



Planning Committee
PJM Conference and Training Center, Audubon, PA
July 14, 2016

#### Administration

- 1. Mr. Steve Herling, PJM, called the meeting to order and asked if the Planning Committee had any additional items for the agenda. There were no suggestions for additional agenda items.
- 2. Mr. Herling asked Ms. Bridgid Cummings to review the meeting minutes of the June 9, 2016 Planning Committee meeting. Mr. Herling asked the Planning Committee to approve the minutes. Mr. Dave Pratzon made a motion to approve the minutes. Mr. Barry Trayers seconded the motion. In a voice vote, the Planning Committee approved the June 9th Planning Committee Minutes.

## **Endorsements/Approvals**

# 3. PJM Manual 20 Updates

Mr. Tom Falin, PJM, presented updates to PJM Manual 20, which are a result of a periodic review of this manual. Revisions included updating out of date language to ensure the manual reflects current processes, as well as revisions needed to clarify the implementation of Capacity Performance. Mr. Dave Pratzon made a motion to endorse and Mr. Carl Johnson seconded the motion. In a voice vote, the Planning Committee endorsed the changes regarding updates to Manual 20.

#### 4. Load Model Selection

Mr. Falin, PJM, presented the load model selection for the 2016 RRS (Reserve Requirement Study). The selected model is the 10 year (2003-2012, #51002) load model including a shift in World peak week for the 2016 RRS Base Case. Mr. Dave Pratzon made a motion to endorse and Mr. Carl Johnson seconded the motion. In a voice vote, the Planning Committee endorsed the load model selection.

## Informational Updates

#### 5. Transmission Owner Upgrades

Mr. Mark Sims, PJM, provided an update regarding the Operating Agreement section on Transmission Substation Equipment. This is being addressed in conjunction with the FERC Order 206 compliance filing (Docket ER-16376). The committee will be provided with updates as they come available.

#### 6. PJM/NYISO Wheel Modeling

Mr. Sims, PJM, provided education about the ConEd Wheel as well as provided an update on the operation and planning protocols related to the cancellation of the ConEd Wheel. Mr. Sims also discussed the potential cost allocation impacts as well as the Transmission Planning assumptions related to the cancellation.





## 7. Network Upgrade Cost Allocation

Mr. Aaron Berner, PJM, presented a problem statement regarding New Service Request Cost Allocation. He discussed the key work activities to be addressed in Special Planning Committee sessions. The expected deliverables are Tariff and Manual language to define the new cost allocation requirements or a discussion to be presented to the Planning Committee for the reason why the current cost allocation rules should be maintained in their current form.

# 8. Queue Processing of Small Generation Resources/Upgrade Requests/Transmission Service Requests

Mr. Berner, PJM, presented a problem statement regarding New Service Request Study Methods. He discussed the key work activities to be addressed in Special Planning Committee sessions. The expected deliverables are Tariff and Manual language to define the new cost allocation requirements or a discussion to be presented to the Planning Committee for the reason why the current cost allocation rules should be maintained in their current form.

## 9. PJM Manual 7 Updates

Mr. Mark Kuras provided an update on the history of Appendix F, Triggered Fault Current Limiters, in PJM Manual 7 as well as a clarification that the Appendix is being moved from the Manual to the Protective Relaying Philosophy Document.

#### 10. NERC/RRO Update

Mr. Kuras, PJM, provided an update on recent NERC activities and PJM compliance activities. NERC standards subject to future enforcement can be found under the July 14<sup>th</sup> Planning Committee Material at the Planning Committee Website.

# 11. PPL New Line Designation

Mr. Shadab Ali, PPL, presented the new 500 kV line designation for the Susquehanna-Shickshinny-Lackawanna line. The diagram is available under the July 14<sup>th</sup> Planning Committee Material at the <u>Planning Committee Website</u>.

# 12. PECO Transmission Planning Criteria

Mr. Mike Donnelly, PECO, presented revisions to the PECO transmission planning criteria.

#### **Informational Section**

## PJM/MISO Queue Study Coordination & Retirement Studies

On June 20, 2016, in Docket No. EL13-88-000, PJM Interconnection, L.L.C. ("PJM") and Midcontinent Independent System Operator, Inc.; (1) jointly submitted their informational filing to provide a status report to the Commission in compliance with the April 21, 2016 Order on Complaint and Technical Conference regarding their progress on developing generator retirement study coordination processes, and (2) submitted proposed revisions to the Joint Operating Agreement entered into between PJM and





MISO, Article IX, sections 9.3 to include a single set of agreed-upon interconnection coordination procedures that are currently in the PJM and MISO business practice manuals.

