

Planning Committee
PJM Conference and Training Center, Audubon, PA
October 6, 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 September 15, 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. Carl Johnson seconded the motion. In a voice vote, the Planning Committee approved the September 15th Planning Committee Minutes.

Endorsements/Approvals

3. Manual 14A Updates

Mr. Joe Hay, PJM, presented changes to Manual 14A (Generation and Transmission Interconnection Process) that are a result of the work completed at the Earlier Queue Submittal Task Force. The tariff changes corresponding to these manual updates were filed with FERC on August 31, 2016. Mr. Dave Scarpignato 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 these updates for Manual 14A.**

4. Manual 14C Updates

Ms. Sue Glatz, PJM, presented updates to Manual 14C (Generation and Transmission Interconnection Facility Construction) related to tie lines and applicable technical standards for Order 1000 projects. She discussed the proposed manual language and the relevant sections of the Designated Entity Agreement (DEA) and Interconnection Coordination Agreement (ICA). The committee was asked to vote on the changes proposed with the exception of section 6.1.6. The redline language in Section 6.1.6 of Manual 14C will be brought back for endorsement at the next meeting. Mr. Pulin Shah 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 updates for Manual 14C, with the exception of Section 6.1.6.**

5. 2016 Installed Reserve Margin Study Results

Mr. Tom Falin, PJM, reviewed the 2016 Installed Reserve Margin (IRM) study results. The recommended IRM for the 2020/2021 Delivery Year is 16.6%, an increase of 0.1% from last year. Mr. Falin also presented the Winter Weekly Reserve Target results which will be discussed further at the November PC meeting. Mr. Dave Scarpignato 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 recommended IRM, FPR and DR Factor for the 2017/18, 2018/19, 2019/20 and 2020/21 Delivery Years.**

6. PJM Relay Subcommittee Charter

Mr. Glenn Bray, PJM Relay Subcommittee Chair, presented redline changes to the PJM Relay Subcommittee Charter. These redline changes were either administrative in nature or for clarification purposes of current processes. Mr. Dave Pratzon made a motion to endorse and Mr. Dave Scarpignato seconded the motion, there were no objections and no abstentions. **In a voice vote, the Planning Committee endorsed the PJM Relay Subcommittee Charter redline changes.**

First Readings

7. PJM Manual 14B Updates

Mr. Mike Herman, PJM, presented modifications to PJM Manual 14B (PJM Region Transmission Planning Process), to reflect the removal of the PJM Capacity Import Limit (CIL) in the Capacity Market. Consideration of the CIL will be included in the long term firm transmission study procedures associated with new Transmission Service Requests. This will be brought to the next PC meeting for endorsement.

8. Manual 21 Review

Mr. Jerry Bell, PJM, reviewed proposed red line changes to Manual 21 (Rules and Procedures for Determination of Generating Capability). These changes to the terms and rules for testing are a result of a periodic review and aim to clean up out of date language and ensure accuracy of current processes. Members are encouraged to contact Mr. Bell directly with any questions pertaining to this language. This will be brought to the next PC meeting for endorsement.

9. Updates to Manual 14A

Mr. Aaron Berner, PJM, presented proposed updates to the PJM Tariff and Manual 14A (Generation and Transmission Interconnection Process). These updates have been discussed at the Special PC Sessions: New Service Request Cost Allocation and are proposed as a way to align the Queue Study process and cost allocation methods. This will be brought to the next PC meeting for endorsement.

X. TO/TOP Matrix Changes

Mr. Sri Kappaguntula, PJM, reviewed the proposed updates to the TO/TOP matrix. There are seven categories that are undergoing changes, including administrative changes, alignment of current practices, and recommendations from an annual review conducted by ReliabilityFirst. This will be brought to the next PC to seek the PC's recommendation that the TOA-AC approve the TO/TOP Matrix V10 as presented.

Informational Updates

10. PJM Definitions Clean Up Project

Ms. Janell Fabiano, PJM, presented background and updates regarding the new glossary and the pending retirement of Manual 35 (Definitions and Acronyms). The first read of the retirement of Manual 35 will be at the October 27th, 2016 MRC meeting.

11. PJM Regional Transmission Expansion Plan (RTEP) Case Updates

Mr. Jonathan Thompson, PJM, provided an update regarding RTEP Case Updates. MMWG cases are expected to be completed Mid-October. The Trial 2 distribution is targeted for October 31, 2016. Short Circuit case distributions will occur early November and TOs will be asked to review and confirm breaker replacements in late November.

12. JOA Deactivation Update

Mr. Berner, PJM, provided an update on the progress at the MISO/PJM Joint and Common Market Initiative (JCM) meetings relating to updates to the Joint Operating Agreement (JOA) for retirement studies. PJM and MISO, in Docket No. EL 13-88-000, were directed to develop generator retirement study coordination processes in the JOA. The proposed updates to the JOA will be presented at the November Planning Committee, the November 15th JCM, and plans to file the language changes with FERC in December.

