

## Interconnection Process Reform Task Force (IPRTF)

August 23, 2021

9:00 a.m. – 4:00 p.m. ET

### Administration

1. Jack Thomas, PJM, called the meeting to order. Ed Kovler, PJM, reviewed the Antitrust, Code of Conduct.

Ed Kovler reviewed the July 19, 2021 IPRTF Draft Meeting Minutes. No objections or changes were requested. The Meeting Minutes were approved.

Ed Kovler reviewed the August 23, 2021 IPRTF Agenda. No changes to the agenda were requested.

### CBIR Process

2. Jack Thomas, PJM, led a discussion to review the possible transition options poll results.
3. The PJM System Planning group provided details and education related to the PJM solution options.
4. Jack Thomas, PJM, continued the CBIR process reviewing design components and documenting solution packages.
  - 4a. Ken Foladare, Geenex Solar, provided details for the Geenex Solar solution proposal.
  - 4b. Ling Hua, Clearway, provided details for the Clearway solution proposal.
  - 4c. Paul M. Sotkiewicz, e-Cubed Policy Associates, LLC, provided details for the e-Cubed solution proposal.

### Attendee List

Last Name	First Name	Company	Sector
Adams	Darrin	East Kentucky Power Cooperative, Inc.	Transmission Owner
Adams	Michael	Public Service Electric & Gas Company	Transmission Owner
Ali	Shadab	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Anders	David	PJM Interconnection, LLC	None
Andrews	Wes	Torch Clean Energy	
Bainbridge	Tom	Energy Harbor LLC	Generation Owner
Baker	Erin	Vesper Energy	
Barker	Jason	Exelon Business Services Company, LLC	Transmission Owner

Baur	Sean	GlidePath Development LLC	None
Bautista	Alejandro	PJM Interconnection, LLC	None
Benчек	Jim	American Transmission Systems, Inc.	Transmission Owner
Bernstein	Matthew	PJM Interconnection, LLC	None
Berton	Tyler	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Bhowmik	Sudipto	IBV Energy	
Boyd	Jesse	RES Group	
Brahman	Azade	DNV	
Brier	Michael	Exelon Business Services Company, LLC	Transmission Owner
Brodbeck	John	EDP Renewables North America, LLC	Generation Owner
Broughton	Dillon	Timmons	
Brown	David	NJ Board of Public Utilities	None
Brozina	Mark	Tangibl LLC	None
Bryant	Eric	FirstEnergy Corporation	Transmission Owner
Bryson	Michael (Mike)	PJM Interconnection, LLC	None
Burbure	Neil	EN Engineering	None
Burbure	Stacy	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Callen	Zachary (Zac)	Illinois Commerce Commission	None
Campbell	Kevin	Exelon Business Services Company, LLC	
Canter	David	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Capparelli	David	Dakota Power Partners	None
Carmean	Gregory	OPSI	None
Caven	Onyinye	PJM Interconnection, LLC	
Cham	Edrissa	Tradewind Energy, Inc.	None
Chang	Sean	Shell Energy North America (US), L.P.	Other Supplier
Chmielewski	Brian	PJM Interconnection, LLC	None
Choi	Wonbae	Samsung	None
Christopher	Mahila	Public Utilities Commission of Ohio (The)	None
Circelli	Roseanne	Public Service Electric & Gas Company	Transmission Owner

