

# <u>Draft</u> <u>Minutes</u>

# PJM Interconnection

# Markets and Reliability Committee The Chase Center on the Riverfront, Wilmington, DE

<u>December 18, 2014</u> 9:00 a.m. – 3:00 p.m.

## **CHAIR/SECRETARY**

Kormos	Mike	PJM Interconnection, LLC	Not Applicable
Anders	David	PJM Interconnection, LLC	Not Applicable

# **VOTING PARTICIPANTS**

Last Name	First Name	Company	Sector
Benchek	Jim	FirstEnergy Solutions Corp.	Transmission Owner
Branch	John	SunCoke Energy, Inc.	Generation Owner
Brodbeck	John	Potomac Electric Power Company	Electric Distributor
Bruce	Susan	Rep.'g Air Liquide Industrial U.S., LP	End User Customer
Bruce	Susan	Rep.'g Air Products & Chemicals, Inc.	End User Customer
Bruce	Susan	Rep.'g Gerdau Ameristeel Energy, Inc.	Other Supplier
Bruce	Susan	Rep.'g Industrial Energy Users-Ohio	Other Supplier
Bruce	Susan	Rep.'g Kimberly-Clark Corporation	Generation Owner
Bruce	Susan	Rep.'g Lehigh Portland Cement Company	End User Customer
Bruce	Susan	Rep.'g Letterkenny Industrial Development Authority	Electric Distributor
Bruce	Susan	Rep.'g Linde LLC	End User Customer
Bruce	Susan	Rep.'g MeadWestvaco Corporation	End User Customer
Bruce	Susan	Rep.'g Praxair, Inc.	End User Customer
Bruce	Susan	Rep.'g Procter & Gamble Paper Products Company (The)	End User Customer
Bruce	Susan	Rep.'g Trustees of the U of PA, dba University of Pennsylvania	End User Customer
Bruce	Susan	Rep.'g Wellsboro Electric Company	Electric Distributor
Campbell	Bruce	Rep.'g EnergyConnect, Inc.	Other Supplier
Campbell	Bruce	Rep.'g Mid-Atlantic Power Partners	Other Supplier
Сох	Jason	Dynegy Marketing & Trade, LLC	Generation Owner
Czigler	Frank	Public Service Electric & Gas Company	Transmission Owner
Etnoyer	Scott	MEG Generating Company, LLC	Generation Owner
Fitch	Neal	NRG Power Marketing LLC	Generation Owner



