

Planning Committee
PJM Interconnection
September 10, 2015
9:30 a.m. – 12:15 p.m. [EST]

Administration (9:30 – 9:55)

1. Administrative Items

- A. Mr. McGlynn, acting as chair, 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.
- B. Mr. McGlynn asked Ms. Thomas to review the meeting minutes of the August 13, 2015 Planning Committee meeting. Mr. Pratzon then made a motion to approve the minutes. Mr. Scarpignato seconded the motion. In a voice vote, the Planning Committee approved the August 13, 2015 Planning Committee minutes.
- C. 2015 RTEP Proposal Window Update
PJM posted a web cast of the preliminary recommendations for the RTEP Proposal Window 1. PJM will present recommendations for Window 1 for October board approval. Window 2 closed on September 4 and cost estimates should be sent in by September 21st.
- D. Earlier Queue Submittals Update
Mr. Gledhill provided an update on the Earlier Queue Submittal Taskforce. PJM is requesting that stakeholders participate. The first meeting will be September 17th.
- E. DEDSTF Update
Ms. Glatz gave an update regarding the Designated Entity Design Engineering Standards Task Force (DEDSTF). The first meeting will be October 12th. Participants can register by going to the taskforce page on pjm.com
- F. Prequalification Update
Ms. Glatz announced that the annual prequalification window is currently open through the month of September. Entities that desire to submit proposals during the 2016 Proposal Window will need to be prequalified in order to participate. Entities are also advised to submit updates at this time if their company qualification information has changed..
- G. Model On Demand Update
Mr. Thompson provided an update on the Model On Demand usage. This fall, PJM will be populating the MOD database with all projects. The first deadline, for the summer 2016 models to be sent to PJM, is Friday, September 11, 2015.

- H. Mr. Thompson provided an update on the PJM Planning 201 course. The course will be available both onsite and via WebEx on October 14th. This course will go over the PJM Planning Division tasks such as the RTEP, Load forecast, Interregional Planning etc.

Endorsements/Approvals (9:55 – 11:00)

2. Order 1000 Lesson Learned – Voltage Threshold and Administrative Items

Ms. Glatz provided a review of the proposed Voltage Threshold Operating Agreement language changes and did not request endorsement. PJM received feedback from several stakeholders regarding PJM including or excluding violations in the RTEP Proposal Windows. Ms. Glatz reviewed the revised Proposed Guide for Voltage floor detailing what violations would and would not be eligible for participation in the Proposal Window. Stakeholders requested more specificity around language regarding “multiple facilities” and “proximity”. Members requested that PJM determine, for the 1% of projects that would have been allocated to multiple zones, whether those projects have been included in the proposal window per these new rules. While some members expressed a desire that having a bright line for violations (200kV and above) be included in the proposal window process, other members expressed disagreement with this proposed approach. PJM will review further and, possibly, recommend updated Operating Agreement language based on member feedback

3. Winter Study Criteria

Mr. Sims reviewed the Manual 14B additions regarding Winter Study Criteria. The Winter Study analysis was posted with the September 10th TEAC material. Mr. Sims discussed the temperature used for determining the thermal ratings. Members requested that Manual 14B be updated to reflect that the thermal ratings will be based on TO discretion otherwise defaulting to 50°F. Mr. Sims will be seeking endorsement in October. A member requested PJM to review the dispatch assumptions and consider the actual generation that cleared during previous capacity auctions.

4. PJM Manuals Update for Multi-Driver Approach

Mr. Barrett reviewed the Manual 14 series updates regarding Multi-Driver Approach. Mr. Barrett reviewed Manual 14A and Manual 14B changes highlighting what Multi-Driver Approach is how PJM will be utilized in the PJM RTEP process. Mr. McGlynn asked the Planning Committee to endorse the Manual 14 Series changes. Ms. Krizenoskas made a motion to endorse and Mr. Trayers seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE MANUAL 14 SERIES CHANGES REGARDING MULTI-DRIVER APPROACH.** There were no votes of opposition or abstention.

5. Long Term Firm Charter

Mr. Berner reviewed the charter for coordination of Long Term Firm Transmission Service Study. The charter details the group’s work activities and intended deliverables. Mr. McGlynn asked the Planning Committee to endorse the Long Term Firm Charter. Mr. Kopinski made a motion to endorse the charter and Mr. Trayers seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE LONG TERM FIRM CHARTER.**

6. Energy Market Uplift

Mr. McGlynn reviewed Manual 14B additions regarding incorporating energy market uplift in the planning process. The Manual 14B changes remain consistent with what was reviewed at the August Planning Committee Meeting, with the addition of the language of “persistent historical” uplift payments. Members provided feedback requesting that persistent historical be changed to “expected” historical uplift payments or “expected” continuation of uplift payments. Mr. McGlynn will seek endorsement in October.

