

Minutes

PJM Interconnection

Members Committee

One Hundred-fifty-ninth Meeting

Hyatt Chesapeake, Cambridge, MD

May 19, 2016

9:30 a.m. – 12:00 noon EPT

Business Casual Attire

Comments by Director, Maryland Energy Administration

Dr. Tung, recently appointed the director of the Maryland Energy Administration, discussed the Maryland governor's administration's programs to promote energy policies that lower Marylanders' energy bills, fuel the creation of jobs, and protect the environment.

1. Comments by the President and CEO

Mr. Ott provided a look ahead for PJM.

2. Comments by the Members Committee Chair

Ms. Guerry provided remarks on the past year's accomplishments.

3. Administration

- A. Mr. Anders announced the following new member companies approved for PJM membership since the last meeting, bringing the total membership to 975:
 - Boston Energy Group, Inc. (Voting Member) selected the Other Supplier sector
 - Clean Energy Future Lordstown, LLC (Voting Member) selected the Generation Owner sector
 - Coastal Strategies, LLC (Voting Member) selected the Other Supplier sector
 - LQA, LLC (Affiliate Member) selected the Other Supplier sector
 - North Hanover Solar W2-082, LLC (Affiliate Member) selected the Generation Owner sector
 - Pine Hill Energy LLC (Affiliate Member) selected the Generation Owner sector
 - South Field Energy (Affiliate Member) selected the Other Supplier sector
 - Southland Industries (Voting Member) selected the Other Supplier sector

The following members changed sector designations:

- Brick Standard LLC changing from Other Supplier to Generation Owner
- Brookfield Power Piney & Deep Creek, LLC changing from Other Supplier to Generation Owner
- Cape May County Municipal Utilities Authority changing from Electric Distributor to Generation Owner
- Carroll County Energy LLC changing from Other Supplier to Generation Owner



- EDP Renewables North America, LLC changing from Other Supplier to Generation Owner
- Essential Power OPP, LLC changing from Transmission Owner to Generation Owner
- Everyday Energy, LLC changing from End Use Customer to Other Supplier
- Hawks Nest Hydro, LLC changing from Other Supplier to Generation Owner
- Mattawoman Energy, LLC changing from Other Supplier to Generation Owner
- Middlesex Energy Center, LLC changing Generation Owner to Other Supplier
- Prarieland Energy, Inc. changing from End Use Customer to Other Supplier
- TransCanada Power Marketing Ltd. changing from Other Supplier to Generation Owner

Mr. Anders noted that one member had withdrawn since the last meeting.

- B. Mr. Anders confirmed the presence of a quorum.
- C. Mr. Anders reminded participants of Antitrust and Code of Conduct requirements.

4. Consent Agenda

Items A, B and D were <u>approved/endorsed</u> by acclamation with no objections or abstentions. Item C was deleted (as it was accomplished at the April 28, 2016 meeting).

- A. Draft minutes of the April 28, 2016 meeting.
- B. Proposed revisions to Manual 34: PJM Stakeholder Process related to the periodic review.
- C. Deleted
- D. Proposed revisions to the Demand Response Emergency Energy Settlement Measurement and Verification process to change the emergency energy default CBL from the "hour before" methodology to the current default economic CBL (3 day type with symmetric additive adjustment).
- E. <u>Approve/endorse</u> proposed revisions to the Tariff and OA regarding incorporation of PJM Business Rules for Dynamic Transfers.

5. PJM Board of Managers Nominating Committee

Mr. Schneider reviewed the activities of the Nominating Committee (NC) in identifying candidates for the Board of Managers, including consideration of the Operating Agreement's qualifications for Board members. He reported that the process was in accordance with the Bylaws and Code of Conduct for the committee, and that the NC was unanimous in its selection of candidates. On behalf of the NC, Mr. Schneider nominated the following candidates for the Board of Managers:

- Mr. Terry Blackwell
- Mr. Dean Oskvig
- Mr. Mark Takahashi



The Members present <u>elected</u> these three candidates. Finally, Mr. Schneider thanked the NC Sector representatives for their service:

- Mr. Kerecman Generation Owner Sector
- Ms. Philips Other Supplier Sector
- Ms. McAlister Electric Distributor Sector
- Ms. Price End Use Customer Sector
- Mr. Horstmann Transmission Owner Sector

6. Stakeholder Survey

Ms. Foster and Ms. Carroll discussed results of the Stakeholder Survey and related action plans.

