

DER and Inverter-based Resources Subcommittee

WebEx Only

September 24, 2021

9:00 a.m. – 4:00 p.m. ET

Administration (9:00 – 9:15)

1. Scott Baker, PJM, opened the meeting and reviewed the agenda.
2. Hamad Ahmed, PJM, reviewed the meeting participation guidelines. The meeting minutes from August 16 and August 17 DIRS were approved with 0 objections and 0 abstentions.

Order 2222 – Stakeholder Feedback on PJM Staff Proposal (9:15 – 11:15)

3. IMM presented feedback on the PJM straw proposal.
 - Catherine Tyler, Monitoring Analytics, reviewed response to PJM proposal for Order 2222. Catherine discussed PJM's need to have accurate information for the registration process and several potential issues within the PJM proposal. Catherine also discussed the need to have a maximum size requirement for DERs in DERA's.
 - Catherine discussed their input on modeling impact factor and reviewed an example between PJM and RT scenario. Catherine also discussed Monitoring Analytics input on DR with injection in DERA and potential dual role of EDC's.
4. PJM Staff reviewed updates to the PJM proposal in the matrix.
 - Danielle Croop, PJM, reviewed several redline changes to the matrix following discussion from August DIRS meetings.
 - Jeff Dennis, AEE, reviewed alternative approach to several topics within the matrix.
 - A post meeting matrix was posted on the DIRS page with the changes.

Order 2222 – Use Case Discussion (11:30 – 12:15)

5. Madalyn Beban, PJM, provided updates on the use cases that PJM has been developing as part of its proposal.
 - Madalyn reviewed different topics that were incorporated following feedback from Stakeholders and discussed several other key topics seeking feedback from Stakeholders. Madalyn reviewed use case characteristics, different DER types and a table highlighting two use cases consolidated into one. Madalyn also presented examples of five different use cases.


Order 2222 – DER / DERA Registration and Review Process (12:45 – 1:30)

6. Danielle Croop, PJM, reviewed draft considerations for the DER and DER Aggregation registration and review process.

- Danielle reviewed roles and responsibilities of RERRA, Aggregator, EDC, PJM and LSE during the DERA registration process and also reviewed flow diagram for 60 days registration and review process.

Wrap-up – Action items and next meeting agenda (1:30 – 1:45)

7. The facilitation 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	5 p.m.	4 p.m.
October 28, 2021	9:00 – 4:00	WebEx	October 20, 2021	October 25, 2021
November 9, 2021-EDC Coordination workshop	3:00 – 5:00	WebEx	November 1, 2021	November 4, 2021
November 22, 2021	9:00 – 3:00	WebEx	November 12, 2021	November 17, 2021
December 9, 2021-EDC Coordination workshop	3:00 – 5:00	WebEx	December 1, 2021	December 6, 2021
December 21, 2021	9:00 – 4:00	WebEx	December 13, 2021	December 16, 2021

Author: Hamad Ahmed

WebEx Meeting Attendance

Name	Company Name	Sector
Hamad Ahmed	PJM Interconnection	None
Malcolm Ainspan	NRG Curtailment Solutions, Inc.	Other Supplier
Melissa Alfano	Solar Energy Industry Association	
William Allen	Commonwealth Edison Company	Transmission Owner
David Anders	PJM Interconnection	None
Jared Anderson	American Transmission Company - Retired	
todd aquino	Pine Gate Mid-Atlantic, LLC	
Jeff Baker	PJM Connect	
Scott Baker	PJM Interconnection	None
George Beam	PPL Elec Utilities Corp dba PPL Utilities (PPL POLR Small C&I)	Transmission Owner
Madalyn Beban	PJM Interconnection	None
Jim Benchek	FirstEnergy Corporation	
Stephen Bennett	PJM Interconnection	None
Emanuel Bernabeu	PJM	
Aaron Berner	PJM Interconnection	None
Tyler Berton	AEP Appalachian Transmission Company, Inc.	Transmission Owner

