

## Market Implementation Committee Special Session: Capacity Market Capability of Energy Storage Resources

WebEx

January 30, 2020

1:00 p.m. – 3:00 p.m. EPT

### Administration

1. Mr. Rami Dirani, provided welcome, announcements, and a review of the Antitrust, Code of Conduct, and Public Meetings/Media Participation Guidelines Text.
2. Ms. Melissa Pilog, reviewed the Capacity Market Capability of Energy Storage Resources work plan.
  - A. Mr. Andrew Levitt, PJM, reviewed the procedural timeline regarding Capacity Market capability of Energy Storage Resources under FERC Order 841.

### [Issue Tracking: Capacity market capability of Energy Storage Resources](#)

### Education

3. Ms. Laura Walter, PJM, provided education on the PJM status quo for Energy Storage Resources in the Capacity Market. Specifically, Ms. Walter, discussed the “10 hour rule” method for calculating capability of ESR, the role of Capacity Interconnection Rights, annual verification of capability, the Capacity market must offer obligation, and the PAI obligation.
  - **Question:** Are ESRs required to report a forced outage if the entity has a Day-Ahead Market commitment to withdraw from the grid (i.e. charge), but the entity is unable because they are at a full state of charge?
  - **Answer:** No
  - Ms. Walter, PJM, also discussed the link between the “10 hour rule” and the Day-ahead Energy Market must offer obligation, real-time availability, the Economic Maximum parameter, outages, and EFORd.
4. Mr. Andrew Levitt, PJM, provided an update on the status of Energy Storage Resources in the PJM queue.
5. Mr. Andrew Levitt, PJM, provided education on the relevant status quo in NYISO and MISO, as well as, a proposal by NYISO that was recently approved by the Federal Energy Regulatory Commission.
  - A stakeholder pointed out a recent study on the Energy Storage Accreditation Methodology.
  - SPP: Energy Storage Accreditation Methodology:  
<https://www.spp.org/Documents/61378/SAWG%20Agenda%20and%20Background%20Materials%20200129.zip>

- Mr. Andrew Levitt, PJM, presented the PJM status quo and past proposals and solicited feedback from stakeholders.

## Future Agenda Items

- Ms. Melissa Pilog, reviewed any action items and discussed future agenda items.

## Future Meeting Dates

February 5, 2020	9:00 a.m. – 4:00 p.m.	PJM Conference & Training Center/ WebEx
February 24, 2020	9:00 a.m. – 11:00 a.m.	WebEx

## In-Person Meeting Attendees

Pilog, Melissa (Facilitator)	PJM Interconnection, LLC	Not Applicable
Dirani, Rami (Secretary)	PJM Interconnection, LLC	Not Applicable
Levitt, Andrew	PJM Interconnection, LLC	Not Applicable
Benner, Scott	PJM Interconnection, LLC	Not Applicable
Walter, Laura	PJM Interconnection, LLC	Not Applicable
Hsia, Eric	PJM Interconnection, LLC	Not Applicable
Rocha Garrido, Patricio	PJM Interconnection, LLC	Not Applicable

## WebEx Meeting Attendees

Ament, Todd	Cube Hydro Partners, LLC	Generation Owner
Baker, Scott	PJM Interconnection	Not Applicable
Baur, Sean	GlidePath Power Operations LLC	Generation Owner
Bell, Jerry	PJM Interconnection	Not Applicable
Bhavaraju, Murty	PJM Interconnection	Not Applicable
Bresler, Stu	PJM Interconnection	Not Applicable
Burke, Jennifer	Lockheed Martin	Not Applicable
Burwen, Jason	EnergyStorage.org	Not Applicable
Ccampbell, Bruce	Enerwise Global Technologies, LLC (EnergyConnect)	Other Supplier
Cao, Roger	PJM Interconnection	Not Applicable
Chakragiri, Mohan	ENGIE Energy Marketing NA, Inc.	Other Supplier
Chang, Sean	Shell Energy North America (US), L.P.	Other Supplier
Chen, Yang	PJM Interconnection	Not Applicable
Chintapalli, Raj	BP Energy Company	Other Supplier
Chocarro Aguirrebengoa, Iker	RWE Renewables Americas, LLC	Generation Owner
Christopher, Mahila	Public Utilities Commission of Ohio	Not Applicable
Coultas, Ann	Invenergy, LLC	Generation Owner
D'Alessandris, Lou	FirstEnergy Solutions Corp.	Transmission Owner
Philips, Darlene	PJM Interconnection	Not Applicable
Davirova, Nigora	PJM Interconnection	Not Applicable
Davis, James	Dominion Energy Generation Marketing, Inc.	Generation Owner
Denby, Brett	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Depillo, Raymond	PSEG Energy Resources and Trade LLC	Other Supplier