7. <u>Information Technology Infrastructure</u>

Mr. O'Brien discussed PJM IT infrastructure enhancements and plans for increased transparency regarding future IT infrastructure changes.

8. ITC Interconnection, LLC

Ms. Foley announced ITC Interconnection, LLC as a new transmission owner member of PJM and note the concomitant update to Tariff Attachment L.

9. Reports

- A. Mr. Bresler provided the report on market operations.
- B. Mr. Bryson provided the report on system operations.
- C. Mr. Duane provided the report on recent regulatory activities.
- D. Mr. Williams provided the report on interregional coordination.
- E. Dr. Bowring provided the report of the Independent Market Monitor.

10. MC Vice Chair Report

- A. Ms. Bruce provided update on 2016 Members Committee Annual Plan.
- B. Ms. Bruce provided a Liaison Committee update.

11. Future Agenda Items

No new future agenda items were identified.





12. Future Meetings

 June 30, 2016
 9:00 a.m.
 Wilmington, DE

 July 28, 2016
 9:00 a.m.
 Wilmington, DE

 September 29, 2016
 9:00 a.m.
 Wilmington, DE

 October 27, 2016
 9:00 a.m.
 Wilmington, DE

 November 17, 2016
 9:00 a.m.
 Wilmington, DE

13. Attendance

In Attendance (Chair/Secretary):

Guerry, Katie EnerNOC, Inc. Other Supplier Anders, Dave PJM Interconnection, LLC Not Applicable

In Attendance (Voting Participants):

