

**Markets and Reliability Committee**  
**PJM Conference and Training Center, Valley Forge, PA**  
**August 22, 2019**  
**9:00 a.m. – 12:15 p.m. EPT**

## Administration

Ms. Denise Foster and Mr. Dave Anders welcomed stakeholders and provided the Anti-trust and Code of Conduct announcements. Mr. Anders noted that PJM is developing a recommendation for the Markets & Reliability Committee's (MRC's) consideration regarding sunseting of completed and inactive stakeholder groups. Ms. Foster noted the upcoming Stakeholder Satisfaction Survey. Mr. Ken Seiler provided remarks regarding progress toward completion of review of projects in the Generation Interconnection Queues.

Sue Riley, PJM Interim CEO, provided remarks regarding the activities of the Financial Risk Mitigation Senior Task Force (FRMSTF).

## Consent Agenda

Items A, B, C and E were **approved/endorsed** by acclamation with no objections or abstentions. Ms. Sharon Midgley, Exelon, moved and Mr. Alex Stern, PSEG, seconded deferral of endorsement of item D to the committee's September 26, 2019 meeting. Following discussion, the motion to defer was **approved** by acclamation with no objections or abstentions. An open stakeholder meeting will be scheduled to resolve any remaining issues with the proposed Manual 14D revisions in item D.

- A. Minutes of the July 25, 2019 meeting of the MRC.
- B. Proposed revisions to PJM Manual 10: Pre-Scheduling Operations in regards to generator outage reporting.
- C. Proposed revisions to Manual 11 – Energy & Ancillary Services Market Operations and Manual 18 – PJM Capacity Market, related to the FERC Order 841 compliance filing, and changes to Manual 15 – Cost Development Guidelines related to cost offers for batteries and flywheels.  
[Issue Tracking: Electric Storage Participation FERC Order 841](#)
- D. Proposed revisions to Manual 13: Emergency Operations and Manual 14D: Generator Operational Requirements as part of the clarification updates to the Non-Retail Behind the Meter Generation business rules.  
[Issue Tracking: Non-Retail Behind the Meter Generation Business Rules](#)
- E. Proposed revisions to PJM Manual 18B: Energy Efficiency Measurement & Verification resulting from the periodic review.

## Endorsements/Approvals

### 1. PJM Manual 14B Amendments (9:15-10:15)

- A. Mr. Aaron Berner reported on the status of Planning Committee activities related to PJM Manual 14B: Regional Transmission Planning Process, including proposed friendly amendments dated August 14, August 20, 2019.
- B. Ms. Sharon Segner, on behalf of LS Power, discussed the proposed original main motion to PJM Manual 14B: Regional Transmission Planning Process presented at the July 25 MRC. LS Power and the second, Office of the People's Counsel for the District of Columbia accepted the August 20<sup>th</sup> version provided to the Planning Committee as a friendly amendment and posted with the materials for Item 1A, as well as accepting two amendments from the floor (one offered by Mr. Pulin Shah, Exelon), subsequently deemed as friendly, which modified language associated with when PJM would not include Supplemental Projects in the RTEP base case. Following discussion, the proposed Manual 14B revisions (the amended main motion) were **endorsed** in a sector-weighted vote with 4.55 in favor.

### 2. Regional Transmission Planning Process (RTEP) Operating Agreement (OA) Revisions (10:15-10:30)

Mr. Erik Heine, Office of the People's Counsel for the District of Columbia, and Brian Vayda, New Jersey Public Power Coalition, withdrew this agenda item.

## First Readings

### 3. Fuel Security Senior Task Force Update

Mr. Tim Horger provided an update on Fuel Security Senior Task Force (FSSTF) and a delay of stakeholder recommendation on path forward and will also be reviewed revisions to the Expected Overall Duration of Work in the FSSTF Charter. The committee **approved** the proposed revisions to the FSSTF Charter at first reading by acclamation with no objections or abstentions.

### 4. Gas Contingency Cost Recovery

Mr. Thomas DeVita provided an overview of draft Tariff revisions associated with gas contingencies cost recovery. The committee will be asked to endorse the Tariff revisions at its next meeting.

### 5. PJM Manuals

- A. Mr. Michael Olaley provided an overview of clarifications to Manual 11: Energy & Ancillary Services associated with regulation historical performance scores and reserve requirements. The committee will be asked to endorse the manual revisions at its next meeting.

