

**Markets and Reliability Committee – Special Meeting – Distributed Energy Resources**  
**PJM Conference & Training Center, Valley Forge, PA**  
**June 17, 2016**  
**9:00 a.m. – 3:00 p.m. EPT**

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

Welcome, announcements and Anti-trust and Code of Conduct announcement – Mr. Dave Anders

## Endorsements/Approvals (9:05-9:10)

### 1. Draft Minutes (9:05-9:10)

Minutes of the May 26, 2016 meeting of the Markets and Reliability Committee (MRC) were approved by acclamation with no objections or abstentions.

## First Readings (9:10-9:10)

None

## Informational Items (9:10-2:55)

### 2. Net Energy Injections at Load Busses Quarterly Report (9:10-9:25)

Mr. Ken Schuyler reviewed the Net Energy Injections at Load Busses Quarterly Report.

### 3. Jurisdiction Over Interconnection and Sales of Generation/Storage on Distribution Facilities (9:25-9:55)

Mr. Dave Egan reviewed a work product of the Net Energy Metering Sr. Task Force regarding the jurisdiction over interconnection and sales of generation/storage on distribution facilities. He also discussed Planning Committee activity around concerns regarding interconnection queue timing and duration.

### 4. Distributed Energy Resource Participation Matrix (9:55-11:00)

Ms. Terri Esterly presented a draft matrix representing various ways that distributed energy resources may participate in PJM.

### 5. Grid-Tied Gen/Storage Services (11:00-12:00)

Mr. Andrew Levitt presented a draft chart of Grid-Tied Generation/Storage Services.

### 6. Use Cases (1:00-2:00)

Mr. Dave Egan and Mr. Andrew Levitt reviewed several use cases that illustrate ways in which distributed energy resources may participate in PJM.

## 7. ISO/RTO Benchmarking (2:00-2:55)

Mr. Andrew Levitt reviewed preliminary benchmarking with other ISO/RTOs regarding participation of distributed energy resources.

### Future Agenda Items (2:55)

No new future agenda items were identified.

### Future Meeting Dates

June 30, 2016	9:00 a.m.	Wilmington, DE
July 28, 2016	9:00 a.m.	Wilmington, DE
August 25, 2016	9:00 a.m.	Wilmington, DE
September 29, 2016	9:00 a.m.	Wilmington, DE
October 27, 2016	9:00 a.m.	Wilmington, DE
November 17, 2016	9:00 a.m.	Wilmington, DE
December 22, 2016	9:00 a.m.	Wilmington, DE

Author: D. A. Anders

### CHAIR/SECRETARY

Last Name	First Name	Company	Role
Anders	David	PJM Interconnection, LLC	Secretary

### In Person Participants

Last Name	First Name	Company	Sector
Adams	Drew	A.F. Mensah, Inc.	Other Supplier
Calore	James	Public Service Electric & Gas	Transmission Owner
Collins	Leonard	State of Delaware	N/A
Foladare	Ken	Tangibl	N/A
Kogut	George	New York Power Authority	Other Supplier
Loose	Trevor	Other	N/A
Luehrs	Gregory	Viridity Energy, Inc.	Other Supplier
Pratzon	David	GT Power Group	N/A
Price	Ruth	Divisio of the Public Advocate of the State of DE	End Use Customer
Rommel	Bruce	Ohio Edison Company	Transmission Owner
Rutigliano	Tom	Icetec	Other Supplier
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Wheeler	John	Fermata, LLC	Other Supplier
Wittman	Wayne	A.F. Mensah, Inc.	Other Supplier

## WebEx Participants

Last Name	First Name	Company	Sector
Ainspan	Malcolm	NRG Curtailment Solutions, Inc.	Other Supplier
Baidwan	Sandeep	LS Power Transmission, LLC	Transmission Owner
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner
Bartenfelder	Steve	Baltimore Gas and Electric Company	Transmission Owner
Benчек	Jim	FirstEnergy Solutions Corp.	Transmission Owner
Berlinski	Mike	Customized Energy Solutions, Ltd.	N/A
Bloom	David	Baltimore Gas and Electric Company	Transmission Owner
Bolan	Martin	FirstEnergy Solutions Corp.	Transmission Owner
Bouchez	Nicole	NYISO	N/A
Briscoe	Judy	BP Energy Company	Other Supplier
Campbell	Bruce	Cpower	N/A
Canter	David	AEP	Transmission Owner
Carmean	Gregory	OPSI	N/A
Cavalier	Jon	FirstEnergy Solutions Corp.	Transmission Owner
Collins	Leonard	State of Delaware	N/A
D'Alessandris	Lou	FirstEnergy Solutions Corp.	Transmission Owner
Davis	Connie	City of Cleveland, DPU	Electric Distributor
DeNavas	Joe	Pepco Holdings Incorporated	N/A
Dessenger	Harry	Customized Energy Solutions, Ltd.	N/A



Diess	Eva	The Mobility House, LLC	Other Supplier
Domian	Christin	Mitsubishi Electric Power	N/A
Drake	Cary	A.F. Mensah Inc.	Other Supplier
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Esposito-Hils	Pati	TransCanada Power Marketing Ltd.	Generation Owner
Farber	John	DE Public Service Commission	N/A
Fecho	Thomas	Indiana Michigan Power Company	Transmission Owner
Feldman	Brett	Navigant Consulting	N/A
Feliks	Kent	AEP	Transmission Owner
Fram	Benjamin	Monitoring Analytics	N/A
Ganrett	Bryan	Duke Energy Business Services, LLC	Transmission Owner
Greening	Michele	Talen Energy Marketing, LLC	Generation Owner
Griffiths	Dan	Consumer Advocates for PJM States	N/A
Hamilton	Brian	Energy Consultants	N/A
Hanser	Erik	Michigan Public Service Commission	N/A
Hayes	Pat	Union Electric d/b/a Ameren Missouri	Other Supplier
Heidorn	Rich	RTO Insider	N/A
Heise	Randi	Dominion Virginia Power	N/A
Herel	Suzanne	RTO Insider	N/A
Hoatson	Tom	West Deptford Energy, LLC	Generation Owner
Horstmann	John	Dayton Power & Light Company	Transmission Owner
Horton	Dana	AEP	Transmission Owner
Inskeep	Ben	EQ Research	N/A

Jablonski	Jim	Borough of Butler	Electric Distributor
Jackson	Michaela	EDF Renewable Energy	N/A
Jardot	Gina	Essential Power Rock Springs, LLC	Transmission Owner
Jennings	Ken	Duke Energy Business Services LLC	Transmission Owner
Johnson	Carl	Customized Energy Solutions, Ltd.	N/A
Kauffman	Brian	NRG Curtailment Solutions, Inc.	Other Supplier
Kilgallen	Kevin	Emerald Energy	N/A
Lacy	Catharine	Virginia Electric & Power Company	Transmission Owner
Levine	Jeffrey	IPR-GDR SUEZ Energy	Other Supplier
Lowe	Connie	Dominion Virginia Power	N/A
Lyser	Shelly	Rockland Electric	Transmission Owner
Mabry	Dave	McNees Wallace & Nurick LLC	N/A
Magee	Daphney	Public Service Gas and Electric	Transmission Owner
Mahnhaupt	Michael	The Mobility House, LLC	Other Supplier
McGuirk	Brian	Direct Energy Business Marketing, LLC	Other Supplier
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Miller	Marguerite	HSBC Technology & Services (USA), Inc.	Other Supplier
Mok	Alan	Duke Energy Business Services, LLC	Transmission Owner
O'Connell	Robert	Main Line Electricity Market Consultants	N/A
Ondayko	Brock	AEP	Transmission Owner
O'Neill	Jack	PJM Interconnection, LLC	N/A
Owens	George E.	Downes Associates, Inc.	Other Supplier
Pakela	Gregory	DTE Energy Trading, Inc.	Other Supplier