| Barker, Jason | Exelon Business Services Company, LLC | Transmission Owner |
|-------------------|---|----------------------|
| Benchek, Jim | FirstEnergy Solutions Corp. | Transmission Owner |
| Bleiweis, Bruce | DC Energy, LLC | Other Supplier |
| Borgatti, Michael | Rep'g Longview Power, LLC | Generation Owner |
| Borgatti, Michael | Rep'g Elgin Energy Center, LLC | Generation Owner |
| Borgatti, Michael | Rep'g Jersey Green Energy LLC | Other Supplier |
| Borgatti, Michael | Rep'g Covanta Energy Group, LLC | Generation Owner |
| Borgatti, Michael | Rep'g Newark Energy Center, LLC | Generation Owner |
| Borgatti, Michael | Rep'g NextEra Energy Power Marketing, LLC | Generation Owner |
| Borgatti, Michael | Rep'g York County Solid Waste and Refuse Authority | Generation Owner |
| Brodbeck, John | EDP Renewables North America, LLC | Generation Owner |
| Bruce, Susan | Rep'g Air Products & Chemicals, Inc. | End User Customer |
| Bruce, Susan | Rep'g Industrial Energy Users-Ohio | Other Supplier |
| Bruce, Susan | Rep'g Gerdau Ameristeel Energy, Inc. | Other Supplier |
| Bruce, Susan | Rep'g Procter & Gamble Paper Products Company (The) | End User Customer |
| Bruce, Susan | Rep'g Kimberly-Clark Corporation | Generation Owner |
| Bruce, Susan | Rep'g Letterkenny Industrial Development Authority | Electric Distributor |
| Bruce, Susan | Rep'g Praxair, Inc. | End User Customer |
| Bruce, Susan | Rep'g Linde, LLC | End User Customer |
| Bruce, Susan | Rep'g Wellsboro Electric Company | Electric Distributor |
| Bruce, Susan | Rep'g Lehigh Portland Cement Company | End User Customer |
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Bruce, Susan Rep'g Air Liquide Industrials U.S., L.P. End User Customer Campbell, Bruce Rep'g EnergyConnect, Inc. Other Supplier Campbell, Bruce Rep'g Enerwise Global Technologies, Inc. Other Supplier Campbell, Bruce Rep'g MidAtlantic Power Partners, LLC Other Supplier Cocco, Michael Old Dominion Electric Cooperative Electric Distributor Transmission Owner Dugan, Chuck East Kentucky Power Cooperative, Inc. Generation Owner Ellison, Alan Grays Ferry Cogeneration Partnership Esposito, Patricia TransCanada Power Marketing Ltd. Generation Owner Generation Owner Fitch, Neal NRG Power Marketing, LLC Fuess, Jay Rep'g Kuehne Chemical Company, Inc. Other Supplier Fuess, Jay Rep'g Icetec.com, Inc. Other Supplier Fuess, Jay Rep'g Energy Consulting Services LLC Other Supplier Fuess, Jay Rep'g PBF Power Marketing, LLC Generation Owner Rep'g Diamond State Generation Partners, LLC Generation Owner Fuess, Jay Rep'g Church Hill Solar Farm, LLC Generation Owner Fuess, Jay Generation Owner Greening, Michele Talen Energy Marketing, LLC Transmission Owner Greiner, Gary Public Service Electric & Gas Company Griffiths, Dan Rep'g West Virginia Consumer Advocate Division End User Customer Griffiths, Dan Rep'g Office of the Attorney General, Kentucky End User Customer Griffiths, Dan Rep'g Maryland Office of People's Counsel End User Customer Griffiths, Dan Rep'g Pennsylvania Office of Consumer Advocate End User Customer End User Customer Griffiths, Dan Rep'g Office of the People's Counsel for the District of Columbia Griffiths, Dan Rep'g New Jersey Division of Rate Counsel End User Customer Griffiths, Dan Rep'g Indiana Office of Utility Consumer Counselor (IN OUCC) End User Customer End User Customer Griffiths, Dan Rep'g Delaware Division of the Public Advocate End User Customer Griffiths, Dan Rep'g Illinois Citizens Utility Board Guerry, Katie EnerNOC, Inc. Other Supplier Helms, Joseph Rainbow Energy Marketing Corporation Other Supplier Transmission Owner Horstmann, John Dayton Power & Light Company (The) Transmission Owner Horton, Dana Appalachian Power Company (AEP Generation)



Rep'g Borough of Lavallette, New Jersey

Jablonski, James

Electric Distributor



| Jablonski, James | Rep'g Borough of Milltown, New Jersey | Electric Distributor |
|------------------|--|----------------------|
| Jablonski, James | Rep'g Borough of Pemberton | Electric Distributor |
| Jablonski, James | Rep'g Borough of Seaside Heights, New Jersey | Electric Distributor |
| Jablonski, James | Rep'g Borough of Butler, Butler Electric Division | Electric Distributor |
| Jablonski, James | Rep'g Borough of Madison, New Jersey | Electric Distributor |
| Jablonski, James | Rep'g Borough of South River, New Jersey | Electric Distributor |
| Jablonski, James | Rep'g Borough of Park Ridge, New Jersey | Electric Distributor |
| Jablonski, James | Rep'g Vineland Municipal Electric Utility | Electric Distributor |
| Jardot, Gina | Essential Power Rock Springs, LLC | Transmission Owner |
| Johnson, Carl | Rep'g American Municipal Power, Inc. | Electric Distributor |
| Johnson, Carl | Rep'g Buckeye Power, Inc. | Electric Distributor |
| Johnson, Carl | Rep'g Indiana Municipal Power Agency | Generation Owner |
| Johnson, Carl | Rep'g North Carolina Electric Membership Corporation | Electric Distributor |
| Johnson, Carl | Rep'g Easton Utilities Commission | Electric Distributor |
| Johnson, Carl | Rep'g Delaware Municipal Electric Corporation, Inc. | Electric Distributor |
| Johnson, Carl | Rep'g Borough of Chambersburg (DTEET) | Electric Distributor |
| Johnson, Carl | Rep'g Central Virginia Electric Cooperative | Electric Distributor |
| Johnson, Carl | Rep'g Blue Ridge Power Agency, Inc. | Electric Distributor |
| Johnson, Carl | Rep'g Allegheny Electric Cooperative, Inc. | Electric Distributor |
| Johnson, Carl | Rep'g Northern Virginia Electric Cooperative (NOVEC) | Electric Distributor |
| Johnson, Carl | Rep'g City of Dover, Delaware | Electric Distributor |
| Johnson, Carl | Rep'g Galt Power, Inc. | Other Supplier |
| Johnson, Carl | Rep'g WPPI Energy | Other Supplier |
| Johnson, Carl | Rep'g North Carolina Municipal Power Agency # 1 | Other Supplier |
| Johnson, Carl | Rep'g Madison Gas & Electric Co. | Other Supplier |
| Johnson, Carl | Rep'g Energy Cooperative Association of PA | Other Supplier |
| Johnson, Carl | Rep'g Town of Williamsport (The) | Electric Distributor |
| Johnson, Carl | Rep'g Thurmont Municipal Light Company | Electric Distributor |
| Johnson, Carl | Rep'g Borough of Mont Alto, Pennsylvania | Electric Distributor |
| Johnson, Carl | Rep'g Hagerstown Light Department | Electric Distributor |
| | | |



