Minutes

Market Implementation Committee
WebEx / Conference \& Training Center
July 12, 2023
9:00 a.m. - 2:00 p.m. EPT

## Administration (9:00-9:05)

Amanda Martin 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 7, 2023 Market Implementation Committee by acclamation with 0 objections and 0 abstentions.

## Endorsements/Approvals (9:35-11:20)

1. Interconnection Process Reform Manual Revisions (9:35-9:50)

Heather Reiter presented conforming revisions to Manual 6: Financial Transmission Rights, Manual 18: PJM Capacity Market, Manual 27: Open Access Transmission Tariff Accounting, and Manual 28: Operating Agreement Accounting as part of the Interconnection Process Reform.
The committee endorsed the revisions at this meeting by acclamation with 0 objections and 0 abstentions.
2. Capacity Offer Opportunities for Generation with Co-located Load (9:50 - 10:35)

Foluso Afelumo solicited stakeholder feedback deferring an endorsement vote on the packages in order for further package development to occur. With support from stakeholders, the Chair deferred the endorsement to the August meeting.
The committee will be asked to endorse packages at its next meeting.
Issue Tracking: Capacity Offer Opportunities for Generation with Co-located Load

## First Reads (10:35-12:05)

3. Reactive Supply and Voltage Compensation (10:35-12:05)
b. Danielle Croop provided an overview on the history, process, and package comparison for the issue.
c. Bruce Grabow, Locke Lord, presented the Clean Energy Caucus package.
d. Glen Boyle presented the PJM package.
e. Joe Bowring, Monitoring Analytics, presented the IMM packages.
f. Foluso Afelumo lead a discussion on the packages presented.

The committee will be asked to endorse a package at its next meeting.
Issue Tracking: Reactive Supply and Voltage Control Compensation

## Lunch (12:05-1:00)

## Working ltems (1:00-1:20)

4. Local Considerations in Net Cost of New Entry (CONE) $(1: 00-1: 20)$

Paul Sotkiewicz, E-Cubed Policy Associates, will present the E-Cubed package. Minutes

## Additional Items (1:20-2:00)

5. Cost Development Subcommittee Update (1:20-1:25)

Nicole Scott provided a Cost Development Subcommittee update.
6. Next Generation Markets (nGEM) Update (1:25-1:40)

Ray Fernandez provided an update on the nGEM project.
7. Minimum Operating Parameter Matrix Update ( $1: 40-1: 50$ )

Lauren Strella Wahba provided an overview for a new technology type and associated proxy parameters added to the Minimum Operating Parameter Matrix.
8. Distributed Resources Subcommittee Update (1:50-2:00)

Ilyana Dropkin provided a Distributed Resources Subcommittee update. The committee plans to review the Automating Bid Duration for Economic Demand Response Participating in Energy Markets Issue Charge at the August MIC.

## Informational Section

Reserve Price Formation Update
Materials are posted as informational only.
Interregional Coordination Update
Materials are posted as informational only.
Stability Limits in Markets and Operations
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 RPCTF website.
Cost Development Subcommittee (CDS)
Meeting materials are posted to the CDS website.
Distributed Resources Subcommittee (DISRS)
Meeting materials are posted to the DISRS 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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## Minutes

| Future Meeting Dates and Materials |  |  | Materials Due to Secretary | Materials Published |
| :---: | :---: | :---: | :---: | :---: |
| Date | Time | Location | 5 p.m. | 4 p.m. |
| August 9 | 9 a.m. | WebEx / Conference \& Training Center | July 28 | August 2 |
| September 6 | 9 a.m. | WebEx / Conference \& Training Center | August 25 | August 30 |
| October 4 | 9 a.m. | WebEx / Conference \& Training Center | September 22 | September 27 |
| November 1 | 9 a.m. | WebEx / Conference \& Training Center | October 20 | October 25 |
| December 6 | $9 \mathrm{a} . \mathrm{m}$. | WebEx / Conference \& Training Center | November 22 | November 29 |