- B. Mr. Andrew Levitt provided a review of Manual 27: Open Access Transmission Tariff Accounting and Manual 28: Operating Agreement Accounting revisions associated with settlements changes for Energy Storage Resource charging energy related to FERC Order 841 compliance filing. The committee will be asked to endorse the manual revisions at its next meeting.

### Informational Reports (11:30-12:15)

- 6. Mr. Pat Bruno provided an update on the recent FERC order directing PJM to postpone the 2022/2023 Base Residual Auction (BRA).
- 7. Mr. Stan Williams provided an update on the recent FERC Order EL08-14 related to Marginal Line Loss.

### Informational Postings Only

#### PJM Manual 03: Transmission Operations, Attachment E: Automatic Sectionalizing Schemes

Automatic Sectionalizing Schemes Pending Approval and Recent Changes were posted with today's meeting materials.

#### New Attachment M-4 to the PJM Tariff Solely Applicable to the Planning of CIP-014 Mitigation Projects

Notice of Transmission Owners Intent to File a New Attachment M-4 to the PJM Tariff Solely Applicable to the Planning of CIP-014 Mitigation Projects (CMPs) was posted with today's meeting materials. Members posed questions of Transmission Owner representatives regarding the process for developing the proposed M-4 as well as its content. Stakeholders were encouraged to submit questions and comments to the link provided in the announcement.

### Future Agenda Items

No additional future agenda items were identified.

### Future Meeting Dates

|                    |           |                  |
|--------------------|-----------|------------------|
| September 26, 2019 | 9:00 a.m. | Valley Forge, PA |
| October 31, 2019   | 9:00 a.m. | Valley Forge, PA |
| December 5, 2019   | 9:00 a.m. | Valley Forge, PA |
| December 19, 2019  | 9:00 a.m. | Valley Forge, PA |

Author: D.A. Anders

### Attendance

#### Secretary/Facilitator

| Last Name | First Name | Company | Sector |
|-----------|------------|---------|--------|
|           |            |         |        |

|        |        |                          |      |
|--------|--------|--------------------------|------|
| Anders | David  | PJM Interconnection, LLC | None |
| Foster | Denise | PJM Interconnection, LLC | None |

### Voting Attendees

| Last Name | First Name | Company  | Sector               |
|-----------|------------|--|----------------------|
| Bayless   | Charlie    | North Carolina Electric Membership Corporation           | Electric Distributor |
| Benchek   | Jim        | American Transmission Systems, Inc.                      | Transmission Owner   |
| Borgatti  | Michael    | Rep.'g Carolina Solar Energy III, LLC                    | Other Supplier       |
| Borgatti  | Michael    | Rep.'g Covanta Energy Group, LLC                         | Generation Owner     |
| Borgatti  | Michael    | Rep.'g Edgemont Genco, LLC                               | Generation Owner     |
| Borgatti  | Michael    | Rep.'g Hazleton Generation, LLC                          | Generation Owner     |
| Borgatti  | Michael    | Rep.'g Jersey Green Energy, LLC                          | Other Supplier       |
| Borgatti  | Michael    | Rep.'g Longview Power, LLC                               | Generation Owner     |
| Borgatti  | Michael    | Rep.'g Moxie Freedom LLC                                 | Generation Owner     |
| Borgatti  | Michael    | Rep.'g Newark Energy Center, LLC                         | Generation Owner     |
| Borgatti  | Michael    | Rep.'g NextEra Energy Marketing, LLC                     | Other Supplier       |
| Borgatti  | Michael    | Rep.'g York County Solid Waste and Refuse Authority      | Generation Owner     |
| Bruce     | Susan      | Rep.'g Air Products & Chemicals, Inc.                    | End-Use Customer     |
| Bruce     | Susan      | Rep.'g ArcelorMittal USA LLC                             | End-Use Customer     |
| Bruce     | Susan      | Rep.'g Gerdau Ameristeel Energy, Inc.                    | Other Supplier       |
| Bruce     | Susan      | Rep.'g Industrial Energy Users-Ohio                      | Other Supplier       |
| Bruce     | Susan      | Rep.'g Kimberly-Clark Corporation                        | Generation Owner     |
| Bruce     | Susan      | Rep.'g Lehigh Portland Cement Company                    | End-Use Customer     |
| Bruce     | Susan      | Rep.'g Letterkenny Industrial Development Authority - PA | Electric Distributor |
| Bruce     | Susan      | Rep.'g MeadWestvaco Corporation                          | End-Use Customer     |
| Bruce     | Susan      | Rep.'g Messer LLC  | End-Use Customer     |
| Bruce     | Susan      | Rep.'g Praxair, Inc.                                     | End-Use Customer     |
| Bruce     | Susan      | Rep.'g Procter & Gamble Paper Products Company (The)     | Generation Owner     |
| Bruce     | Susan      | Rep.'g Trustees of the University of Pennsylvania        | End-Use Customer     |
| Bruce     | Susan      | Rep.'g Wellsboro Electric Company                        | Electric Distributor |
| Carrier   | Ron        | Direct Energy Business, LLC                              | Other Supplier       |
| Chandler  | Kent       | Office of the Attorney General, Kentucky                 | End-Use Customer     |
| Davis     | James      | Virginia Electric & Power Company                        | Transmission Owner   |
| Dugan     | Chuck      | East Kentucky Power Cooperative, Inc.                    | Transmission Owner   |
| Fitch     | Neal       | NRG Power Marketing, LLC                                 | Generation Owner     |
| Foladare  | Kenneth    | Rep.'g Geenex Solar LLC                                  | Generation Owner     |
| Ford      | Adrien     | Old Dominion Electric Cooperative                        | Electric Distributor |
| Fuess     | Christian  | Rep.'g Diamond State Generation Partners, LLC            | Generation Owner     |

