

As of February 16, 2022

Market Implementation Committee (MIC) WebEx Only February 9, 2022 9:00 a.m. – 1:40 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 January 12, 2022 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

- 1. Nicholas DiSciullo reviewed the MIC Work Plan.
- 2. Susan McGill provided an update on the mandatory Browserless/API 2 Factor Authentication Public Key Infrastructure (PKI) implementation.

X. Weak Encryption Retirement

Amanda Egan provided an update on the retirement of Weak Encryption and its impact to the Voting Application.

Endorsements/Approvals

 Manual 27 Revisions – Schedule 9 and 10 Rebecca Stadelmeyer reviewed conforming revisions to Manual 27: Open Access Transmission Tariff Accounting resulting from PJM's recent formula rate filing (Docket No. ER2-26). The committee endorsed the Manual 27 revisions by acclamation with 0 objections and 0 abstentions.

4. Pseudo Modeled Combined Cycle Minimum Run Time Guidance

- a) Tom Hauske reviewed Package A addressing Pseudo Modeled Combined Cycle Minimum Run Time Guidance.
- b) Lisa Morelli facilitated a discussion on the CBIR matrix. Updates were made to the solution options and Package A during the meeting. A Post-Meeting version of the matrix has been posted to the meeting materials.

The committee deferred the endorsement vote on Package A to the March MIC meeting. Package A will be brought to the February 24 MRC meeting for a first read. Issue Tracking: Pseudo Modeled Combined Cycle Minimum Run Time Guidance

First Readings

5. Manual 18 Revisions – MOPR, MSOC, Historic Net EAS

Jeff Bastian provided a first read of revisions to Manual 18: PJM Capacity Market conforming with PJM's 7/30/21 filing to reform application of the MOPR, PJM's 10/21 compliance filing made in accordance with FERC's 9/2/21 Order to amend the default MSOC, and FERC's 12/22/21 order



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directing PJM to reinstate the historic net EAS methodology, and FERC's 1/20/22 order directing PJM to remove the 10% adder from the net EAS calculation for the reference resource CT. The committee will be asked to endorse the revisions at its next meeting.

- 6. Critical Gas Infrastructure Demand Response Participation Jack O'Neill provided a first read of a Problem Statement and Issue Charge addressing Critical Gas Infrastructure recommendation for Demand Response. This stems from the FERC/NERC report on the severe cold weather event in Texas and South Central US last February. The committee will be asked to approve the Issue Charge at its next meeting.
- 7. Operating Reserve Clarification for Resources Operating as Requested by PJM Phil D'Antonio provided a first read of a Problem Statement and Issue Charge addressing clarifications and potential enhancements to the rules for paying Operating Reserve credits to resources operating as requested by PJM. The committee will be asked to approve the issue charge at its next meeting.

Working Items

8. Market Suspension

Lisa Morelli facilitated a discussion to develop packages on the Market Suspension matrix as part of the Consensus Based Issue Resolution process. Updates were made to the solution options and packages during the meeting. A Post-Meeting version of the matrix has been posted to the meeting materials. PJM, the IMM and Calpine will work offline between meetings and the committee will continue the CBIR process at its next meeting.

Issue Tracking: Rules Related to Market Suspension

9. Capacity Offer Opportunities for Generation with Co-Located Load

- a) Jeff Bastian provided education regarding current capacity offer requirements for existing generation resources. Yuri Smolanitsky provided education on interconnection requirements for new, large, fast response interruptible commercial load co-located with existing generation.
- b) Jason Barker, Constellation, provided education on potential configurations for the service of co-located load.

The committee will continue discussing this issue at its next meeting. <u>Issue Tracking: Capacity Offer Opportunities for Generation with Co-Located Load</u>

Additional Items

10. 2022/23 ARR/FTR Update

Xu Xu reviewed the ARR/FTR modeling processes completed to date and upcoming deadlines for the 2022/2023 planning year.

11. Incremental Auction Revenue Rights for RTEP Upgrades

Emmy Messina provided an update on Incremental Auction Revenue Rights for upgrades in the Regional Transmission Expansion Plan for the 2022/2023 planning year.

12. Renewable Dispatch



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Mike Zhang provided an informational update on the Renewable Dispatch issue recently initiated at the Operating Committee. Issue Tracking: Renewable Dispatch

13. Unit Specific Parameter Adjustment Process Lauren Strella Wahba provided an update on the Unit Specific Parameter Adjustment Process.

14. Cost Development Subcommittee Update Nicole Scott provided an informational update on the work to be performed at the Cost Development Subcommittee.

Informational Section

PJM Net Energy Injections Quarterly Review

Materials are posted as informational only.

Interregional Coordination Update

Materials are posted as informational only.

Fast Start Pricing Monthly Metrics Update

Materials are posted as informational only.

ARR FTR Market Task Force (AFMTF)

Meeting materials are posted to the AFMTF website.

Reactive Power Compensation Task Force (RPCTF)

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

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.