| Rep'g Illinois Municipal Electric Agency | Electric Distributor |
|---|---|
| Brookfield Energy Marketing LP | Other Supplier |
| IBERDROLA RENEWABLES, LLC | Generation Owner |
| New York Power Authority | Other Supplier |
| GDF Suez Energy Marketing NA, Inc. | Other Supplier |
| Rep'g Barclays Capital Services, Inc | Other Supplier |
| Rep'g HSBC Technology & Services (USA), Inc. | Other Supplier |
| Rep'g Credit Suisse (USA), Inc. | Other Supplier |
| Rep'g Oxford Energy Services, LLC | Other Supplier |
| BlueRock Energy, Inc. | Other Supplier |
| DTE Energy Trading, Inc. | Other Supplier |
| Duquesne Light Company | Transmission Owner |
| Rep'g Dynegy Marketing and Trade, LLC | Generation Owner |
| Rep'g Wheelabrator Frackville Energy Co., Inc. | Generation Owner |
| Rep'g Eastern Generation, LLC | Generation Owner |
| ITC Mid-Atlantic Development LLC | Other Supplier |
| PPL Electric Utilities Corp. dba PPL Utilities (LSE) | Transmission Owner |
| Calpine Energy Services, L.P. | Generation Owner |
| Tangent Energy Solutions, Inc. | Other Supplier |
| Office of the People's Counsel for the District of Columbia | End User Customer |
| American Municipal Power, Inc. | Electric Distributor |
| Citigroup Energy, Inc. | Other Supplier |
| Safeway Inc. | End User Customer |
| Direct Energy Business, LLC | Other Supplier |
| Rockland Electric Company | Transmission Owner |
| | Brookfield Energy Marketing LP IBERDROLA RENEWABLES, LLC New York Power Authority GDF Suez Energy Marketing NA, Inc. Rep'g Barclays Capital Services, Inc Rep'g HSBC Technology & Services (USA), Inc. Rep'g Credit Suisse (USA), Inc. Rep'g Oxford Energy Services, LLC BlueRock Energy, Inc. DTE Energy Trading, Inc. Duquesne Light Company Rep'g Dynegy Marketing and Trade, LLC Rep'g Wheelabrator Frackville Energy Co., Inc. Rep'g Eastern Generation, LLC ITC Mid-Atlantic Development LLC PPL Electric Utilities Corp. dba PPL Utilities (LSE) Calpine Energy Services, L.P. Tangent Energy Solutions, Inc. Office of the People's Counsel for the District of Columbia American Municipal Power, Inc. Citigroup Energy, Inc. Safeway Inc. Direct Energy Business, LLC |