#### Order 1000 Lessons Learned

On April 29, 2016, an Order 1000 Lessons Learned meeting was held. PJM presented a path forward which included 3 tracks: Reliability project process document, Energy Efficiency project process document, and TEAC Redesign. A fourth track was suggested at the meeting: Upgrade projects. PJM is working on drafts of the process documents and discussing ideas for TEAC Redesign internally. Additional meetings will be scheduled.

## Subcommittee/Task Force Updates

#### **DEDSTF**

The DEDSTF last met on 6/15/2016. At that meeting the three sub groups (Substations, lines and protection) continued discussions on the organization/development of the Design Standards as well as the process of reviewing the existing materials. The next meeting of the DEDSTF is 7/19/2016.

#### **DEDSTF** website

## <u>Transmission Replacement Processes Senior Task Force (TRPSTF)</u>

As of the most recent TRPSTF meeting on June 20th, all of the education sessions have been completed. At the meeting on June 3rd, several modules were covered, including duties, rights, and obligations of signatories to the CTOA along with a review of Order 888, Order 890, Order 1000, and the Atlantic City decision. Additional topics included FERC rules and orders surrounding planning process and transparency, and cost recovery and allocation. The fourth and final education session was held on June 20th. PSEG discussed the additional value and benefits brought to the overall system from the inclusion of supplemental upgrades. AEP presented on their Asset Health Center which focuses on condition, performance, and risk assessment drivers over a simple assessment of asset age. AEP also shared class/voltage asset ages. Additional Orders (679, 889, 2000, and 2003) were also reviewed the most recent education session. At the next meeting on July 18th, the group will proceed with formal interest identification and commencement of the CBIR process.

Please encourage any subject matter experts who may later participate in the TRPSTF to view the recorded training sessions, as it is important for participants to remain on the same page for continued progress of this senior task force. Please visit the TRPSTF site for further information, and direct any questions you may have to the TRPSTF secretaries (<u>Julia Spatafore</u> and <u>Jason Quevada</u>).

To receive email notifications, please subscribe to the Transmission Replacement Processes Senior Task Force list serve on the My Email Lists page on your My PJM account.





# **Future Meeting Dates**

August 11, 2016 9:30 a.m. PJM Conference and Training Center, Audubon, PA
September 15, 2016 9:30 a.m. PJM Conference and Training Center, Audubon, PA
October 6, 2016 9:30 a.m. PJM Conference and Training Center, Audubon, PA
November 3, 2016 9:30 a.m. PJM Conference and Training Center, Audubon, PA
December 15, 2016 9:30 a.m. PJM Conference and Training Center, Audubon, PA

**Author: Bridgid Cummings** 

## Attendees

| Attendees                    | Company   | Sector               |
|------------------------------|---|----------------------|
| Steve Herling (Chair)        | PJM Interconnection, LLC                            | Not Applicable       |
| Bridgid Cummings (Secretary) | PJM Interconnection, LLC                            | Not Applicable       |
| Toby Hu                      | Ameren Corporation                                  | Not Applicable       |
| Kiran Thammineni             | Ameren Corporation                                  | Not Applicable       |
| Chris Norton                 | American Municipal Power, Inc.                      | Electric Distributor |
| Edward Tatum                 | American Municipal Power, Inc.                      | Electric Distributor |
| Dale Burmester               | American Transmission Systems, Inc.                 | Transmission Owner   |
| Gary Fuerst                  | American Transmission Systems, Inc.                 | Transmission Owner   |
| Jim Zweig                    | American Transmission Systems, Inc.                 | Transmission Owner   |
| Brock Ondayko                | Appalachain Power Company                           | Transmission Owner   |
| David Canter                 | Appalachian Power Company                           | Transmission Owner   |
| Takis Laios                  | Appalachian Power Company                           | Transmission Owner   |
| Deniz Ozkan                  | Atlantic Wind Connection                            | Not Applicable       |
| Hugh Scott                   | Baltimore Gas and Electric Company                  | Transmission Owner   |
| Marek Kaczanowski            | Baltimore Gas and Electric Company                  | Transmission Owner   |
| Eric Yeh                     | Baltimore Gas and Electric Company                  | Transmission Owner   |
| James Jablonski              | Borough of Butler, Butler Electric Division         | Electric Distributor |
| Ron Pezon                    | Borough of Chambersburg                             | Electric Distributor |
| Diane Janicki                | Boston Energy Trading and Marketing LLC             | Generation Owner     |
| David Scarpignato            | Calpine Energy Services, L.P.                       | Generation Owner     |
| Tom Hoatson                  | Carroll County Energy LLC                           | Other Supplier       |
| Michael Natrin               | Carroll County Energy LLC                           | Other Supplier       |
| Yan Du                       | Central Transmission, LLC                           | Transmission Owner   |
| Barry Trayers                | Citigroup Energy, Inc.                              | Other Supplier       |
| Connie Davis                 | City of Cleveland, DPU, Div of Cleveland Public Pwr | Electric Distributor |
| William Allen                | Commonwealth Edison Company                         | Transmission Owner   |
| Paul Mills                   | Commonwealth Edison Company                         | Transmission Owner   |
| Ronald Regner                | Commonwealth Edison Company                         | Transmission Owner   |
| Yonas Habtemichael           | Constellation NewEnergy, Inc                        | Transmission Owner   |
| Dan Griffiths                | Consumer Advocates of PJM States                    | Not Applicable       |
| Sandeep Baidwan              | Continuum Associates, LLC                           | Not Applicable       |
| Guy Filomena                 | Customized Energy Solutions, Ltd.*                  | Not Applicable       |
|                              |   |                      |