Foladare	Kenneth	IMG Midstream LLC	Generation Owner
Fondacci	Luis	North Carolina Electric Membership Corporation	Electric Distributor
Fuess	Jay	Rep.'g Castlebridge Energy Group, LLC	Other Supplier
Fuess	Jay	Rep.'g Church Hill Solar Farm, LLC	Generation Owner
Fuess	Jay	Rep.'g Diamond State Generation Partners, LLC	Generation Owner
Fuess	Jay	Rep.'g Energy Consulting Services LLC	Other Supplier
Fuess	Jay	Rep.'g Icetec.com, Inc.	Other Supplier
Fuess	Jay	Rep.'g Kuehne Chemical Company, Inc.	Other Supplier
Fuess	Jay	Rep.'g PBF Power Marketing LLC	Generation Owner
Greening	Michele	PPL EnergyPlus, L.L.C.	Transmission Owner
Hastings	David	Rep.'g Mercuria Energy America, Inc.	Other Supplier
Hastings	David	Rep.'g Northstar Trading Ltd.	Other Supplier
Hastings	David	Rep.'g Saracen Energy East LP	Other Supplier
Hastings	David	Rep.'g SESCO Enterprises LLC	Other Supplier
Hastings	David	Rep.'g Solios Power LLC	Other Supplier
Hastings	David	Rep.'g Twin Cities Power, LLC	Other Supplier
Horstmann	John	Rep.'g Dayton Power and Light Company (The)	Transmission Owner
Jablonski	James	Rep.'g Borough of Butler, Butler Electric Division	Electric Distributor
Jablonski	James	Rep.'g Borough of Lavallette, New Jersey	Electric Distributor
Jablonski	James	Rep.'g Borough of Madison, New Jersey	Electric Distributor
Jablonski	James	Rep.'g Borough of Milltown	Electric Distributor
Jablonski	James	Rep.'g Borough of Park Ridge, New Jersey	Electric Distributor
Jablonski	James	Rep.'g Borough of Pemberton	Electric Distributor
Jablonski	James	Rep.'g Borough of Seaside Heights, New Jersey	Electric Distributor
Jablonski	James	Rep.'g Borough of South River, New Jersey	Electric Distributor
Jablonski	James	Rep.'g Vineland Municipal Electric Utility	Electric Distributor
Johnson	Carl	Rep.'g American Municipal Power, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Blue Ridge Power Agency, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Borough of Chambersburg	Electric Distributor
Johnson	Carl	Rep.'g Buckeye Power, Inc.	Electric Distributor
Johnson	Carl	Rep.'g Central Virginia Electric Cooperative	Electric Distributor
Johnson	Carl	Rep.'g City of Dover, Delaware	Electric Distributor
Johnson	Carl	Rep.'g Delaware Municipal Electric Corporation	Electric Distributor
Johnson	Carl	Rep.'g Easton Utilities Commission	Electric Distributor
Johnson	Carl	Rep.'g Energy Cooperative Association of PA	Other Supplier
Johnson	Carl	Rep.'g Galt Power Inc.	Other Supplier
Johnson	Carl	Rep.'g Hagerstown Light Department	Electric Distributor
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Johnson	Carl	Rep.'g Illinois Municipal Electric Agency	Electric Distributor
Johnson	Carl	Rep.'g Indiana Municipal Power Agency	Generation Owner
Johnson	Carl	Rep.'g Madison Gas & Electric Company	Other Supplier
Johnson	Carl	Rep.'g Mont Alto, PA (Borough of)	Electric Distributor
Johnson	Carl	Rep.'g North Carolina Municipal Power Agency # 1	Other Supplier
Johnson	Carl	Rep.'g Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Johnson	Carl	Rep.'g Thurmont, MD (Town of)	Electric Distributor
Johnson	Carl	Rep.'g Williamsport, MD (Town of)	Electric Distributor
Johnson	Carl	Rep.'g WPPI Energy	Other Supplier
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Kogut	George	New York Power Authority	Other Supplier
Levine	Jeffrey	GDF SUEZ Energy Marketing NA, Inc.	Other Supplier
Lieberman	Steven	Old Dominion Electric Cooperative	Electric Distributor
Long	Scott	Allegheny Electric Cooperative, Inc.	Electric Distributor
McMahon	Mike	Illinois Citizens Utility Board	End User Customer
Merola	Becky	Noble Americas Gas & Power Corp.	Other Supplier
Pakela	Greg	DTE Energy Trading, Inc.	Other Supplier
Peoples	John	Duquesne Light Company	Transmission Owner
Pratzon	David	Rep.'g Calpine Energy Services, L.P.	Generation Owner
Pratzon	David	Rep.'g Liberty Electric Power, LLC	Generation Owner
Quinlan	Pamela	Rockland Electric Company	Transmission Owner
Rainey	Frank	PEI Power Corporation	Generation Owner
Riding	MQ	Essential Power Rock Springs, LLC	Transmission Owner
Rohrbach	John	Rep.'g Southern Maryland Electric Cooperative	Electric Distributor
Rohrbach	John	Rep.'g Wabash Valley Power Association, Inc.	Electric Distributor
Scoglietti	Barbara	Tangent Energy Solutions, Inc.	Other Supplier
Sitaraman	Nicole	Ofc People's Counsel District of Columbia	End User Customer
Tsikirayi	Edward	Long Island Lighting Company d/b/a LIPA	Other Supplier
Vaudreuil	Greg	Mosaic Power	Other Supplier
Wadsworth	Joe	Vitol Inc.	Other Supplier

