



Market Implementation Committee
PJM Conference & Training Center, Audubon, PA
April 15, 2020
9:00 a.m. – 4:00 p.m. EPT

#### Administration

Ms. Bhavana Keshavamurthy reviewed the Antitrust, Code of Conduct, Public Meetings/Media Participation and the WebEx Participant Identification Requirements.

The Committee approved the draft minutes from the Mar. 11, 2020 Market Implementation Committee meeting with **0 objections and 0 abstentions**.

Ms. Melissa Pilong provided an announcement related to the information session scheduled for Apr.21 at the Tech Change Forum. The session will review the Operating Cost and Maintenance Adder (VOM) review process. The meeting is listed as the Tech Change Forum Special Session-Maintenance Adder & Operating Cost Submission Process on the PJM Calendar.

#### First Readings

#### 2. Manual 18 revisions related to Price Responsive Demand

Ms. Terri Esterly reviewed conforming revisions to Manual 18: PJM Capacity Market related to Price Responsive Demand. The committee will be asked to endorse the manual revisions at the May MIC meeting.

#### 3. PMA Credit Requirements for NITS Charges

Ms. Bridgid Cummings reviewed the Problem Statement and Issue Charge addressing the Peak Market Activity (PMA) credit requirements for Network Integration Transmission Service (NITS) charges.

The committee will be asked to approve the issue charge, which includes use of the Quick Fix process outlined in Section 8.6.1 of Manual 34 at the May MIC meeting.

## 4. Five Minute Dispatch and Pricing

Mr. Tim Horger provided an update on the Five Minute Dispatch and Pricing Issue Charge and impacts to the Fast-Start Pricing order. Mr. Joe Bowring from Monitoring Analytics detailed the IMM's position on the timelines for the implementation of the changes detailed in the proposals. Mr. Adam Keech provided additional background on PJM's position on the need for a short-term and intermediate-term timelines as detailed in the PJM proposal. Stakeholders provided feedback and requested that this issue return as a second read at the May MIC.

## Issue Tracking: Five Minute Dispatch and Pricing

## **Working Items**

#### 5. Stability Limits in Markets and Operations





Mr. Keyur Patel and Mr. Joe Ciabattoni provided an overview of the generator constraint concept and reviewed the PJM package. Stakeholders provided feedback on the proposal and requested PJM consider alternatives to the package including a combination of the thermal surrogate and generator constraints model.

Stakeholders are requested to provide additional proposals and feedback prior to the May MIC meeting.

Issue Tracking: Stability Limits in Markets and Operations

#### **Additional Items**

#### 6. ARR/FTR Market Task Force Update

Mr. Dave Anders provided an update on the current status and next steps for the ARR FTR Market Task Force.

#### 7. nGEM Project Update

Mr. Todd Keech provided an update on the nGEM project. As per stakeholder request, Mr. Keech will continue to provide periodic update on the nGEM project at the MIC.

#### 8. Performance Assessment Interval Report Update

Ms. Danielle Croop provided an informational update on the Performance Assessment Interval (PAI) settlements report.

#### 9. Regulation Market Settlement Agreement

Mr. Eric Hsia provided an overview of PJM's filing in Docket No. ER19-1651-001, in compliance with the Commission's directive in its March 26, 2020 order approving the April 23, 2019 Regulation Market Settlement Agreement.

#### **Informational Section**

#### **Tools Security Update**

The presentation provides an overview of the PKI based authentication PJM plans to implement for the OASIS/Exschedule tools. Materials are posted as informational only.

#### Manual 03 Changes

Materials provide an overview of changes made to Manual 3 as part of the periodic review. Materials are posted as informational only.

#### Manual 03 Attachment E Automatic Sectionalizing Schemes

This document is posted in accordance with requirements stated in Manual 3, Section 5. Materials are posted as informational only.

## **Interregional Coordination Update**

Materials are posted as informational only.





## **Credit Subcommittee (CS)**

Meeting materials will be posted to the <u>CS website</u>.

## **Demand Response Subcommittee (DRS)**

Meeting materials will be posted to the <u>DRS web site</u>.

### **Intermittent Resources Subcommittee (IRS)**

Meeting materials will be posted to the IRS web site.

### Market Settlements Subcommittee (MSS)

Meeting materials are posted to the MSS web site.

## **Report on Market Operations**

The Report on Market Operations will be reviewed during the MC Webinar.