Sudipto Bhowmik	Burns and McDonnell	
Donnie Bielak	PJM Interconnection	None
Michael Borgatti	PJM Committee Voting Generic Account	
John Borkoski	MD Public Service Commission	
Joe Bowring	Monitoring Analytics	
Glen Boyle	PJM Interconnection	None
John Brodbeck	EDP Renewables North America LLC	Generation Owner
Patrick Bruno	PJM Interconnection	None
Michael Bryson	PJM Internal	
Thomas Buhler	PJM Connect	
Tim Burdis	PECO Energy Company	Transmission Owner
Tim Burdis	PJM Interconnection	None
Jennifer Burke	Guidehouse Inc.	None
Kevin Burns	Open Access Technology International, Inc.	None
Michelle Butler	Guidehouse	
Zachary Callen	Illinois Commerce Commission	
Bruce Campbell	Enerwise Global Technologies, LLC	Other Supplier
David Canter	Appalachian Power Company (AEP Generation)	Transmission Owner
Gregory Carmean	Organization of PJM States, Inc.	
Onyinye Caven	Salil LLC	
Edrissa Cham	Savion, LLC	
Sean Chang	Shell Energy North America (US), L.P.	Other Supplier
Iker Chocarro Aguirrebengoa	RWE Renewables Americas, LLC	Generation Owner
Wonbae Choi	Samsung Renewable Energy Inc.	
Mahila Christopher	Public Utilities Commission of Ohio	
Roseanne Circelli	Public Service Electric & Gas Company	Transmission Owner
Stephen Thiel ComEd	PJM Connect	
Nancy Connelly	Duke Energy Ohio, Inc.	Transmission Owner
Billy Coyle	Dominion Virginia Power	Transmission Owner
Thomas Cremer	Centrica Business Solutions Optimize, LLC	Other Supplier

Danielle Croop	PJM Interconnection	None
		Transmission Owner
Jeff Currier ES	Dominion Virginia Power	
		Transmission Owner
Louis D'Alessandris	American Transmission Systems, Inc.	
		Transmission Owner
Padmaja Dasari	Dayton Power & Light Company (The) (EDC)	
Elizabeth Davis	PJM Interconnection	None
		Generation Owner
James Davis	Dominion Energy Generation Marketing, Inc.	
Joseph DeLosa	New Jersey Board of Public Utilities	
Nancy Demers	Kentucky Public Service Commission	
		Electric Distributor
Brett Denby	Northern Virginia Electric Cooperative (NOVEC)	
Thomas DeVita	PJM Interconnection	None
Meredith Dibert	Pennsylvania Department of Environmental Protection	
Laura DiNicola	firstenergy	
		Transmission Owner
Mamadou Diong	Dominion Virginia Power	
Nicholas Disciullo	PJM Interconnection	None
		Transmission Owner
Christin Domian	Duquesne Light Company	
		Other Supplier
Erin Donohue	Enel X North America, Inc.	
Jere Downs	PJM Connect	
Ilyana Dropkin	PJM Interconnection	None
		Transmission Owner
Chuck Dugan	East Kentucky Power Cooperative, Inc.	
Nicolae Dumitriu	PJM Interconnection	None
		Transmission Owner
Rachel Elkins	American Transmission Systems, Inc.	
		Transmission Owner
David Ellis	Public Service Electric & Gas Company	
Christine Ericson	Illinois Commerce Commission	
zhenyu fan	PJM Interconnection	None
Brett Feldman	Other	
Guy Filomena	Customized Energy Solutions, Ltd.	None
Daniel Fipke	174 Power Global	
Brian Fitzpatrick	PJM Interconnection	None
		Other Supplier
Kenneth Foladare	Geenex Solar LLC	

		Electric Distributor
Adrien Ford	Old Dominion Electric Cooperative	
Denise Foster Cronin	East Kentucky Power Cooperative, Inc.	Transmission Owner
Darrell Frogg	PJM Interconnection	None
Christian Fuess	PBF Power Marketing, LLC	Generation Owner
Janice Fuller	NextEra Energy Marketing, LLC	Other Supplier
Michael Gahimer	Indiana Office of Utility Consumer Counselor (IN OUCC)	
Jill Gates	PJM Interconnection	
Terry Gates	Appalachian Power Company (AEP Generation)	Transmission Owner
Ike Gibbs	ibvenergy partners llc	
Rehan Gilani	ConEdison Energy, Inc.	Other Supplier
Suzanne Glatz	PJM Interconnection	None
Craig Glazer	PJM Interconnection	None
Walter Graf	Banpu North America	
Luke Granstrand	Dominion Virginia Power	Transmission Owner
Michele Greening	PJM Interconnection	None
Gary Greiner	PSEG Energy Resources and Trade LLC	Other Supplier
Garan Gunn	Public Service Electric & Gas Company	Transmission Owner
Vince Guntle	American PowerNet Management, L.P.	End-Use Customer
Howard Haas	Monitoring Analytics	
Erik Hanser	Michigan Public Service Commission	
Gary Hartman	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Prusha Hasan	Advanced Energy Economy	
David Hastings	PJM Committee Voting Generic Account	
Jason Hathcock	Strata Solar	
Thomas Hauske	PJM Interconnection	None
Hassan Hayat	Siemens Industry, Inc.	Other Supplier
Frederick Heinle	Office of the Peoples Counsel	
Suzanne Herel	PJM Interconnection	None
Tom Hoatson	West Deptford Energy, LLC	Generation Owner