# **NON-VOTING PARTICIPANTS**

Last Name	First Name	Company	Sector
Abbott	Tim	Duke Energy Business Services, Inc.	Generation Owner
Ainspan	Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Aravind	Arun	Dominion Resources	Not Applicable



Armstrong	Ron	Dominion Energy Marketing, Inc.	Generation Owner
Berger	Ken	Dominion Virginia Power	Not Applicable
Birnel	William	Westar Energy, Inc.	Other Supplier
Bloom	David	Baltimore Gas and Electric Company	Transmission Owner
Bone	Caroline	Deutsche Bank	Not Applicable
Boucher	Mark	EnergyConnect, Inc.	Other Supplier
Burns	Will	Burns Law Firm	Not Applicable
Carmean	Gregory	OPSI	Not Applicable
Carretta	Kenneth	Public Service Electric & Gas Company ER&T	Transmission Owner
Carver	Scott	LS Power Transmission, LLC	Transmission Owner
Chappelle	Laura	Chappelle Consulting, LLC	Not Applicable
Chen	Jennifer	Sustainable FERC Projects	Not Applicable
Cox	Phil	AEP	Transmission Owner
Crystle	Gil	UGI Development Company	Transmission Owner
Currier	Jeffrey	Virginia Electric & Power Company	Transmission Owner
Czigler	Frank	PSEG	Transmission Owner
Dean	Evan	FirstEnergy Solutions Corporation	Transmission Owner
Denavas	Joe	Potomac Electric Power Company	Electric Distributor
Doremus	Steven	EnerNOC, Inc.	Other Supplier
Ellison	Alan	Grays Ferry Cogeneration Partnership	Generation Owner
Erbrick	Michael	MICS	Not Applicable
Evrard	David	Pennsylvania Office of Consumer Advocate	End-Use Customer
Farber	John	Delaware Public Service Commission	Not Applicable
Feierabend	Rick	Dominion Virginia Power	Not Applicable
Fernandes	John	Renewable Energy Systems Americas	Not Applicable
Fisher	Amy	Homer City Generation, L.P.	Generation Owner
Fort	Jim	Energy Authority, Inc. (The)	Other Supplier
Freeman	Allan	Michigan Public Service Commission	Not Applicable
Frelich	Jessica	Integrys Energy Services, Inc.	Other Supplier
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Grant	Annalee	SNL Energy	Not Applicable
Guistwhite	Jeff	EnergyConnect, Inc.	Other Supplier
Hagaman	Derek	GT Power Group	Not Applicable
Hall	Walter	Maryland Public Service Commission	Not Applicable
Hart	Joy	North Carolina Electric Membership Corporation	Electric Distributor
Henry	Michelle	FirstEnergy Solutions Corporation	Transmission Owner