In Attendance (Non-Voting Participants):

| Aglmick, Douglas | GEN OPS, LLC | Other Supplier |
|------------------|-------------------------------------|------------------|
| Ainspan, Malcolm | NRG Curtailment Solutions, Inc. | Other Supplier |
| Applebaum, David | NextEra Energy Power Marketing, LLC | Generation Owner |
| Beirne, Sam | Maryland Energy Administration | Not Applicable |





Bloom, David Baltimore Gas and Electric Company

Boughner, Arnold Easton Utilities Commission

Carrado, Regina Exelon Business Services Company, LLC
Currier, Jeffrey Virginia Electric & Power Company

Davis, Connie Cleveland Public Power

Denavas, Joe Pepco Holdings Incorporated

Everngam, Scott The Federal Energy Regulatory Commission

Farber, John Delaware Public Service Commission
Fiastro, John Maryland Energy Administration
Filomena, Guy Customized Energy Solutions
Garver, Andrew Ohio Consumers' Counsel

Gebolys, Debbie Public Utilities Commission of Ohio
Godson, Gloria Exelon Business Services Company, LLC
Grubb, Rick Northampton Generating Company, L.P.

Hagaman, Derek GT Power Group

Hanser, Erik Michigan Public Service Commission

Haugh, Mike Ohio Consumers' Counsel

Hayes, Patrick Union Electric Company d/b/a Ameren Missouri

Herel, Suzanne RTO Insider

Herrera, Steve Duke Energy Business Services, Inc.

Huntoon, Stephen Energy Counsel, LLP
Hupp, Michael Dominion Virginia Power
Hyzinski, Tom Talen Energy Marketing, LLC

Janicki, Diane Boston Energy Trading and Marketing LLC
Jett, William Duke Energy Business Services, Inc.

Johnson, Matthew The Energy Authority

Ko, William Boston Energy Trading and Marketing LLC

Maloney, Harry City of Dover, Delaware

Manning, James North Carolina Electric Membership Corporation

Marton, Dave FirstEnergy Solutions Corporation

May, Sheri Duke Energy Business Services LLC

McCullogh, Andrew Emera Energy Services, Inc.

Midgley, Sharon Exelon Business Services Company, LLC

Transmission Owner

Electric Distributor

Transmission Owner
Transmission Owner

Electric Distributor

Not Applicable

Transmission Owner

Generation Owner

Not Applicable

Not Applicable

Not Applicable

Other Supplier

Not Applicable

Generation Owner

Not Applicable

Not Applicable

Generation Owner

Generation Owner

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Generation Owner

Other Supplier

Generation Owner

Electric Distributor

Electric Distributor

Transmission Owner

Transmission Owner

Other Supplier

Transmission Owner





Minalga, Jason ITC Mid-Atlantic Development LLC

Nadel, Steven PPL

Norton, Chris American Municipal Power, Inc.

O'Connor, Siobhan The Energy Authority

Ondayko, Brock AEP

Owens, George Downes Associates, Inc.
Patten, Kevin American Electric Power

Price, Ruth Delaware Public Advocates Office Reeping, Robert FirstEnergy Solutions Corporation

Robson, Matt SESCO Enterprises LLC Sachdeva, Manmohan Buckeye Power, Inc.

Schafer, Anita

Duke Energy Business Services, Inc.