13. NERC Reliability Standard Update – Geomagnetic Disturbance Events

Mr. Frank Koza, PJM, provided background and next steps pertaining to NERC Reliability Standard, TPL-007-1, Transmission System Planned Performance for Geomagnetic Disturbance Events. The first requirement, due in six months, is to establish roles and responsibilities. Followed by creation of models to accomplish the GIC calculations and vulnerability analysis within 18 months.

14. NERC/RRO Update

Mr. Mark Kuras, PJM, provided an update on recent NERC activities and PJM compliance activities. NERC standards subject to future enforcement can be found under the October 6th Planning Committee Material at the [Planning Committee Website](#).

15. PJM/NYISO Wheel Modeling

Mr. Sims, PJM, provided an update regarding updates to the operational and planning protocols related to the termination of the ConEd Wheel. There was discussion regarding different case assumptions and meetings which are being conducted which look at operations, planning, and markets as well as impacts to PJM, NYISO, and impacted member companies. Members are encouraged to participate in these joint meetings regarding the termination of the ConEd wheel. The ConEd/PSEG Wheel Replacement Proposal is available [here](#). Please email RTEP@pjm.com if you have additional questions or concerns.

16. Dominion Bath Thermal SPS Retirement

Ms. Randi Heise, Dominion provided an update on the Bath SPS retirement. This SPS is no longer required after upgrades in the area were completed.

Informational Section

DEDSTF Update

The Designated Entity Design Standards Task Force (DEDSTF) last met on 9/12/2016. 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 10/25/2016. [DEDSTF website](#)

New Service Request Study Methods

A meeting is currently scheduled for October 18th to continue discussions.

Order 1000 Update

Special PC Sessions on Order 1000 were held on September 16, 2016, and October 3. Additional sessions are scheduled for October 21, 2016, and November 11, 2016 (all 9am – 12 Noon). At the special sessions, we are discussing guidelines to be developed for the Market Efficiency process. Other efforts to be discussed at future sessions are (1) draft manual on the Competitive Planning Process (PJM Manual 14F) and (2) TEAC Redesign and (3) RTEP Planning Cycle.

Transmission Operations Manual 3 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

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
January 12, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
February 9, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
March 9, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
April 13, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
May 4, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
June 8, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
July 13, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
August 10, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
September 14, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
October 12, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
November 9, 2017	9:30 a.m.	PJM Conference and Training Center, Audubon, PA
December 14, 2017	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
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
Kevin Patten	Appalachain 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
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
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
Yan Du	Central Transmission, LLC	Transmission Owner
Barry Trayers	Citigroup Energy, Inc.	Other Supplier
William Allen	Commonwealth Edison Company	Transmission Owner
John Garavaglia	Commonwealth Edison Company	Transmission Owner
Kevin Happ	Commonwealth Edison Company	Transmission Owner
Thomas Leeming	Commonwealth Edison Company	Transmission Owner
Paul Mills	Commonwealth Edison Company	Transmission Owner
Ronald Regner	Commonwealth Edison Company	Transmission Owner
Diana McNally-Barsotti	Consolidated Edison	Other Supplier
Dan Griffiths	Consumer Advocates of PJM States	Not Applicable
Jamie Lejcar	CPS Energy	Electric Distributor
Carl Johnson	Customized Energy Solutions, Ltd.*	Not Applicable
John Horstmann	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
David Hastings	Dhast Co	Not Applicable
Rebekah Kelman	DNVGL	Not Applicable
Janhavi Dharmadhikari	Dominion Energy Marketing, Inc.	Generation Owner
Ronnie Bailey	Dominion Virginia Power	Transmission Owner
Craig Crider	Dominion Virginia Power	Transmission Owner
Kyle Hannah	Dominion Virginia Power	Transmission Owner

