

**Planning Committee
PJM Interconnection
December 3, 2015**

Administration

1. Administrative Items

- A. Mr. Herling 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. Herling asked Ms. Thomas to review the meeting minutes of the November 5, 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 November 5, 2015 Planning Committee minutes.
- C. Mr. Herman provided an update regarding the 2015 RTEP Proposal Windows. Mr. Herman provided statistics regarding violations, proposals, and approved projects from the inception of Order 1000 Proposal Window Process with Artificial Island through the 2015 RTEP Proposals Windows.
- D. Mr. Gledhill provided an update regarding the Earlier Queue Submittal Taskforce. The last meeting was on November 3rd where Mr. Egan provided education regarding what future fee structures may look like for queue submittals. The taskforce will be narrowing down options at upcoming meetings. The next meeting will be on December 21st.
- E. Mr. Herman provided an update regarding the Designated Entity Design Standards Task Force. ITC led an educational discussion on the MISO and SPP minimum design standard development process. Also PJM led a discussion of the work activities of the relay subcommittee. Next meeting will be held on December 16th. TSS will provided education on their development and review process.
- F. Mr. Thompson provided an update on Model on Demand. Beginning of January 2016, draft cases will be sent for Transmission Owners to review cases for benchmarking. Mr. Thompson requested that contingencies be provided in the traditional breaker, bus, single, and ### types by December 11th. Given the new TPL -001-4 standards for contingencies, Mr. Thompson requested that Transmission Owners to provide the P type contingency name at the beginning of each contingency name.
- G. Mr. Quevada provided an update on the Resource Adequacy Analysis Subcommittee. The next education session will be on Wednesday 9th. The upcoming sessions will focus on capacity model, world region, procedure how to calculate LOLE and any impacts on the IRM due to capacity performance Information.

Endorsements/Approvals

2. Load Forecast Update

Mr. Reynolds reviewed distributed solar generation assumptions and forecast. Members questioned the accuracy and thoroughness of the capacity factors data for each Transmission Owner. Members questioned whether the theoretical solar data is acceptable to use in the load forecast since there is limited historical data available. Mr. Reynolds explained that the percent of solar generation operating at peak conditions will be verified or corrected as needed prior to the release of the 2016 forecast, and ensured Members that the net effect of incorporating distributed solar generation will lower the forecast despite the use of historical solar addbacks. Mr. Herling asked the Planning Committee to endorse the Manual 19 change regarding the Load Forecast excluding the solar forecast changes. **Mr. Pratzon** made a motion to endorse and **Mr. Manning** seconded. **IN A COUNTED VOTE, THE PLANNING COMMITTEE ENDORSED THE MANUAL 19 CHANGES RELATED TO THE LOAD FORECAST.** There were 77 aye's, 18 no's and 89 votes of abstention.

First Readings

3. Voltage Threshold and Administrative Update

Ms. Glatz reviewed draft Operating Agreement language regarding administrative changes and voltage threshold additions. PJM is proposing changes for entities to provide PJM with a 3 year eligibility update. PJM is also proposing for PJM to have 15 days to issue a construction responsibility letter instead of the current 10 days. Additionally, PJM is proposing that PJM have 60 days for an entity to execute the Designated Entity Agreement. Ms. Glatz reviewed proposed voltage threshold language changes that would exempt less than 200kV violations except under two limited circumstances. If several violations have the same contingent element, are locally or electrically close, or if PJM determines that a 200kV+ solution may be applicable, then those violations would be included in the proposal window. Members requested that PJM include that voltage violations be given the same considerations as thermal violations. One Member asked that PJM consider a scenario where a solution for an exempted facility was later determined prior to PJM Board approval to have cost allocation to more than one zone.

