



Market Implementation Committee (MIC) WebEx Only April 7, 2021 9:00 a.m. – 2:30 p.m. EPT

#### Administration

Nick 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 March 10, 2021 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Nick DiSciullo provided an update on the MIC Work Plan, which included pending issue charges.

Dave Anders provided an update on the voting protocols for Board elections at the May Members Committee meeting.

#### First Readings

#### 2. Reactive Supply and Voltage Control Compensation

- a) Jim Davis, Dominion Energy, provided a second first read of the Problem Statement and Issue Charge addressing Compensation for Reactive Supply and Voltage Control service.
- b) Joe Bowring, IMM, provided a first read of an alternate Problem Statement and Issue Charge addressing Compensation for Reactive Supply and Voltage Control service.

The committee will be asked to vote on the Dominion Energy and IMM Issue Charges at its next meeting.

#### 3. Manual 11, Manual 18 and Manual 28: Fast-Start Pricing Changes

Nicole Militello and Rebecca Stadelmeyer provided a first read of updates to Manual 11: Energy & Ancillary Services Market Operations, Manual 18: PJM Capacity Market and Manual 28: Operating Agreement Accounting. The committee will be asked to endorse these revisions at its next meeting.

#### 4. Regulation for Virtual Combined Cycles

Becky Robinson, Vistra, provided a first read of the Problem Statement and Issue Charge addressing Regulation for Virtual Combined Cycles. The committee will be asked to approve the issue charge at its next meeting.

#### Working Items

#### 5. RPM Capacity Transfer Rights

a) Jeff Bastian provided education on the status quo approach to the determination and allocation of CTRs.





- b) Kevin Zemanek, Buckeye Power, provided education on the RPM Capacity Transfer Rights Issue Charge.
- c) Joe Bowring, IMM, provided education on RPM Capacity Transfer Rights.

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: Capacity Transfer Rights in RPM

#### 6. Market Suspension

- a) Stefan Starkov provided an update on the Market Suspension scenario table and an overview of PJM's proposed solution options.
- b) Lisa Morelli facilitated a discussion on proposed solution options and began the process of developing packages on the Market Suspension matrix as part of the Consensus Based Issue Resolution (CBIR) process. The PJM package was presented and David Hicks, Perast Fund LP, proposed an alternate package.

Issue Tracking: Rules Related to Market Suspension

#### **Additional Items**

#### 7. Real Time Value (RTV) Markets Gateway Process Update

Tong Zhao provided a review of the recent change to the RTV submittal process in Markets Gateway following the change to the RTV market rules.

#### 8. Synchronized Reserve Event Actions and Expectations

Michael Zhang provided an update on the newly formed Synchronized Reserve Deployment Task Force (SRDTF).

#### 9. Markets Certification Exam Update Survey

Troy Cawley provided details on the Markets Certification Exam Update Survey.

#### 10. nGEM Project Update

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

#### 11. Emerging Technologies Survey

Scott Baker provided an informational announcement about a forthcoming stakeholder survey related to emerging technologies.

#### 12. Freeze Date FERC Filing

Joe Rushing provided an update on the Freeze Date, FFE Solution FERC filing.

#### 13. Posting Timeline Trial

Michele Greening reviewed information related to a proposed posting timeline trial period.





#### 14. Market Seller Offer Cap

Adam Keech discussed next steps regarding the March 18, 2021 FERC Order on the Market Seller Offer Cap complaints.

#### **Informational Section**

#### **Interregional Coordination Update**

Materials are posted as informational only.

#### **IROL-CIP Cost Recovery**

Darrell Frogg will be providing a second read on Interconnection Reliability Operating Limits-Critical Infrastructure Protection (IROL-CIP) Cost Recovery at the Operating Committee tomorrow. Problem Statement and Issue Charge will be up for endorsement then.

#### 2021/2022 Operating Reserve Demand Curves - Effective 5/1/2022 to 5/31/2022

Materials are posted as informational only.

#### **Shortage Pricing – Price Formation Explanation**

Materials are posted as informational only.