Jennifer Hohenshilt	Talen Energy Marketing, LLC	Generation Owner
Nels Hoplin	Trans-Allegheny Interstate Line Company	Transmission Owner
Lynn Marie Horning	Customized Energy Solutions, Ltd.	None
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
Steven Hughes	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Gerit Hull	American Municipal Power, Inc.	Electric Distributor
Benjamin Hunter	BSHunter	
Tom Hyzinski	gtgghyzinsk	
Diane Janicki	Boston Energy Trading and Marketing LLC	Other Supplier
Gina Jardot	NRG Curtailment Solutions, Inc.	Other Supplier
William Jett	Duke Energy Business Services LLC	Transmission Owner
Augustus Johnson	Dominion Virginia Power (EDC)	Transmission Owner
Carl Johnson	Customized Energy Solutions, Ltd.	None
Nathaniel Johnson	Appalachian Power Company (AEP Generation)	Transmission Owner
David Johnston	Other	
Ibrahima Kalle	Tibiri Energy Group	
Brian Kauffman	Enel X North America, Inc.	Other Supplier
Samuel Kayne	Delaware PSC	
Stephen Kelly	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Kevin Kilgallen	Avangrid Renewables, LLC	Generation Owner
Nicolas Koehler	Appalachian Power Company (AEP Transmission)	Transmission Owner
Alexandria Koeplinger	Michigan Public Service Commission	
George Kogut	New York Power Authority	Other Supplier
Dimitar Kozuharov	State Commissions	
Katherine Legates	Appalachian Power Company (AEP Generation)	Transmission Owner
Cecilia Liang-Nicol	Allegheny Power (MonPwr Gen)	

		Electric Distributor
Steven Lieberman	American Municipal Power, Inc.	
David Lopez	Center for Renewables Integration	
CONNIE LOWE	Dominion Virginia Power	Transmission Owner
Leonid Lyakhovich	Public Service Electric & Gas Company	Transmission Owner
David Mabry	McNees Wallace & Nurick LLC	
Anthony Madonna	EnergyHub	
Angelo Marcino	PJM Interconnection	None
Yohannes Mariam	Office of the People's Counsel for the District of Columbia	
		Generation Owner
Timothy Martin	Green River Holdings, LLC	
Ray MASON	Other	
		Other Supplier
Doug Matheson	Enel X North America, Inc.	
John McCombIII	PJM Interconnection	None
Katharine McCormick	Illinois Commerce Commission	
Ken McCracken	Reliability First	
Steve McElwee	PJM Interconnection	None
Paul McGlynn	PJM Interconnection	None
		Transmission Owner
Timothy McInerney	Commonwealth Edison Company	
Allison Mensik	University of Delaware	
Sharon Midgley	Exelon Business Services Company, LLC	Transmission Owner
Mike Nester	Dominion Virginia Power (EDC)	Transmission Owner
Ryan Nice	PJM Interconnection	
		Other Supplier
Emma Nix	Jersey Green Energy LLC	
		Electric Distributor
Chris Norton	American Municipal Power, Inc.	
Brent Oberlin	Plus Power	
		Transmission Owner
Brock Ondayko	AEP Energy Partners, Inc. (AEP Gen Resources)	
Sara Parkison	University of Delaware	
Martin Paszek	OSI Digital Grid Solutions	
Asanga Perera	New York ISO	
Darlene Phillips	PJM Interconnection	None
Christopher Pilong	PJM Interconnection	None