| Last Name  | First Name | Company   | Sector               |
|------------|------------|---|----------------------|
| Fuess      | Christian  | Rep.'g Ictec.com, Inc.                                      | Other Supplier       |
| Fuess      | Christian  | Rep.'g Kuehne Chemical Company, Inc.                        | Other Supplier       |
| Fuess      | Christian  | Rep.'g PBF Power Marketing, LLC                             | Generation Owner     |
| Helms      | Joseph     | Rainbow Energy Marketing Corporation                        | Other Supplier       |
| Hoatson    | Tom        | Renaissance Power & Gas, Inc.                               | Other Supplier       |
| Hoatson    | Tom        | Riverside Generating, LLC                                   | Generation Owner     |
| Hoatson    | Tom        | West Deptford Energy, LLC                                   | Generation Owner     |
| Hohenshilt | Jennifer   | Talen Energy Marketing, LLC                                 | Generation Owner     |
| Horstmann  | John       | Dayton Power & Light Company (The)                          | Transmission Owner   |
| Horton     | Dana       | Appalachian Power Company                                   | Transmission Owner   |
| Huang      | James      | Rockland Electric Company                                   | Transmission Owner   |
| Hyzinski   | Thomas     | Rep.'g Dynegy Marketing and Trade, LLC                      | Generation Owner     |
| Hyzinski   | Thomas     | Rep.'g GenOn Energy Management, LLC                         | Generation Owner     |
| Johnson    | Carl       | Rep.'g Blue Ridge Power Agency, Inc.                        | Electric Distributor |
| Johnson    | Carl       | Rep.'g Borough of Chambersburg                              | Electric Distributor |
| Johnson    | Carl       | Rep.'g Borough of Mont Alto, Pennsylvania                   | Electric Distributor |
| Johnson    | Carl       | Rep.'g Buckeye Power, Inc.                                  | Electric Distributor |
| Johnson    | Carl       | Rep.'g Central Virginia Electric Cooperative                | Electric Distributor |
| Johnson    | Carl       | Rep.'g City of Dover, Delaware                              | Electric Distributor |
| Johnson    | Carl       | Rep.'g Delaware Municipal Electric Corporation, Inc.        | Electric Distributor |
| Johnson    | Carl       | Rep.'g Easton Utilities Commission                          | Electric Distributor |
| Johnson    | Carl       | Rep.'g Energy Cooperative Association of Pennsylvania (The) | Other Supplier       |
| Johnson    | Carl       | Rep.'g Galt Power, Inc.                                     | Other Supplier       |
| Johnson    | Carl       | Rep.'g Hagerstown Light Department                          | Electric Distributor |
| Johnson    | Carl       | Rep.'g Illinois Municipal Electric Agency                   | Electric Distributor |
| Johnson    | Carl       | Rep.'g Indiana Municipal Power Agency                       | Generation Owner     |
| Johnson    | Carl       | Rep.'g Madison Gas & Electric Co.                           | Other Supplier       |
| Johnson    | Carl       | Rep.'g North Carolina Municipal Power Agency Number 1       | Other Supplier       |
| Johnson    | Carl       | Rep.'g Northern Illinois Municipal Power Agency             | Electric Distributor |
| Johnson    | Carl       | Rep.'g Northern Virginia Electric Cooperative (NOVEC)       | Electric Distributor |
| Johnson    | Carl       | Rep.'g Thurmont Municipal Light Company                     | Electric Distributor |
| Johnson    | Carl       | Rep.'g Town of Williamsport (The)                           | Electric Distributor |
| Johnson    | Carl       | Rep.'g WPPI Energy  | Other Supplier       |
| Kauffman   | Brian      | Enel X North America, Inc.                                  | Other Supplier       |
| Keenan     | Matthew    | Elwood Energy, LLC  | Generation Owner     |
| Kelly      | Stephen    | Brookfield Energy Marketing LP                              | Other Supplier       |