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Future Meeting Dates and Materials			Materials Due e to Secretary	Materials Published
Date	Time	Location	5 p.m.	4 p.m.
March 9	9 a.m.	WebEx	February 25	March 2
April 13	9 a.m.	WebEx	April 1	April 6
May 11	9 a.m.	WebEx	April 29	May 4
June 8	9 a.m.	WebEx	May 26	June 1

Author: Nicholas DiSciullo

WebEx Meeting Attendees

Names Lisa Morelli (Chair) DiSciullo, Nicholas (Secretary) Aguilar, Fabiano Silveira Anders, David Anderson, Jared Baizman, Aaron Baker, Scott Barker, Jason Bastian. Jeff Benchek, Jim Bennett, Stephen Berg, William Bernabeu, Emanuel Bowker, Shannon Bowring, Joseph Boyle, Glen Breidenbaugh, Aaron Bresler, Stu Brodbeck, John Bruno, Patrick Bryson, Michael (Mike) Burnham, Kat Callen, Zachary (Zac) Campbell, Bruce Canter, David Cao, Roger Carmean, Gregory Carrier, Ronald (Ron) Carroll, Rebecca Caven, Augustine Chang, Sean Chen, Hong Chmielewski, Brian Chu, George Cocco, Michael

Company Name

PJM Interconnection, LLC PJM Interconnection, LLC Strom Power, LLC PJM Interconnection, LLC S&P Global Inc. PJM Interconnection, LLC PJM Interconnection, LLC Constellation Energy Generation, LLC PJM Interconnection, LLC American Transmission Systems, Inc. PJM Interconnection, LLC Constellation Energy Generation, LLC PJM Interconnection, LLC PJM Interconnection, LLC Monitoring Analytics, LLC PJM Interconnection, LLC Rodan Energy Solutions (USA) Inc. PJM Interconnection, LLC EDP Renewables North America, LLC PJM Interconnection, LLC PJM Interconnection. LLC Advanced Energy Economy (AEE) Illinios Commerce Commission EnergyConnect, Inc. AEP Appalachian Transmission Company, Inc. PJM Interconnection, LLC OPSI **Big Lake Consulting** PJM Interconnection, LLC PJM Interconnection, LLC Shell Energy North America (US), L.P. PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Old Dominion Electric Cooperative

Sector Not Applicable Not Applicable

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



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Colaresi, Chandra Corash. Richard Croop, Danielle D'Antonio, Phil Davis, Elizabeth (Becky) Davis, James (Jim) DeVita, Thomas Dillon. Matthew Domian, Christin Dorko, Keri Downs, Jere Duensing, Allison Dugan, Chuck Dumitriu. Nicolae Egan, Amanda Elkins, Rachel Endress, Eric Ericson, Christine Esterly, Theresa Fabiano, Janell Fan, Zhenyu Farhat, Michelle Fazio, Danielle Fernandez, Ray Filomena, Guy Fitzpatrick, Brian Foladare, Kenneth (Ken) Ford. Adrien Franks, Christine Fuess, Christian Garnett, Bryan Gates, Jill Gates, Terry Gilani. Rehan Graf, Walter Graham, Sophie Guo, JauJia Halay, Alina Hanser, Erik Hastings. David Hauske, Thomas Heinle, Frederick (Erik) Herel, Suzanne Hoatson, Thomas (Tom) Hohenshilt, Jennifer Holter. Natasha Hooker, Marquette Horger, Tim Horning, Lynn Marie Horstmann, John

Cpower Energy Management PSEG Energy Resources & Trade LLC PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Dominion Energy Generation Marketing, Inc. PJM Interconnection, LLC **UGI Development Company** Duquesne Light Company Monitoring Analytics, LLC PJM Interconnection, LLC Saracen Energy East LP East Kentucky Power Cooperative, Inc. PJM Interconnection. LLC PJM Interconnection, LLC FirstEnergy Corporation PJM Interconnection, LLC Illinois Commerce Commission PJM Interconnection. LLC PJM Interconnection. LLC PJM Interconnection, LLC PJM Interconnection, LLC Noble Americas Gas & Power Corp. PJM Interconnection, LLC Customized Energy Solutions, Ltd.* PJM Interconnection, LLC Geenex Solar LLC Old Dominion Electric Cooperative PJM Interconnection, LLC PBF Power Marketing, LLC Duke Energy Ohio, Inc. PJM Interconnection, LLC AEP Appalachian Transmission Company, Inc. ConEdison Energy, Inc. PJM Interconnection, LLC Adapt2 Solutions, Inc. AEP Appalachian Transmission Company, Inc. The Federal Energy Regulatory Commission Michigan Public Service Commission Market Interconnection Consulting Services (MICS) PJM Interconnection, LLC Office of the Peoples Counsel for the District of Columbia PJM Interconnection, LLC Riverside Generating, LLC Talen Energy Marketing, LLC PJM Interconnection. LLC Dominion Energy Generation Marketing, Inc. PJM Interconnection, LLC Customized Energy Solutions, Ltd.* Dayton Power & Light Company (The)

