LLC PSEG Energy Resources & Trade LLC American PowerNet Management AEP Appalachian Transmission Company, Inc. Monitoring Analytics, LLC The Federal Energy Regulatory Commission Michigan Public Service Commission Market Interconnection Consulting Services (MICS) PJM Interconnection. LLC Monitoring Analytics, LLC Office of the Peoples Counsel for the District of Columbia Wolf Hills Energy, LLC Wriglev Capital LLC DC Energy Mid-Atlantic, LLC PJM Interconnection. LLC Noble Americas Energy Solutions LLC Riverside Generating, LLC Talen Energy Marketing, LLC PJM Interconnection, LLC Customized Energy Solutions, Ltd.* Jersey Green Energy LLC Tenaska Power Services Co. American Municipal Power, Inc. Elliott Bay Energy Trading, LLC GT Power Group Indiana Office of Utility Consumer Counsel Boston Energy Trading & Marketing, LLC Essential Power Rock Springs, LLC Duke Energy Business Services LLC Customized Energy Solutions, Ltd.* **Tibiri Energies** Enel X North America, Inc. PJM Interconnection. LLC PJM Interconnection, LLC Jpower USA Brookfield Energy Marketing LP PJM Interconnection, LLC Gabel and Associates Avangrid Renewables LLC PJM Interconnection, LLC New York Power Authority Fellon McCord PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection. LLC Allegheny Electric Cooperative, Inc. FirstEnergy Corporation American Municipal Power, Inc. CPV Shore, LLC

None None Other Supplier End-Use Customer Transmission Owner None None None None None None End-Use Customer Generation Owner Other Supplier None None None Generation Owner Generation Owner None None Other Supplier Generation Owner **Electric Distributor** Other Supplier None End-Use Customer Other Supplier Generation Owner Transmission Owner None None Other Supplier None None None Other Supplier None None Generation Owner None Other Supplier None None None None Electric Distributor Transmission Owner **Electric Distributor** Generation Owner



As of September 16, 2021

Lopez-Lopez, Anthony Lu. Chenchao Luzetsky, Robert Mabry, David Marcino, Angelo Mariam, Yohannes Marzewski, Skyler McArdle. Brian McGlynn, Paul McLaughlin, Jeffrey McLaverty, Megan McNeil, Justin Messina, Emmy Midgley, Sharon Militello, Nicole Mok. Alan Monzon, Stephanie Mooney, Jeff Napoli, Matthew Nix, Emma Norton, Chris Okenfuss, James Olaleye, Michael Ondayko, Brock O'Neill, Jack Pacella, Chris Pakela, Greg Patel, Keyur Peoples, John Perera, Asanga Phenix, Michael Philips, Marjorie Phillips, Darlene Phillips, Jennifer Pilong, Christopher Pilong, Melissa Poulos, Greg Pratt, Nicholas (Nick) Price. Mark Procuniar. Jason Pungaliya, Rajat Purdie, Michael Rahimi, Farrokh Rainey, John Ramsey, James Rayhorn, Carolyn Reeping, Bob Rich, Edward Robinson, Becky Rodriguez, Tomas

Bryndan Associates, Inc. PJM Interconnection. LLC TAQA Gen X LLC McNees Wallace & Nurick LLC PJM Interconnection, LLC Office of the Peoples Counsel for the District of Columbia Monitoring Analytics, LLC NextEra Energy Power Marketing, LLC PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC Office of the Attorney General, Kentucky PJM Interconnection, LLC Exelon Business Services Company, LLC PJM Interconnection, LLC Duke Energy Kentucky, Inc. PJM Interconnection, LLC FirstEnergy Corporation ConEdison Energy, Inc. Gable and Associates American Municipal Power, Inc. Savion. LLC PJM Interconnection, LLC AEP Appalachian Transmission Company, Inc. PJM Interconnection, LLC PJM Interconnection, LLC DTE Energy Trading, Inc. PJM Interconnection, LLC **Duquesne Light Company** PJM Interconnection, LLC TAQA Gen X LLC Riverside Generating Company, L.L.C. PJM Interconnection, LLC C.P. Crane LLC PJM Interconnection, LLC PJM Interconnection, LLC CAPS PPL Electric Utilities Corp. dba PPL Utilities DC Energy Mid-Atlantic, LLC Dayton Power & Light Company (The) Pine Gate Mid-Atlantic, LLC **Dominion Virginia Power** Open Access Technology International, Inc. Northern Virginia Electric Cooperative Suffolk Fund LLC Dominion Virginia Power Ohio Edison Company PJM Interconnection, LLC Vista Energy Marketing, L.P. OPSI

None None Generation Owner None None End-Use Customer None Other Supplier None None None End-Use Customer None Transmission Owner None Transmission Owner None Transmission Owner Other Supplier None Electric Distributor None None Transmission Owner None None Other Supplier None Transmission Owner None Generation Owner Generation Owner None Generation Owner None None None Transmission Owner None Transmission Owner Other Supplier None None Electric Distributor None None Transmission Owner None Other Supplier None



As of September 16, 2021

Rohrbach, John Roonev, Alexa Salaneck, Alexandra Sasser, Jonathan Scarpignato, David Schisler, Ken Schuyler, Ken Schweizer. David Shah, Vijay Shanker, Roy Smith, Kara Snow, Jim Solomon, Greg Sauibb. Bill Stadelmeyer, Rebecca Starkov, Stefan Stone, Andy Strella, Lauren Sturgeon, John Suh, Jung Svenson, Heather Swalwell. Brad Sweeney, Rory Tangirala, Subha Terranova, Chris Theodore, Sharon Thomas. Jack Tibbetts. Maeve Tribulski, Jennifer Tutino, Joseph Tyler, Catherine Wadsworth, Joseph Walker, Tori Ward. Michael Warner-Freeman, Jennifer Warshel, Kim Watson, Betty Wehnes, Kathleen Whitehead, Jeffrey Widom. Stuart Wilson, Rob Wilson, James Wisersky, Megan Xu, Xu Yoder, Michael Zemanek, Kevin Zhao, Tong

Southern Maryland Electric Cooperative, Inc. PPL Electric Utilities Corp. dba PPL Utilities Monitoring Analytics, LLC Customized Energy Solutions, Ltd.* Calpine Energy Services, L.P. Enel X North America, Inc. PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC H.Q. Energy Services (U.S.), Inc. Buckeye Power, Inc. PJM Interconnection, LLC NextEra Energy Marketing, LLC Ohio Valley Electric Corp PJM Interconnection, LLC PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection, LLC Duke Energy Carolinas, LLC Calpine Energy Services, L.P. Public Service Electric & Gas Company Tangent Energy Solutions, Inc. GT Power Group ABB Enterprise Software Inc. PJM Interconnection, LLC Electric Power Supply Association PJM Interconnection, LLC K & L Gates PJM Interconnection, LLC PJM Interconnection, LLC Monitoring Analytics, LLC Vitol Inc. Pine Gate Mid-Atlantic, LLC PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection, LLC SolarCity Maryland Public Service Commission GT Power Group PJM Interconnection. LLC Illinois Municipal Electric Agency Wilson Energy Economics Madison Gas & Electric Company PJM Interconnection, LLC **RTO** Insider Buckeve Power, Inc. PJM Interconnection, LLC

Electric Distributor Transmission Owner None None Generation Owner Other Supplier None None None Other Supplier Electric Distributor None Other Supplier Transmission Owner None None None None Other Supplier Generation Owner Transmission Owner Other Supplier None None None None None None None None None Other Supplier Other Supplier None None None None None None None Electric Distributor None Other Supplier None None Electric Distributor None