Randi Heise	Dominion Virginia Power	Transmission Owner
Rongda Zhao	Dominion Virginia Power	Not Applicable
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
Chad Hirsh	Duquesne Light Company	Transmission Owner
Jason Cox	Dynegy Power Marketing, Inc.	Generation Owner
Iker Chocarro	E.on Climate & Renewables North America, Inc	Generation Owner
Chris Adams	East Kentucky Power Cooperative, Inc.	Transmission Owner
Kevin Kilgallen	Emerald Energy Consulting, LLC	Not Applicable
Malcolm Ainspan	Energy Curtailment Specialists, Inc.	Not Applicable
John Marczewski	Energy Initiatives Group	Not Applicable
Nick Gangi	Eversource Energy	Not Applicable
Robert Taylor	Exelon Business Services Company, LLC	Transmission Owner
Sharon Midgley	Exelon Generation Co., LLC	Generation Owner
Shadrack Orero	Exelon Generation Co., LLC	Generation Owner
Roozbeh Shegarfi	Exelon Generation Co., LLC	Generation Owner
Chad Singer	Fellon McCord	Not Applicable
Thomas Bainbridge	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
Gabriella Hudis	Gabel and Associates	Not Applicable
Travis Stewart	Gabel and Associates	Not Applicable
David Hilt	Gridliance, GP, LLC	Not Applicable
Jody Holland	Gridliance, GP, LLC	Not Applicable
Rachel Hulett	Gridliance, GP, LLC	Not Applicable
Derek Hagaman	GT Power Group	Not Applicable
David Pratzon	GT Power Group	Not Applicable
Kenneth Foladare	IMG Midstream LLC	Generation Owner
John Kopinski	ITC Mid-Atlantic Development LLC	Other Supplier
Brenda Prokop	ITC Mid-Atlantic Development LLC	Other Supplier
Ben Abing	ITC Transmission	Not Applicable
Robert O'Connell	Main Line Electricity Market Consultants	Not Applicable
Heather Thomson	Marec	Not Applicable
David Mabry	McNees Wallace & Nurick LLC	Not Applicable
Christin Domian	Mitsubishi Electric Power Products Inc.	Not Applicable
Radha Soorya	Navigant	Not Applicable
Douglas Dickson	New Jersey Board of Public Utilities	Not Applicable
George Kogut	New York Power Authority	Other Supplier
Jung Suh	Noble Americas Energy Solutions LLC	Other Supplier
James Manning	North Carolina Electric Membership Corporation	Electric Distributor
Neal Fitch	NRG Power Marketing LLC	Generation Owner
Yohannes Mariam	Office of the Peoples Counsel for the D.C.	End User Customer
John Donelson	Old Dominion Electric Cooperative	Electric Distributor

Robert Duan	Ontario Power Generation Inc.	Other Supplier
Gregory Carmean	OPSI	Not Applicable
Mike Donnelly	PECO Energy Company	Transmission Owner
Pulin Shah	PECO Energy Company	Transmission Owner
Dhruv Acharya	PEPCO Holdings, Inc.	Transmission Owner
Amy Blauman	PEPCO Holdings, Inc.	Transmission Owner
Patricia Kurowski	PEPCO Holdings, Inc.	Transmission Owner
Fran Barrett	PJM Interconnection, LLC	Not Applicable
Jerry Bell	PJM Interconnection, LLC	Not Applicable
Aaron Berner	PJM Interconnection, LLC	Not Applicable
Rebecca Carroll	PJM Interconnection, LLC	Not Applicable
Jason Connell	PJM Interconnection, LLC	Not Applicable
Mary Ellen Driscoll	PJM Interconnection, LLC	Not Applicable
Ilyana Dropkin	PJM Interconnection, LLC	Not Applicable
Janell Fabiano	PJM Interconnection, LLC	Not Applicable
Tom Falin	PJM Interconnection, LLC	Not Applicable
Zhenyu Fan	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
Joe Hay	PJM Interconnection, LLC	Not Applicable
Michael Herman	PJM Interconnection, LLC	Not Applicable
Chuck Liebold	PJM Interconnection, LLC	Not Applicable
Paul McGlynn	PJM Interconnection, LLC	Not Applicable
Molly Mooney	PJM Interconnection, LLC	Not Applicable
Dave Pomian	PJM Interconnection, LLC	Not Applicable
Jason Quevada	PJM Interconnection, LLC	Not Applicable
Patricio Rocha Garrido	PJM Interconnection, LLC	Not Applicable
Mark Sims	PJM Interconnection, LLC	Not Applicable
Mike Ward	PJM Interconnection, LLC	Not Applicable
Glenn Weiss	PJM Interconnection, LLC	Not Applicable
Jeff Palermo	PJP Consulting	Not Applicable
Mark Watson	Platts Energy Company	Not Applicable
Shadab Ali	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Glenn Bray	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Steven Nadel	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Phil Penney	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Frank Richardson	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Kriti Dawadi	PSEG Energy Resources and Trade LLC	Transmission Owner
Ray DePillo	PSEG Energy Resources and Trade LLC	Transmission Owner
Sam Giordano	PSEG Energy Resources and Trade LLC	Transmission Owner
William Lavista	PSEG Energy Resources and Trade LLC	Transmission Owner
Mark Masan	PSEG Energy Resources and Trade LLC	Transmission Owner
Qamar Arsalan	Public Service Electric & Gas Company	Transmission Owner
James Calore	Public Service Electric & Gas Company	Transmission Owner

James Caristia
Kathleen Crowley
Esam Khadr
Leonid Lyakhovich
Rich Marinelli
Jerry Martinez
Greg Player
Ming Zhou
Chandana Bommareddy
Hisham Othman
Roleto Mangonon
David Wunderlich
Rory Sweeney
Andy Peebles
Mohamed Ahmed
Lauren Longo
John Sillin
Pati Esposito-Hils
Eric Sorber
Pat Hayes

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Public Service Electric & Gas Company
Quanta Technology
Quanta-Technology
Rockland Electric Company
Royal Bank of Canada
RTO Insider
Shell Energy North America (US), LP
SNC-Lavalin
Talen Energy Marketing, LLC
The Federal Energy Regulatory Commission
TransCanada Power Marketing Ltd.
UGI Utilities, Inc.
Union Electric Company d/b/a Ameren Missouri

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