Cline	Tyler	Coronal Energy	None
Cocco	Michael	Old Dominion Electric Cooperative	Electric Distributor
Conklin	Tyler	Public Utilities Commission of Ohio	None
Connell	Jason	PJM Interconnection, LLC	None
Copeland	Kyle	PJM Interconnection, LLC	
Crawford	Byron	Amazon Energy LLC	Other Supplier
Crosby	Matthew	CCRenew	
Cusick	Kerinia	Center for Renewables Integration	None
Dada	Noorgul	PJM Interconnection, LLC	None
Dadourian	John	Monitoring Analytics, LLC	None
D'Alessandris	Lou	FirstEnergy Corporation	Transmission Owner
Davis	David	Strata Solar	None
Davis	James (Jim)	Dominion Energy Generation Marketing, Inc.	Generation Owner
DeAngelis	Tom	East Point Energy	
Delaney	Liz	Borrego Solar Systems	None
Denby	Brett	NOVEC	None
Dertzbaugh	Tim	Foundaton Solar	
Dibert	Meredith	PA GOV	
Dionne	Sam	Sun Pin Solar	
Dixit	Anuj	Recurrent Energy, LLC	Other Supplier
Dolan	James	PJM Interconnection, LLC	None
Dolan	Ryan	Dayton Power & Light Company (The)	Transmission Owner
Dossin	Sophia	Invenergy, LLC	Generation Owner
Downs	Jere	PJM Interconnection, LLC	None
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Echeverri	Julian	OPD Energy	None
Edgar-Smith	Collin	PJM Interconnection, LLC	None
Fall	Maguette	EDF Renewable Energy	
Fan	Zhenyu	PJM Interconnection, LLC	None
Feller	John	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Fernandes	Anisha	PJM Interconnection, LLC	None
Filomena	Guy	Customized Energy Solutions, Ltd.*	None
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Other Supplier

Fink	Sari	American Clean Power Association	None
Foladare	Kenneth	Geenex Solar LLC	Generation Owner
Ford	Adrien	Old Dominion Electric Cooperative	Electric Distributor
Ford	Jennifer	FirstEnergy Corporation	Transmission Owner
Ford	Nicholas (Nick)	Hexagon Energy	None
Foster Cronin	Denise	East Kentucky Power Cooperative, Inc.	Transmission Owner
Franks	Ed	PJM Interconnection, LLC	
Fronsdahl	Nicole	1898 and co	
Fuller	Peter	NRG Power Marketing, LLC	Generation Owner
Gahimer	Michael	IN Office of Utility Consumer Counselor	End-Use Customer
Gebolys	Debbie	Public Utilities Commission of Ohio (The)	None
Ghodsian	Arash	American Transmission Company, LLC	None
Ghodsian	Arash	American Transmission Company, LLC	None
Gibbons	Drew	Savion, LLC	
Gilani	Rehan	ConEdison Energy, Inc.	Other Supplier
Glatz	Suzanne (Sue)	PJM Interconnection, LLC	None
Glenn	David	Avangrid Renewables LLC	Generation Owner
Glennon	James	PJM Interconnection, LLC	None
Gluck	Jim	PJM Interconnection, LLC	None
Gray	Jeff	Grayp LLC	
Greening	Michele	PJM Interconnection, LLC	
Grieve	Andrew	Pine Gate Mid-Atlantic, LLC	Other Supplier
Griffith	Scott	Duke Energy Renewable Services, LLC	
Gulland	Sam	Torch Clean Energy	
Gunn	Garan	Public Service Electric & Gas Company	Transmission Owner
Gupta	R	Eco Plexus	
Hanser	Erik	Michigan Public Service Commission	None
Hasan	Prusha	Advanced Energy Economy, Inc.	None

Hastings	David	Market Interconnection Consulting Services (MICS)	None
Hathcock	Jason	Strata Solar	None
Heath	Katie	Copia Power	None
Heinle	Erik	OPC DC	
Heitmeyer	Chad	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Herel	Suzanne	PJM Interconnection, LLC	None
Hibsman	Michael	Hexagon Energy	
Hicks	Rebecca	Dominion Energy Generation Marketing, Inc.	
Hoatson	Tom	Riverside Generating, LLC	Generation Owner
Hodgdon	Scott	Burns & McDonnell	None
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Hooper	Matthew	Savion, LLC	
Horning	Lynn Marie	Customized Energy Solutions, Ltd.*	None
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hua	Ling	Clearway Energy LLC	None
Hua	Ling	Clearway Energy LLC	None
Hudis	Gabriella	Jersey Green Energy LLC	Other Supplier
Hudson	Jeff	Urban Grid Solar Projects, LLC	Other Supplier
Hussing	Greg	None	None
Hyzinski	Tom	GT Power Group	None
Iler	Arthur (Art)	Indiana Office of Utility Consumer Counsel	End-Use Customer
James	Eric	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Janapareddy	Anuj	National Grid Renewables	
Jardot	Gina	Essential Power Rock Springs, LLC	Generation Owner
Jayachandran	Marilyn	PJM Interconnection, LLC	None
Johnson	Carl	Customized Energy Solutions, Ltd.*	None
Johnson	Jessica	Timmons	
Johnston	David	Indiana Utility Regulatory Commission	None
Jones	Peter	Energy Endeavors, LLC	Other Supplier
Joshiapura	Neil	State Corporation Commission Commonwealth of Virginia	None
Kalle	Ibrahima	Tibiri Energies	None