#### Effective Load Carrying Capability (ELCC): Conforming Manual Language Changes

Materials are posted as informational only.

#### Manual 03 Updates

Updates to PJM Manual 03, Revision 59 – Transmission Operations are posted as informational only with meeting materials.

#### PJM Manual 03 Attachment E Automatic Sectionalizing Schemes

The PJM Manual 03 Attachment E Automatic Sectionalizing Schemes Pending Approval and Recent Changes document has been posted as an Information Only item to the April meeting website.

#### 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**

May 13, 2021 June 9, 2021 July 14, 2021 August 11, 2021 September 9, 2021 October 6, 2021 November 3, 2021	9:00 a.m. 9:00 a.m. 9:00 a.m. 9:00 a.m. 9:00 a.m. 9:00 a.m.	WebEx WebEx TBD TBD TBD TBD TBD TBD
December 1, 2021	9:00 a.m.	TBD

Author: Nick DiSciullo

#### WebEx Meeting Attendees

Names	Company Name	Sector
Morelli, Lisa (Chair)	PJM Interconnection, LLC	Not Applicable
DiSciullo, Nicholas (Secretary)	PJM Interconnection, LLC	Not Applicable
Aguilar, Fabiano Silveira	Strom Power, LLC	Other Supplier
Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Anders, David	PJM Interconnection, LLC	Not Applicable
Anderson, Bob	Tenaska Power Services Co.	Generation Owner
Baizman, Aaron	PJM Interconnection, LLC	Not Applicable
Baker, Laura	Stone, Mattheis, Xenopoulos & Brew, PC	Not Applicable
Baker, Scott	PJM Interconnection, LLC	Not Applicable
Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Bastian, Jeff	PJM Interconnection, LLC	Not Applicable
Beban, Madalyn	PJM Interconnection, LLC	Not Applicable
Benchek, Jim	American Transmission Systems, Inc.	Transmission Owner
Berend, Seth	Calpine Energy Services, L.P.	Generation Owner
Binder, Gerry	SESCO Enterprises LLC	Other Supplier
Bleiweis, Bruce	DC Energy LLC	Other Supplier
Bowen, Brandon	Indiana Untility Regulatory Commission	Not Applicable
Bowring, Joseph	Monitoring Analytics, LLC	Not Applicable
Boyle, Glen	PJM Interconnection, LLC	Not Applicable
Breidenbaugh, Aaron	Rodan Energy Solutions (USA) Inc.	Other Supplier
Bresler, Stu	PJM Interconnection, LLC	Not Applicable
Brodbeck, John	EDP Renewables North America, LLC	Generation Owner
Bruno, Patrick	PJM Interconnection, LLC	Not Applicable
Bryson, Michael (Mike)	PJM Interconnection, LLC	Not Applicable
Canter, David	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Cao, Roger	PJM Interconnection, LLC	Not Applicable
Carmean, Gregory	OPSI	Not Applicable
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable
Cassity, Jon	Archer Contingent Energy Risk LLC	Not Applicable





Caven, Augustine
Cawley, Troy
Chang, Sean
Chen, Hong
Chmielewski, Brian
Chu, George
Ciabattoni, Joseph
Cocco, Michael
Coyle, Billy
Coyne, Suzanne
Croop, Danielle
Crystle, Gil
D'Alessandris, Lou
D'antonio, Phil
Davis, Elizabeth (Beck

Davis, Elizabeth (Becky)
Davis, James (Jim)
Davis, Mike
DeLosa, Joseph
Depillo, Raymond
DeVita, Thomas
Di Iorio, Michelle
Dillon, Matthew
DiNicola, Laura
Dolan, James
Domian, Christin

Downs, Jere Drivas, Cristina Drom, Richard Dropkin, Ilyana Dugan, Chuck Egan, Amanda Elkins, Rachel Everngam, Scott

Fabiano, Janell

Fan, Zhenyu Fernandez, Ray Filomena, Guy Fitch, Neal Fitzpatrick, Brian Foladare, Kenneth

Ford, Adrien Frogg, Darrell Fuess, Christian Gahimer, Michael Gates, Terry Gebolys, Debbie

Genuario, Gabrielle Gibbons, Jaret Gilani, Rehan Gluck, Jim PJM Interconnection, LLC PJM Interconnection, LLC

Shell Energy North America (US), L.P.

