

**Emerging Technologies Forum**  
***Energy Transition and Energy Storage: Can we have one without the other?***

**Teleconference/WebEx Only**  
**March 16, 2023**  
**9:00 a.m. – 12:00 p.m. EPT**

**Administration (9:00-9:10)**

1. Chris Callaghan, facilitator, and Ed Kovler, acting secretary, opened the meeting, reviewed the meeting/media participation guidelines, reviewed minutes from the last meeting, and reviewed the agenda.

**Opening (9:10-9:30)**

2. Danielle Croop, PJM, discussed PJM's outlook on the energy transition and where storage can play a role.

**Panel Discussion (9:30-10:45)**

3. Walter Graf, PJM, moderated the discussion on the future applications of Storage within ISOs/RTOs with the panel attendees below.

<b>Advancing Storage Applications in ISO/RTOs – Where are we 5 to 10 years from now?</b>	
Moderator: Walter Graf, PJM, Senior Director, Economics	
<i>Challenges and opportunities operating a 4,000+MW fleet of batteries</i>	Gabe Murtaugh, CAISO, Storage Sector Manager
<i>Implementing the Virginia Clean Economy Act storage mandate</i>	Brandon Martin, Dominion Energy, Manager of Business Development, Energy Storage
<i>Emerging use cases and applications for storage</i>	Kiran Kumaraswamy, Fluence, VP of Growth and Head of Commercial
<i>Question &amp; Answer Session</i>	Panel, Moderator, and Attendees

**Break (10:45-11:00)**

**Moderated Discussion (11:00-11:45)**

4. Scott Baker, PJM, moderated a discussion with Jonathon Glass, Technology to Market Advisor at ARPA-E, on investing in breakthrough storage technology.

**Wrap up – Action Items and Future Agenda Topics (11:45-12:00)**

The facilitation team reviewed action items from the meeting and took requests for future agenda items.

Future Meeting Dates and Materials			Materials Due to Secretary	Materials Published
Date	Time	Location		
October 2, 2023	9:00-12:00	WebEx	Sept. 22, 2023	Sept. 27, 2023
December 12, 2023	9:00-12:00	WebEx	Dec. 4, 2023	Dec. 7, 2023

## WebEx Meeting Registration

Last Name	First Name	Company	Sector
Callaghan (Facilitator)	Chris	PJM Interconnection, LLC	None
Kovler (Acting Secretary)	Ed	PJM Interconnection, LLC	None
Tutino (Secretary)	Joseph	PJM Interconnection, LLC	None
Ackerman	Andrea	CAPS	None
Anders	David	PJM Interconnection, LLC	None
Baker	Jeff	Duke Energy Ohio, Inc	Transmission Owner
Baker	Scott	PJM Interconnection, LLC	None
Benson	Dan	Duke Energy Indiana, LLC	None
Benckek	James	American Transmission Systems, Inc.	Transmission Owner
Bernabeu	Emanuel	PJM Interconnection, LLC	None
Bhana	Rajesh	Exelon Business Services Company, LLC	Transmission Owner
Boyle	Sean	Constellation Energy Generation, LLC	Generation Owner
Brodbeck	John	EDP Renewables North America LLC	Generation Owner
Bunch	Kevin	EDF Trading North America, LLC	Other Supplier
Canter	David	Appalachian Power Company (AEP Generation)	Transmission Owner
Chmielewski	Brian	PJM Interconnection, LLC	None
Concina	Wendell	Commonwealth Edison Company	Transmission Owner
Corash	Richard	Public Service Electric and Gas Company	Transmission Owner
Coyle	Billy	Virginia Electric & Power Company	Transmission Owner
Croop	Danielle	PJM Interconnection, LLC	None
D'Antonio	Phil	PJM Interconnection, LLC	None
Davis	Elizabeth	PJM Interconnection, LLC	None
Davis	Jim	Virginia Electric & Power Company	Transmission Owner
Dolan	Ryan	Electric Power Engineers	None
Downs	Jere	PJM Interconnection, LLC	None
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Dumitriu	Nicolae	PJM Interconnection, LLC	None
Fan	Zhenyu	PJM Interconnection, LLC	None
Fazio	Danielle	Engelhart CTP (US) LLC	Other Supplier
Feller	John	PPL Electric Utilities Corp. dba PPL Utilities (TO)	Transmission Owner
Filomena	Guy	Customized Energy Solutions, Ltd.	None
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier
Foladare	Kenneth	Tangibl	None
Ford	Adrien	Constellation Energy Generation, LLC	Generation Owner
Garnett	Bryan	Duke Energy Ohio, Inc	Transmission Owner
Gilani	Rehan	ConEdison Energy, Inc	Other Supplier
Glatz	Suzanne	PJM Interconnection, LLC	None
Gorman	Bradley	American Transmission Systems, Inc.	Transmission Owner
Graf	Walter	PJM Interconnection, LLC	None
Greening	Michele	PJM Interconnection, LLC	None
Guntle	Vince	American PowerNet Management, L.P	End Use Customer
Guzejko	Brian	PECO Energy Company	Transmission Owner
Hartung	Shanna	PJM Interconnection, LLC	None
Hasham-Lawrence	Aine	PJM Interconnection, LLC	None
Herel	Suzanne	PJM Interconnection, LLC	None
Hoatson	Tom	West Deptford Energy, LLC	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horger	Tim	PJM Interconnection, LLC	None
Horning	Lynn Marie	American Municipal Power, Inc.	Electric Distributor

Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Hyzinski	Tom	GT Power Group, LLC	None
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Johnson	Carl	Customized Energy Solutions, Ltd.	None
Johnston	David	Indiana Utility Regulatory Commission	None
Kauffman	Brian	Enel X North America, Inc.	Other Supplier
Kazerooni	Hamid	PJM Interconnection, LLC	None
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Kogut	George	New York Power Authority	Other Supplier
Laios	Takis	Appalachian Power Company (AEP Transmission)	Transmission Owner
Lejcar	Jamie	Allegheny Electric Cooperative, Inc.	Electric Distributor
Lockwood	Craig	Appalachian Power Company (AEP Transmission)	Transmission Owner
Mabry	David	McNees Wallace & Nurick LLC	None
Mariam	Yohannes	Office of the People's Counsel for the District of Columbia	None
Mason	Gary	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Mason	Julie	Duke Energy Ohio, Inc.	Transmission Owner
Matheson	Douglas	SYSO Inc.	Other Supplier
McClelland	Maura	Public Utilities Commission of Ohio	None
McCormick	Katharine	Illinois Commerce Commission	None
McNicholas	Daniel	Nautilus Power, LLC	Generation Owner
Mefford	Mark	East Kentucky Power Cooperative, Inc.	Transmission Owner
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Militello	Nicole	PJM Interconnection	None
Mooney	Jeffrey	Allegheny Power (MonPwr Gen)	Transmission Owner
Nareshkumar	Koushy	Potomac Electric Power Company	Electric Distributor
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
Okenfuss	James	Savion, LLC	None
Ondayko	Brock	AEP Energy Partners, Inc. (AEP Gen Resources)	Transmission Owner
Peters	Ignatius	Burns and McDonnell	None
Phenix	Michael	Red Oak Power, LLC	Generation Owner
Phillips	Darlene	PJM Interconnection	None
Poulos	Greg	CAPS	None
Price	Mark	DC Energy Mid-Atlantic, LLC	Other Supplier
Price	Ruth	Delaware Division of the Public Advocate	None
Ramsey	James	Perast Fund LP	Other Supplier
Roettker	Joe	Duke Energy Ohio, Inc.	Transmission Owner
Rohrbach	John	Wabash Valley Power Association, Inc.	Electric Distributor
Roychowdhury	Rajarshi	Dayton Power & Light Company (The)	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None
Scarpignato	David	Calpine Energy Services, L.P.	Generation Owner
Schmitt	David	New Jersey Board Of Public Utilities	None
Schroeder	Connie	Dominion Virginia Power	Transmission Owner
Schuyler	Ken	PJM Interconnection	None
Selick	Sam	Customized Energy Solutions, Ltd.	None
Shah	Vijay	PJM Interconnection	None
Shegarfi	Roozbeh	Constellation Energy Generation, LLC (NEV_XLON)	Generation Owner
Shields	Jeffrey	PJM Interconnection	None
Sloan	Ben	Organization of PJM States, Inc.	None
Stines	Zachary	New Leaf Energy, Inc.	None
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Suh	Jung	Calpine Energy Solutions, LLC	Other Supplier
Swalwell	Brad	Tangent Energy Solutions, Inc.	Other Supplier
Sweeney	Rory	Power Prose, Inc.	None
Unger	Matthew	State Corporation Commission (Commonwealth of Virginia)	None
Walcavich	Colin	Green River Holdings, LLC	Generation Owner
Wehnes	Kathleen	Maryland Department of the Environment	None
Whitehead	Jeffrey	GT Power Group, LLC	None
Wilches	Rafael	PSEG Energy Resources and Trade LLC	Other Supplier
Wilson	James	Wilson Energy Economics	None



Wingfield	Derek	East Kentucky Power Cooperative, Inc.	Transmission Owner
Wolf	James	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Yi	Jin An	Other	None
Zhou	Zhangxin	Virginia Electric & Power Company	Transmission Owner

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