

# Carbon Pricing Senior Task Force (CPSTF) Final Report

November 2021

#### **Issue Creation**

<u>Problem Statement</u> and <u>Issue Charge</u> brought forward by Eastern Generation, Public Service Electric & Gas, CPV Power Holdings, NextEra Energy Marketing, and Dayton Power & Light Company and approved at the April 25, 2019 Markets and Reliability Committee (MRC).

#### **Issue Summary**

The <u>Carbon Pricing Senior Task Force (CPSTF)</u> was established to discuss and explore potential process or rule changes necessary to manage emissions leakage and integrate a regional or sub-regional carbon pricing mechanisms into PJM's energy market design, where appropriate.

Stage 1 of the key work activities included education on various topics as well as the review of PJM and other stakeholder and industry analyses and potential solutions. Educational topics included presentations by PJM and many others in the industry on carbon pricing concepts, the Regional Greenhouse Gas Initiative (RGGI), a review of RPS standards and goals around the PJM region, leakage mitigation efforts in other regions of the country, state/federal jurisdictional issues, a review of then-pending legislation around a clean energy standard, and development of cost-based offers in PJM and inclusion of emission-based costs in such offers. On the analysis side, PJM presented its study on carbon pricing (using high & low RGGI scenario prices) and potential leakage mitigation options. Other analyses and potential solution ideas were presented by MJB&A/EDF, Monitoring Analytics, Exelon, Vistra, and E3/EPSA. See here for Leakage Mitigation Study Comparisons

Stage 2 of the key work activities was targeted to include the development of a common set of rules to integrate carbon pricing and manage leakage, where appropriate. Stage 2 of the key work activities has not been initiated.

Number of Meetings and date range covering this topic: 16 from July 2019 through September 2021 Poll Results: Summer 2020 <u>polling</u> to solicit feedback on next steps

## **Consensus-Based Issue Resolution Process – Not Applicable**

## Appendix I: Supplemental Documents

CPSTF Page: <u>https://www.pjm.com/committees-and-groups/task-forces/cpstf</u> Issue Tracking: <u>https://www.pjm.com/committees-and-groups/issue-tracking/issue-trackingdetails.aspx?Issue=6d27f558-5540-485c-890c-856cfcc8a3a6</u> Sunset Presentation: <u>https://www.pjm.com/-/media/committees-</u> groups/committees/mrc/2021/20211020/20211020-item-07-carbon-pricing-senior-task-force-presentation.ashx

FERC Docket: N/A



## **Appendix II: PJM Participation**

Facilitator: Jen Tribulski Secretary: Suzanne Coyne Advocate: N/A Subject Matter Experts: Stephen Bennett, Emanuel Bernabeu, Anthony Giacomoni, Gary Helm, Eric Hsia, Ken Schuyler, Natalie Tacka PJM Legal: Chen Lu

## **Appendix III: Stakeholder Participation**

Anders, David	PJM Interconnection
Benchek, Jim	First Energy
Bernabeu, Emanuel	PJM Interconnection
Book, Hayley	Pennsylvania Department of Environmental Protection
Breidenbaugh, Aaron	Centrica Business Solutions Optimize, LLC
Brodbeck, John	EDP Renewables North America LLC
Bryson, Michael	PJM Interconnection
Callen, Zac	Illinois Commerce Commission
Canter, David	Appalachian Power Company
Carmean, Gregory	OPSI
Chmielewski, Brian	PJM Interconnection
Christopher, Mahila	Public Utilities Commission of Ohio (The)
Coyle, Billy	Dominion Energy Generation Marketing, Inc.
Crystle, Gil	UGI Development Company
D'Alessandris, Lou	First Energy
Davis, David	Strata Solar
Davis, James	Dominion Energy Generation Marketing, Inc.
DeLosa, Joseph	New Jersey Board of Public Utilities
Denby, Brett	Northern Virginia Electric Cooperative
Dillon, Matthew	UGI Development Company
Dossin, Sophia	Invenergy, LLC
Downs, Jere	PJM Interconnection
Elkins, Rachel	American Transmission Systems, Inc.
Ericson, Christine	Illinois Commerce Commission
Fan, Zhenyu	PJM Interconnection
Filomena, Guy	Customized Energy Solutions, Ltd.
Fink, Regan	Pine Gate Renewables
Fink, Sari	American Wind Energy Association
Foladare, Kenneth	Geenex Solar LLC
Ford, Adrien	Old Dominion Electric Cooperative

Not Applicable **Transmission Owner** Not Applicable Not Applicable **Other Supplier Generation Owner** Not Applicable Not Applicable **Transmission Owner** Not Applicable Not Applicable Not Applicable **Generation Owner Generation Owner Transmission Owner** Not Applicable **Generation Owner** Not Applicable **Electric Distributor Generation Owner Generation Owner** Not Applicable **Transmission Owner** Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable **Other Supplier Electric Distributor** 