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Old Dominion Electric Cooperative
Dominion Virginia Power
PJM Interconnection, LLC

UGI Development Company FirstEnergy Corporation PJM Interconnection, LLC PJM Interconnection, LLC

PJM Interconnection, LLC

Dominion Energy Generation Marketing, Inc. Northern Virginia Electric Cooperative DE Public Service Commission PSEG Energy Resources & Trade LLC

PJM Interconnection, LLC

PSEG Energy Resources & Trade LLC

UGI Development Company FirstEnergy Corporation PJM Interconnection, LLC Duquesne Light Company PJM Interconnection, LLC Whitetail Solar 1, LLC Eckert Seamans PJM Interconnection, LLC

East Kentucky Power Cooperative, Inc.

PJM Interconnection, LLC FirstEnergy Corporation

The Federal Energy Regulatory Commission

PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC
Customized Energy Solutions, Ltd.\*
NRG Power Marketing LLC
PJM Interconnection, LLC

Tangibl LLC

Old Dominion Electric Cooperative
PJM Interconnection, LLC
PBF Power Marketing, LLC

IN Office of Utility Consumer Counselor AEP Appalachian Transmission Company, Inc. Public Utilities Commission of Ohio (The)

PJM Interconnection, LLC

ARIPPA

ConEdison Energy, Inc.
PJM Interconnection, LLC

Not Applicable Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable Not Applicable Electric Distributor Not Applicable Not Applicable Not Applicable Generation Owner Transmission Owner Not Applicable Not Applicable Generation Owner Electric Distributor Not Applicable

Other Supplier
Not Applicable
Other Supplier
Generation Owner
Transmission Owner
Not Applicable
Transmission Owner
Not Applicable
Generation Owner
Not Applicable

Not Applicable

Transmission Owner Not Applicable Transmission Owner Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Generation Owner Not Applicable

Not Applicable
Not Applicable
Electric Distributor
Not Applicable
Generation Owner
End-Use Customer
Transmission Owner
Not Applicable
Not Applicable
Not Applicable
Other Supplier
Not Applicable





Graham, Sophie Grant, Melanie Greening, Michele Greiner, Gary Grooms, Craig Guntle. Vince Haas, Howard Hanser, Erik Harris, Makenna Hastings, David Hauske, Thomas Heinle, Frederick Heisey, Bradley Herel, Suzanne Hicks, Dave Hoatson, Tom Hohenshilt, Jennifer

Horger, Tim
Horning, Lynn Marie
Horstmann, John
Hsia, Eric
Hudis, Gabriella
Hull, Gerit
Hyzinski, Tom
Iler, Arthur (Art)
Janicki, Diane
Jardot, Gina
Jett, Jason

Holdbrook, Ruth

Jewel, Kelsi
Jha, Monica
Johnson, Carl
Johnston, David
Kauffman, Brian
Keech, Adam
Keegan, John (Jack)
Kelly, Stephen
Kenney, Susan
Kilgallen, Kevin
Kimmel, David
Kogut, George
Kozhuharov, Dimitar
LaRocque, Matthew

Larry, Steven
Lejcar, Jamie
Li, Kanning
Libbos, Robin
Lieberman, Steven
Lin, Jeremy
Litchfield, Matthew

Adapt2 Solutions Allegheny Power PJM Interconnection, LLC

PSEG Energy Resources & Trade LLC

Buckeye Power, Inc.

American PowerNet Management Monitoring Analytics, LLC

Michigan Public Service Commission

Adapt2 Solutions

Market Interconnection Consulting Services (MICS)

PJM Interconnection, LLC

Office of the Peoples Counsel for the District of Columbia

Wolf Hills Energy, LLC PJM Interconnection, LLC

Perast Fund LP

Riverside Generating, LLC Talen Energy Marketing, LLC Northern Virginia Electric Cooperative

PJM Interconnection, LLC

Customized Energy Solutions, Ltd.\*

Dayton Power & Light Company (The)

PJM Interconnection, LLC Jersey Green Energy LLC Jennings, Strouss & Salmon, P.L.C.

GT Power Group Indiana Office of Utility Consumer Counsel

Boston Energy Trading & Marketing, LLC Essential Power Rock Springs, LLC

BYHM Capital LLC Dominion Virginia Power

PCI

Customized Energy Solutions, Ltd.\*
Indiana Utility Regulatory Commission

Enel X North America, Inc.
PJM Interconnection, LLC
PJM Interconnection, LLC
Brookfield Energy Marketing LP
PJM Interconnection, LLC
Avangrid Renewables LLC
PJM Interconnection, LLC
New York Power Authority

PJM Interconnection. LLC

Delaware Municipal Electric Corporation, Inc.

Tenaska Power Services Co.
Allegheny Electric Cooperative, Inc.
PJM Interconnection, LLC
FirstEnergy Corporation
American Municipal Power, Inc.
PJM Interconnection, LLC
CPV Shore, LLC

None

Not Applicable Not Applicable Other Supplier Electric Distributor End-Use Customer Not Applicable Not Applicable

None
Not Applicable
Not Applicable
End-Use Customer
Generation Owner
Not Applicable
Other Supplier
Generation Owner
Generation Owner
Electric Distributor
Not Applicable
Not Applicable
Transmission Owner
Not Applicable
Other Supplier

Not Applicable
End-Use Customer
Other Supplier
Generation Owner
Not Applicable
Not Applicable
Not Applicable
Not Applicable
Other Supplier
Not Applicable
Not Applicable
Other Supplier
Not Applicable
Other Supplier
Not Applicable
Other Supplier
Not Applicable

Generation Owner

Not Applicable

Other Supplier

Not Applicable

Electric Distributor
Not Applicable
Generation Owner
Electric Distributor
Not Applicable
Transmission Owner
Electric Distributor
Not Applicable
Generation Owner





Long, Glenn Lowenthal-Savy, Danielle

Lu, Chenchao Mabry, David Marcino, Angelo Mariam. Yohannes Martin, Valerie

Matuszak, Alex

McGlynn, Paul McLaverty, Megan Mendelsohn, Mark Midgley, Sharon Militello, Nicole Mok. Alan

Mooney, Jeff Murphy, Shaun Nix, Emma Okenfuss, James

Olaleye, Michael Olinger, Robert Ondayko, Brock

Pakela, Greg Parker, Amanda Patel, Anjali Patel, Keyur

Pawar, Aasawari Pelletier, Eveline Perera, Asanga

Phillips, Darlene Pizzutelli, Ashley

Poulos, Greg Pradhan, Salil

Pratt, Nicholas

Price, Ruth

Procuniar, Jason Purdie, Michael

Rahimi, Farrokh Reams, Will Redwine, Arlo Robinson, Becky

Robinson, Evelyn Rodriguez, Tomas Rohrbach, John Rooney, Alexa

Ruck, Andrew Rushing, Joseph Sasser, Jonathan Scarpignato, David Schisler, Ken Schum, Alice

PJM Interconnection, LLC

Monitoring Analytics, LLC PJM Interconnection, LLC McNees Wallace & Nurick LLC

PJM Interconnection, LLC

Office of the Peoples Counsel for the District of Columbia

The Federal Energy Regulatory Commission

UGI Energy Services, LLC PJM Interconnection, LLC PJM Interconnection, LLC

Noble Americas Gas & Power Corp. Exelon Business Services Company, LLC

PJM Interconnection, LLC Duke Energy Kentucky, Inc. FirstEnergy Corporation PJM Interconnection, LLC Gable and Associates Savion, LLC

PJM Interconnection, LLC Keystone Projects

AEP Appalachian Transmission Company, Inc.

DTE Energy Trading, Inc. Pennsylvania Electric Company

Office of the Peoples Counsel for the District of Columbia

PJM Interconnection, LLC

First Solar, Inc. Hydro-Quebec

PJM Interconnection, LLC PJM Interconnection, LLC

Monongahela Power Company d/b/a Allegheny Power

CAPS

Whitetail Solar 1. LLC

PPL Electric Utilities Corp. dba PPL Utilities

Division of the Public Advocate of the State of Delaware

Dayton Power & Light Company (The)

Dominion Virginia Power

Open Access Technology International, Inc. Allegheny Electric Cooperative, Inc. The Federal Energy Regulatory Commission

Vista Energy Marketing, L.P.

PJM Interconnection, LLC

**OPSI** 

Southern Maryland Electric Cooperative, Inc. PPL Electric Utilities Corp. dba PPL Utilities PSEG Energy Resources & Trade LLC

PJM Interconnection, LLC Customized Energy Solutions, Ltd.\* Calpine Energy Services, L.P. Enel X North America, Inc. Illinois Municipal Electric Agency

Not Applicable

Not Applicable Not Applicable Not Applicable

Not Applicable **End-Use Customer** 

Not Applicable Other Supplier Not Applicable Not Applicable Not Applicable

Transmission Owner Not Applicable Transmission Owner Transmission Owner Not Applicable Not Applicable

None

Not Applicable Not Applicable Transmission Owner

Other Supplier Electric Distributor End-Use Customer Not Applicable Not Applicable Not Applicable

Not Applicable Not Applicable Transmission Owner Not Applicable Generation Owner Transmission Owner **End-Use Customer** Transmission Owner Not Applicable

Not Applicable Electric Distributor Not Applicable Other Supplier Not Applicable Not Applicable Electric Distributor Transmission Owner Other Supplier Not Applicable Not Applicable Generation Owner

Other Supplier

Electric Distributor





Schuyler, Ken Schweizer, David Shanker, Roy

Skumanich, William (Bill)

Smith, Kara Sorrels, James Sotkiewicz, Paul Souder, Michelle Stadelmeyer, Rebecca Starkov, Stefan

Stern, Alexander (Alex)

Stewart, Travis Stone, Andy Strom, Ryan Stupar, Rob Sun, Haibin Svenson, Heather Swalwell, Brad Sweeney, Rory

Thorsen, Michael Tibbetts, Maeve Tribulski, Jennifer Tyler, Catherine Ward, James

Terranova, Chris

Watkins, Erik Wehnes, Kathleen Whitehead, Jeffrey Widom, Stuart Wisersky, Megan

Wray, Gizelle Yoder, Michael Zemanek, Kevin Zhang, Michael (Mike)

Zhao, Tong

PJM Interconnection, LLC PJM Interconnection, LLC H.Q. Energy Services (U.S.), Inc.

RTR Energy Solutions Buckeye Power, Inc.

AEP Appalachian Transmission Company, Inc

E-Cubed Policy Associates PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC

Public Service Electric & Gas Company

Gable and Associates PJM Interconnection, LLC Buckeye Power, Inc. Invenergy, LLC

Constellation Energy Services, Inc. Public Service Electric & Gas Company

Tangent Energy Solutions, Inc.

GT Power Group
PJM Interconnection, LLC
Buckeye Power, Inc.
Pierce Atwood

PJM Interconnection, LLC Monitoring Analytics, LLC

Other

PJM Interconnection, LLC

Maryland Public Service Commission

GT Power Group
PJM Interconnection, LLC
Madison Gas & Electric Company
Solar Energy Industries Association

RTO Insider
Buckeye Power, Inc.
PJM Interconnection, LLC
PJM Interconnection, LLC

Not Applicable
Not Applicable
Other Supplier
Not Applicable
Electric Distributor
Transmission Owner
Not Applicable

Not Applicable Not Applicable Not Applicable Transmission Owner Not Applicable Not Applicable

Electric Distributor
Generation Owner
Other Supplier
Transmission Owner
Other Supplier

Not Applicable
Not Applicable
Electric Distributor
Not Applicable
Other Supplier

Not Applicable
Not Applicable
Electric Distributor
Not Applicable
Not Applicable