



## ISSUE CREATION

[Problem Statement](#) and [Issue Charge](#) brought forward by PJM and Distributed Resources Subcommittee (DISRS) reached consensus at the December 4, 2023 DISRS meeting.

The issue was worked through the Distributed Resources Subcommittee [Charter](#)

## ISSUE SUMMARY

Over the past three years, PJM and stakeholders have worked to define business rules for hybrid resources participating in PJM's markets. The first phase of this work focused on solar-storage hybrids. The second phase expanded the hybrids participation model to all types of inverter-based hybrid resources. The third phase of this work will focus on enhancements and/or clarifications to the existing market rules for these resources, as well as the definition of additional market rules for non-inverter based hybrid configurations (e.g., gas plus storage).

## CONSENSUS-BASED ISSUE RESOLUTION PROCESS

Number of Meetings and date range covering this topic at DISRS: 10 meetings and 11/3/2023 – 8/5/2024

Non-Binding Poll Results: None

Vote Results: None

DISRS completed its work on this issue through CBIR process. DISRS reached consensus at the August 5, 2024 meeting to bring the single solution package in the matrix to the MIC: [Final Matrix](#)

## 1. RECOMMENDED PROPOSAL

The proposed package addressed multiple design components. An overview of the proposal can be viewed [here](#).

Alternate 1 Proposal

None

## 2. ALTERNATE 2 PROPOSAL

None

## 3. STANDING COMMITTEE RESULTS

Market Implementation Committee (MIC) will vote on the proposed package at October 9, 2024 MIC meeting.

## APPENDIX I: SUPPLEMENTAL DOCUMENTS

[Committee Page](#)

[Issue Tracking](#)



# Distributed Resources Subcommittee (DISRS) Final Report

## APPENDIX II: PJM PARTICIPATION

Facilitator: Ilyana Dropkin

Secretary: David Hauske

Subject Matter Expert: Maria Belenky

PJM Legal: Thomas DeVita

## APPENDIX III: STAKEHOLDER PARTICIPATION

Last Name	First Name	Company	Sector
Anders	David	PJM Interconnection, LLC	None
Anderson	Juliet	Constellation Energy Generation, LLC	Generation Owner
Baizman	Aaron	PJM Interconnection, LLC	None
Baker	Scott	PJM Interconnection, LLC	None
Baker	Jeff	Duke Energy Ohio, Inc.	Transmission Owner
Barker	Jason	Vitol Inc.	Generation Owner
Barrett	Richard	New Jersey Board of Public Utilities	None
Bauer	Jessie	Commonwealth Edison Company	Transmission Owner
Beam	George	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Belenky	Maria	PJM Interconnection, LLC	None
Berneski	Marissa	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Borkoski	John	MD Public Service Commission	None
Branch	John	Enel Trading North America, LLC	Other Supplier
Brooks	Royce	Old Dominion Electric Cooperative	Electric Distributor
Campbell	Bruce	Enerwise Global Technologies, LLC	Other Supplier
Carmean	Greg	Organization of PJM States, Inc. (OPSI)	None
Chmielewski	Brian	PJM Interconnection, LLC	None
Christopher	Mahila	Public Utilities Commission of Ohio	None
Chu	George	PJM Interconnection, LLC	None
Ciabattoni	Joe	PJM Interconnection, LLC	None