Schum, Alice

Illinois Municipal Electric Agency

Seibel, August IMG Midstream LLC Seide, Richard Apex Clean Energy

Sillin, John The Federal Energy Regulatory Commission

Stanton, Brian TrueLight Commodities, LLC

Sterling, Jennifer Exelon

Stewart, Travis Gabel Associates

Stuchell, Jeff FirstEnergy Solutions Corporation

Taylor, Rob Exelon Business Services Company, LLC

Thomson, Heather Michigan Alternative & Renewable Energy Center

Tigue, John New York State Electric & Gas Corporation

Tung, Mary Beth Maryland Energy Administration

Vogel, Anne American Electric Power

Walker, Jennifer Exelon Business Services Company, LLC

Watson, Mark Platts

Weber, Adam Union Electric Company d/b/a Ameren Missouri

Weishaar, Bob McNees Wallace & Nurick LLC

Williams, Amber New York State Electric & Gas Corporation

Wilmoth, Emily Dominion Virginia Power

Wisersky, Megan Madison Gas & Electric Company

Other Supplier

Transmission Owner

Generation Owner

Other Supplier

Transmission Owner

Other Supplier

Transmission Owner

Not Applicable

Transmission Owner

Other Supplier
Electric Distributor
Generation Owner
Electric Distributor

Other Supplier
Not Applicable
Not Applicable
Other Supplier

Transmission Owner

Not Applicable

Transmission Owner

Transmission Owner
Not Applicable

Not Applicable
Other Supplier
Not Applicable

Transmission Owner

Transmission Owner
Not Applicable

Other Supplier
Not Applicable
Other Supplier
Not Applicable
Other Supplier





| Wynn, Laura | Stone, Mattheis, Xenopoulos, & Brew, PC | Not Applicable |
|-------------------|---|----------------|
| Xenopoulos, Damon | Stone, Mattheis, Xenopoulos, & Brew, PC | Not Applicable |
| York, Katherine | Tennessee Valley Authority (The) | Other Supplier |

In Attendance (PJM Participants):

| Almgren, Ake | PJM Board of Managers | Not Applicable |
|----------------------|--------------------------|----------------|
| Barrett, Francis | PJM Interconnection, LLC | Not Applicable |
| Blackwell, Terry | PJM Board of Managers | Not Applicable |
| Boyle, Stephen | PJM Interconnection, LLC | Not Applicable |
| Bresler, Stu | PJM Interconnection, LLC | Not Applicable |
| Bryson, Michael | PJM Interconnection, LLC | Not Applicable |
| Carroll, Rebecca | PJM Interconnection, LLC | Not Applicable |
| Daugherty, Suzanne | PJM Interconnection, LLC | Not Applicable |
| Driscoll, Mary Ellen | PJM Interconnection, LLC | Not Applicable |
| Duane, Vince | PJM Interconnection, LLC | Not Applicable |
| Ennis, Brad | PJM Interconnection, LLC | Not Applicable |
| Foley, Pauline | PJM Interconnection, LLC | Not Applicable |
| Ford, Adrien | PJM Interconnection, LLC | Not Applicable |
| Foster, Denise | PJM Interconnection, LLC | Not Applicable |
| Foster, Neel | PJM Board of Managers | Not Applicable |
| Glazer, Craig | PJM Interconnection, LLC | Not Applicable |
| Hendrzak, Chantal | PJM Interconnection, LLC | Not Applicable |
| Herling, Steven | PJM Interconnection, LLC | Not Applicable |
| Holland, Risa | PJM Interconnection, LLC | Not Applicable |
| Keech, Adam | PJM Interconnection, LLC | Not Applicable |
| Kelley, Michael | PJM Interconnection, LLC | Not Applicable |
| Kinsey, Jean | PJM Board of Managers | Not Applicable |
| Koza, Frank | PJM Interconnection, LLC | Not Applicable |
| Lahey, Richard | PJM Board of Managers | Not Applicable |
| Langbein, Pete | PJM Interconnection, LLC | Not Applicable |
| Manion, Evelyn | PJM Interconnection, LLC | Not Applicable |
| | | |







Monzon, Stephanie O'Neill, Jack Oskvig, Dean Ott, Andrew L. Quintavalla, Ginger Riley, Susan Robinson, Charles Rogers, Sarah Salmon, Lisa Schneider, Howard Schuyler, Ken Sechrist, Erin Slusser, Jeff Swimm, Nora C. Tribulski, Jennifer Weiss, Glenn Williams, Stan

PJM Interconnection, LLC PJM Interconnection, LLC PJM Board of Managers PJM Interconnection, LLC PJM Interconnection, LLC PJM Board of Managers PJM Board of Managers PJM Board of Managers PJM Interconnection, LLC PJM Board of Managers PJM Interconnection, LLC Not Applicable Not Applicable

Author: D.A. Anders

Yeddanapudi, Sree