

Planning Committee
PJM Conference and Training Center, Audubon, PA
July 13, 2017

Administration

1. Mr. Paul McGlynn, PJM, called the meeting to order and reviewed the Code of Conduct and Anti-Trust.
2. Mr. McGlynn asked Ms. Bridgid Cummings to review the meeting minutes of the June 8, 2017 Planning Committee meeting. Mr. McGlynn asked the Planning Committee to approve the minutes. Mr. Barry Trayers made a motion to approve the minutes. Mr. Carl Johnson seconded the motion. In a voice vote, the Planning Committee approved the June 8, 2017 Planning Committee Minutes.

Endorsements

3. Load Model Selection

Mr. Patricio Rocha-Garrido, PJM, presented the results of the Load Model selection process for the 2017 Reserve Requirement Study. Mr. Carl Johnson made a motion to endorse and Ms. Adrien Ford seconded the motion. There were no objections and no abstentions. **In a voice vote, the committee endorsed the Load Model selection for the 2017 RRS.**

4. PJM M14B and PJM Operating Agreement Updates – TEAC Redesign

Ms. Amanda Long, PJM, presented updates to PJM Manual 14B (PJM Regional Transmission Process) and the PJM Operating Agreement in regards to the RTEP cycle timeline and the proposal window duration. The PJM Manual 14B updates relate to moving the current 12-month RTEP cycle to an overlapping 18-month RTEP cycle. The Operating Agreement updates relate to updating the proposal window from 30 days to 60 days. Mr. John Kopinski made a motion to endorse the Manual 14B Updates and Mr. John Syner seconded the motion. There were no objections and no abstentions. **In a voice vote, the Planning Committee approved the updates to Manual 14B.** Mr. John Kopinski made a motion to endorse the Operating Agreement and Mr. John Syner seconded the motion. There were no objections and no abstentions. **In a voice vote, the Planning Committee approved the updates to the Operating Agreement.**

First Readings

5. TO/TOP Matrix V11 Update

Mr. Srinivas Kappagantula, PJM, provided a first read for the TO/TOP Matrix V11. The committee will be asked to provide their recommendation to the TOA-AC for approval at its next meeting.

6. PJM Manual 14A

Mr. Joe Hay, PJM, presented proposed updates to Manual 14A (Generation and Transmission Interconnection Process). These updates were identified as part of the biennial review of the

manual. This will be brought back to the next Planning Committee as a first reading. Members are asked to please review the red-line changes and provide feedback to David Egan at David.Egan@pjm.com.

7. **PJM Manual 14B – NYISO/PJM Wheel Replacement**

Mr. Michael Herman, PJM, presented updates to Manual 14B (PJM Regional Transmission Process) resulting from the NYSIO/PJM Wheel Replacement and System Planning department responsibilities. The committee will be asked to endorse these updates at its next meeting.

Informational Updates

8. **Grid Resilience in System Planning**

Mr. Mark Sims, PJM, provided an introduction to grid resilience in Transmission Planning as well as next steps. PJM will continue to refine the meaning of grid resilience in Transmission Planning in the coming meetings. Members are encouraged to provide feedback via RTEP@pjm.com.

9. **Winter Season Resource Adequacy and Capacity Requirements**

Mr. Rocha-Garrido, PJM, provided an update on recent work related to the MRC problem statement regarding winter season resource adequacy and capacity requirements. Discussions will continue to occur at the Resource Adequacy Analysis Subcommittee, the next meeting will be held on August 4th. Updates will continue to be brought to the Planning Committee as they become available.

10. **Class Average Wind and Solar Capacity Factors**

Mr. Jerry Bell reviewed the updated wind and solar class average capacity factors.

11. **Geomagnetic Disturbance (GMD) Update**

Mr. Stan Sliwa, PJM, provided an update on efforts being made to PJM Planning processes in light of NERC Reliability Standard TPL-007-1: Transmission System Planned Performance for Geomagnetic Disturbance Events.

12. **TPL-001-4 Spare Equipment Strategy Update**

Mr. Sliwa, PJM, provided an update on the annual evaluation of the TPL-001-4 spare equipment strategy requirement.

13. **Planning Community Tool Update**

Ms. Lauren Strella, PJM, provided an update on the progress of the newly developed Planning Community Tool. PJM is asking for the help of members to participate as beta testers for this new environment. If you are interested in working with PJM in this effort, please email RTEP@pjm.com.

14. NERC and Regional Coordination Update

Mr. Tom Moleski, PJM, provided an update on recent NERC activities and PJM compliance activities. NERC standards subject to future enforcement can be found under the May 4th Planning Committee Material at the [PC Website](#).