4. Long Term Firm Transmission Service Task Force Update

Mr. Berner provided a first read of the solution package to modify existing and expand Long Term Firm Transmission Service methodologies. The solution package makes modifications to the Base Case and Queue study modeling parameters and methodologies, the distribution factor and line rating thresholds used to determine the need for facility upgrades, and will incorporate the Capacity Import Limit study constraints into the Long-term Firm Transmission Service studies. Considering that no significant comments were received, the meeting for the Task Force which was to be held on December 4th was cancelled.

5. PARTF Update

Mr. Berner provided a first read of Manual 14 series updates regarding PAR withdrawal and injection rights. Phase Angle Regulators will undergo similar methodologies as other Controllable AC Merchant Transmission Facilities. As such, Manual 14A will be updated to include language regarding the specific requirements necessary to allow PAR devices to be studied to receive rights

consistent with those to be granted for Controllable A.C. Merchant Transmission Facilities. There will not need to be any PJM Tariff changes since the tariff provides details regarding Controllable AC Merchant Transmission Facilities in general.

6. DEDSTF Update

Mr. Herman provided a first read of the DEDSTF Charter. The DEDSTF charter details the three main areas of focus for design standards -transmission lines, substations, System Protection and Control Design and Coordination, in which the task force will develop standards. The Charter also details the duration and expected deliverables which can be found under the December 3rd Planning Committee material on PJM.com

Education

7. NERC/RRO Update

Mr. Kappagantula 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 December 3rd Planning Committee Material. NERC Standards subject to future enforcement can be found under the December 3rd Planning Committee Material at PJM.com. Mr. Kappagantula also provided an update on the 2016 NERC Electric Reliability Organization (ERO) Enterprise Compliance Monitoring and Enforcement Program (CMEP) Implementation Plan. As part of this update, Mr. Kappagantula informed the Planning Committee about the highlights of the 2016 ReliabilityFirst (RF) CMEP IP

8. FERC Activities and Proceedings

Ms. Foley provided an update of current FERC activities and proceedings. Ms. Foley identified the completion of Order Number 1000 Compliance filing, Multi-Driver Approach, and Proposal Window Fee. Ms. Foley also reviewed FERC's consideration of a New Hybrid Cost Allocation and interregional compliance filings.

9. Status of PJM Interconnection Queues

Mr. Egan provided information on the status of PJM's Interconnection Queues. Mr. Egan reviewed statistics through the end of the AB1 queue regarding fuel type, megawatt in-services, projects in-service, current back log, etc. More information can be found under the December 3rd Planning Committee Material at PJM.com

10. 2016 Load Forecast Review

Mr. Reynolds reviewed statistics from the 2016 Load Forecast Report. Mr. Reynolds detailed key parameter assumptions such as estimation period, weather simulation, economics, etc. Mr. Reynolds reviewed both of the summer and winter RTO load forecasts, economic forecasts, saturation, and load adjustments.

Future Meeting Dates

January 7, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
February 11, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
March 10, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
April 7, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
May 12, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
June 9, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
July 14, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
August 11, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
September 15, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
October 6, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
November 3, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
December 15, 2016	9:30 AM	PJM Conference and Training Center, Valley Forge, PA

Author: Amber Thomas

Attendees

Attendees	Company	Sector
Herling, Steve (Chair)	PJM Interconnection, LLC	Not Applicable
Thomas, Amber (Secretary)	PJM Interconnection, LLC	Not Applicable
Rutigliano, Tom	Achieving Equilibrium LLC	Other Supplier
Thammineni, Kiran	Ameren	Transmission Owner
Weber, Adam	Ameren	Transmission Owner
Tatum, Edward	American Municipal Power, Inc.	Electric Distributor
McAlister, Lisa	American Municipal Power, Inc.	Electric Distributor
Norton, Chris	American Municipal Power, Inc.	Electric Distributor
Burmester, Dale	American Transmission Company, LLC	Not Applicable
Sch lindwein, Mike	American Transmission Company, LLC	Not Applicable
Hagman, Chris	American Transmission Company, LLC	Transmission Owner
Fuerst, Gary	American Transmission Systems, Inc.	Transmission Owner
Seide, Richard	APEX Clean Energy	Other Supplier
Ondayko, Brock	Appalachian Power Company	Transmission Owner
Patten, Kevin	Appalachian Power Company	Transmission Owner
Canter, David	Appalachian Power Company	Transmission Owner
Laios, Takis	Appalachian Power Company	Transmission Owner
Koehler, Nick	Appalachian Power Company	Transmission Owner
Sundararajan, Raja	Appalachian Power Company	Transmission Owner
Holliday, Randy	Appalachian Power Company	Transmission Owner
Swain, Brian	Appalachian Power Company	Transmission Owner
Marker, Jerod	Appalachian Power Company	Transmission Owner
Burkholder, Josh	Appalachian Power Company	Transmission Owner