		Transmission Owner
Joseph Polka	Duquesne Light Company	
Greg Poulos	PJM Committee Voting Generic Account	
		Transmission Owner
Nicholas Pratt	PPL Electric Utilities Corp. dba PPL Utilities (TO)	
Ruth Price	Delaware Division of the Public Advocate	
		Electric Distributor
Jason Proconiar	Buckeye Power, Inc.	
Farrokh Rahimi	Open Access Technology International, Inc.	None
		Electric Distributor
John Rainey	Northern Virginia Electric Cooperative (NOVEC)	
Wanda Reder	PPL	
Edward Rich	PJM Interconnection	
Becky Robinson	vistra energy	
Tomas Rodriguez	Organization of PJM States, Inc.	
		Electric Distributor
John Rohrbach	Wabash Valley Power Association, Inc.	
		Transmission Owner
Alexa Rooney	PPL Electric Utilities Corp. dba PPL Utilities (TO)	
		Transmission Owner
Alex Rosenblatt	Duquesne Light Company	
		Transmission Owner
James Rouland	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	
		Transmission Owner
Amanda Rumsey	PPL Electric Utilities Corp. dba PPL Utilities (TO)	
Eric Runge	Open Access Technology International, Inc.	None
Tom Rutigliano	Natural Resources Defense Council	
Jonathan Sasser	Customized Energy Solutions, Ltd.	None
		Generation Owner
David Scarpignato	Calpine Energy Services, L.P.	
Ken Schuyler	PJM Interconnection	None
David Schweizer	PJM Interconnection	
August Seibel	Black Dog Insights	
		Transmission Owner
Bahaa Seireg	Rockland Electric Company	
		Transmission Owner
Evan Shearer	Duke Energy Business Services LLC	
		Transmission Owner
Mark Smith	AEP Energy Partners, Inc. (AEP Retail)	
Greg Solomon	Pennsylvania Public Utility Commission	
		Transmission Owner
James Sorrels	AEP Appalachian Transmission Company, Inc.	

		Other Supplier
Trevor Sprague	Jersey Green Energy LLC	
Sean Sproul	AMP Solar US Services, LP.	
Vincent Stefanowicz	PJM Interconnection	None
Ed Stein	Ohio Edison Company	Electric Distributor
Alexander Stern	Public Service Electric & Gas Company	Transmission Owner
Haibin Sun	Exelon Business Services Company, LLC	Transmission Owner
Heather Svenson	Public Service Electric & Gas Company	Transmission Owner
Brad Swalwell	Tangent Energy Solutions, Inc.	Other Supplier
Rory Sweeney	GT Power Group, LLC	None
Kristin Swenson	Midcontinent Independent Sys Op, Inc. (CTS)	
Ryan Thompson	Metis Energy, LLC	None
Kevin Thundiyil	Exelon Generation Co., LLC (NEV_XLON)	Generation Owner
Andrea Tighe	CAPS	
James Tobia	FirstEnergy Services	
Jianzhong Tong	University of Delaware	
Catherine Tyler	Monitoring Analytics	
Jerry Warchol	Dominion Virginia Power (EDC)	Transmission Owner
Kathleen Wehnes	Maryland Department of the Environment	
Christopher Wehr	Ohio Edison Company (EDC)	Electric Distributor
Joshua Whitaker	Budderfly, Inc.	
Brett White	Invenergy, LLC	Generation Owner
Brett White	Pine Gate Mid-Atlantic, LLC	Other Supplier
Jeffrey Whitehead	GT Power Group	
Bernie Whitmoyer	Jersey Central Power & Light Company	Transmission Owner
Amy Willey	Delaware Public Service Commission	
Femie Williams	East Kentucky Power Cooperative, Inc.	Transmission Owner
Emily Wilmoth ES	Dominion Virginia Power	Transmission Owner
De Andre Wilson	Maryland Public Service Commission	

Megan Wisersky	Madison Gas & Electric Co.	Other Supplier
Damon Xenopoulos	Other	
Andrea Yeaton	PJM Interconnection	None
Jin An Yi	jinan	
Kyungjin Yoo	Monitoring Analytics	
Vivian Younes	PPL Electric Utilities Corp. dba PPL Utilities (LSE)	Transmission Owner
Mike Zhang	PJM Interconnection	None

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