Author: A. Martin
Attendance

| In-Person |  |  |  |
| :--- | :--- | :--- | :--- |
| Last Name | First Name | Company Name | Sector |
| Afelumo | Foluso | PJM Interconnection | None |
| Martin | Amanda | PJM Interconnection | None |
| bastian | jeffrey | PJM Interconnection | None |
| Boyle | Glen | PJM Interconnection | None |
| Brodbeck | John | EDP Renewables North America LLC | Generation Owner |
| Cabezas | Angela | PJM Interconnection | None |
| Carroll | Rebecca | PJM Interconnection | None |
| Chmielewski | Brian | PJM Interconnection | None |
| Ciabattoni | Joseph | PJM Interconnection | None |
| Dumitriu | Nicolae | PJM Interconnection | None |
| Esquivel | Manuel | Enel Trading North America, LLC | Other Supplier |
| Esterly | Theresa | PJM Interconnection | None |
| Fabiano | Janell | PJM Interconnection | None |
| Fernandez | Ray | PJM Interconnection | None |
| Filomena | Guy | Customized Energy Solutions, Ltd. | None |
| Greening | Michele | PJM Interconnection | None |
| Hohenshilt | Jennifer | Talen Energy Marketing, LLC | Generation Owner |
| Horger | Tim | PJM Interconnection | None |
| Kirk | Steven | NextEra Energy Marketing, LLC | Other Supplier |
| Kogut | George | New York Power Authority | Other Supplier |
| Lai | Erin | PJM Interconnection | None |
| LeithYessian | Devin | RTOinsider | None |
| Mabry | David | McNees Wallace \& Nurick LLC | None |
| Mason | Gary | Monongahela Power Company d/b/a Allegheny Power | Transmission Owner |
| Reiter | Heather | PJM Interconnection | None |
| Scarp | David | Calpine Energy Services, L.P. | Generation Owner |
| Scarpignato | Dominic | Scarp Industries | None |
| Sims | Mark | PJM Interconnection | None |
| Stadelmeyer | Rebecca | Jersey Green Energy LLC | Other Supplier |
| Stern | Alexander | Exelon Business Services Company, LLC | Transmission Owner |
| Sweeney | Rory | Power Prose, Inc. | None |
|  |  |  |  |


| Webex |  |  | Sector |
| :--- | :--- | :--- | :--- |
| Last Name | First Name | Company | None |
| Afelumo | Foluso | PJM Interconnection | None |
| Anders | David | PJM Interconnection | Generation Owner |
| Anderson | Juliet | Constellation Energy Generation, LLC | Other Supplier |
| Asplund | Russell | Northstar Trading Ltd. | Electric Distributor |
| Baer | Madelyn | Buckeye Power, Inc. |  |