| Last Name   | First Name | Company  | Sector               |
|-------------|------------|--|----------------------|
| Kilgallen   | Kevin      | Avangrid Renewables, LLC   | Generation Owner     |
| Kogut       | George     | New York Power Authority   | Other Supplier       |
| Lieberman   | Steven     | American Municipal Power, Inc.   | Electric Distributor |
| Long        | Scott      | Allegheny Electric Cooperative, Inc.   | Electric Distributor |
| Midgley     | Sharon     | Exelon Business Services Company, LLC  | Transmission Owner   |
| O'Connell   | Robert     | PPGI Fund A/B Development, LLC.  | Generation Owner     |
| Poulos      | Greg       | Rep.'g Consumer Protection and Advocate Division of the Tennessee Attorney General                     | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Delaware Division of the Public Advocate  | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Illinois Citizen Utility Board  | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Indiana Office of Utility Consumer Counselor (IN OUCC)  | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Maryland Office of People's Counsel   | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Michigan Department of Attorney General, Environment, Natural Resources, & Agriculture Division | End-Use Customer     |
| Poulos      | Greg       | Rep.'g New Jersey Division of Rate Counsel   | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Office of the People's Counsel for the District of Columbia                                     | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Ohio Consumers' Counsel   | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Pennsylvania Office of Consumer Advocate  | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Public Staff - North Carolina Utilities Commission  | End-Use Customer     |
| Poulos      | Greg       | Rep.'g Virginia Division of Consumer Counsel   | End-Use Customer     |
| Poulos      | Greg       | Rep.'g West Virginia Consumer Advocate Division  | End-Use Customer     |
| Rohrbach    | John       | Rep.'g Kentucky Municipal Energy Agency  | Other Supplier       |
| Rohrbach    | John       | Rep.'g Southern Maryland Electric Cooperative, Inc.  | Electric Distributor |
| Rohrbach    | John       | Rep.'g Wabash Valley Power Association, Inc.   | Electric Distributor |
| Scarpignato | David      | Calpine Energy Services, L.P.  | Generation Owner     |
| Stern       | Alex       | Public Service Electric & Gas Company  | Transmission Owner   |
| Sturgeon    | John       | Duke Energy Business Services LLC  | Transmission Owner   |
| Thomas      | Amber      | PPL Electric Utilities Corporation d/b/a PPL Utilities   | Transmission Owner   |
| Vayda       | Brian      | Rep.'g Borough of Butler, Butler Electric Division   | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of Lavallette, New Jersey   | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of Madison, New Jersey  | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of Milltown, New Jersey   | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of Park Ridge, New Jersey   | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of Pemberton, New Jersey  | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of Seaside Heights, New Jersey  | Electric Distributor |
| Vayda       | Brian      | Rep.'g Borough of South River, New Jersey  | Electric Distributor |
| Vayda       | Brian      | Rep.'g Vineland Municipal Electric Utility   | Electric Distributor |

| Last Name | First Name | Company   | Sector             |
|-----------|------------|---|--------------------|
| Whitehead | Jeffrey    | Rep.'g Eastern Generation, LLC                  | Generation Owner   |
| Whitehead | Jeffrey    | Rep.'g Essential Power Rock Springs, LLC        | Generation Owner   |
| Whitehead | Jeffrey    | Rep.'g Wheelabrator Frackville Energy Co., Inc. | Generation Owner   |
| Wicks     | Tonja      | Duquesne Light Company                          | Transmission Owner |