## **Future Meeting Dates**

May 13, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
June 3, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
July 8, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
August 5, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
September 2, 2020	9:00 a.m.	PJM Conference & Training Center/ WebEx
Author: Bhavana Keshavamurthy		·

### Webex Meeting Attendees

Names	Company Name	Sector
Morelli, Lisa (Chair)	PJM Interconnection, LLC	Not Applicable
Keshavamurthy, Bhavana (Secretary)	PJM Interconnection, LLC	Not Applicable
Abdur-Rahman, Muhsin	ABB	Not Applicable
Abramowitz, Jeremy	FERC	Not Applicable
Anders, David	PJM Interconnection, LLC	Not Applicable
Baizman, Aaron	PJM Interconnection, LLC	Not Applicable
Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Benchek, Jim	American Transmission Systems, Inc.	Transmission Owner
Bernstein, Matthew	PJM Interconnection, LLC	Not Applicable
Bleiweis, Bruce	DC Energy LLC	Other Supplier
Boyle , Glen	PJM Interconnection, LLC	Not Applicable
Branch, John	NAES	Not Applicable
Bresler, Stu	PJM Interconnection, LLC	Not Applicable
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier
Bruno, Patrick	PJM Interconnection, LLC	Not Applicable
Budney,Dave	PJM Interconnection, LLC	Not Applicable
Callaghan, Chris	PJM Interconnection, LLC	Not Applicable
Campbell, Bruce	EnergyConnect, Inc.	Other Supplier
Canchi ,Devendra	Monitoring Analytics, LLC	Not Applicable
Canter, David	Appalachian Power Company	Transmission Owner
Carmean, Greg	OPSI	Not Applicable
Carrier, Ron	Direct Energy Business, LLC	Other Supplier
Carroll, Rebecca	PJM Interconnection, LLC	Not Applicable





Chang, Sean
Chen, Hong
Chmielewski, Brian
Christopher, Mahila
Chu, George
Ciabattoni, Joe
Cocco, Michael
Coyne, Suzanne
Croop, Danielle
Crystle, Gil
Cummings, Bridgid

D'Alessandris, Lou D'Antonio, Phil Dasher, Brett Dailey, Mike Davis, Elizabeth Davis, Jim DeLosa, Joe Denby,Brett DeVita, Thomas DePillo, Ray

Diiorio, Michelle Dillon, Matt DiNicola, Laura Dixon, Chad Dolan, Jim Dorko, Keri Duensing, Allison

Dugan, Chuck Egan, Amanda Ejebe,Gabriel

Ernst, Andrew Esterly, Theresa Everngam, Scott Fabiano, Janell Fan, Zhenyu Fazio, Danielle Fernandez, Ray Filomena, Guy

Fink, Sari Fitch, Neal Fitzpatrick, Brian Foldare, Kenneth

Ford, Adrien
Frogg, Darrell
Fuess, Christian
Gagen, Rod
Gates, Terry
Garnett, Bryan
Genuario,Gabrielle

Shell Energy North America (US), LP

PJM Interconnection, LLC
PJM Interconnection, LLC
Ohio Public Utility Commission
PJM Interconnection, LLC
PJM Interconnection, LLC
Old Dominion Electric Cooperative
PJM Interconnection, LLC
UGI Development Company
PJM Interconnection, LLC

FirstEnergy Solutions Corp. PJM Interconnection, LLC Energy Authority, Inc. (The)

Northern Virginia Electric Cooperative

PJM Interconnection, LLC

Dominion Energy

NJ Board of Public Utilities

Northern Virginia Electric Cooperative

PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC PSEG Energy Resources and Trade LLC

UGI Development Company FirstEnergy Solutions Corp. Customized Energy Solutions. Ltd PJM Interconnection, LLC Monitoring Analytics, LLC

East Kentucky Power Cooperative, Inc.

PJM Interconnection, LLC

OATI

Archer Energy

Saracen Energy

PJM Interconnection, LLC
Blue Horse Shoe Energy
PJM Interconnection, LLC
PJM Interconnection, LLC
Engelhart CTP (US) LLC
PJM Interconnection, LLC
Customized Energy Solutions, Ltd.

American Wind Energy Management Corporation

NRG Power Marketing LLC PJM Interconnection, LLC

Tangible

Old Dominion Electric Cooperative PJM Interconnection, LLC PBF Power Marketing

Dominion Energy Generation Marketing, Inc.

Appalachian Power Company

Duke Energy

PJM Interconnection, LLC

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Gilani, Rehan
Gorman, Kevin
Greening, Michele
Greiner, Gary
Guntle, Vince
Haque, Asim
Hanser, Erik
Hastings, David
Hauske, Thomas
Heidorn, Richard
Helms, Joe
Herel, Suzanne
Hoang, Liem

Hoang, Liem
Hoatson, Tom
Holdbrook, Ruth
Horning, Lynn Marie
Horstmann, John
Horton, Dana
Hsia, Eric
Huang, Jamie
Hudis, Gabriella
Hull, Gerit
Hurwich, Mark
Hyzinski, Tom

Janicki, Diane Jens, Tom Jett, William Jha, Monica Johnson, Carl Josyula, Siva Kazerooni, Hamid Keech, Adam

Keegan, Jack Keenan,Mathew Kelly, Stephen Kilgallen, Kevin Kogut, George Kozhuharov, Dimitar Kuo, David

LaRocque, Matthew
Leasure, Jill
Lejcar, Jamie
Liang-Nicol, Cecilia
Libbos, Robin
Lieberman, Steve
Lowe, Connie
Lu, Chenchao
Luna, Joel
Mabry, David

Marcino, Angelo

ConEdison Energy, Inc.