Carl Johnson Customized Energy Solutions, Ltd.\* Jonathan Sasser Customized Energy Solutions, Ltd.\* Mike Hurd Dayton Power & Light Company (The) Transmission Owner

Michael Russ Dayton Power & Light Company (The) John Farber DE Public Service Commission

Jaclyn Cantler Delmarva Power & Light Company

Michael Erbrick DhastCo.LLC

Jeffrey Whitehead Direct Energy Business Marketing, LLC Janhavi Dharmadhikari Dominion Energy Marketing, Inc.

Ronnie Bailey Dominion Virginia Power Craig Crider Dominion Virginia Power Jeff Currier Dominion Virginia Power Kyle Hannah Dominion Virginia Power Dominion Virginia Power Cynthia Yeh Dominion Virginia Power Frank Zhang

Steve Steinkuhl Duke Energy Business Services LLC

Julie Mason Duke Energy Ohio, Inc. Duke Energy Ohio, Inc. Judy Stubbe **Duquesne Light Company** Elizabeth Cook John Peoples **Duquesne Light Company** 

Patrick Grau Dynegy Marketing and Trade, LLC

Iker Chocarro E.on Climate & Renewables North America, Inc.

Thomas Rutigliano Earth Networks

Darrin Adams East Kentucky Power Cooperative, Inc. East Kentucky Power Cooperative, Inc. Nathan Bradley Wes Fluty East Kentucky Power Cooperative, Inc. Kevin Kilgallen Emerald Energy Consulting, LLC

John Marczewski **Energy Initiatives Group** Nick Gangi **Eversource Energy** 

Melanie Sanders Exelon Business Services Company, LLC Robert Taylor Exelon Business Services Company, LLC

Exelon Generation Co., LLC Sharon Midgley Roozbeh Shegarfi Exelon Generation Co., LLC

Federal Energy Regulatory Commission (The) Alina Halay

Thomas Bainbridge FirstEnergy Solutions Corp. Jim Benchek FirstEnergy Solutions Corp. Martin Bolan FirstEnergy Solutions Corp. Lou D'Alessandris FirstEnergy Solutions Corp. Jeff Stuchell FirstEnergy Solutions Corp. John Syner FirstEnergy Solutions Corp. Gabel and Associates Michael Borgatti Travis Stewart Gabel and Associates

Not Applicable Not Applicable

Transmission Owner

Not Applicable Electric Distributor

Not Applicable Other Supplier **Generation Owner** 

Transmission Owner Transmission Owner

Not Applicable

Transmission Owner Transmission Owner Transmission Owner

Transmission Owner

Transmission Owner Transmission Owner Transmission Owner

Transmission Owner Generation Owner Generation Owner Other Supplier

Transmission Owner Transmission Owner Transmission Owner

Not Applicable Not Applicable Not Applicable Transmission Owner

Transmission Owner **Generation Owner Generation Owner** 

Not Applicable

Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner

Transmission Owner

Not Applicable

Not Applicable

5 PJM©2016



Amy Fisher GE Energy Financial Services

Rachel Hulett Gridliance, GP, LLC
David Pratzon GT Power Group
Kenneth Foladare IMG Midstream LLC

John Kopinski ITC Mid-Atlantic Development LLC
Brenda Prokop ITC Mid-Atlantic Development LLC

Matt Keenan J-Power USA

John Seelke LS Power Transmission, LLC

Robert O'Connell Main Line Electricity Market Consultants

Morris Schreim Maryland Public Service Commission

David Mabry McNees Wallace & Nurick LLC

Erik Hanser Michigan Public Service Commission

Adam Solomon Midwest Independent Transmission System Operator, Inc.