### Non-Voting Attendees

| Last Name     | First Name | Company  | Sector               |
|---------------|------------|--|----------------------|
| Abdur-Rahman  | Mushin     | ABB Network Management                                 | None                 |
| Abend         | Erik       | EA Consulting  | None                 |
| Adams         | Darrin     | East Kentucky Power Cooperative, Inc.                  | Transmission Owner   |
| Anderson      | Jared      | Platts   | None                 |
| Bainbridge    | Thomas     | FirstEnergy Solutions Corp.                            | Transmission Owner   |
| Barker        | Jason      | Exelon Business Services Company, LLC                  | Transmission Owner   |
| Bickerstaff   | Dean       | Hartree Partners, LP                                   | Other Supplier       |
| Bleiweis      | Bruce      | DC Energy, LLC   | Other Supplier       |
| Branch        | John       | St. Joseph Energy Center, LLC                          | Generation Owner     |
| Campbell      | Bruce      | Enerwise Global Technologies, LLC                      | Other Supplier       |
| Carrado       | Regina     | Exelon Business Services Company, LLC                  | Transmission Owner   |
| Chocarro      | Iker       | E.ON Climate & Renewables North America Inc.           | Generation Owner     |
| Cocco         | Michael    | Old Dominion Electric Cooperative                      | Electric Distributor |
| Coffey        | Cecelia    | The Federal Energy Regulatory Commission               | None                 |
| Colbert       | Cathleen   | NRG Power Marketing, LLC                               | Generation Owner     |
| Coultas       | Ann        | Invenergy, LLC   | Generation Owner     |
| Cox           | Jason      | EDF Trading North America, LLC                         | Other Supplier       |
| Crystle       | Gil        | UGI Energy Services, LLC                               | Other Supplier       |
| D'Alessandris | Lou        | FirstEnergy Solutions Corp.                            | Transmission Owner   |
| DeLosa        | Joseph     | New Jersey Board of Public Utilities                   | None                 |
| DePillo       | Raymond    | PSEG Energy Resources & Trade LLC                      | Other Supplier       |
| Dillon        | Matthew    | UGI Energy Services, LLC                               | Other Supplier       |
| DiNicola      | Laura      | FirstEnergy Solutions Corp.                            | Transmission Owner   |
| Domian        | Christin   | Duquesne Light Company                                 | Transmission Owner   |
| Durinsky      | Mike       | FirstEnergy Solutions Corp.                            | Transmission Owner   |
| Engleman      | Michael    | LS Power   | None                 |
| Evrard        | David      | Pennsylvania Office of Consumer Advocate               | End-Use Customer     |
| Fazio         | Danielle   | Engelhart  | None                 |
| Feller        | John       | PPL Electric Utilities Corporation d/b/a PPL Utilities | Transmission Owner   |
| Fortini       | Michael    | DTE Energy Trading, Inc.                               | Other Supplier       |