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



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Hsia, Eric Hull. Gerit Hurwich, Mark Hyzinski, Tom ller, Arthur (Art) Janicki, Diane Jardot, Gina Jett. William (Bill) Johnson, Carl Johnston, David Kalaskar, Rahul Kayne, Samuel Keech, Adam Keenan. Matthew Kelly, Stephen Kenney, Susan Kent, Janessa Kilgallen, Kevin Kirk, Ryan Knotts, Pamela Kogut, George Lai, Erin Laios, Takis Langbein, Pete LaRocque, Matthew Lejcar, Jamie Libbos, Robin Lockwood. Dan Lu, Chen Mabry, David Markiewicz, Cindy Martin, Valerie Matuszak. Alex McGill. Susan McGlynn, Paul McLaverty, Megan McNeil, Justin Messina, Emmy Midgley, Sharon Militello. Nicole Miller, John Mok, Alan Mooney, Jeff O'Hara, Bernard (Bernie) Okenfuss, James Olaleve, Michael Ondayko, Brock O'Neill, Jack Pakela, Greg Patel, Keyur

PJM Interconnection, LLC 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.* Indiana Utility Regulatory Commission AES Laurel Mountain, LLC State of Delaware PJM Interconnection, LLC Jpower USA Brookfield Energy Marketing LP PJM Interconnection, LLC **Duquesne Light Company** Avangrid Renewables LLC AEP Appalachian Transmission Company, Inc. **DE Public Service Commission** New York Power Authority PJM Interconnection, LLC AEP Appalachian Transmission Company, Inc. PJM Interconnection, LLC PJM Interconnection, LLC Allegheny Electric Cooperative, Inc. FirstEnergy Corporation PJM Interconnection. LLC PJM Interconnection, LLC McNees Wallace & Nurick LLC FirstEnergy Corporation The Federal Energy Regulatory Commission UGI Energy Services, 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 Commonwealth Edison Company Duke Energy Kentucky, Inc. FirstEnergy Corporation Sargent & Lundy Savion, LLC PJM Interconnection. LLC AEP Appalachian Transmission Company, Inc. PJM Interconnection, LLC DTE Energy Trading, Inc. PJM Interconnection, LLC

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



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Pelletier, Eveline Peoples, John Phillips, Darlene Pilong, Christopher Pilong, Melissa Poulos, Greg Pratt, Nicholas (Nick) Price. Ruth Purdie, Michael Rahimi, Farrokh Ramsey, James Rayhorn, Carolyn Robinson, Becky Rodriguez, Tomas Rohrbach, John Roy Chowdhury, Meghadeep Rutledge, Craig Salaneck, Alexandra Sasser, Jonathan Scarpignato, David (Scarp) Scheidecker, Paul Schisler, Ken Schmitt, David Schreim, Morris Schuyler, Ken Schweizer, David Scott. Nicole Servera. Max Shanker, Roy Shegarfi, Roozbeh Smolanitsky, Yuri Sotkiewicz, Paul Souder. Michelle Sauibb. Bill Stadelmeyer, Rebecca Starkov, Stefan Stern, Alexander (Alex) Stone, Andy Strella, Lauren Stuchell. Jeff Sturgeon, John Suh, Jung Svenson, Heather Swalwell, Brad Sweeney, Rory Terranova. Chris Tibbetts, Maeve Tyler, Catherine Wadsworth, Joseph Walcavich, Colin

Hydro-Quebec Duquesne Light Company PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC CAPS PPL Electric Utilities Corp. dba PPL Utilities Division of the Public Advocate of the State of Delaware **Dominion Virginia Power** OATI Energy Trading Suffolk Fund LLC **Dominion Virginia Power** Vista Energy Marketing, L.P. OPSI Southern Maryland Electric Cooperative, Inc. Yes Energy, LLC AEP Appalachian Transmission Company, Inc. Monitoring Analytics, LLC Customized Energy Solutions, Ltd.* Calpine Energy Services, L.P. PJM Interconnection, LLC Enel X North America, Inc. New Jersey Board of Public Utilities Maryland Public Service Commission PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC Unicia Energy LP H.Q. Energy Services (U.S.), Inc. Exelon Business Services Company, LLC PJM Interconnection, LLC E-Cubed Policy Associates PJM Interconnection, LLC Ohio Valley Electric Corp PJM Interconnection, LLC PJM Interconnection, LLC Public Service Electric & Gas Company PJM Interconnection, LLC PJM Interconnection, LLC FirstEnergy Corporation Duke Energy Carolinas, LLC Calpine Energy Services, L.P. Public Service Electric & Gas Company Tangent Energy Solutions, Inc. **GT** Power Group PJM Interconnection. LLC K & L Gates Monitoring Analytics, LLC Vitol Inc. National Grid Renewables, LLC

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



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Ward, Michael Warshel, Kim Wehnes, Kathleen Whitehead, Jeffrey Xu, Xu Yeaton, Andrea Yoder, Michael Yoo, Kyungjin Zemanek, Kevin Zhang, Michael (Mike) PJM Interconnection, LLC PJM Interconnection, LLC Maryland Public Service Commission GT Power Group PJM Interconnection, LLC PJM Interconnection, LLC RTO Insider PJM Interconnection, LLC Buckeye Power, Inc. PJM Interconnection, LLC None None None None None None Electric Distributor None