Patten	Kevin	AEP	Transmission Owner
Peoples	John	Duquesne Light Company	Transmission Owner
Peters	James	ITC Interconnection LLC	Other Supplier
Prokop	Brenda	ITC Mid-Atlantic Development LLC	Other Supplier
Rizzo	Greg	Aquenergy Systems Inc.	Generation Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.	N/A
Schneider	Jon	FirstEnergy Solutions Corp.	Transmission Owner
Schreim	Morris	Maryland Public Service Commission	N/A
Scoglietti	Barbara	Tangent Energy Solutions	Other Supplier
Shanker	Roy	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Swink	Rick	Potomac Electric Power Company	Electric Distributor
Vaudreuil	Greg	Mosaic Power	Other Supplier
Watson	Betty	SolarCity	N/A
Watson	Mark	Platts	N/A
Wehr	Christopher	FirstEnergy Solutions Corp.	Transmission Owner
Whitehead	Jeff	Direct Energy Business Marketing, LLC	Other Supplier
Williams	Amber	New York State Electric & Gas Corporation	Other Supplier
Wilson	James	Wilson Energy Economics	N/A
Wisersky	Megan	Madison Gas & Electric Co.	Other Supplier
Wufan	Jia	The Mobility House, LLC	Other Supplier
Yu	Joel	Rockland Electric	Transmission Owner
Ziegler	Richard	FirstEnergy Solutions Corp.	Transmission Owner

## PJM Participants

Last Name	First Name	Company	Sector
Berner	Aaron	PJM Interconnection, LLC	N/A
Bhavaraju	Murty	PJM Interconnection, LLC	N/A
Brown	Rich	PJM Interconnection, LLC	N/A
Ciabattoni	Joe	PJM Interconnection, LLC	N/A
Covino	Susan	PJM Interconnection, LLC	N/A
Croop	Danielle	PJM Interconnection, LLC	N/A
Cummings	Bridgid	PJM Interconnection, LLC	N/A
Driscoll	Mary Ellen	PJM Interconnection, LLC	N/A
Egan	David	PJM Interconnection, LLC	N/A
Esterly	Theresa	PJM Interconnection, LLC	N/A
Falin	Tom	PJM Interconnection, LLC	N/A
Fan	Zhenyu	PJM Interconnection, LLC	N/A
Fereshetian	Damon	PJM Interconnection, LLC	N/A
Gledhill	Andrew	PJM Interconnection, LLC	N/A
Hendrzak	Chantal	PJM Interconnection, LLC	N/A
Holland	Risa	PJM Interconnection, LLC	N/A
Hsia	Eric	PJM Interconnection, LLC	N/A
Kimmel	David	PJM Interconnection, LLC	N/A
Langbein	Pete	PJM Interconnection, LLC	N/A
Levitt	Andrew	PJM Interconnection, LLC	N/A



Maxwell	Melissa	PJM Interconnection, LLC	N/A
Olaleye	Michael	PJM Interconnection, LLC	N/A
Pincus	Steven	PJM Interconnection, LLC	N/A
Reynolds	John	PJM Interconnection, LLC	N/A
Schuyler	Ken	PJM Interconnection, LLC	N/A
Shoemaker	Jason	PJM Interconnection, LLC	N/A
Shparber	Steven	PJM Interconnection, LLC	N/A
Sitarchyk	Mike	PJM Interconnection, LLC	N/A
Velasco	Cheryl Mae	PJM Interconnection, LLC	N/A
Ward	Mike	PJM Interconnection, LLC	N/A
Weiss	Glenn	PJM Interconnection, LLC	N/A
Williams	Stan	PJM Interconnection, LLC	N/A