# Distributed Resources Subcommittee (DISRS) Final Report

Connelly	Nancy	Duke Energy Ohio, Inc.	Transmission Owner
Connolly	Matthew	PJM Interconnection, LLC	None
Costa	Arthur	Dominion Virginia Power	Transmission Owner
Coyne	Suzanne	PJM Interconnection, LLC	None
Croop	Danielle	PJM Interconnection, LLC	None
D'Antonio	Phil	PJM Interconnection, LLC	None
Davies	Steve	Indiana Regulatory Commission	None
Domian	Christin	Duquesne Light Company	Transmission Owner
Dossin	Sophia	Middle River Power	Generation Owner
Drom	Rick	Eckert Seamans	None
Dropkin	Ilyana	PJM Interconnection, LLC	None
Dugan	Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Ellis	David	Public Service Electric and Gas Company	Transmission Owner
Esterly	Theresa	PJM Interconnection, LLC	None
Fan	Zhenyu	PJM Interconnection, LLC	None
Fee	George	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Fereshetian	Damon	PJM Interconnection, LLC	None
Filomena	Guy	Customized Energy Solutions, Ltd.	None
Fink	Sari	MAREC Action	None
Fink	Regan	Pine Gate Mid-Atlantic, LLC	Generation Owner
Foladare	Kenneth	Geenex Solar LLC	Other Supplier
Ford	Adrien	Constellation Energy Generation, LLC	Generation Owner
Frogg	Darrell	PJM Interconnection, LLC	None
Fuller	Peter	Autumn Lane Energy Consulting LLC	None
Gates	Terry	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Gates	Jill	PJM Interconnection, LLC	None
Gilani	Rehan	RWE Clean Energy, LLC	Generation Owner
Gordon	Jon	Advanced Energy United	None



# Distributed Resources Subcommittee (DISRS) Final Report

Grant	Christopher	Florida Power & Light Company	Other Supplier
Grey	Bruce	Samsung Electronics Co., Ltd.	None
Grisolia	Albert	Public Service Electric and Gas Company	Transmission Owner
Hallett	Brian	ReliabilityFirst	None
Hanawa	Angie	Enel X North America, Inc.	Other Supplier
Handlin	Michael	PJM Interconnection, LLC	None
Hanser	Erik	Michigan Public Service Commission	None
Hartt	Brandon	Engelhart CTP (US) LLC	Other Supplier
Hastings	David	Public Service Electric and Gas Company	Transmission Owner
Hatch	Kevin	PJM Interconnection, LLC	None
Hauske	David	PJM Interconnection, LLC	None
Hausle	Kyle	NuEnergy, LLC	Other Supplier
hedayati	Mojgan	PJM Interconnection, LLC	None
Himmelspach	Treasa	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Hoatson	Thomas	LS Power	None
Hohenshilt	Jennifer	Talen Energy Marketing, LLC	Generation Owner
Horning	Lynn	AMP Transmission, LLC	Transmission Owner
Horstmann	John	Dayton Power & Light Company (The)	Transmission Owner
Hurd	Shawn	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Hyzinski	Tom	GT Power Group, LLC	None
Janicki	Diane	Boston Energy Trading and Marketing LLC	Other Supplier
Jardot	Gina	NRG Curtailment Solutions, Inc.	Other Supplier
Johnson	Carl	Customized Energy Solutions, Ltd.	None
Jones	Allie	Northeastern REMC	Electric Distributor
Kathan	David	Kathan Energy Consulting	None
Kelly	Stephen	Brookfield Renewable Trading and Marketing LP (BSMH)	Other Supplier
Kempton	Willett	University of Delaware	None
Kilgallen	Kevin	Avangrid Renewables, LLC	Generation Owner