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## Minutes



| Belenky | Maria | PJM Interconnection | None |
| :---: | :---: | :---: | :---: |
| Benchek | James | American Transmission Systems, Inc. | Transmission Owner |
| Berg | William | Constellation Energy Generation, LLC | Generation Owner |
| Berthiaume | Scott | Rockland Electric Company | Transmission Owner |
| Bleiweis | Bruce | DC Energy, LLC | Other Supplier |
| Bowring | Joe | Monitoring Analytics | None |
| Boyle | Glen | PJM Interconnection | None |
| Cabezas | Angela | PJM Connect | None |
| Cao | Roger | PJM Interconnection | None |
| Carmean | Gregory | Organization of PJM States, Inc. | None |
| Carrier | Ronald | Big Lake Consulting Group, LLC | None |
| Carroll | Rebecca | PJM Interconnection | None |
| Carson | Donna | East Kentucky Power Cooperative, Inc. | Transmission Owner |
| Caven | Augustine | PJM Interconnection | None |
| Chmielewski | Brian | PJM Interconnection | None |
| Christopher | Mahila | Public Utilities Commission of Ohio | None |
| Cocco | Michael | Old Dominion Electric Cooperative | Electric Distributor |
| Concina | Wendell | Commonwealth Edison Company | Transmission Owner |
| Corash | Richard | PSEG Energy Resources and Trade LLC | Other Supplier |
| Cosby | Sarah | Dominion Virginia Power | Transmission Owner |
| Coyne | Suzanne | PJM Interconnection | None |
| Croop | Danielle | PJM Interconnection | None |
| Dantonio | Phil | PJM Interconnection | None |
| Davis | David | Apex Clean Energy Holdings, LLC | None |
| Davis | James | Dominion Energy Generation Marketing, Inc. | Generation Owner |
| DeVita | Thomas | PJM Interconnection | None |
| Dierksheide | Andrew | Interstate Gas Supply, LLC | Other Supplier |
| Dillon | Matthew | UGI Development Company | Generation Owner |
| Domian | Christin | Duquesne Light Company | Transmission Owner |
| Douglass | Robert | Constellation Energy Generation, LLC | Generation Owner |
| Dowd | Nate | Burns and McDonnell | None |
| Drom | Rick | Rick Drom | None |
| Dropkin | Ilyana | PJM Interconnection | None |
| Dugan | Chuck | East Kentucky Power Cooperative, Inc. | Transmission Owner |
| Ejebe | Gabriel | Open Access Technology International, Inc. | None |
| Esquivel | Manuel | Enel Trading North America, LLC | Other Supplier |
| Everngam | Scott | Blue Horseshoe Energy LLC | None |
| Fabiano | Janell | PJM Interconnection | None |
| fan | zhenyu | PJM Interconnection | None |
| Filomena | Guy | Customized Energy Solutions, Ltd. | None |
| Fink | Regan | Pine Gate Mid-Atlantic, LLC | Generation Owner |
| Fink | Sari | American Clean Power | None |
| Fitzpatrick | Brian | PJM Interconnection | None |
| Foladare | Kenneth | Geenex Solar LLC | Other Supplier |
| Franks | Christine | PJM Interconnection | None |
| Frogg | Darrell | PJM Interconnection | None |
| Fuess | Christian | Diamond State Generation Partners, LLC | Generation Owner |
| Fuller | Peter | Autumn Lane Energy Consulting LLC | None |
| Fultz | McClain | PPL Electric Utilities Corp. dba PPL Utilities (LSE) | Transmission Owner |
| Gaddes | Caleb | Lightsource Renewably Energy Development, LLC | Other Supplier |
| Gates | Terry | Appalachian Power Company (AEP Generation) | Transmission Owner |
| Gilani | Rehan | Cosolidated Edison Company of New York, Inc. | Other Supplier |
| Gordon | Jon | Advanced Energy United | None |
| Gorman | Bradley | American Transmission Systems, Inc. | Transmission Owner |
| Grabow | Bruce | Locke Lord LLP | None |
| Greening | Michele | PJM Interconnection | None |
| handlin | mike | PJM Interconnection | None |
| Hartung | Shanna | PJM Interconnection | None |
| Hastings | David | PJM Committee Voting Generic Account | Other Supplier |
| Hauske | Thomas | PJM Interconnection | None |
| Hauske | David | PJM Interconnection | None |
| Herel | Suzanne | PJM Interconnection | None |

Minutes


| Hoatson | Tom | West Deptford Energy, LLC | Generation Owner |
| :---: | :---: | :---: | :---: |
| Hoey | Edward | PJM Interconnection | None |
| Hohenshilt | Jennifer | Talen Energy Marketing, LLC | Generation Owner |
| Holdbrook | Ruth | Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Holland | Risa | PJM Interconnection | None |
| Holter | Natasha | PJM Interconnection | None |
| Horigan | Walter | Tangibl Group, Inc. | None |
| Horning | Lynn Marie | American Municipal Power, Inc. | Electric Distributor |
| Horstmann | John | Dayton Power \& Light Company (The) | Transmission Owner |
| Hounshell | Jacob | Buckeye Power, Inc. | Electric Distributor |
| Hsia | Eric | PJM Interconnection | None |
| Hudis | Gabriella | Jersey Green Energy LLC | Other Supplier |
| Hurwich | Mark | Elliott Bay Energy Trading, LLC | Other Supplier |
| Hyatt | Earl | Monitoring Analytics | None |
| Hyzinski | Thomas | GT Power Group | None |
| Janicki | Diane | Boston Energy Trading and Marketing LLC | Other Supplier |
| Jardot | Gina | NRG Curtailment Solutions, Inc. | Other Supplier |
| Johnson | Carl | Customized Energy Solutions, Ltd. | None |
| Jones | Scott | Indiana Office of Utility Cusumer Sounselor | None |
| Kalaskar | Rahul | AES Laurel Mountain, LLC | Generation Owner |
| Kelly | Stephen | Brookfield Renewable Trading and Marketing LP (BSMH) | Other Supplier |
| Kent | Janessa | Duquesne Light Company | Transmission Owner |
| Keshavamurthy | Bhavana | PJM Interconnection | None |
| Kim | Caleb | Dayton Power \& Light Company (The) | Transmission Owner |
| Kim | Sung | PJM Interconnection | None |
| Kimmel | David | PJM Interconnection | None |
| Laios | Takis | Appalachian Power Company (AEP Transmission) | Transmission Owner |
| LaVista | William | RWE Clean Energy, LLC | Generation Owner |
| Lawton | Alex | Advanced Energy United | None |
| Lee | Ray | PJM Interconnection | None |
| Lee | Aristotle | Grays Ferry Cogeneration Partnership | Generation Owner |
| Leith-Yessian | Devin | RTO Insider | None |
| Lejcar | Jamie | Allegheny Electric Cooperative, Inc. | Electric Distributor |
| Liang-Nicol | Cecilia | Allegheny Power (MonPwr Gen) | Generation Owner |
| Lockwood | Daniel | PJM Interconnection | None |
| Lucia | Seth | Constellation Energy Generation, LLC | Generation Owner |
| Mali | Gizella | PJM Interconnection | None |
| Martin | Amanda | PJM Interconnection | None |
| Marzewski | Skyler | PJM Interconnection | None |
| Mason | Gary | Monongahela Power Company d/b/a Allegheny Power | Transmission Owner |
| Matheson | Douglas | SYSO Inc. | Other Supplier |
| Matuszak | Alex | UGI Energy Services, LLC | Other Supplier |
| McClelland | Maura | Public Utilities Commission of Ohio | None |
| McDewell | Christian | Pennsylvania Public Utility Commission | None |
| McLaverty | Megan | PJM Interconnection | None |
| McNicholas | Daniel | Nautilus Power, LLC | Generation Owner |
| Mekala | Karthik | RWE Clean Energy, LLC | Generation Owner |
| Messina | Emmy | PJM Interconnection | None |
| Midgley | Sharon | Exelon Business Services Company, LLC | Transmission Owner |
| Mohler | Tina | PJM Interconnection | None |
| Morelli | Lisa | PJM Interconnection | None |
| Moye | Robert | Commonwealth Chesapeake Company, LLC | Generation Owner |
| Mucher | Andrea | Delaware Division of the Public Advocate | None |
| Murugan | Arjunkumar | EEPLUS | None |
| Nix | Emma | Leeward Asset Management, LLC | Generation Owner |
| ODonnell | Colleen | PUCO | None |
| OHara | Bernard | Sargemt and Lundy | None |
| Olaleye | Michael | PJM Interconnection | None |
| Ondayko | Brock | AEP Energy Partners, Inc. (AEP Gen Resources) | Transmission Owner |
| Osborn | Eric | EDF Trading North America, LLC | Other Supplier |
| Pakela | Greg | DTE Energy Trading, Inc. | Other Supplier |
| Parrot | Sarah | Public Utilities Commission of Ohio | None |