Foster Cronin, Denise Fuess, Christian Gibbons, Jaret Good, Megan Granstrand, Luke Greening, Michele Greiner, Gary Guntle, Vince Hasan, Prusha Hastings, David Heisey, Bradley Helm, Gary Herel, Suzanne Hohenshilt, Jennifer Horning, Lynn Marie Horstmann, John Hsia, Eric Hudson, Wesley Hull, Gerit Hyzinski, Tom ller, Art Janicki, Diane Jett, William Johnson, Carl Kelly, Stephen Kilgallen, Kevin Kogut, George Kozhuharov, Dimitar Ladin, Sarah LaRocque, Matthew Lejcar, Jamie Levitt, Andrew Lu, Chenchao Mariam, Yohannes McNeil, Justin McNeil, Kytson Megali, Brian Nenon, Michael Nix, Emma **Okenfuss**, James Ondayko, Brock

East Kentucky Power Cooperative, Inc. White Pine Consulting, LLC ARIPPA Pennsylvania Public Utility Commission Dominion Energy Generation Marketing, Inc. PJM Interconnection PSEG Energy Resources and Trade LLC American PowerNet Management, L.P. Advanced Energy Economy Market Interconnection Consulting Services Tenaska Pennsylvania Partners, LLC PJM Interconnection **PJM Interconnection** Talen Energy Marketing, LLC Customized Energy Solutions, Ltd. Dayton Power & Light Company (The) PJM Interconnection Dominion Energy Generation Marketing, Inc. American Municipal Power, Inc. GT Power Group, LLC Indiana Office of Utility Consumer Boston Energy Trading and Marketing LLC Duke Energy Business Services, LLC Customized Energy Solutions, Ltd. Brookfield Renewable Trading and Marketing LP Avangrid Renewables, LLC New York Power Authority Delaware Municipal Electric Corporation, Inc. Institute for Policy Integrity at NYU School of Law PJM Interconnection Allegheny Electric Cooperative, Inc. PJM Interconnection **PJM Interconnection** Office of the People's Counsel for the District of Columbia Kentucky Public Service Commission Maryland Public Service Commission Exelon Business Services Company, LLC Strata Clean Energy Gabel Associates Savion, LLC AEP Energy Partners, Inc.

**Transmission Owner** Not Applicable Not Applicable Not Applicable **Generation Owner** Not Applicable Other Supplier **End-Use Customer** Not Applicable Not Applicable **Generation Owner** Not Applicable Not Applicable **Generation Owner** Not Applicable Transmission Owner Not Applicable **Generation Owner Electric Distributor** Not Applicable Not Applicable **Other Supplier Transmission Owner** Not Applicable Other Supplier **Generation Owner Other Supplier Electric Distributor** Not Applicable Not Applicable Electric Distributor Not Applicable Not Applicable **End-Use Customer** Not Applicable Not Applicable **Transmission Owner** Not Applicable Not Applicable Not Applicable Transmission Owner



Pakela, Greg Pelletier, Eveline Poulos, Greg Price, Ruth Pungaliya, Rajat Rodriguez, Tomas Rohrbach, John Rutigliano, Tom Sasser, Jonathan Scheirer, Alexandra Schmitt, David Schuyler, Ken Shegarfi, Roozbeh Sotkiewicz, Paul Svenson, Heather Sweeney, Rory Tacka, Natalie Wadsworth, Joseph Wehnes, Kathleen Weigel, Shannon Whitehead, Jeff Williams, Fernie Wilson, James Wisersky, Megan Wisniewski, Christian Yoder, Michael

DTE Energy Trading, Inc. H.Q. Energy Services (U.S.), Inc. Rep.'g Delaware Division of the Public Advocate Delaware Division of the Public Advocate Pine Gate Mid-Atlantic, LLC OPSI Wabash Valley Power Association, Inc. NRDC Customized Energy Solutions, Ltd. **PJM Interconnection** New Jersey Board of Public Utilities PJM Interconnection Exelon Generation Co., LLC **E-Cubed Policy Associates** Public Service Electric & Gas Company GT Power Group, LLC **PJM Interconnection** Vitol Inc. Maryland Department of the Environment **Edison Energy GT** Power Group East Kentucky Power Cooperative, Inc. Wilson Energy Economics Madison Gas & Electric Co. **DNREC** - Division of Air Quality **RTO** Insider

**Other Supplier Other Supplier End-Use Customer End-Use Customer Other Supplier** Not Applicable **Electric Distributor** Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable **Generation Owner** Not Applicable **Transmission Owner** Not Applicable Not Applicable **Other Supplier** Not Applicable Not Applicable Not Applicable **Transmission Owner** Not Applicable **Other Supplier** Not Applicable Not Applicable