Highlands Energy Group LLC (The) PJM Interconnection, LLC

PSEG Energy Resources and Trade LLC

UGI Development Company PJM Interconnection, LLC

Michigan Public Service Commission

Market Interconnection LLC PJM Interconnection, LLC

RTO Insider

Rainbow Energy Marketing Corporation

PJM Interconnection, LLC PJM Interconnection, LLC

LS Power

Northern Virginia Electric Cooperative Customized Energy Solutions, Ltd.\* Dayton Power & Light Company (The) Appalachian Power Company PJM Interconnection, LLC ConEdison Energy, Inc. Jersey Green Energy LLC American Municipal Power, Inc.

GT Power Group

Boston Energy Trading & Marketing, LLC

Blackoak Capital

Duke Energy Business Services LLC

Elliott Bay Energy Trading, LLC

PCI

Customized Energy Solutions, Ltd.\*

Monitoring Analytics, LLC

Invenergy, LLC

PJM Interconnection, LLC

Just Energy Elwood Energy

Brookfield Energy Marketing LP Avangrid Renewables, LLC New York Power Authority

Delaware Municipal Electric Corporation, Inc.

DC Energy LLC

PJM Interconnection, LLC

Keystone-Conemaugh Projects, LLC Allegheny Electric Cooperative, Inc.

Monongahela Power Company d/b/a Allegheny Power

FirstEnergy Solutions Corp.

American Municipal Power, Inc.

Dominion Virginia Power

PJM Interconnection, LLC

Monitoring Analytics, LLC

McNees Wallace & Nurick LLC

PJM Interconnection, LLC

Other Supplier Other Supplier Not Applicable

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Markiewicz, Cindy
McDaniel, John
McGlynn, Paul
Meadors, Mandy
Messina, Emmy
Midgley, Sharon
Militello, Nicole
Monzon, Stephanie
Morelli, Lisa
Neubrander, Kerry

Nix, Emma
Olaleye, Michael
Ondayko, Brock
Pakela, Gregory
Patel, Keyurbhai
Pelletier, Eveline
Peoples, John
Philips, Darlene
Pilong, Chris
Pilong, Melissa
Poulos, Greg

Price, Ruth
Rajan , Abhijit
Rayhorn, Carolyn
Reeping, Bob
Robinson, Becky

Rohrbach, John

Sasser, Jonathan Scheidecker, Paul Schmitt, Jeff Schuyler, Ken Shah, Vijay Shanker, Roy Sillin, John Sotkiewicz, Paul

Sotkiewicz, Paul Squibb, Bill Sterling, John Stern,Alex Stone, Andy

Stone, Andy Sturgeon, John Swalwell, Brad Sweeney, Rory

Tangirala, Subha Thompson, Matthew Tibbetts, Maeve Toomey, Megan Tribulski, Jennifer Tyler, Catherine

VanAmburg, Cari

Wadsworth, Joseph

FirstEnergy Solutions Corp.

Baltimore Gas and Electric Company
PJM Interconnection, LLC

Duke Energy Ohio, Inc
PJM Interconnection, LLC

PJM Interconnection, LLC

Exelon Business Services Company, LLC PJM Interconnection, LLC

PJM Interconnection, LLC DC Energy Gable Associates PJM Interconnection, LLC Appalachain Power Company DTE Energy Trading, Inc. PJM Interconnection, LLC

Hydro-Quebec
Duquesne Light Company
PJM Interconnection, LLC
PJM Interconnection, LLC
PJM Interconnection, LLC

CAPS

Division of the Public Advocate of the State of Delaware

Dominion Resources Dominion Virginia Power Ohio Edison Company Vistra Energy

Vistra Energy
ACES Power

Customized Energy Solutions, Ltd.\*

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

The Federal Energy Regulatory Commission

E-Cubed Policy Associates LLC Ohio Valley Electric Corporation

First Solar, Inc

PSEG Energy Resources and Trade LLC

PJM Interconnection, LLC Duke Energy Carolinas, LLC

Tangent Energy GT Power Group ABB

XO Energy MA Pierce Atwood

Vitol Inc.

Talen Energy Marketing, LLC PJM Interconnection, LLC Monitoring Analytics, LLC Recurrent Energy Transmission Owner

Transmission Owner Not Applicable Transmission Owner Not Applicable

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Generation Owner
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Other Supplier
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Generation Owner





Walter, Laura Ward, Michael Warshel, Kim Whitehead, Jeffrey Yoder, Michael Zemanek, Kevin PJM Interconnection, LLC PJM Interconnection, LLC PJM Interconnection, LLC GT Power Group RTO Insider Buckeye Power, Inc. Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Electric Distributor