7. TO/TOP Matrix Update

Mr. Kappagantula reviewed the Transmission Owner/Transmission Operator Matrix Version 9 update. Mr. Kappagantula reviewed administrative changes regarding content organization, additions of new NERC Reliability Standards, and changes to existing NERC Reliability Standards. The details of each of these changes can be found in the Planning Committee September 10th material.

8. Light Load Update Criteria

Mr. Sims reviewed Light Load criteria. Mr. Sims explained the re-evaluation of the Light Load Sensitivity analysis due to a case error. Mr. Sims discussed the current scenario analysis regarding load and generation dispatch for the light load period. Mr. Sims will review light load sensitivity results at the October Planning Committee.

First Readings (11:00 – 11:40)

9. PARTF Update

Mr. Berner provided a first read regarding Phase Angle Regulator technology (PARs) and work undertaken this year to determine if this technology could be granted transmission injection and/or withdrawal rights. The PAR Task Force considered several items regarding PAR flow A.C. controllability such as, facility design control, facility tap changes, and injection/withdrawal rights. Similar to HVDC or VFT, PAR firm transmission and withdrawal rights would be studied in the same manner as similar Merchant Transmission projects. This effort to allow PARs to obtain transmission injection and/or withdrawal rights is not applicable for existing PARs internal to PJM (not along a border connecting PJM to another outside area). Mr. Berner will seek endorsement for the PAR Transmission Injection and Withdrawal rights in October.

10. Load Forecast Update

Mr. Gledhill reviewed proposed changes to the PJM load forecast model and discussed their incremental impact to the forecast. These changes include adoption of a shorter period for weather simulation, a new representation of weather, and indices that capture the saturation and efficiency of equipment. PJM plans to have the new forecast model in place for the 2016 load forecast. Mr. Bresler discussed devising an approach to make Energy Efficiency adjustments to the forecast for use in the RPM auctions to avoid the double counting of EE resources. Energy Efficiency resources will be discussed at the upcoming MRC October 1st.

11. Preliminary 2015 IRM Study Results

Mr. Rocha reviewed preliminary 2015 IRM Study Results. The preliminary results show an increase of 0.8 percentage points in the IRM due to capacity model and load model changes and an increase of 0.3 percentage points in the FPR due to load model changes. Endorsement of these results will be requested at the October PC meeting.

12. NERC TPL Standards Update

Mr. Herman will review the NERC TPL Standards at the October Planning Committee Meeting.

Education (11:40 – 12:15)

13. NERC/RRO Update

Mr. Kuras provided the Planning Committee with an update on recent NERC activities and PJM compliance activities. Comments and ballots for on-going standard reviews can be found under the September 10th Planning Committee Material. NERC Standards subject to future enforcement can be found under the September 10th Planning Committee Material..

14. Relay Subcommittee Update

The Relay Subcommittee will provide an update to the Planning Committee once the subcommittee finalizes manual/charter changes.

15. 2016 Preliminary Project Budget

Mr. Snow reviewed PJM's 2016 preliminary project budget including details of historical annual capital expenditures and a summary of the projects included in the preliminary 2016 capital budget. Mr. Snow stated that the Finance Committee will make a recommendation to the PJM Board of Managers by in October 2015.

Future Agenda Items

There were no future agenda items suggested.

Future Meeting Dates

October 8, 2015	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
November 5, 2015	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
December 3, 2015	9:30 AM	PJM Conference and Training Center, Valley Forge, PA

Attendance

Attendees	Company Name
Steven Herling	PJM Interconnection, LLC
Amber Thomas	PJM Interconnection, LLC
Sean Black	Ameren
Kiran Thammineni	Ameren

