

Emerging Technologies Forum WebEx Only September 1, 2021 9:00 a.m. – 12:00 p.m. EPT

Administration

- Yuri Smolanitsky, PJM, made announcements, and review the Antitrust, Code of Conduct, Public Meeting/Media Participation Guidelines, and the WebEx Participant Identification Requirement. Stakeholders endorsed the draft minutes from the June 14, 2021 meeting with no objections and no abstentions registered.
- Eric Hsia, PJM, made a public announcement about Marginal Emission Rate production release DM2 and reference white paper posted at <u>https://www.pjm.com/-/media/etools/data-miner-2/marginal-</u> <u>emissions-primer.ashx</u>. A question raised about longevity of the marginal unit and impact from a significant load change. Future modifications will be presented at the Tech Change Forum.

Topic Discussions

3. Carbon Emissions Data

a. Brent Hollenbeck, TimberRock, discussed the use of real-time marginal carbon emissions data as part of an accounting system to track load customers' carbon intensity.

4. Hydrogen Technology Implementation in Generation Facility

a. Mark Barry, Long Ridge Energy, discussed on how hydrogen being incorporated at the Long Ridge Energy Generation project

- 5. Hydrogen Research and Technology
 - a. Brenor Brophy, Plug Power, discussed hydrogen-manufacturing plant.
- 6. IEEE 2020 System Operator Survey
 - a. Jay Liu, PJM, reviewed IEEE 2020 system operator survey December

Future Agenda Items

Participants had opportunity to request the addition of any new item(s) to the agenda of a future meeting.

a. PPL dynamic line rating.

Future Meeting Dates

December 7, 2021

9:00 a.m.

WebEx/Teleconference Attendance

WebEx



Meeting Minutes

Last Name	First Name	Company Name	Sector
Ali	Shadab	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Allyn	Jennifer	Sempra Renewables	None
Ament	Todd	Mahoning Creek Hydroelectric Company, LLC	Generation Owner
Anders	David	PJM Interconnection, LLC	None
Baker	Scott	PJM Interconnection, LLC	None
Baker	Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Benchek	Jim	American Transmission Systems, Inc.	Transmission Owner
Bernabeu	Emanuel	PJM Interconnection, LLC	None
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bhana	Rajesh	Exelon Business Services Company, LLC	Transmission Owner
Buhler	Thomas	Rockland Electric Company	Transmission Owner
Burnham	Kat	Advanced Energy Economy (AEE)	None
Callen	Zachary (Zac)	Illinios Commerce Commission	None
Carmean	Gregory	OPSI	None
Caven	Augustine	PJM Interconnection, LLC	None
Cheung	Erica	Ontario Power Generation Energy Trading, Inc.	Other Supplier
Chin	Brian	Citigroup Energy, Inc.	Other Supplier
Chmielewski	Brian	PJM Interconnection, LLC	None
Choi	Wonbae	Samsung	None
Christopher	Mahila	Public Utilities Commission of Ohio (The)	None
D'Alessandris	Lou	FirstEnergy Corporation	Transmission Owner
Davis	Elizabeth (Becky)	PJM Interconnection, LLC	None
Day	Jason	Oceanside Power LLC	None
Didsayabutra	Paul	Rochester Gas and Electric Corporation	Other Supplier
Dumitriu	Nicolae	PJM Interconnection, LLC	None
Eklof	Nate	WPPI Energy	Other Supplier
Elkins	Rachel	FirstEnergy Corporation	Transmission Owner
Evans	David	Commonwealth Edison Company	Transmission Owner
Fan	Zhenyu	PJM Interconnection, LLC	None
Filomena	Guy	Customized Energy Solutions, Ltd.*	None
Fitzpatrick	Brian	PJM Interconnection, LLC	None
Foladare	Kenneth	Geenex Solar LLC	Generation Owner
Fuller	Jason	Pacific Northwest National Laboratory	None
Gahimer	Michael	IN Office of Utility Consumer Counselor	End-Use Customer
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Graf	Walter	PJM Interconnection, LLC	None
Grytsulyak	Yuriy	PJM Interconnection, LLC	None
Guntle	Vince	American PowerNet Management	End-Use Customer
Guzejko	Brian	PECO Energy Company	Transmission Owner
Hasan	Prusha	Advanced Energy Economy, Inc.	None
Hathcock	Jason	Strata Solar	None
Heater	Megan	PJM Interconnection, LLC	None



