

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

WebEx

February 24, 2020

9:00 a.m. – 12:00 p.m. EPT

Administration

1. Mr. Rami Dirani, provided welcome, announcements, and review of the Antitrust, Code of Conduct, and Public Meetings/Media Participation Guidelines Text. Draft meeting minutes for January 28, 2020 were approved.

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

Education & Next Steps

2. Dr. Patricio Rocha Garrido, PJM, presented an overview on the concept of Effective Load Carrying Capability (ELCC) in the Capacity Market.
3. Mr. Tom Rutigliano, NRDC, representing Public Interest Organizations, presented a proposal for use of effective load carrying capability for calculating the capability of energy storage resources in the capacity market.
4. Mr. Sean Baur, GlidePath, presented a proposal for an alternative to the 10-hour rule for establishing the capability of energy storage resources in the capacity market.
5. Dr. Howard Haas, Monitoring Analytics, presented a proposal for a “24 hour rule” for establishing the capability of energy storage resources in the capacity market, and described considerations for application of effective load carrying capability in the capacity market.
6. Mr. Chenchao Lu, PJM, and Mr. Andrew Levitt, PJM, discussed procedural details and next steps.

Future Agenda Items

7. There were no immediate action items from the meeting.

Author: Rami Dirani

WebEx Attendees

Abdur-Rahman, Muhsin	ABB	Not Applicable
Achaab, Ed	Appalachian Power Company	Not Applicable
Anders, David	PJM Interconnection	Not Applicable
Anderson, Bob	FirstEnergy Solutions Corp	Transmission Owner
Baker, Scott	PJM Interconnection	Not Applicable
Baur, Sean	GlidePath Power Operations LLC	Generation Owner
Benckek, Jim	FirstEnergy Solutions Corp.	Transmission Owner

Benner, Scott	PJM Interconnection	Not Applicable
Bockhorn, Tim	Dayton Power & Light Company (The)	Transmission Owner
Brodbeck, John	EDP Renewables North America, LLC	Generation Owner
Burke, Jennifer	Lockheed Martin	Not Applicable
Burwen, Jason	EnergyStorage.org	Not Applicable
Campbell, Bruce	Enerwise Global Technologies, LLC (EnergyConnect)	Other Supplier
Canter, David	Appalachian Power Company	Transmission Owner
Carmean, Gregory	OPSI	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, Iker	E.ON Climate & Renewables North America, Inc	Generation Owner
Christopher, Mahila	Public Utilities Commission of Ohio	Not Applicable
Cocco, Michael	Old Dominion Electric Cooperative	Electric Distributor
Croop, Danielle	PJM Interconnection	Not Applicable
D'Alessandris, Lou	FirstEnergy Solutions Corp.	Transmission Owner
Daley, Kate	Dominion Virginia Power	Not Applicable
Davis, Elizabeth	Dominion Energy Generation Marketing, Inc.	Generation Owner
Davis, Jim	Dominion Energy Generation Marketing, Inc.	Generation Owner
DeLosa, Joe	New Jersey Board of Public Utilities	Not Applicable
DePillo, Ray	PSEG Energy Resources and Trade LLC	Other Supplier
Dirani, Rami	PJM Interconnection	Not Applicable
Dixon, Chad	Customized Energy Solutions, Ltd.	Not Applicable
Dolan, James	PJM Interconnection	Not Applicable
Dorko, keri	Monitoring Analytics	Not Applicable
Eric, Hsia	PJM Interconnection	Not Applicable
Fan, Zhenyu	PJM Interconnection	Not Applicable
Faulds, Sean	Brookfield Power Piney & Deep Creek LLC	Generation Owner
Fee, George	Appalachian Power Company (Kingsport-Demand Resp)	Transmission Owner
Fidler, Danielle	Earthjustice	Not Applicable
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
Ford, Adrien	Old Dominion Electric Cooperative	Electric Distributor
Fuller, Pete	Autumn Lane Energy	Not Applicable
Gahimer, Mike	Indiana Office of Utility Consumer Counselor	End-Use Customer
Gallo, Mike	Solar Frontier	Not Applicable
Gates, Terry	Appalachian Power Company	Transmission Owner