15. PPL EU Request for a New 500 kV Line Designation

Mr. Shadab Ali, PPL, provided an overview of PPL's EU Request for a new 500kV line designation to the existing Breinigsville-Alburtis 500 kV line.

Future Meeting Dates

Date	Time	Committee	Location
August 10, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
September 14, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
October 12, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
November 9, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
December 14, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA

Author: Bridgid Cummings

Attendees

Attendees	Company	Sector
Paul McGlynn (Chair)	PJM Interconnection, LLC	Not Applicable
Bridgid Cummings (Secretary)	PJM Interconnection, LLC	Not Applicable
Eric Laverty	Aces Power Marketing Inc.	Electric Distributor
RJ Cundiff	AEP Energy Partners, Inc.	Transmission Owner
Toby Hu	Ameren Corporation	Not Applicable
Steven Lieberman	American Municipal Power, Inc.	Electric Distributor
Dale Burmester	American Transmission Systems, Inc.	Transmission Owner
Jim Zweig	American Transmission Systems, Inc.	Transmission Owner
Brock Ondayko	Appalachian Power Company	Transmission Owner
Kevin Patten	Appalachian Power Company	Transmission Owner
David Canter	Appalachian Power Company	Transmission Owner
Takis Laios	Appalachian Power Company	Transmission Owner
Craig Lockwood	Appalachian Power Company	Transmission Owner
Markian Melnyk	Atlantic Grid Operations A, LLC	Other Supplier
Chukwuemeka Igwilo	Baltimore Gas and Electric Company	Transmission Owner
Rajul Mahmud	Baltimore Gas and Electric Company	Transmission Owner
Hugh Scott	Baltimore Gas and Electric Company	Transmission Owner
Ron Pezon	Borough of Chambersburg	Electric Distributor
Brian Vayda	Borough of Park Ridge	Electric Distributor
Travis Bouslog	Burns & McDonnell Engineering Company Inc	Not Applicable
Tom Hoatson	Carroll County Energy LLC	Other Supplier
Michael Natrin	Carroll County Energy LLC	Other Supplier
jm@cci.com	Castleton Commodities International LLC	Not Applicable
Ryan Jones	CCS Energy	Not Applicable
Barry Trayers	Citigroup Energy, Inc.	Other Supplier
Deral Danis	Clean Line Energy Partners LLC	Not Applicable

William Allen	Commonwealth Edison Company	Transmission Owner
John Garavaglia	Commonwealth Edison Company	Transmission Owner
Thomas Leeming	Commonwealth Edison Company	Transmission Owner
Nate Rushing	Competitive Power Ventures, Inc.	Not Applicable
Diana McNally-Barsotti	Consolidated Edison	Other Supplier
Greg Poulos	Consumer Advocates of PJM States	Not Applicable
Sandeep Baidwan	Continuum Associates, LLC	Not Applicable
Bruce Campbell	Cpower	Other Supplier
Jamie Lejcar	CPS Energy	Electric Distributor
Guy Filomena	Customized Energy Solutions, Ltd.*	Not Applicable
Carl Johnson	Customized Energy Solutions, Ltd.*	Not Applicable
Jonathan Sasser	Customized Energy Solutions, Ltd.*	Not Applicable
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
Michael Russ	Dayton Power & Light Company (The)	Transmission Owner
Hertzel Shamash	Dayton Power & Light Company (The)	Transmission Owner
Joseph DeLosa	DE Public Service Commission	Not Applicable
John Farber	DE Public Service Commission	Not Applicable
David Hastings	Dhast Co	Not Applicable
Ruth Ann Price	Division of the Public Advocate of the State of Delaware	Other Supplier
Ronnie Bailey	Dominion Virginia Power	Transmission Owner
Craig Crider	Dominion Virginia Power	Transmission Owner
Kyle Hannah	Dominion Virginia Power	Transmission Owner
Bao Pham	Dominion Virginia Power	Transmission Owner
Frank Zhang	Dominion Virginia Power	Transmission Owner
George Owens	Downes Associates, Inc.	Other Supplier
Gregory Pakela	DTE Energy Trading, Inc.	Other Supplier
Steve Steinkuhl	Duke Energy Business Services LLC	Transmission Owner
Julie Mason	Duke Energy Ohio, Inc.	Transmission Owner
Judy Stubbe	Duke Energy Ohio, Inc.	Transmission Owner
Elizabeth Cook	Duquesne Light Company	Transmission Owner
Chad Hirsh	Duquesne Light Company	Transmission Owner
Tonja Wicks	Duquesne Light Company	Transmission Owner
Iker Chocarro	E.on Climate & Renewables North America, Inc	Generation Owner
Thomas Rutigliano	Earth Networks	Other Supplier
Darrin Adams	East Kentucky Power Cooperative, Inc.	Transmission Owner
Wes Fluty	East Kentucky Power Cooperative, Inc.	Transmission Owner
Scott Sells	East Kentucky Power Cooperative, Inc.	Transmission Owner
Amanda Stacy	East Kentucky Power Cooperative, Inc.	Transmission Owner
Kevin Kilgallen	Emerald Energy Consulting, LLC	Not Applicable
Malcolm Ainspan	Energy Curtailment Specialists, Inc.	Not Applicable
Pablo Ovando	Exelon Business Services Company, LLC	Transmission Owner
Melanie Sanders	Exelon Business Services Company, LLC	Transmission Owner
Robert Taylor	Exelon Business Services Company, LLC	Transmission Owner
Kevin Thundiyil	Exelon Business Services Company, LLC	Transmission Owner
Tony Tong	Exelon Business Services Company, LLC	Transmission Owner
Jeffrey Yuknis	Exelon Business Services Company, LLC	Transmission Owner

Sharon Midgley	Exelon Generation Co., LLC	Generation Owner
Roozbeh Shegarfi	Exelon Generation Co., LLC	Generation Owner
Thomas Bainbridge	FirstEnergy Solutions Corp.	Transmission Owner
Jim Benchek	FirstEnergy Solutions Corp.	Transmission Owner
Martin Bolan	FirstEnergy Solutions Corp.	Transmission Owner
Jeff Stuchell	FirstEnergy Solutions Corp.	Transmission Owner
John Syner	FirstEnergy Solutions Corp.	Transmission Owner
Rachel Hulett	Gridliance, GP, LLC	Not Applicable
David Pratzon	GT Power Group	Not Applicable
Joe Staszowski	ISO New England	Not Applicable
Brenda Prokop	ITC Interconnect	Transmission Owner
Ernest Owens	ITC Mid-Atlantic Development LLC	Other Supplier
Rehan Gilani	Leidos	Not Applicable
John Seelke	LS Power Transmission, LLC	Transmission Owner
Heather Thomson	Marec	Not Applicable
David Mabry	McNees Wallace & Nurick LLC	Not Applicable
Christin Domian	Mitsubishi Electric Power Products Inc.	Not Applicable
George Kogut	New York Power Authority	Other Supplier
David Davis	NextEra Energy Power Marketing, LLC	Generation Owner
Amanda Mack	NextEra Energy Transmission, LLC	Other Supplier
Frederico Von Pinho	NextEra Energy Transmission, LLC	Other Supplier
Gabriel Hollis	Nextera Energy, Inc	Other Supplier
Laxman Subedi	NiSource	Not Applicable
James Manning	North Carolina Electric Membership Corporation	Electric Distributor
Neal Fitch	NRG Power Marketing LLC	Generation Owner
John Donelson	Old Dominion Electric Cooperative	Electric Distributor
Adrien Ford	Old Dominion Electric Cooperative	Electric Distributor
William Pezalla	Old Dominion Electric Cooperative	Electric Distributor
Mark Ringhausen	Old Dominion Electric Cooperative	Electric Distributor
Robert Duan	Ontario Power Generation Inc.	Other Supplier
Douglas Dale	PECO Energy Company	Transmission Owner
Mike Donnelly	PECO Energy Company	Transmission Owner
Pulin Shah	PECO Energy Company	Transmission Owner
Dhruv Acharya	PEPCO Holdings, Inc.	Transmission Owner
Scott Razze	PEPCO Holdings, Inc.	Transmission Owner
Amber Young	PEPCO Holdings, Inc.	Transmission Owner
Dave Anders	PJM Interconnection, LLC	Not Applicable
Fran Barrett	PJM Interconnection, LLC	Not Applicable
Jerry Bell	PJM Interconnection, LLC	Not Applicable
Aaron Berner	PJM Interconnection, LLC	Not Applicable
Nicole Bugay	PJM Interconnection, LLC	Not Applicable
Onyinye Caven	PJM Interconnection, LLC	Not Applicable
Jason Connell	PJM Interconnection, LLC	Not Applicable
Danielle Croop	PJM Interconnection, LLC	Not Applicable
Mary Ellen Driscoll	PJM Interconnection, LLC	Not Applicable
Ilyana Dropkin	PJM Interconnection, LLC	Not Applicable

David Egan	PJM Interconnection, LLC	Not Applicable
Zhenyu Fan	PJM Interconnection, LLC	Not Applicable
Lawrence Farmer	PJM Interconnection, LLC	Not Applicable
Pauline Foley	PJM Interconnection, LLC	Not Applicable
Suzanne Glatz	PJM Interconnection, LLC	Not Applicable
Andrew Gledhill	PJM Interconnection, LLC	Not Applicable
Jim Glennon	PJM Interconnection, LLC	Not Applicable
Jacob Grande	PJM Interconnection, LLC	Not Applicable
Joe Hay	PJM Interconnection, LLC	Not Applicable
Chantal Hendrzak	PJM Interconnection, LLC	Not Applicable
Steve Herling	PJM Interconnection, LLC	Not Applicable
Michael Herman	PJM Interconnection, LLC	Not Applicable
Risa Holland	PJM Interconnection, LLC	Not Applicable
Eric Hsia	PJM Interconnection, LLC	Not Applicable
Srinivas Kappagantula	PJM Interconnection, LLC	Not Applicable
Frank Koza Jr.	PJM Interconnection, LLC	Not Applicable
Lisa Krizenoskas	PJM Interconnection, LLC	Not Applicable
Matthew LaRocque	PJM Interconnection, LLC	Not Applicable
Chuck Liebold	PJM Interconnection, LLC	Not Applicable
Jeremy Lin	PJM Interconnection, LLC	Not Applicable
Amanda Long	PJM Interconnection, LLC	Not Applicable
Erich Mauroschadt	PJM Interconnection, LLC	Not Applicable
Susan McGill	PJM Interconnection, LLC	Not Applicable
Tom Moleski	PJM Interconnection, LLC	Not Applicable
Molly Mooney	PJM Interconnection, LLC	Not Applicable
Steve Pincus	PJM Interconnection, LLC	Not Applicable
Wenzhen Qui	PJM Interconnection, LLC	Not Applicable
Jason Quevada	PJM Interconnection, LLC	Not Applicable
John Reynolds	PJM Interconnection, LLC	Not Applicable
Patricio Rocha-Garrido	PJM Interconnection, LLC	Not Applicable
Syne Salem	PJM Interconnection, LLC	Not Applicable
Ken Schuyler	PJM Interconnection, LLC	Not Applicable
Jason Shoemaker	PJM Interconnection, LLC	Not Applicable
Stan Sliwa	PJM Interconnection, LLC	Not Applicable
Mark Sims	PJM Interconnection, LLC	Not Applicable
Preston Walker	PJM Interconnection, LLC	Not Applicable
Mike Ward	PJM Interconnection, LLC	Not Applicable
Tao Yang	PJM Interconnection, LLC	Not Applicable
Shadab Ali	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Michele Greening	PPL Electric Utilities Corp. dba PPL Utilities	Generation Owner
Steven Nadel	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Phil Penny	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Sam Giordano	PSEG Energy Resources and Trade LLC	Transmission Owner
Gary Greiner	PSEG Energy Resources and Trade LLC	Transmission Owner
William Lavista	PSEG Energy Resources and Trade LLC	Transmission Owner
James Caristia	Public Service Electric & Gas Company	Transmission Owner

Shuting Guo	Public Service Electric & Gas Company	Transmission Owner
Esam Khadr	Public Service Electric & Gas Company	Transmission Owner
Leonid Lyakhovich	Public Service Electric & Gas Company	Transmission Owner
Rich Marinelli	Public Service Electric & Gas Company	Transmission Owner
John Nagurney	Public Service Electric & Gas Company	Transmission Owner
Alexander Stern	Public Service Electric & Gas Company	Transmission Owner
Debbie Gebolys	Public Utilities Commission of Ohio (The)	Not Applicable
Chandana Bommareddy	Quanta Technology	Not Applicable
Ray Mason	Reliability First	Not Applicable
Roletto Mangonon	Rockland Electric Company	Transmission Owner
Felicia Thomas-Friel	RPA - New Jersey	Not Applicable
Rory Sweeney	RTO Insider	Not Applicable
Stephanie Tsao	S&P Global Market Intelligence	Not Applicable
Gerry Binder	SESCO Enterprises LLC	Other Supplier
Andy Peebles	Shell Energy North America (US), LP	Other Supplier
Neil Joshipura	State Corporate Commission Virginia	Not Applicable
Becky Davis	Talen Energy Marketing, LLC	Generation Owner
Tom Hyzinski	Talen Energy Marketing, LLC	Generation Owner
Barbara Scoglietti	Tangent Energy Solutions, Inc.	Other Supplier
Syed Ahmad	The Federal Energy Regulatory Commission	Not Applicable
John Sillin	The Federal Energy Regulatory Commission	Not Applicable
Adam Weber	Union Electric Company d/b/a Ameren Missouri	Other Supplier
James Wilson	Wilson Energy Economics	Not Applicable