| Last Name   | First Name | Company   | Sector               |
|-------------|------------|---|----------------------|
| Fuerst      | Gary       | FirstEnergy Solutions Corp.                                 | Transmission Owner   |
| Gahimer     | Michael    | Indiana Office of Utility Consumer Counselor (IN OUCC)      | End-Use Customer     |
| Garnett     | Bryan      | Duke Energy Business Services LLC                           | Transmission Owner   |
| Gebolys     | Debra      | The Public Utilities Commission of Ohio                     | None                 |
| Gilani      | Rehan      | Consolidated Edison Company of New York, Inc.               | Transmission Owner   |
| Grooms      | Craig      | Buckeye Power, Inc.   | Electric Distributor |
| Guy         | Gary       | Exelon Business Services Company, LLC                       | Transmission Owner   |
| Halay       | Alina      | The Federal Energy Regulatory Commission                    | None                 |
| Hannah      | Kyle       | Dominion Energy Generation Marketing, Inc.                  | Generation Owner     |
| Hanser      | Erik       | Michigan Public Service Commission                          | None                 |
| Harmon      | Michael    | Union Electric Company d/b/a Ameren Missouri                | Other Supplier       |
| Hastings    | David      | MICS  | None                 |
| Heinle      | Frederick  | Office of the People's Counsel for the District of Columbia | End-Use Customer     |
| Heisey      | Bradley    | Tenaska Power Services Co.                                  | Generation Owner     |
| Hilaski     | Steve      | Potomac Electric Power Company                              | Electric Distributor |
| Hollis      | Gabriel    | NextEra Energy Marketing, LLC                               | Other Supplier       |
| Horning     | Lynn       | Customized Energy Solutions, Ltd.*                          | None                 |
| Hudis       | Gabriella  | Gabel Associates  | None                 |
| Huntoon     | Steve      | Chesapeake Transmission LLC                                 | Other Supplier       |
| Janicki     | Diane      | Boston Energy Trading and Marketing LLC                     | Other Supplier       |
| Jardot      | Gina       | Essential Power Rock Springs, LLC                           | Generation Owner     |
| Jha         | Monica     | Power Costs Inc.  | None                 |
| Kaplan Esq. | Donald     | K&L Gates   | None                 |
| Kerecman    | Joseph     | Calpine Energy Services, L.P.                               | Generation Owner     |
| Koehler     | Nicolas    | AEP Appalachian Transmission Company, Inc.                  | Transmission Owner   |
| Laios       | Takis      | AEP Appalachian Transmission Company, Inc.                  | Transmission Owner   |
| Lawson      | Ryen       | Dominion Energy Generation Marketing, Inc.                  | Generation Owner     |
| Liang-Nicol | Cecilia    | FirstEnergy Solutions Corp.                                 | Transmission Owner   |
| Libbos      | Robin      | FirstEnergy Solutions Corp.                                 | Transmission Owner   |
| Logan       | Sharon     | The Federal Energy Regulatory Commission                    | None                 |
| Mancuso     | Melanie    | FirstEnergy Solutions Corp.                                 | Transmission Owner   |
| Mariam      | Yohannes   | Office of the People's Counsel for the District of Columbia | End-Use Customer     |
| Martin      | Valerie    | The Federal Energy Regulatory Commission                    | None                 |
| Matuszak    | Anthony    | UGI Energy Services, LLC                                    | Other Supplier       |
| McInerney   | Timothy    | Commonwealth Edison Company                                 | Transmission Owner   |
| McLawhorn   | James      | Public Staff - North Carolina Utilities Commission          | End-Use Customer     |



| Last Name  | First Name | Company  | Sector               |
|------------|------------|--|----------------------|
| Meadors    | Amanda     | Duke Energy Business Services LLC                      | Transmission Owner   |
| Moye       | Bob        | Rainbow Energy Marketing Corporation                   | Other Supplier       |
| Nadel      | Steven     | PPL Electric Utilities Corporation d/b/a PPL Utilities | Transmission Owner   |
| O'Boyle    | Brian      | Rockland Electric Company                              | Transmission Owner   |
| Pelletier  | Eveline    | H.Q. Energy Services (U.S.), Inc.                      | Other Supplier       |
| Peoples    | John       | Duquesne Light Company                                 | Transmission Owner   |
| Pezalla    | William    | Old Dominion Electric Cooperative                      | Electric Distributor |
| Pinnock    | Ashley     | NextEra Energy Marketing, LLC                          | Other Supplier       |
| Poelstra   | Tabitha    | Appian Way Energy Partners MidAtlantic, LLC            | Other Supplier       |
| Price      | Ruth       | Delaware Public Service Commission                     | None                 |
| Raff       | Richard    | Kentucky Public Service Commission                     | None                 |
| Rainey     | Frank      | PEI Power Corporation                                  | Generation Owner     |
| Reams      | William    | Allegheny Electric Cooperative, Inc.                   | Electric Distributor |
| Redwine    | Arlo       | The Federal Energy Regulatory Commission               | None                 |
| Rismiller  | Randy      | Illinois Commerce Commission                           | None                 |
| Robinson   | Becky      | Dynegy Marketing and Trade, LLC                        | Generation Owner     |
| Russ       | Michael    | Dayton Power & Light Company (The)                     | Transmission Owner   |
| Sasser     | Jonathan   | Customized Energy Solutions, Ltd.*                     | None                 |
| Schmidt    | Thomas     | Buckeye Power, Inc.                                    | Electric Distributor |
| Segner     | Sharon     | West Deptford Energy, LLC                              | Generation Owner     |
| Shah       | Pulin      | Exelon Business Services Company, LLC                  | Transmission Owner   |
| Shanker    | Roy        | H.Q. Energy Services (U.S.), Inc.                      | Other Supplier       |
| Shealy     | Erin       | GDS Associates   | None                 |
| Sillin     | John       | The Federal Energy Regulatory Commission               | None                 |
| Silveira   | Fabiano    | Strom Power, LLC                                       | Other Supplier       |
| Smith      | Christen   | RTO Insider  | None                 |
| Sotkiewicz | Paul       | Elwood Energy, LLC                                     | Generation Owner     |
| Staevska   | Aspassia   | Pennsylvania Public Utilities Commission               | None                 |
| Stewart    | Travis     | Gabel Associates                                       | None                 |
| Stuchell   | Jeff       | FirstEnergy Solutions Corp.                            | Transmission Owner   |
| Suda       | Molly      | Duke Energy Business Services LLC                      | Transmission Owner   |
| Sun        | Haibin     | Exelon Business Services Company, LLC                  | Transmission Owner   |
| Sweeney    | Rory       | GT Power Group   | None                 |
| Tangirala  | Subha      | Abb Network Management                                 | None                 |
| Tatum      | Ed         | American Municipal Power, Inc.                         | Electric Distributor |
| Taylor     | Robert     | Exelon Business Services Company, LLC                  | Transmission Owner   |