Lockwood, Craig	Appalachian Power Company	Transmission Owner
Melnyk, Markian	Atlantic Grid Operations A, LLC	Other Supplier
Bloom, David	Baltimore Gas and Electric Company	Transmission Owner
Scott, Hugh	Baltimore Gas and Electric Company	Transmission Owner
Yeh, Eric	Baltimore Gas and Electric Company	Transmission Owner
Jablonski, James	Borough of Butler, Butler Electric Division	Electric Distributor
Kelly, Stephen	Brookfield Energy Marketing LP	Other Supplier
Bouslog, Travis	Burns McDonnell	Not Applicable
Scarpignato, David	Calpine Energy Services, L.P.	Generation Owner
Trayers, Barry	Citigroup Energy, Inc.	Other Supplier
Davis, Connie	City of Cleveland, DPU, Div of CPP	Electric Distributor
Danis, Deral	Clean Line Energy Partners LLC	Not Applicable
Allen, William	Commonwealth Edison Company	Other Supplier
Leeming, Thomas	Commonwealth Edison Company	Transmission Owner
Regner, Ronald	Commonwealth Edison Company	Transmission Owner
Mills, Paul	Commonwealth Edison Company	Transmission Owner
Paszek, Martin	Consolidated Edison of New York, Inc.	Not Applicable
Nehrozoglu, Aydemir	Consolidated Edison of New York, Inc.	Not Applicable
Griffiths, Dan	Consumer Advocates of PJM States	Not Applicable
Baidwan, Sandeep	Continuum Associates Inc.	Not Applicable
Johnson, Carl	Customized Energy Solutions, Ltd.*	Not Applicable
Sasser, Jonathan	Customized Energy Solutions, Ltd.*	Not Applicable
Filomena, Guy	Customized Energy Solutions, Ltd.*	Not Applicable
Horstmann, John	Dayton Power & Light Company (The)	Transmission Owner
Hurd, Mike	Dayton Power & Light Company (The)	Transmission Owner
DeLosa, Joseph	DE Public Service Commission	Not Applicable
Farber, John	DE Public Service Commission	Not Applicable
Cantler, Jaclyn	Delmarva Power & Light Company	Electric Distributor
Hastings, David	Dhast Co.	Not Applicable
Whitehead, Jeffrey	Direct Energy Business Marketing, LLC	Other Supplier
Dharmadhikari, Janhavi	Dominion Energy Marketing, Inc.	Generation Owner
Zhao (ES), Rongda	Dominion Virginia Power	Not Applicable
Owens, George	Downes Associates, Inc.	Other Supplier
Pakela, Gregory	DTE Energy	Electric Distributor
Steinkuhl, Steve	Duke Energy Business Services LLC	Transmission Owner
Mason, Julie	Duke Energy Ohio, Inc.	Transmission Owner
Stubbe, Judy	Duke Energy Ohio, Inc.	Transmission Owner
Hirsh, Chad	Duquesne Light Company	Transmission Owner
Chocarro Aguirrebengoa, Iker	E.ON Climate & Renewables North America, Inc.	Generation Owner
Adams, Chris	East Kentucky Power Cooperative, Inc.	Transmission Owner