Kauffman	Brian	Enel X North America, Inc.	Other Supplier
Kay	Thomas	Commonwealth Edison Company	Transmission Owner
Keenan	Matthew	Jpower USA	None
Kelly	Bridgette	X-Elio	
Kelly	Stephen	Brookfield Energy Marketing LP	Other Supplier
Khan	Bakhtawar	Gabel Assoc	
khodaparastan	Mahdiyeh	ENBW	
Kidwell	Christopher	Duke Energy Business Services LLC	Transmission Owner
Kilgallen	Kevin	Avangrid Renewables LLC	Generation Owner
Kogut	George	New York Power Authority	Other Supplier
Kovler	Ed	PJM Interconnection, LLC	None
Kozhuharov	Dimitar	Delaware Municipal Electric Corporation, Inc.	Electric Distributor
Krizenoskas	Lisa	PJM Interconnection, LLC	None
Kuchan	Meagan	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Ladin	Sarah	NYU EDU	
Laios	Takis	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Lambert	Andrew	PJM Interconnection, LLC	None
Lame	Mamadou	Borrego Solar Systems	None
LaRocque	Matthew	PJM Interconnection, LLC	None
Leventhal	David	AES Ohio Generation, LLC	
Linder	Nicholas	Ulteig	None
Litchfield	Matthew	CPV Shore, LLC	Generation Owner
Lopez	Annie	East Point Energy	
Lousos	Alexandros	AMP Transmission, LLC	Transmission Owner
Mabry	David	McNees Wallace & Nurick LLC	None
Malcolm	Kimberly	FirstEnergy Corporation	Transmission Owner
Mariam	Yohannes	Office of the Peoples Counsel for the District of Columbia	End-Use Customer
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Maurek	Chad	Meppi	
Mazari	Shukul	Savion, LLC	
McCormick	Katharine	Illinois Commerce Commission	None
McGill	Susan	PJM Interconnection, LLC	None
McGlynn	Paul	PJM Interconnection, LLC	None

McNeil	Justin	Office of the Attorney General, Kentucky	End-Use Customer
Mekala	Karthik	RWE Renewables Americas, LLC	Generation Owner
Midgley	Sharon	Exelon Business Services Company, LLC	Transmission Owner
Milligan	James	Duquesne Light Company	Transmission Owner
Miralda	Jessica	Borrego Solar Systems	
Murphy	Shaun	PJM Interconnection, LLC	None
Najafabadi	Amin	DNV	
Narum	Travis	Savion, LLC	
Nedwick	Peter	Virginia Electric & Power Company	Transmission Owner
Nestel	Stacey	PJM Interconnection, LLC	None
Niu	Hui (Grace)	PJM Interconnection, LLC	None
Okenfuss	James	Savion, LLC	None
Ondayko	Brock	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Pahwa	Ankit	Burns & McDonnell	None
Panegal	Ash	Apex Clean Energy	None
Parkison	Sara	University of Delaware	None
Patel	Komal	PJM Interconnection, LLC	None
Paul	Conrad	FirstEnergy Corporation	Transmission Owner
Pawar	Aasawari	First Solar, Inc.	None
Peacey	Denelle	TransAlta Energy Marketing (U.S.) Inc.	Other Supplier
Pezalla	William	Old Dominion Electric Cooperative	Electric Distributor
Pham	Bao	Old Dominion Electric Cooperative	Electric Distributor
Poulos	Greg	CAPS	None
Pratt	Nicholas (Nick)	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Ptak	Anton	EDF Renewable Energy	None
Pungaliya	Rajat	Pine Gate Renewables, LLC	None
Rainey	John	Northern Virginia Electric Cooperative	Electric Distributor
Rana	Deepesh	Apex Clean Energy	None
Rasmussen	Terence	AMP	
Reagan	Ryann	New Jersey Board of Public Utilities	None
Redding	Andrew	Heelstone Renewable Energy	None