| Last Name | First Name | Company                               | Sector               |
|-----------|------------|---------------------------------------|----------------------|
| Thompson  | Matt       | XO Energy MA, L.P.                    | Other Supplier       |
| Tibbetts  | Maeve      | Pierce Atwood                         | None                 |
| Toomey    | Megan      | Talen Energy Marketing, LLC           | Generation Owner     |
| Trayers   | Barry      | Citigroup Energy, Inc.                | Other Supplier       |
| Vargo     | Daniel     | Allegheny Electric Cooperative, Inc.  | Electric Distributor |
| Wadsworth | Joe        | Vitol Inc.                            | Other Supplier       |
| Walker    | Jennifer   | Exelon Business Services Company, LLC | Transmission Owner   |
| Wisersky  | Megan      | Madison Gas & Electric Co.            | Other Supplier       |
| Wynder    | Michael    | Nodal Exchange                        | None                 |

#### PJM Attendees

| Last Name  | First Name | Company                  | Sector |
|------------|------------|--------------------------|--------|
| Barrett    | Fran       | PJM Interconnection, LLC | None   |
| Beard      | Michael    | PJM Interconnection, LLC | None   |
| Beban      | Madalyn    | PJM Interconnection, LLC | None   |
| Bennett    | Stephen    | PJM Interconnection, LLC | None   |
| Berner     | Aaron      | PJM Interconnection, LLC | None   |
| Bhavaraju  | Murty      | PJM Interconnection, LLC | None   |
| Bloczynski | Nigeria    | PJM Interconnection, LLC | None   |
| Boyle      | Glen       | PJM Interconnection, LLC | None   |
| Bresler    | Stu        | PJM Interconnection, LLC | None   |
| Brown      | Richard    | PJM Interconnection, LLC | None   |
| Bruno      | Joshua     | PJM Interconnection, LLC | None   |
| Bruno      | Patrick    | PJM Interconnection, LLC | None   |
| Bryson     | Mike       | PJM Interconnection, LLC | None   |
| Budney     | David      | PJM Interconnection, LLC | None   |
| Buehler    | Susan      | PJM Interconnection, LLC | None   |
| Burdis     | Tim        | PJM Interconnection, LLC | None   |
| Cabezas    | Angela     | PJM Interconnection, LLC | None   |
| Carroll    | Rebecca    | PJM Interconnection, LLC | None   |
| Caven      | Augustine  | PJM Interconnection, LLC | None   |
| Croop      | Danielle   | PJM Interconnection, LLC | None   |
| Davirova   | Nigora     | PJM Interconnection, LLC | None   |
| Davis      | Elizabeth  | PJM Interconnection, LLC | None   |
| DeVita     | Thomas     | PJM Interconnection, LLC | None   |
| Dolan      | James      | PJM Interconnection, LLC | None   |
| Duane      | Vince      | PJM Interconnection, LLC | None   |