Adams, Darrin	East Kentucky Power Cooperative, Inc.	Transmission Owner
Bradley, Nathan	East Kentucky Power Cooperative, Inc.	Transmission Owner
Dugan, Chuck	East Kentucky Power Cooperative, Inc.	Transmission Owner
Brodbeck, John	EDP Renewables North America, LLC	Other Supplier
Ainspan, Malcolm	Energy Curtailment Specialists, Inc.	Other Supplier
Shegarfi, Roozbeh	Exelon	Transmission Owner
Barker, Jason	Exelon Business Services Company, LLC	Transmission Owner
Taylor, Robert	Exelon Business Services Company, LLC	Transmission Owner
Midgley, Sharon	Exelon Generation Co., LLC	Generation Owner
Benchek, Jim	FirstEnergy Solutions Corp.	Transmission Owner
Stuchell, Jeff	FirstEnergy Solutions Corp.	Transmission Owner
Syner, John	FirstEnergy Solutions Corp.	Transmission Owner
D'Alessandris, Lou	FirstEnergy Solutions Corp.	Transmission Owner
Bower, Phil	FirstEnergy Solutions Corp.	Transmission Owner
Bolan, Martin	FirstEnergy Solutions Corp.	Transmission Owner
Borgatti, Michael	Gabel and Associates	Not Applicable
Vansant, Charles	GenPower Coal III, LLC	Not Applicable
Hagaman, Derek	GT Power Group	Not Applicable
Pratzon, David	GT Power Group	Not Applicable
Nash, James	Hudson Transmission Partners, LLC	Other Supplier
Thomas, Bob	Illinois Municipal Electric Agency	Electric Distributor
Foladare, Kenneth	IMG Midstream LLC	Generation Owner
Piascik, Thomas	IMG Midstream LLC	Generation Owner
Kopinski, John	ITC Mid-Atlantic Development LLC	Other Supplier
Prokop, Brenda	ITC Mid-Atlantic Development LLC	Other Supplier
Peters, James	ITC Mid-Atlantic Development LLC	Transmission Owner
Segner, Sharon	LS Power Transmission, LLC	Not Applicable
Du, Yan	LSPower	Transmission Owner
O'Connell, Robert	Main Line Electricity Market Consultants	Not Applicable
Mabry, David	McNees Wallace & Nurick LLC	Not Applicable
Solomon, Adam	MISO	Not Applicable
Domian, Christin	Mitsubishi Electric Power Products Inc.	Not Applicable
Nezam Sarmadi, Seyed	New England Power Company	Not Applicable
Kogut, George	New York Power Authority	Other Supplier
Davis, David	NextEra Energy Power Marketing, LLC	Generation Owner
Von Pinho, Frederico	NextEra Energy Transmission, LLC	Other Supplier
Suh, Jung	Noble Americas Energy Solutions LLC	Other Supplier
Manning, James	NCEMC	Electric Distributor
Taylor, Miles	Northern Indiana Public Service Company	Other Supplier
Moran, Shaun	Northern Indiana Public Service Company	Other Supplier