Christin Domian Mitsubishi Electric Power Products Inc.

Benjamin Fram Monitoring Analytics

Douglas Dickson New Jersey Board of Public Utilities

George Kogut New York Power Authority

David Davis NextEra Energy Power Marketing, LLC

Mason Emnett NextEra Energy Power Marketing, LLC

Gabriel Hollis Nextera Energy, Inc

Jung Suh Noble Americas Energy Solutions LLC

 Neal Fitch
 NRG Power Marketing LLC

 John Donelson
 Old Dominion Electric Cooperative

 Robert Duan
 Ontario Power Generation Inc.

Gregory Carmean OPSI

Iris Boci PECO Energy Company
Mike Donnelly PECO Energy Company
Dhruv Acharya PEPCO Holdings, Inc.
Gloria Godson PEPCO Holdings, Inc.
Patricia Kurowski PEPCO Holdings, Inc.

Dave Anders PJM Interconnection, LLC Aaron Berner PJM Interconnection, LLC Christina Catalano PJM Interconnection, LLC Mary Ellen Driscoll PJM Interconnection, LLC Amanda Egan PJM Interconnection, LLC Tom Falin PJM Interconnection, LLC PJM Interconnection, LLC Zhenyu Fan Pauline Foley PJM Interconnection, LLC Suzanne Glatz PJM Interconnection, LLC

Andrew Gledhill

Michael Herman

Jim Glennon

Not Applicable
Not Applicable
Not Applicable
Generation Owner
Other Supplier
Other Supplier

Not Applicable

Transmission Owner
Not Applicable

Not Applicable

Not Applicable
Not Applicable

Not Applicable Not Applicable

Not Applicable

Other Supplier
Generation Owner

Generation Owner

Other Supplier
Other Supplier
Generation Owner
Electric Distributor
Other Supplier

Not Applicable
Transmission Owner

Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner

Transmission Owner
Not Applicable

Not Applicable

Not Applicable

PJM©2016 6

PJM Interconnection, LLC

PJM Interconnection, LLC

PJM Interconnection, LLC





| PJM Interconnection, LLC                       |
|--|
| PJM Interconnection, LLC                       |
| PPL Electric Utilities Corp. dba PPL Utilities |
| PPL Electric Utilities Corp. dba PPL Utilities |
|  |

Gary Greiner PSEG Energy Resources and Trade LLC Greg Player PSEG Energy Resources and Trade LLC Sujata Walsh PSEG Energy Resources and Trade LLC Vilna Gaston Public Service Electric & Gas Public Service Electric & Gas Company Qamar Arsalan Public Service Electric & Gas Company James Calore James Caristia Public Service Electric & Gas Company Kathleen Crowley Public Service Electric & Gas Company Esam Khadr Public Service Electric & Gas Company

Leonid Lyakhovich
Public Service Electric & Gas Company
Rich Marinelli
Public Service Electric & Gas Company
Public Service Electric & Gas Company
Public Service Electric & Gas Company
Ming Zhou
Public Service Electric & Gas Company

Chandana Bommareddy Quanta Technology

David Burnham Rock Island Clean Line LLC
Roleto Mangonon Rockland Electric Company
Joel Yu Rockland Electric Company

Suzanne Herel RTO Insider
Rory Sweeney RTO Insider

Gerry Binder SESCO Enterprises LLC

Andy Peebles Shell Energy North America (US), LP

Jack Halpern Stantec

Leonard Collins State of Delaware

Syed Ahmad The Federal Energy Regulatory Commission

Pati Esposito-Hils TransCanada Power Marketing Ltd.

Pat Hayes Union Electric Company d/b/a Ameren Missouri
Adam Weber Union Electric Company d/b/a Ameren Missouri

Not Applicable
Transmission Owner
Transmission Owner

Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner
Transmission Owner

Not Applicable
Not Applicable
Not Applicable
Transmission Owner
Transmission Owner

Not Applicable
Not Applicable
Other Supplier
Other Supplier
Not Applicable
Not Applicable
Not Applicable
Other Supplier
Other Supplier

Other Supplier