Patrick Hayes	Ameren Control Area
Kamran Ali	American Electric Power
Josh Burkholder	American Electric Power
David Canter	American Electric Power
Hassan Hayat	American Electric Power
Takis Laios	American Electric Power
Jerod Marker	American Electric Power
Brian Swain	American Electric Power
Eric Swanger	American Electric Power
Mike Schlindwein	American Transmission Company LLC
Dale Burmester	American Transmission Company, LLC
Chris Hagman	American Transmission Company, LLC
Gary Fuerst	American Transmission Systems, Inc.
Brock Ondayko	Appalachian Power Company
Bernie Pasternack	Appalachian Power Company
Kevin Patten	Appalachian Power Company
Craig Lockwood	Appalachian Power Company
Deniz Ozkan	Atlantic Wind Connection
Kishan Ellepola	Baltimore Gas and Electric Company
Zelalem Tekle	Baltimore Gas and Electric Company
Kevin Gorman	Bellsouth
James Jablonski	Borough of Butler, Butler Electric Division
Ron Pezon	Borough of Chambersburg
Xiao Li	Boston University
Sebastian Smater	BTGPactual Commodities (US) LLC
Travis Bouslog	Burns & McDonnell
Jakob Metzler	Castleton Commodities International
Barry Trayers	Citigroup Energy, Inc.
Connie Davis	City of Cleveland, Div of Cleveland Public Pwr
William Allen	Commonwealth Edison Company
Thomas Leeming	Commonwealth Edison Company
Paul Mills	Commonwealth Edison Company
Ronald Regner	Commonwealth Edison Company
Martin Paszek	Consolidated Edison
Shadrack Orero	Constellation
Dan Griffiths	Consumer Advocates of PJM States
Sandeep Baidwan	Continuum Associates
Guy Filomena	Customized Energy Solutions, Ltd.*
Carl Johnson	Customized Energy Solutions, Ltd.*
Jonathan Sasser	Customized Energy Solutions, Ltd.*

John Horstmann	Dayton Power & Light Company (The)
Mike Hurd	Dayton Power & Light Company (The)
Joseph DeLosa	DE Public Service Commission
John Farber	DE Public Service Commission
Jaclyn Cantler	Delmarva Power & Light Company
Prashanth Buyanni	DNV GL
Janhavi Dharmadhikari	Dominion Energy Marketing, Inc.
Sarah Vannatta	Dominion Virginia Power
Rongda Zhao	Dominion Virginia Power
George Owens	Downes Associates, Inc.
Greg Pakela	DTE Energy Trading, Inc.
George Dawe	Duke Energy
Steve Steinkuhl	Duke Energy Business Services LLC
Julie Mason	Duke Energy Ohio, Inc.
Judy Stubbe	Duke Energy Ohio, Inc.
Stephen Abate	Duquesne Light Company
Jason Harchick	Duquesne Light Company
Iker Chocarro	E.ON Climate and Renewables
Chris Adams	East Kentucky Power Cooperative, Inc.
Darrin Adams	East Kentucky Power Cooperative, Inc.
Nathan Bradley	East Kentucky Power Cooperative, Inc.
Rebecca Davis	East Kentucky Power Cooperative, Inc.
Chuck Dugan	East Kentucky Power Cooperative, Inc.
Wesley Fluty	East Kentucky Power Cooperative, Inc.
Malcolm Ainspan	Energy Curtailment Specialists, Inc.
Dave Burnham	Eversource Energy
Andrew Tan	Eversource Energy
Jason Barker	Exelon Business Services Company, LLC
Melanie Sanders	Exelon Business Services Company, LLC
Robert Taylor	Exelon Business Services Company, LLC
Syed Ahmad	Federal Energy Regulatory Commission
Alina Halay	Federal Energy Regulatory Commission
Thomas Bainbridge	FirstEnergy Solutions Corporation
Jim Benchek	FirstEnergy Solutions Corporation
Martin Bolan	FirstEnergy Solutions Corporation
Jeff Stuchell	FirstEnergy Solutions Corporation
Lou D'Alessandris	FirstEnergy Solutions Corporation
MH Henry	FirstEnergy Solutions Corporation
Larre Hozempa	FirstEnergy Solutions Corporation
Grant Marchewka	FirstEnergy Solutions Corporation

John Syner (FE)	FirstEnergy Solutions Corporation
Derek Hagaman	GT Power Group
David Pratzon	GT Power Group
Robert Patrylo	H-P Energy Resources LLC
Wm VanderLaan	Illinois Commerce Commission
Kenneth Folandare	IMG Midstream
Thomas Piascik	IMG Midstream
John Kopinski	ITC MidAtlantic
Brenda Prokop	ITC MidAtlantic
Kaustubh Deshmukh	ITC Transco
Alan Nasr	ITC Transco
Peter Sparhawk	Louis Berger
Robert Colozza	LS Power
Yan Du	LS Power
Joshua York	LS Power
Robert O'Connell	Main Line Electricity Market Consultants
Fred Kelley	Maryland State
David Mabry	McNees Wallace & Nurick LLC
Bruce Burcat	Mid-Atlantic Renewable Energy Coalition
Adam Solomon	Midwest Independent Transm. Sys Op, Inc.
Ranjit Amgai	Miso Energy
Alex Borden	Miso Energy
Digaunto Chatterjee	Miso Energy
LH Hecker	Miso Energy
John Dadourian	Monitoring Analytics, LLC
Nabil Hitti	National Grid
Don Morrow	Navigant
George Kogut	New York Power Authority
Frederico Von Pinho	NextEra Energy Transmission, LLC
Jung Suh	Noble Americas Energy Solutions LLC
James Manning	North Carolina Electric Membership Corporation
Miles Taylor	Northern Indiana Public Services Company
Neal Fitch	NRG Power Marketing LLC
Yohannes Mariam	Office of the Peoples Counsel for the DC
John Donelson	Old Dominion Electric Cooperative
Steven Lieberman	Old Dominion Electric Cooperative
Ed Tatum	Old Dominion Electric Cooperative
James Wright	Old Dominion Electric Cooperative
Robert Duan	Ontario Power Generation Inc.
Gregory Carmean	OPSI

Debbie Gebolys	Other
Annalee Grant	Other
Doug Hurley	Other
P Jeffrey Palermo	Other
Heather Thomson	Other
Iris Boci	PECO Energy Company
Mike Donnelly	PECO Energy Company
Pulin Shah	PECO Energy Company
Dhruv Acharya	PEPCO Holdings, Inc.
Gloria Godson	PEPCO Holdings, Inc.
Patricia Kurowski	PEPCO Holdings, Inc.
Amber Young	PEPCO Holdings, Inc.
Hamad Ahmed	PJM Interconnection, LLC
David Anders	PJM Interconnection, LLC
Larry Austin	PJM Interconnection, LLC
Aaron Berner	PJM Interconnection, LLC
Murty Bhavaraju	PJM Interconnection, LLC
Stu Bresler	PJM Interconnection, LLC
Mike Bryson	PJM Interconnection, LLC
Brian Chmielewski	PJM Interconnection, LLC
Bridgid Cummings	PJM Interconnection, LLC
Janell Fabiano	PJM Interconnection, LLC
Tom Falin	PJM Interconnection, LLC
Z Fan	PJM Interconnection, LLC
Suzanne Glatz	PJM Interconnection, LLC
Andrew Gledhill	PJM Interconnection, LLC
James Glennon	PJM Interconnection, LLC
Yuriy Grytsulyak	PJM Interconnection, LLC
Michael Herman	PJM Interconnection, LLC
Adam Keech	PJM Interconnection, LLC
Jeremy Lin	PJM Interconnection, LLC
E. Mauroschadt	PJM Interconnection, LLC
Melissa Maxwell	PJM Interconnection, LLC
Molly Mooney	PJM Interconnection, LLC
Darlene Phillips	PJM Interconnection, LLC
Jason Quevada	PJM Interconnection, LLC
John Reynolds	PJM Interconnection, LLC
Patricio Rocha-Garrido	PJM Interconnection, LLC
Mark Sims	PJM Interconnection, LLC
Julia Spatafore	PJM Interconnection, LLC

Glenn Weiss	PJM Interconnection, LLC
Leslie Yeager	PJM Interconnection, LLC
David Gladey	PPL Electric Utilities Corp
Frank Richardson	PPL Electric Utilities Corp
Kenneth Carretta	PSEG Energy Resources and Trade LLC
Qamar Arsalan	Public Service Electric & Gas Company
Jim Calore	Public Service Electric & Gas Company
Frank Czigler	Public Service Electric & Gas Company
Daniel Hutt	Public Service Electric & Gas Company
Leonid Lyakhovich	Public Service Electric & Gas Company
Rich Marinelli	Public Service Electric & Gas Company
Rodney Marshall	Public Service Electric & Gas Company
Jerry Martinez	Public Service Electric & Gas Company
Massamba Samb	Public Service Electric & Gas Company
Chandana Bommareddy	Quanta Technology, LLC.
Tom Hoatson	Riverside Generating, LLC
Roleto Mangonon	Rockland Electric Company
Joel Yu	Rockland Electric Company
Rich Heidorn	RTO Insider
Suzanne Herel	RTO Insider
Jack Halpern	Stantec
Nikhil kumar	Susquehanna Internation Group, LLP
Mashiur Bhuiyan	Talen Energy
Shadab Ali	Talen Energy Marketing, LLC
Michele Greening	Talen Energy Marketing, LLC
Lisa Krizenoskas	Talen Energy Marketing, LLC
Kerry Muller	Talen Energy Marketing, LLC
Jonathan Fernandez	The Federal Energy Regulatory Commission
John Sillin	The Federal Energy Regulatory Commission
Adam Weber	Union Electric Company d/b/a Ameren Missouri
Mike Jacobs	Union of Concerned Scientists
Jim Cox	Vectren
Justin Joiner	Vectren
Steve Rawlinson	Vectren
Ronnie Bailey	Virginia Electric & Power Company
Michael Batta	Virginia Electric & Power Company
Craig Crider	Virginia Electric & Power Company
James Wilson	Wilson Energy Economics