Renzi	Kim	FirstEnergy Corporation	
Richards Jr	Cleveland	Price Waterhouse Cooper	None
Robichaud	Donna	Geenex	None
Rodriguez	Tomas	OPSI	None
Rodriguez	Tomas	OPSI	None
Rooney	Alexa	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Ryan	Todd	Smart Wire Grid, Inc.	None
Sajja	Pavan	Northern Indiana Public Service Company	Other Supplier
Sasser	Jonathan	Customized Energy Solutions, Ltd.*	None
Schmitt	David	New Jersey Board of Public Utilities	None
Schuyler	Ken	PJM Interconnection, LLC	None
Seiler	Kenneth (Ken)	PJM Interconnection, LLC	None
Shah	Pulin	PECO Energy Company	Transmission Owner
Sharpe	Ian	Leeward Renewable Energy, LLC	None
Shields	Tom	Avangrid Renewables, LLC	Generation Owner
Shoemaker	Jason	PJM Interconnection, LLC	None
Sims	Mark	PJM Interconnection, LLC	None
Singh	Harliv	Northern States Power Company	Other Supplier
Sisillo	Vincent	Savion, LLC	
Smith	Patrick	Duke Energy Renewable Services, LLC	
Stern	Alexander (Alex)	Public Service Electric & Gas Company	Transmission Owner
Stoll	Aaron	ULTEIG	
Streeter	Jason	AES Ohio Generation, LLC	Generation Owner
Stuchell	Jeff	FirstEnergy Corporation	Transmission Owner
Sunderman	Derek	Tradewind Energy, Inc.	None
Swagata	Sengupta	Public Service Electric & Gas Company	Transmission Owner
Swalwell	Brad	Tangent Energy Solutions, Inc.	Other Supplier
Sweeney	Rory	GT Power Group	None
Szot	Lisa	Enel Trading North America, LLC	Other Supplier
Taylor	Robert	Exelon Business Services Company, LLC	Transmission Owner
Tekle	Zelalem	Baltimore Gas and Electric Company	Transmission Owner

Terranova	Chris	PJM Interconnection, LLC	None
Thomas	Amber	Exelon Business Services Company, LLC	Transmission Owner
Thomas	Jack	PJM Interconnection, LLC	None
Thompson	Jonathan	PJM Interconnection, LLC	None
Thundiyil	Kevin	Exelon Business Services Company, LLC	Transmission Owner
Tobia	James	FirstEnergy Corporation	Transmission Owner
Toppo	Shilpa	174 Power	
Tribulski	Jennifer	PJM Interconnection, LLC	None
Vander Vorst	Aaron	Tradewind Energy, Inc.	None
Von Pinho	Frederico	NextEra Energy Transmission, LLC	Other Supplier
Wagner	Toni	PJM Interconnection, LLC	None
Warmuth	Jenna	Nexamp	None
Warren	Wendy	Wright Law	
Watson	Jeanine	PJM Interconnection, LLC	None
Weeks	Thomas	Michigan Public Power Agency	Generation Owner
Whalen	Michael	Foundaton Solar	
Wharton	Matthew	PJM Interconnection, LLC	None
White	Brett	Other	None
Whitehead	Jeffrey	GT Power Group	None
Whitson	Warren	Silicon Ranch	
Widom	Stuart	PJM Interconnection, LLC	None
Williams	Lesley	Geenex Solar LLC	Other Supplier
Xu	Xu	PJM Interconnection, LLC	None
Yochelson	Cheri	Dominion Virginia Power	None
Young	Brandon	Public Service Electric & Gas Company	Transmission Owner
Yovanovich	Laura	PJM Interconnection, LLC	None
	Mubashir	Plus Power	