# Distributed Resources Subcommittee (DISRS) Final Report

Kosner	Bob	Illinois Municipal Electric Agency	Electric Distributor
Li	Kanning	PJM Interconnection, LLC	None
Litzke	Jack	PJM Interconnection, LLC	None
Lu	Chen	PJM Interconnection, LLC	None
Mabry	David	McNees Wallace & Nurick LLC	None
Marcino	Angelo	PJM Interconnection, LLC	None
mason	julie	Duke Energy Ohio, Inc.	Transmission Owner
Mason	Gary	Monongahela Power Company d/b/a Allegheny Power	Transmission Owner
Matheson	Douglas	SYSO Inc.	Other Supplier
Matheson	Douglas	SYSO Inc.	Other Supplier
Matheson	Eric	None	None
McAnany	James	PJM Interconnection, LLC	None
McClelland	Maura	Public Utilities Commission of Ohio	None
Mccorry	Hanna	Illinois Commerce Commission	None
McDaniel	John	Baltimore Gas and Electric Company	Transmission Owner
McDewell	Christian	Commonwealth of PA	None
McNeil	Justin	Office of the Attorney General, Kentucky	End-Use Customer
Metz	John	University of Delaware	None
Miller	John	Calico Energy	None
Mohler	Tina	PJM Interconnection, LLC	None
Morelli	Lisa	PJM Interconnection, LLC	None
Morgenstern	Carl	Duquesne Light Company	Transmission Owner
Moscovitz	Daniel	PJM Interconnection, LLC	None
Nix	Emma	EDF Renewable Development, Inc.	None
Noonan	Casey	PJM Interconnection, LLC	None
Norton	Chris	American Municipal Power, Inc.	Electric Distributor
Olaleye	Michael	PJM Interconnection, LLC	None
Ondayko	Brock	AEP Energy Partners, Inc.	Transmission Owner



# Distributed Resources Subcommittee (DISRS) Final Report

O'Neill	Jack	PJM Interconnection, LLC	None
Osborn	Eric	EDF Trading North America, LLC	Other Supplier
patel	keyurbhai	PJM Interconnection, LLC	None
Patel	Harshil	PJM Interconnection, LLC	None
Phan	Albert	Exelon Business Services Company, LLC	Transmission Owner
Rainey	John	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Richardson	Terrence	Duquesne Light Company	Transmission Owner
Rumsey	Amanda	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Rutledge	Craig	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Salman	Tony	Duke Energy Ohio, Inc.	Transmission Owner
Sasser	Jonathan	Customized Energy Solutions, Ltd.	None
Scheidecker	Paul	Monitoring Analytics, LLC	None
Schroeder	Connie	Dominion Virginia Power	Transmission Owner
Selick	Sam	Customized Energy Solutions, Ltd.	None
Shah	Vijay	PJM Interconnection, LLC	None
Sharkazy III	William	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Sloan	Ben	Organization of PJM States, Inc. (OPSI)	None
Sorrels	James	AEP Appalachian Transmission Company, Inc.	Transmission Owner
Spaetzel	Carl	South Central Power Company	Other Supplier
Stadlmeyer	Rebecca	Gable and Associates	None
Stern	Alexander	Exelon Business Services Company, LLC	Transmission Owner
Storino	Laura	New Jersey Board of Public Utilities	None
Sturgeon	John	Duke Energy Business Services LLC	Transmission Owner
Sweeney	Rory	Northern Virginia Electric Cooperative (NOVEC)	Electric Distributor
Taylor	Daniel	PJM Interconnection, LLC	None
Thomas	Joshua	NextEra Energy Marketing, LLC	Other Supplier
Tyler	Catherine	Monitoring Analytics, LLC	None
Unger	Matthew	State Corporation Commission (Commonwealth of Virginia)	None



# Distributed Resources Subcommittee (DISRS) Final Report

Unger	Matthew	State Corporation Commission (Commonwealth of Virginia)	None
VanBlargan	Bryna	Sabinsville SunPower, LLC	None
Vinnik	Daniel	PJM Interconnection, LLC	None
Wehnes	Kathleen	None	None
Wehr	Christopher	Ohio Edison Company	Transmission Owner
Wharton	Matthew	PJM Interconnection, LLC	None
Wilson	De Andre	Maryland Public Service Commission	None
Xiao	Hong	Energy Exemplar LLC	None
Yasutake	Sarah	Jersey Green Energy LLC	Other Supplier
Yeh	Cynthia	Dominion Virginia Power	Transmission Owner
Yoo	Kyungjin	PJM Interconnection, LLC	None
Zaccagnino	Michelle	Exelon Business Services Company, LLC	Transmission Owner
Zhang	Michael	PJM Interconnection, LLC	None
Zimmerman	Sean	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner