

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

Administration

1. Mr. Steve Herling, PJM, called the meeting to order and reviewed the Code of Conduct and Anti-Trust.
2. Mr. Herling asked Ms. Bridgid Cummings to review the meeting minutes of the March 9, 2017 Planning Committee meeting. Mr. Herling asked the Planning Committee to approve the minutes. Mr. Carl Johnson made a motion to approve the minutes. Mr. Barry Trayers seconded the motion. In a voice vote, the Planning Committee approved the March 9, 2017 Planning Committee Minutes.

Endorsements

3. PJM Manual 14B Updates

Mr. Michael Herman, PJM, presented red-line changes to Manual 14B (PJM Region Transmission Planning Process) related to Baseline Thermal Analysis, PRC-023 requirements and references to SPS (Special Protection System) changed to RAS (Remedial Action Scheme). Red-line changes regarding the handling of energy efficiency were also presented; this change is being made to reflect current practices given approval of the energy and saturation variables in the long term load forecast (11/2015). Mr. Ronnie Bailey made a motion to endorse and Mr. Barry Trayers seconded the motion, there were no objections and no abstentions. **In a voice vote, the Planning Committee endorsed the updates to Manual 14B.**

First Readings

4. PJM Manual 14F

Mr. Herman, PJM, reviewed the proposed draft of Manual 14F: PJM Competitive Planning Process Manual. This is a new manual and members are strongly encouraged to provide feedback prior to the April MRC meeting. Please provide feedback to Michael.Herman@pjm.com. This will be brought to the next Planning Committee meeting for endorsement, absent any significant requested changes to the draft Manual 14F.

5. Designated Entity Design Standards Task Force

Mr. Herman, PJM, presented a summary of the compilation of the documents written as part of the efforts of the Designated Entity Design Standards Task Force. These DEDSTF requirements must be followed for all proposals that require the signing of a Designated Entity Agreement. These documents will be brought to the next Planning Committee meeting for endorsement.

6. Manual 14A and Tariff Updates

Mr. Aaron Berner, PJM, presented updates to Manual 14A: Generation and Transmission Interconnection Process and the Tariff related to less than \$5 million cost allocation and the

alternate queue. The proposed language will seek to remove alternate queue screening. It also has proposed language to evaluate the need for reinforcements with first request to cause the need for a reinforcement to be allocated 100% of the cost of the upgrade. These revisions will be brought to the next Planning Committee meeting for endorsement.

Informational Updates

7. Transmission Service and Upgrade Requests

Mr. Berner, PJM, provided an update on the status of manual and/or tariff language pertaining to Transmission Service and Upgrade Requests. The group will continue to meet in future Special PC Sessions to discuss changes to Part II and III for Transmission Service Study changes.

8. Transitional Seasonal Capacity Study

Mr. Berner, PJM, provided an update on the study conducted for transitional seasonal capacity. Updates will continue to be provided as they become available.

9. EQSTF Tariff Clean Up

Mr. Dave Egan, PJM, provided an update on administrative changes to the PJM Tariff to reflect the correct language intended by the EQSTF. The impacted language is related to System Impact Study Costs for 2 MW generation and 20 MW generation.

10. Upgrade Construction Service Agreement Definitions Change

Mr. Egan, PJM, provided a summary of changes to definitions in Attachment GG of the PJM Tariff. These changes are also being presented at the Governing Document Enhancement & Clarification Subcommittee on May 10, 2017.

11. CETLs for NY Imports

Mr. Mark Sims, PJM, provided a summary regarding CETL methodology directly related to the PJM/NYISO interface. Updated CETLs for the Capacity Market was posted April 14th.

12. TEAC Redesign Update

Mr. Sims provided an update on the TEAC Redesign effort and reviewed the proposed 12 month and 18 month RTEP cycle structure and timing. This item will be brought back to the Planning Committee to further discuss potential Manual changes and additional preparations.

13. Planning Community Tool

Ms. Lauren Strella, PJM, presented an update on the status of the Planning Community Tool. Members are encouraged to attend the live demo of the Tech Change Community Tool on April 25th, this tool will be very similar to the Planning Community Tool. The Planning Community Tool will be rolled out in Q3 of 2017.

14. Multiregional Modeling Working Group and MOD-032 Update

Mr. Jason Connell, PJM, provided an update on the Gen Model, Short Circuit MOD-032 Request, and the MMWG case build due dates. There is much activity in the next two months, please refer to the presentation material available on the [PC Website](#) under Item 14 in the April 13th meeting materials.

15. TO Load Development and Modeling

Mr. Alex Worcester, PJM, provided an overview of TO Load Forecasting methodologies provided from different perspectives. He noted that this presentation was to provide a general summary and not intended to reflect any specific process of any given Transmission Owner.

16. NERC/RRO Update

Mr. Preston Walker, PJM, provided an update on recent NERC activities and PJM compliance activities. NERC standards subject to future enforcement can be found under the March 9th Planning Committee Material at the [PC Website](#). You can also reach out to Preston at Preston.Walker@pjm.com if there are any further questions.

17. PPL Planning Criteria

Mr. Chip Richardson, PPL, provided a review of modifications to the PPL Planning Criteria.

18. ITCI Planning Criteria

Mr. John Kopinski, ITCI, provided an overview of ITCI as well as provided a summary of the ITCI Planning Criteria. Additional details are available on the [PC Website](#) under Item 18 in the April 13th meeting materials.

19. BGE Remedial Action Scheme Retirement

Mr. Eric Yeh, BGE, provided the history of the Concord St RAS as well as a review of reasons for removing the Concord St RAS.

20. Automatic Sectionalizing Schemes

Mr. Lagy Mathew, PJM, provided an update regarding Automatic Sectionalizing Schemes and the criteria on which they are assessed. His presentation provided a list of Schemes in the Dominion zone that will be added to Attachment E in M03: Transmission Operations with an effective date of July 27, 2017. Please reference the presentation on the [PC Website](#) under Item 20 in the April 13th meeting materials for the complete list.

21. OATT and Manual 14D Updates

Mr. Joe Mulhern, PJM, presented PJM Tariff and Manual 14D: Generator Operational Requirements changes specific to new data requirements for Solar Parks which participate in the PJM Wholesale Markets.

Informational Section

Manual 3 - Transmission Operations Review

Ms. Nicole Scott, PJM, was available to answer questions on updates to Manual 3 – Transmission Operations. Materials are posted as Informational Only.

Future Meeting Dates

May 4, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
June 8, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
July 13, 2017	9:30 a.m.	Planning Committee	PJM Conference and Training Center, Audubon, PA
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
Steve Herling (Chair)	PJM Interconnection, LLC	Not Applicable
Bridgid Cummings (Secretary)	PJM Interconnection, LLC	Not Applicable
Nicolas Koehler	AEP Indiana-Michigan Transmission Company, Inc.	Transmission Owner
Sanjoy Sarawgi	AEP Indiana-Michigan Transmission Company, Inc.	Transmission Owner
Sean Black	Ameren Corporation	Not Applicable
Kristin Rothey	American Municipal Power, Inc.	Electric Distributor
Gary Fuerst	American Transmission Systems, Inc.	Transmission Owner
David Bates	American Transmission Systems, Inc.	Transmission Owner
Jim Zweig	American Transmission Systems, Inc.	Transmission Owner
Brock Ondayko	Appalachian Power Company	Transmission Owner
Ryan Dolan	Appalachian Power Company	Transmission Owner
Takis Laios	Appalachian Power Company	Transmission Owner
Chukwuemeka Igwilo	Baltimore Gas and Electric Company	Transmission Owner
Hugh Scott	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
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
Yan Du	Central Transmission, LLC	Transmission Owner
Barry Trayers	Citigroup Energy, Inc.	Other Supplier
William Allen	Commonwealth Edison Company	Transmission Owner
Alan Engelmann	Commonwealth Edison Company	Transmission Owner
John Garavaglia	Commonwealth Edison Company	Transmission Owner
Paul Mills	Commonwealth Edison Company	Transmission Owner
Ronald Regner	Commonwealth Edison Company	Transmission Owner
John Hafner	Competitive Power Ventures, Inc.	Not Applicable

Dan Griffiths	Consumer Advocates of PJM States	Not Applicable
Greg Poulos	Consumer Advocates of PJM States	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
Jaclyn Cantler	Delmarva Power & Light Company	Electric Distributor
Ruth Ann Price	Division of the Public Advocate of the State of Delaware	Other Supplier
Ronnie Bailey	Dominion Virginia Power	Transmission Owner
Kyle Hannah	Dominion Virginia Power	Transmission Owner
Bao Pham	Dominion Virginia Power	Transmission Owner
Sarah Rana	Dominion Virginia Power	Transmission Owner
Frank Zhang	Dominion Virginia Power	Transmission Owner
George Owens	Downes Associates, Inc.	Other Supplier
Greg Pakela	DTE Energy Trading, Inc.	Other Supplier
Steve Steinkuhl	Duke Energy Business Services LLC	Transmission Owner
Julie Mason	Duke Energy Ohio, Inc.	Transmission Owner
Steve Abate	Duquesne Light Company	Transmission Owner
Tonja Wicks	Duquesne Light Company	Transmission Owner
Chirag Mehta	Durable Power	Not Applicable
Iker Chocarro	E.on Climate & Renewables North America, Inc	Generation Owner
Darrin Adams	East Kentucky Power Cooperative, Inc.	Transmission Owner
Nathan Bradley	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
Steve Huntoon	Energy Counsel, LLP	Not Applicable
Malcolm Ainspan	Energy Curtailment Specialists, Inc.	Not Applicable
Eric DeBellis	Environmental Law & Policy Center	Not Applicable
Gina Jardot	Essential Power, LLC	Generation Owner
Nick Gangi	Eversource Energy	Not Applicable
Mike Kormos	Exelon Business Services Company, LLC	Transmission Owner
Pablo Ovando	Exelon Business Services Company, LLC	Transmission Owner
Tony Tong	Exelon Business Services Company, LLC	Transmission Owner
Jason Barker	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 Thundiyl	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
Martin Bolan	FirstEnergy Solutions Corp.	Transmission Owner
Lou D'Alessandris	FirstEnergy Solutions Corp.	Transmission Owner
David Marton	FirstEnergy Solutions Corp.	Transmission Owner
John Syner	FirstEnergy Solutions Corp.	Transmission Owner
Michael Borgatti	Gabel and Associates	Not Applicable
Travis Stewart	Gabel and Associates	Not Applicable
Amy Fisher	GE Energy Financial Services	Not Applicable
Rachel Hulett	Gridliance, GP, LLC	Not Applicable
David Pratzon	GT Power Group	Not Applicable
Roy Shanker	H.Q. Energy Services (U.S.), Inc.	Other Supplier
Jim Nash	Hudson Transmission Partners, LLC	Other Supplier
Bob Thomas	Illinois Municipal Electric Agency	Electric Distributor
Kenneth Foladare	IMG Midstream LLC	Generation Owner
Joe Staszowski	ISO New England	Not Applicable
Brenda Prokop	ITC Interconnect	Transmission Owner
John Kopinski	ITC Mid-Atlantic Development LLC	Other Supplier
Ben Abing	ITC Transmission	Not Applicable
Robert Colozza	LS Power Transmission, LLC	Transmission Owner
Robert O'Connell	Main Line Electricity Market Consultants	Not Applicable
Heather Thomson	Marec	Not Applicable
David Mabry	McNees Wallace & Nurick LLC	Not Applicable
Erik Hanser	Michigan Public Service Commission	Not Applicable
Christin Domian	Mitsubishi Electric Power Products Inc.	Not Applicable
John Dadourian	Monitoring Analytics	Not Applicable
Zach Gill Sanford	Navigant	Not Applicable
Douglas Dickson	New Jersey Board of Public Utilities	Not Applicable
George Kogut	New York Power Authority	Other Supplier
Mason Emmett	NextEra Energy Power Marketing, LLC	Generation Owner
Dean Busch	NextEra Energy Resources, LLC	Other Supplier
Jim Arkerson	NextEra Energy Resources, LLC	Other Supplier
Frederico Von Pinho	NextEra Energy Transmission, LLC	Other Supplier
Gabriel Hollis	Nextera Energy, Inc	Other Supplier
Jung Suh	Noble Americas Energy Solutions LLC	Other Supplier
John Lemire	North Carolina Electric Membership Corporation	Electric Distributor
Miles Taylor	Northern Indiana Public Service Company	Other Supplier
Neal Fitch	NRG Power Marketing LLC	Generation Owner
John Donelson	Old Dominion Electric Cooperative	Electric Distributor
Mike Donnelly	PECO Energy Company	Transmission Owner
Gloria Godson	PEPCO Holdings, Inc.	Transmission Owner
Patricia Kurowski	PEPCO Holdings, Inc.	Transmission Owner
Dave Anders	PJM Interconnection, LLC	Not Applicable
Aaron Berner	PJM Interconnection, LLC	Not Applicable
Chris Callaghan	PJM Interconnection, LLC	Not Applicable

Christina Catalano	PJM Interconnection, LLC	Not Applicable
Jason Connell	PJM Interconnection, LLC	Not Applicable
David Egan	PJM Interconnection, LLC	Not Applicable
Tom Falin	PJM Interconnection, LLC	Not Applicable
Zhenyu Fan	PJM Interconnection, LLC	Not Applicable
Lawrence Farmer	PJM Interconnection, LLC	Not Applicable
Anisha Fernandes	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
Michael Herman	PJM Interconnection, LLC	Not Applicable
Tahmina Khan	PJM Interconnection, LLC	Not Applicable
Frank Koza Jr.	PJM Interconnection, LLC	Not Applicable
Jeremy Lin	PJM Interconnection, LLC	Not Applicable
Lagy Mathew	PJM Interconnection, LLC	Not Applicable
Erich Mauroschadt	PJM Interconnection, LLC	Not Applicable
Melissa Maxwell	PJM Interconnection, LLC	Not Applicable
Susan McGill	PJM Interconnection, LLC	Not Applicable
Asanga Perera	PJM Interconnection, LLC	Not Applicable
Dave Picarelli	PJM Interconnection, LLC	Not Applicable
John Reynolds	PJM Interconnection, LLC	Not Applicable
Nick Rodak	PJM Interconnection, LLC	Not Applicable
Jason Shoemaker	PJM Interconnection, LLC	Not Applicable
Stan Sliwa	PJM Interconnection, LLC	Not Applicable
Julia Spatafore	PJM Interconnection, LLC	Not Applicable
Mike Ward	PJM Interconnection, LLC	Not Applicable
Glenn Weiss	PJM Interconnection, LLC	Not Applicable
Alex Worcester	PJM Interconnection, LLC	Not Applicable
Zelalem Tekle	PowerGEM	Not Applicable
Michele Greening	PPL Electric Utilities Corp. dba PPL Utilities	Generation Owner
Steven Nadel	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Cleveland Richards	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Chip Richardson	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Kriti Dawadi	PSEG Energy Resources and Trade LLC	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
Mark Marsan	PSEG Energy Resources and Trade LLC	Transmission Owner
Shuting Guo	Public Service Electric & Gas Company	Transmission Owner
James Caristia	Public Service Electric & Gas Company	Transmission Owner
Daniel Hutt	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
Jerry Martinez	Public Service Electric & Gas Company	Transmission Owner
John Nagurney	Public Service Electric & Gas Company	Transmission Owner
Greg Player	Public Service Electric & Gas Company	Transmission Owner



Draft Minutes

Alexander Stern	Public Service Electric & Gas Company	Transmission Owner
Ming Zhou	Public Service Electric & Gas Company	Transmission Owner
Chandana Bommareddy	Quanta Technology	Not Applicable
Joel Yu	Rockland Electric Company	Transmission Owner
Rory Sweeney	RTO Insider	Not Applicable
Andy Peebles	Shell Energy North America (US), LP	Other Supplier
Jennifer Hohenshilt	Talen Energy Marketing, LLC	Generation Owner
Syed Ahmad	The Federal Energy Regulatory Commission	Not Applicable
Leanne Kuehne	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
Brian Hamilton	Unknown	Unknown
Steve Chafin	Virginia Electric & Power Company	Transmission Owner
Patricia Lobb	Unkown	Unkown
Ata Modiri	Unknown	Unknown