Genuario, Gabrielle	PJM Interconnection	Not Applicable
Gilani, Rehan	ConEdison Energy, Inc.	Other Supplier
Gledhill, Andrew	PJM Interconnection	Not Applicable
Goggin, Michael	Grid Strategies LLC	Not Applicable
Haas, Howard	Monitoring Analytics	Not Applicable
Hastings, David	Market Interconnection Consulting Services, LLC	Not Applicable
Hauske, Tom	PJM Interconnection	Not Applicable
Heinle, Erik	Office of the People's Counsel for the District of Columbia	End-Use Customer
Herel, Suzanne	PJM Interconnection	Not Applicable
Hoatson, Tom	West Deptford Energy, LLC	Generation Owner
Hollis, Gabriel	NextEra Energy Transmission, LLC	Other Supplier
Holter, Natasha	PJM Interconnection	Not Applicable
Huang, Jame	Rockland Electric Company	Transmission Owner
Hudis, Gabriella	Gable Associates	Not Applicable
Hull, Gerit	American Municipal Power, Inc.	Electric Distributor
Hyzinski, Tom	GT Power Group	Not Applicable
Ishwanthlal, Shaun	Brookfield Renewable Trading and Marketing LP	Other Supplier
Islam, Lubaba	Rockland Electric Company	Transmission Owner
Jacobs, Mike	Fowler Ridge IV Wind Farm, LLC	Generation Owner
Janicki, Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jett, William	Duke Energy Business Services LLC	Transmission Owner
Jha, Monica	PCI	Not Applicable
Johnson, Carl	Customized Energy Solutions, Ltd.	Not Applicable
Kauffman, Brian	Enel X North America, Inc.	Other Supplier
Kazerooni, Hamid	Invenergy, LLC	Generation Owner
Keegan, Jack	PJM Interconnection	Not Applicable
Kelly, Stephen	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Kimmel, David	PJM Interconnection	Not Applicable
Kiselev, Dmitriy	Consolidated Edison Solutions, Inc.	Other Supplier
Konowal, Richard	PJM Interconnection	Not Applicable
Kosel, Howard	Consolidated Edison Solutions, Inc.	Other Supplier
Levitt, Andrew	PJM Interconnection	Not Applicable
Libbos, Robin	Monongahela Power Company, d/b/a Allegheny Power	Transmission Owner
Long, Amanda	PJM Interconnection	Not Applicable
Lowe, Connie	Dominion Virginia Power	Transmission Owner
Mabry, David	McNees Wallace & Nurick, LLC	Not Applicable
Mariam, Yohannes	Office of the People's Counsel for the District of Columbia	End-Use Customer
Marzewski, Skyler	Monitoring Analytics	Not Applicable
Mascarenhas, Sandeep	Office of the People's Counsel for the District of Columbia	Other Supplier
McDougall, Devin	Earthjustice	Not Applicable

Midgley, Sharon	Exelon Business Services Company, LLC	Transmission Owner
Mooney, Molly	PJM Interconnection	Not Applicable
Nix, Emma	Gabel and Associates	Not Applicable
Ondayko, Brock	AEP Energy Partners, Inc.	Transmission Owner
Oppel, Laurie	Balico, LLC	Not Applicable
Pelletier, Eveline	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Peoples, John	Duquesne Light Company	Transmission Owner
Philips, Marji	PJM Interconnection	Not Applicable
Pilong, Melissa	PJM Interconnection	Not Applicable
Pizzutelli, Ashley	FirstEnergy Solutions Corp.	Transmission Owner
Price, Ruth Ann	Delaware Division of the Public Advocate	End-Use Customer
Robinson, Becky	Vistra Energy	Not Applicable
Rutigliano, Tom	Natural Resources Defense Council	Not Applicable
Sasser, Jonathan	Customized Energy Solutions, Ltd.	Not Applicable
Scarpignato, David	Calpine Energy Services, L.P.	Generation Owner
Scheidecker, Paul	PJM Interconnection	Not Applicable
Schultz, Matthew	Duke Energy Business Services LLC	Transmission Owner
Schuyler, Ken	PJM Interconnection	Not Applicable
Shanker, Roy	East Coast Power Linden Holdings, LLC	Generation Owner
Sterling, John	First Solar, Inc.	Not Applicable
Svenson, Heather	Public Service Electric & Gas Company	Transmission Owner
Swalwell, Brad	Tangent Energy Solutions, Inc	Other Supplier
Sweeney, Rory	GT Power Group	Not Applicable
Tejblum, Ben	sPower Development Company, LLC	Not Applicable
Toomey, Megan	Talen Energy Marketing, LLC	Generation Owner
VanAmburg, Cari	Recurrent Energy	Generation Owner
VanderLaan, William	Illinois Commerce Commission	Not Applicable
Wehnes, Kathleen	Maryland Department of the Environment	Not Applicable
Wehr, Christopher	Ohio Edison Company (ATSI CSP)	Transmission Owner
Whitehead, Jeff	GT Power Group	Not Applicable
Wilson, Bram	Wilson Energy Economics	Not Applicable
Wilson, James	Wilson Energy Economics	Not Applicable