Herel	Suzanne	RTO Insider	Not Applicable
Hilaski	Steve	Pepco Holdings Incorporated	Not Applicable
Huntoon	Stephen	Energy Counsel, LLP	Not Applicable
Janicki	Diane	Boston Energy Trading and Marketing LLC	Generation Owner
Jardot	Gina	Essential Power, LLC	Generation Owner
Jones	Steve	Dominion Resources	Not Applicable
Kaczanowski	Marek	Baltimore Gas and Electric Company	Transmission Owner
Kazerooni	Hamid	PPL	Transmission Owner
Kopon	Owen	Steel Producers	Not Applicable
Lacy	Catharine	Dominion Resources	Not Applicable
LaRochelle	Robert	Dominion Energy Marketing, Inc.	Generation Owner
Lewis	Cara	Public Service Electric & Gas Company	Transmission Owner
Liang-Nicol	Cecilia	FirstEnergy Solutions Corporation	Transmission Owner
Luby	Callaghan	TrailStone Power, LLC	Other Supplier
Lyser	Shelly	Rockland Electric Company	Transmission Owner
Mahon	Christopher	The Federal Energy Regulatory Commission	Not Applicable
Mahoney	Julie	New York State Electric & Gas Corporation	Other Supplier
Manning	James	North Carolina Electric Membership Corporation	Electric Distributor
Martin	Valerie	The Federal Energy Regulatory Commission	Not Applicable
Marton	Dave	FirstEnergy Solutions Corporation	Transmission Owner
McAlister	Lisa	American Municipal Power, Inc.	Generation Owner
McGee	Brandon	Customized Energy Solutions, Inc.*	Not Applicable
McGuirk	Brian	Direct Energy Business, LLC	Other Supplier
Mendelsohn	Mark	Noble Americas Gas & Power Corp.	Other Supplier
Metzler	Jacob	Castleton Commodities Merchant Trading L.P.	Other Supplier
Monroe	Alicia	The Federal Energy Regulatory Commission	Not Applicable
Newell	Gary	American Municipal Power, Inc.	Generation Owner
Ondayko	Brock	AEP	Transmission Owner
Patten	Kevin	American Electric Power	Transmission Owner
Philips	Marji	Direct Energy Business, LLC	Other Supplier
Rains	Robert	Washington Analysis	Not Applicable
Rajan	Abhijit	Dominion Resources	Not Applicable
Saini	Ishwar	Macquarie Energy LLC	Other Supplier
Sarmentero	Andrea	American Municipal Power, Inc.	Generation Owner
Schaefer	Steve	Schaefer Consulting	Not Applicable
Schum	Alice	Illinois Municipal Electric Agency	Electric Distributor



Schutt	Jeremy	energy.me midwest llc d/b/a energy.me	Other Supplier
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Slifer	Diane	Viauna	Not Applicable
Smyth	Dermot	ConEdison Energy Inc.	Other Supplier
Sock	Bryan	PSEG Energy Resources and Trade LLC	Transmission Owner
Stadelmeyer	Rebecca	Exelon Business Services Company, LLC	Transmission Owner
Stubbe	Judy	Duke Energy Business Services, Inc.	Generation Owner
Stuchell	Jeff	FirstEnergy Solutions Corporation	Transmission Owner
Tatum	Ed	Old Dominion Electric Cooperative	Electric Distributor
Thomas	Glen	GT Power Group	Not Applicable
Thomas	Robert	Dominion Energy Marketing, Inc.	Generation Owner
Vaudreuil	Gregory	Mosaic Power	Other Supplier
Walker	Wes	Dominion Energy Marketing, Inc.	Generation Owner
Wang	Yanchun	Johnson Controls, Inc.	Not Applicable
Weaver	David	PECO Energy Company	Transmission Owner
Weber	Adam	Union Electric Company d/b/a Ameren Missouri	Other Supplier
Wehr	Christopher	FirstEnergy Solutions Corporation	Transmission Owner
Wilmoth	Emily	Dominion Virginia Power	Not Applicable
Wilson	James	Wilson Energy Economics	Not Applicable
Wisersky	Megan	Madison Gas & Electric Company	Other Supplier
Xenopoulous	Damon	Brickfield, Burchette, Ritts & Stone, P.C.	Not Applicable
Yang	Vincent	NRG Power Marketing, L.L.C.	Generation Owner

# PJM PARTICIPANTS

Last Name	First Name	Company	Sector
Baker	Scott	PJM Interconnection, LLC	Not Applicable
Bastian	Jeff	PJM Interconnection, LLC	Not Applicable
Berner	Aaron	PJM Interconnection, LLC	Not Applicable
Boston	Terry	PJM Interconnection, LLC	Not Applicable
Boyle	Stephen	PJM Interconnection, LLC	Not Applicable
Bratspis	David	PJM Interconnection, LLC	Not Applicable
Bresler	Stu	PJM Interconnection, LLC	Not Applicable
Brown	Richard	PJM Interconnection, LLC	Not Applicable
Bryson	Michael	PJM Interconnection, LLC	Not Applicable
Budney	David	PJM Interconnection, LLC	Not Applicable
Burlew	Jim	PJM Interconnection, LLC	Not Applicable