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Helm	Gary	PJM Interconnection, LLC	None
Herel	Suzanne	PJM Interconnection, LLC	None
Hoatson	Tom	Riverside Generating, LLC	Generation Owner
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horning	Lynn Marie	Customized Energy Solutions, Ltd.*	None
Hsia	Eric	PJM Interconnection, LLC	None
Hull	Gerit	American Municipal Power, Inc.	Electric Distributor
Hurwich	Mark	Elliott Bay Energy Trading, LLC	Other Supplier
Hyzinski	Tom	GT Power Group	None
Jens	Thomas	Black Oak Energy, LLC	Other Supplier
Johnston	David	Indiana Utility Regulatory Commission	None
Kazerooni	Hamid	PJM Interconnection, LLC	None
Koepplinger	Alexandria	Michigan Public Service Commission	None
Kogut	George	New York Power Authority	Other Supplier
Laios	Takis	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Le	Khai	Perkins Coie	None
Liu	Jay	PJM Interconnection, LLC	None
Lowe	Connie	Dominion Virginia Power	None
Martini	Danielle	PJM Interconnection, LLC	None
Mason	Julie	Duke Energy Ohio, Inc.	Transmission Owner
McArdle	Brian	NextEra Energy Power Marketing, LLC	Other Supplier
McCarthy	John	Covanta Energy Group, LLC	Generation Owner
McGlynn	Paul	PJM Interconnection, LLC	None
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Milani	Martin	Sunverge	None
Okenfuss	James	Savion, LLC	None
Ondayko	Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Pezalla	William	Old Dominion Electric Cooperative	Electric Distributor
Pham	Bao	Old Dominion Electric Cooperative	Electric Distributor
Pilong	Christopher	PJM Interconnection, LLC	None
Qiu	Wenzheng	PJM Interconnection, LLC	None
Robinson	Becky	Vista Energy Marketing, L.P.	Other Supplier
Rodriguez	Tomas	OPSI	None
Salet	Sal	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	None
Schmitt	Jeffrey	PJM Interconnection, LLC	None
Schmitt	David	New Jersey Board of Public Utilities	None
Singh	Mohit	Commonwealth Edison Company	Transmission Owner
Sitarchyk	Michael	PJM Interconnection, LLC	None
Sorrels	James	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Sun	Haibin	Constellation Energy Services, Inc.	Other Supplier
Sunderhauf	Stephen	Delmarva Power	Transmission Owner
Svenson	Heather	Public Service Electric & Gas Company	Transmission Owner
Swalwell	Brad	Tangent Energy Solutions, Inc.	Other Supplier
Tacka	Natalie	PJM Interconnection, LLC	None



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Tang	James	PJM Interconnection, LLC	None
Tekle	Zelalem	Baltimore Gas and Electric Company	Transmission Owner
Thundiyil	Kevin	Exelon Business Services Company, LLC	Transmission Owner
Van Stee	Tomas	EnPowered USA Inc.	Other Supplier
Wagner	Toni	PJM Interconnection, LLC	None
Watts	Shane	PJM Interconnection, LLC	None
Willey	Amy	Delaware.gov	None
Willis	Brian	Potomac Electric Power Company	Electric Distributor
Wisersky	Megan	Madison Gas & Electric Company	Other Supplier
Yoder	Michael	RTO Insider	None
Zamani	Vahraz	Grid Bright	None

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