Dixon, Chad	Customized Energy Solutions, Ltd.	Not Applicable
Domian, Christin	Duquesne Light Company	Transmission Owner
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Bernabeu, Emanuel	PJM Interconnection	Not Applicable
Fee, George	Appalachian Power Company (Kingsport-Demand Resp)	Transmission Owner
Filomena, Guy	Customized Energy Solutions, Ltd.	Not Applicable
Fink, Sari	American Wind Energy Association	Not Applicable
Foladare, Kenneth	Geenex Solar LLC	Generation Owner
Foley, Imelda	Environmental Defense Fund	Not Applicable
Freeman, Jennifer	PJM Interconnection	Not Applicable
Gahimer, Michael	Indiana Office of Utility Consumer Counselor	End-Use Customer
Garnett, Bryan	Duke Energy Ohio, Inc.	Transmission Owner
Gates, Terry	Appalachian Power Company	Transmission Owner
Genuario, Gabrielle	PJM Interconnection	Not Applicable
Ghodsian, Arash	EDF Renewable Development, Inc.	Not Applicable
Gledhill, Andrew	PJM Interconnection	Not Applicable
Hastings, David	Market Interconnection Consulting Services, LLC	Not Applicable
Hauske, Tom	PJM Interconnection	Not Applicable
Heinle, Frederick	Office of the People's Counsel for the District of Columbia	End-Use Customer
Herel, Suzanne	PJM Interconnection	Not Applicable
Horning, Lynn Marie	Customized Energy Solutions, Ltd.	Not Applicable
Hull, Gerit	American Municipal Power, Inc.	Electric Distributor
Hyzinski, Tom	GT Power Group	Not Applicable
Jacobs, Michael	Fowler Ridge IV Wind Farm, LLC	Generation Owner
Janicki, Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Johnson, Carl	Customized Energy Solutions, Ltd.	Not Applicable
Kelly, Stephen	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Libbos, Robin	Monongahela Power Company, d/b/a Allegheny Power	Transmission Owner
Lowe, Connie	Dominion Virginia Power	Transmission Owner
Mabry, David	McNees Wallace & Nurick, LLC	Not Applicable
Markiewicz, Cindy	Allegheny Energy Supply Company, LLC	Transmission Owner
Marzewski, Skyler	Monitoring Analytics	Not Applicable
Nicol, Cecilia	N/A	Not Applicable
Norton, Chris	American Municipal Power, Inc.	Electric Distributor
Ondayko, Brock	AEP Energy Partners, Inc.	Transmission Owner
Patel, Keyur	PJM Interconnection	Not Applicable
Pelletier, Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Philips, Marji	LS Power	Not Applicable
Pilong, Christopher	PJM Interconnection	Not Applicable
Price, Ruth	Delaware Division of the Public Advocate	End-Use Customer
Robinson, Becky	Vistra Energy	Not Applicable
Rose, Luke	N/A	Not Applicable



# Draft Meeting Minutes

Rutigliano, Tom	Natural Resources Defense Council	Not Applicable
Sasser, Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Schreim, Morris	MD PSC	Not Applicable
Schuyler, Ken	PJM Interconnection	Not Applicable
Shanker, Roy	East Coast Power Linden Holdings, LLC	Generation Owner
Sun, Haibin	Constellation Energy Services, Inc.	Other Supplier
Toomey, Megan	Talen Energy Marketing, LLC	Generation Owner
Watson, Betty	Affirmed Energy LLC	Other Supplier
Watson, Brian	Appalachian Power Company	Transmission Owner
Weeks, Thomas	Michigan Public Power Agency	Generation Owner
Wehr, Christopher	Ohio Edison Company (ATSI CSP)	Transmission Owner
Whitehead, Jeffrey	GT Power Group	Not Applicable
Winkler, Eric	Winkler Energy Consulting	Not Applicable
Wisersky, Megan	Madison Gas & Electric Co.	Other Supplier
Wray, Gizelle	Solar Energy Industries Association (SEIA)	Not Applicable