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Daugherty	Suzanne	PJM Interconnection, LLC	Not Applicable
DeLoach	Ron	PJM Interconnection, LLC	Not Applicable
Dotter	Ray	PJM Interconnection, LLC	Not Applicable
Egan	Amanda	PJM Interconnection, LLC	Not Applicable
Ennis	Brad	PJM Interconnection, LLC	Not Applicable
Fabiano	Janell	PJM Interconnection, LLC	Not Applicable
Falco	Christine	PJM Interconnection, LLC	Not Applicable
Fernandez	Ray	PJM Interconnection, LLC	Not Applicable
Ford	Adrien	PJM Interconnection, LLC	Not Applicable
Foster	Denise	PJM Interconnection, LLC	Not Applicable
Hartung	Dean	PJM Interconnection, LLC	Not Applicable
Hauske	Thomas	PJM Interconnection, LLC	Not Applicable
Herling	Steven	PJM Interconnection, LLC	Not Applicable
Horowitz	Shira	PJM Interconnection, LLC	Not Applicable
Hsia	Eric	PJM Interconnection, LLC	Not Applicable
Kelley	Michael	PJM Interconnection, LLC	Not Applicable
Kendall	Ross	PJM Interconnection, LLC	Not Applicable
Kormos	Michael J.	PJM Interconnection, LLC	Not Applicable
Langbein	Pete	PJM Interconnection, LLC	Not Applicable
LaRocque	Matthew	PJM Interconnection, LLC	Not Applicable
Lee	Lori Murphy	PJM Interconnection, LLC	Not Applicable
Lusska	Kirsten	PJM Interconnection, LLC	Not Applicable
Manion	Evelyn	PJM Interconnection, LLC	Not Applicable
Mathias	Richard	PJM Interconnection, LLC	Not Applicable
McCartha	Esrick	PJM Interconnection, LLC	Not Applicable
McGlynn	Paul	PJM Interconnection, LLC	Not Applicable
McLaverty	Megan	PJM Interconnection, LLC	Not Applicable
McLeod	lan	PJM Interconnection, LLC	Not Applicable
McNamara	Sean	PJM Interconnection, LLC	Not Applicable
Noonan	Tom	PJM Interconnection, LLC	Not Applicable
O'Neill	Jack	PJM Interconnection, LLC	Not Applicable
Ott	Andrew L.	PJM Interconnection, LLC	Not Applicable
Robinson	Evelyn	PJM Interconnection, LLC	Not Applicable
Schweizer	David	PJM Interconnection, LLC	Not Applicable
Sechrist	Erin	PJM Interconnection, LLC	Not Applicable
Slusser	Jeff	PJM Interconnection, LLC	Not Applicable



Snyder	Sue	PJM Interconnection, LLC	Not Applicable
Souder	Dave	PJM Interconnection, LLC	Not Applicable
Swimm	Nora C.	PJM Interconnection, LLC	Not Applicable
Tribulski	Jennifer	PJM Interconnection, LLC	Not Applicable
Weiss	Glenn	PJM Interconnection, LLC	Not Applicable
Withrow	David	PJM Interconnection, LLC	Not Applicable
Xu	Xu	PJM Interconnection, LLC	Not Applicable

#### **ADMINISTRATION**

Mr. Kormos welcomed stakeholders to the meeting and Mr. Anders provided the Anti-trust and Code of Conduct announcements.

#### **ENDORSEMENTS/APPROVALS**

#### 1. DRAFT MINUTES

Minutes of the November 20, 2014 Markets and Reliability Committee (MRC) meeting were <u>approved</u> by acclamation with no objections or abstentions.

#### 2. PJM MANUALS

- A. Mr. Schweizer reviewed changes to Manual 10: Pre-Scheduling Operations identified in the annual review of the manual as well as related to outage reporting for facilities providing Black Start Service.
- B. Mr. Schweizer reviewed changes to Manual 14D: Generator Operational Requirements related to requirements of NERC standard VAR-002-3.
- C. Mr. McCartha presented proposed Manual 01: Control Center and Data Exchange Requirements related to implementation of the previously FERC-approved PJMnet Network Connection issue

Following discussion, the proposed revisions in items 2.A through 2.C were <u>endorsed</u> by acclamation with no objections or abstentions.