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| Patel | Anita | PJM Interconnection | None |
| :---: | :---: | :---: | :---: |
| patel | keyurbhai | PJM Interconnection | None |
| Peoples | John | Duquesne Light Company | Transmission Owner |
| Pfeiff | Mike | OATI, Inc | None |
| Phillips | Amanda | Wabash Valley Power Association, Inc. | Electric Distributor |
| Pilong | Christopher | PJM Interconnection | None |
| Pilong | Melissa | PJM Interconnection | None |
| Poulos | Greg | PJM Committee Voting Generic Account | None |
| Procuniar | Jason | Buckeye Power, Inc. | Electric Distributor |
| Rasmussen | Jay | Duke Energy Business Services LLC | Transmission Owner |
| Richards | Wade | Apex Clean Energy Holdings, LLC | None |
| Rumsey | Amanda | PPL Electric Utilities Corp. dba PPL Utilities (TO) | Transmission Owner |
| Sasser | Jonathan | Customized Energy Solutions, Ltd. | None |
| Schmatz | Peter | PSEG Energy Resources and Trade LLC | Other Supplier |
| Schreim | Morris | Maryland Public Service Commission | None |
| Schuyler | Ken | PJM Interconnection | None |
| Scott | Nicole | PJM Interconnection | None |
| Seibel | August | IMG Midstream LLC | Generation Owner |
| Selick | Sam | Customized Energy Solutions, Ltd. | None |
| Shanker | Roy | East Coast Power Linden Holding, L.L.C. | Generation Owner |
| shegarfi | roozbeh | Constellation Energy Generation, LLC (NEV_XLON) | Generation Owner |
| Sillin | John | FERC | None |
| Skucas | Ruta | PJM Committee Voting Generic Account | None |
| Sloan | Ben | Organization of PJM States, Inc. | None |
| Smith | Kara | Ohio Edison Company | Electric Distributor |
| Sorrels | James | AEP Appalachian Transmission Company, Inc. | Transmission Owner |
| Souder | Michelle | PJM Interconnection | None |
| Sparks | Bridget | sPower Development Company, LLC | Generation Owner |
| Sprinkle | Dan | Louisville Gas and Electric Company/Kentucky Utilities Company | Transmission Owner |
| Stadelmeyer | Rebecca | Jersey Green Energy LLC | Other Supplier |
| Stefanowicz | Vincent | PJM Interconnection | None |
| Stemetzki | Michael | PJM Interconnection | None |
| Stern | Alexander | Exelon Business Services Company, LLC | Transmission Owner |
| Stone | Andy | Andy Stone | None |
| Strella Wahba | Lauren | PJM Interconnection | None |
| Strom | Ryan | Buckeye Power, Inc. | Electric Distributor |
| Sturgeon | John | Duke Energy Business Services LLC | Transmission Owner |
| Swalwell | Brad | Tangent Energy Solutions, Inc. | Other Supplier |
| Sweeney | Rory | Power Prose, Inc. | None |
| Theodore | Sharon | Electric Power Supply Association | None |
| Tubridy | Meg | Rockland Electric Company | Transmission Owner |
| Ushijima | Hiroaki | J-Power | Generation Owner |
| VanBlargan | Bryna | Sabinsville SunPower, LLC | None |
| Vinnik | Daniel | PJM Interconnection | None |
| Walcavich | Colin | Green River Holdings, LLC | Generation Owner |
| Wehnes | Kathleen | retired | None |
| Whitehead | Jeffrey | GT Power Group | None |
| Wilkinson | Eric | Orsted | None |
| Wilson | James | Wilson Energy Economics | None |
| Wylie-Chambers | Ericka | Exelon Business Services Company, LLC | Transmission Owner |
| Xu | Xu | PJM Interconnection | None |
| Yovanovich | Laura | PPL Electric Utilities Corp. dba PPL Utilities (TO) | Transmission Owner |
| Zhang | Mike | PJM Interconnection | None |

## Antitrust:

You may not discuss any topics that violate, or that might appear to violate, the antitrust laws including but not limited to agreements between or among competitors regarding prices, bid and offer practices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that might unreasonably restrain competition. If any of these items are discussed the chair will re-direct the conversation. If the conversation still persists, parties will be asked to leave the meeting or the meeting will be adjourned.

Code of Conduct:

Minutes

As a mandatory condition of attendance at today's meeting, attendees agree to adhere to the PJM Code of Conduct as detailed in PJM Manual M-34 section 4.5 , including, but not limited to, participants' responsibilities and rules regarding the dissemination of meeting discussion and materials.

## Public Meetings/Media Participation:

Unless otherwise noted, PJM stakeholder meetings are open to the public and to members of the media. Members of the media are asked to announce their attendance at all PJM stakeholder meetings at the beginning of the meeting or at the point they join a meeting already in progress. Members of the Media are reminded that speakers at PJM meetings cannot be quoted without explicit permission from the speaker. PJM Members are reminded that "detailed transcriptional meeting notes" and white board notes from "brainstorming sessions" shall not be disseminated. Stakeholders are also not allowed to create audio, video or online recordings of PJM meetings. PJM may create audio, video or online recordings of stakeholder meetings for internal and training purposes, and your participation at such meetings indicates your consent to the same.

Participant Identification in Webex:
When logging into the Webex desktop client, please enter your real first and last name as well as a valid email address. Be sure to select the "call me" option. PJM support staff continuously monitors Webex connections during stakeholder meetings. Anonymous users or those using false usernames or emails will be dropped from the teleconference.

## Participant Use of Webex Chat:

The use of the Webex chat feature during meetings shall be primarily reserved for administrative and logistical purposes, such as managing a question or comment queue, noting technical difficulties, and meeting support or management purposes. Utilizing Webex chat for any other commentary should be limited to short phrases. Detailed commentary or substantive dialog shall be shared orally by entering the speaker queue.