| Last Name     | First Name | Company                  | Sector |
|---------------|------------|--------------------------|--------|
| Egan          | Amanda     | PJM Interconnection, LLC | None   |
| Esterly       | Theresa    | PJM Interconnection, LLC | None   |
| Fabiano       | Janell     | PJM Interconnection, LLC | None   |
| Falin         | Tom        | PJM Interconnection, LLC | None   |
| Fernandes     | Anisha     | PJM Interconnection, LLC | None   |
| Foley         | Pauline    | PJM Interconnection, LLC | None   |
| Franks        | Christine  | PJM Interconnection, LLC | None   |
| Frogg         | Darrell    | PJM Interconnection, LLC | None   |
| Glatz         | Suzanne    | PJM Interconnection, LLC | None   |
| Glazer        | Craig      | PJM Interconnection, LLC | None   |
| Gluck         | Jim        | PJM Interconnection, LLC | None   |
| Greening      | Michele    | PJM Interconnection, LLC | None   |
| Haque         | Asim       | PJM Interconnection, LLC | None   |
| Hendrzak      | Chantal    | PJM Interconnection, LLC | None   |
| Herel         | Suzanne    | PJM Interconnection, LLC | None   |
| Herling       | Steve      | PJM Interconnection, LLC | None   |
| Hoey          | Edward     | PJM Interconnection, LLC | None   |
| Holter        | Natasha    | PJM Interconnection, LLC | None   |
| Horger        | Tim        | PJM Interconnection, LLC | None   |
| Hsia          | Eric       | PJM Interconnection, LLC | None   |
| Keech         | Adam       | PJM Interconnection, LLC | None   |
| Keshavamurthy | Bhavana    | PJM Interconnection, LLC | None   |
| Langbein      | Pete       | PJM Interconnection, LLC | None   |
| Lee           | Ray        | PJM Interconnection, LLC | None   |
| Levitt        | Andrew     | PJM Interconnection, LLC | None   |
| Lopez         | Veronica   | PJM Interconnection, LLC | None   |
| Lu            | Chen       | PJM Interconnection, LLC | None   |
| McGill        | Susan      | PJM Interconnection, LLC | None   |
| McGlynn       | Paul       | PJM Interconnection, LLC | None   |
| McLaverly     | Megan      | PJM Interconnection, LLC | None   |
| Messina       | Emmy       | PJM Interconnection, LLC | None   |
| Monzon        | Stephanie  | PJM Interconnection, LLC | None   |
| Mooney        | Molly      | PJM Interconnection, LLC | None   |
| Morelli       | Lisa       | PJM Interconnection, LLC | None   |
| Murphy Lee    | Lori       | PJM Interconnection, LLC | None   |
| Nix           | Emma       | PJM Interconnection, LLC | None   |

| Last Name   | First Name | Company                  | Sector |
|-------------|------------|--------------------------|--------|
| O'Brien     | Tom        | PJM Interconnection, LLC | None   |
| Olaley      | Michael    | PJM Interconnection, LLC | None   |
| O'Neill     | Jack       | PJM Interconnection, LLC | None   |
| Patel       | Anita      | PJM Interconnection, LLC | None   |
| Patel       | Keyur      | PJM Interconnection, LLC | None   |
| Phillips    | Darlene    | PJM Interconnection, LLC | None   |
| Pilong      | Chris      | PJM Interconnection, LLC | None   |
| Pincus      | Steve      | PJM Interconnection, LLC | None   |
| Riley       | Susan      | PJM Interconnection, LLC | None   |
| Robinson    | Charles    | PJM Interconnection, LLC | None   |
| Robinson    | Evelyn     | PJM Interconnection, LLC | None   |
| Salmon      | Lisa       | PJM Interconnection, LLC | None   |
| Scheidecker | Paul       | PJM Interconnection, LLC | None   |
| Schuyler    | Ken        | PJM Interconnection, LLC | None   |
| Schweizer   | David      | PJM Interconnection, LLC | None   |
| Seiler      | Ken        | PJM Interconnection, LLC | None   |
| Shields     | Jeffrey    | PJM Interconnection, LLC | None   |
| Souder      | Dave       | PJM Interconnection, LLC | None   |
| Souder      | Michelle   | PJM Interconnection, LLC | None   |
| Stanisz     | Mark       | PJM Interconnection, LLC | None   |
| Stefanowicz | Vince      | PJM Interconnection, LLC | None   |
| Stotesbury  | Christina  | PJM Interconnection, LLC | None   |
| Swimm       | Nora       | PJM Interconnection, LLC | None   |
| Velasco     | Cheryl Mae | PJM Interconnection, LLC | None   |
| Ward        | Mike       | PJM Interconnection, LLC | None   |
| Williams    | Stan       | PJM Interconnection, LLC | None   |
| Xu          | Xu         | PJM Interconnection, LLC | None   |
| Zamojcin    | Ann        | PJM Interconnection, LLC | None   |