#### 3. ZONAL AND RESIDUAL METERED LOAD AGGREGATES

Mr. Fernandez presented proposed tariff revisions related to data availability for the default load bus distribution factors for Zonal and Residual Metered Load aggregates utilized by the Day-Ahead Energy Market. Following discussion, the committee **endorsed** the proposed revisions by acclamation with no objections or abstentions.

#### 4. HARMONIZATION OF PJM'S GOVERNING DOCUMENTS

Mr. Shparber presented a proposed Problem Statement and Issue Charge related to harmonization of PJM's governing documents (OA, Tariff, and Reliability Assurance Agreement) and Manual 35: Definitions and Acronyms. Following discussion, the committee <a href="mailto:approved">approved</a> the proposed Problem Statement and Issue Charge by acclamation with no objections or abstentions.

#### 5. ENHANCED INVERTER CAPABILITY

Mr. Berner presented proposed Tariff and Manual revisions related to Enhanced Inverter Capability. Following discussion, the committee <u>endorsed</u> the proposed revisions by acclamation with no objections and two abstentions.



#### FIRST READINGS

#### 6. PJM MANUALS

- A. Mr. Deloach reviewed changes to Manual 03A: Energy Management System (EMS) Model Updates and Quality Assurance (QA). The committee will be asked to endorse these revisions at its next meeting.
- B. Mr. Berner provided a first read of PJM Manual 14A updates for changes to MISO-PJM coordination. The committee will be asked to endorse these revisions at its next meeting.
- C. Mr. Bastian presented proposed revisions to Manual 18: PJM Capacity Market related to the recently FERC approved revisions to the shape of the Variable Resource Requirement Curve, gross Cost of New Entry values, and the Net Energy & Ancillary Services Revenue Offset methodology.

#### **INFORMATIONAL ITEMS**

# 7. REACTIVE SUPPLY AND VOLTAGE CONTROL SERVICE FROM DEACTIVATING RESOURCES

Mr. Burlew discussed a pending compliance filing related to reactive supply and voltage control service from deactivating resources. Member endorsement of compliance filings is not required.

#### 8. DEMAND RESPONSE

Mr. Duane discussed recent events related to demand response participation in PJM markets and a planned "stop gap" contingent filing with the FERC intended to address demand response participation in PJM markets in the event that the Supreme Court chooses to deny the petition for certiorari in the EPSA case.

# 9. ENERGY MARKET OFFER CAPS

Mr. Ott discussed PJM Board direction that PJM staff submit to the FERC OA and Tariff revisions related to Energy Market Offer Caps.

# 10. <u>2015 RELIABILITY FILING</u>

Mr. Bresler discussed the planned Reliability filing for the 2015/2016 delivery year related to adjustments to Tariff provisions regarding "Reliability Must Run" unit payments and a waiver to the Tariff requirements regarding capacity release in the third Incremental Auction.

## 11. CAPACITY PERFORMANCE (1:00-3:00)

Mr. Ott discussed the recent FERC filing related to Capacity Performance, addressing stakeholder questions.

#### **FUTURE AGENDA ITEMS (3:00)**

No new future MRC agenda items were identified.

#### **FUTURE MEETINGS**

January 22, 2015	9:00 AM	Wilmington, DE
February 26, 2015	9:00 AM	Wilmington, DE
March 26, 2015	9:00 AM	Wilmington, DE
April 23, 2015	9:00 AM	Wilmington, DE
May 28, 2015	9:00 AM	Wilmington, DE
June 25, 2015	9:00 AM	Wilmington, DE
July 23, 2015	9:00 AM	Wilmington, DE
August 27, 2015	9:00 AM	Wilmington, DE



September 24, 2015 9:00 AM Wilmington, DE October 22, 2015 9:00 AM Wilmington, DE November 19, 2015 9:00 AM Wilmington, DE December 17, 2015 9:00 AM Wilmington, DE

Author: D.A. Anders