Fitch, Neal	NRG Power Marketing LLC	Generation Owner
Mariam, Yohannes	Office of the Peoples Counsel for the DC	End User Customer
Donelson, John	Old Dominion Electric Cooperative	Electric Distributor
Lieberman, Steven	Old Dominion Electric Cooperative	Electric Distributor
Duan, Robert	Ontario Power Generation Inc.	Other Supplier
Carmean, Gregory	OPSI	Not Applicable
Boci, Iris	PECO Energy Company	Transmission Owner
Acharya, Dhruv	PEPCO Holdings, Inc.	Not Applicable
Kurowski, Patricia	PEPCO Holdings, Inc.	Not Applicable
Young, Amber	PEPCO Holdings, Inc.	Not Applicable
Godson, Gloria	PEPCO Holdings, Inc.	Transmission Owner
Barrett, Francis	PJM Interconnection, LLC	Not Applicable
Connell, Jason	PJM Interconnection, LLC	Not Applicable
Cummings, Bridgid	PJM Interconnection, LLC	Not Applicable
Egan, Amanda	PJM Interconnection, LLC	Not Applicable
Glatz, Suzanne	PJM Interconnection, LLC	Not Applicable
Gledhill, Andrew	PJM Interconnection, LLC	Not Applicable
Herman, Michael	PJM Interconnection, LLC	Not Applicable
Janapareddy, Anupama	PJM Interconnection, LLC	Not Applicable
Khashfe, Bill	PJM Interconnection, LLC	Not Applicable
Malladi, Brindavani	PJM Interconnection, LLC	Not Applicable
Quevada, Jason	PJM Interconnection, LLC	Not Applicable
Reynolds, John	PJM Interconnection, LLC	Not Applicable
Rocha-Garrido, Patricio	PJM Interconnection, LLC	Not Applicable
Sims, Mark	PJM Interconnection, LLC	Not Applicable
McGill, Susan	PJM Interconnection, LLC	Not Applicable
Schuyler, Ken	PJM Interconnection, LLC	Not Applicable
Foley, Pauline	PJM Interconnection, LLC	Not Applicable
Horger, Tim	PJM Interconnection, LLC	Not Applicable
Berner, Aaron	PJM Interconnection, LLC	Not Applicable
Liebold, Chuck	PJM Interconnection, LLC	Not Applicable
Glazer, Craig	PJM Interconnection, LLC	Not Applicable
Glennon, Jim	PJM Interconnection, LLC	Not Applicable
Mauroschadt, Erich	PJM Interconnection, LLC	Not Applicable
Weiss, Glenn	PJM Interconnection, LLC	Not Applicable
Baker, Scott	PJM Interconnection, LLC	Not Applicable
Fan, Zhenyu	PJM Interconnection, LLC	Not Applicable
Mooney, Molly	PJM Interconnection, LLC	Not Applicable
Palermo, Jeff	PJP Consulting	Not Applicable
Gass, Scott	PowerGEM	Not Applicable

Tekle, Zelalem	PowerGEM	Not Applicable
Ali, Shadab	PPL Electric Utilities Corp.	Transmission Owner
Gladey, David	PPL Electric Utilities Corp.	Transmission Owner
Krizenoskas, Lisa	PPL Electric Utilities Corp.	Transmission Owner
Greiner, Gary	PSEG Energy Resources and Trade LLC	Other Supplier
Czigler, Frank	Public Service Electric & Gas Company	Transmission Owner
Lyakhovich, Leonid	Public Service Electric & Gas Company	Transmission Owner
Samb, Massamba	Public Service Electric & Gas Company	Transmission Owner
Gunn, Garan	Public Service Electric & Gas Company	Transmission Owner
Gostkowski, Elizabeth	Public Service Electric & Gas Company	Transmission Owner
Crowley, Kathy	Public Service Electric & Gas Company	Transmission Owner
Marshall, Rodney	Public Service Electric & Gas Company	Transmission Owner
Marinelli, Richard	Public Service Electric & Gas Company	Transmission Owner
Marsan, Mark	Public Service Electric & Gas Company	Transmission Owner
Wreschnig, Stephen	Public Service Electric & Gas Company	Transmission Owner
Gebolys, Debbie	Public Utilities Commission of Ohio (The)	Not Applicable
Mason, Ray	ReliabilityFirst Corporation	Not Applicable
Hoatson, Tom	Riverside Generating, LLC	Other Supplier
Mangonon, Roletto	Rockland Electric Company	Transmission Owner
Yu, Joel	Rockland Electric Company	Transmission Owner
Herel, Suzanne	RTO Insider	Not Applicable
Nader, Jordan	RunnerStone, LLC	Not Applicable
Peebles, Andy	Shell Energy North America (US), LP	Other Supplier
Engleman, Michael	Squire Patton Boggs	Not Applicable
Halpern, Jack	Stantec	Not Applicable
Greening, Michele	Talen Energy Marketing, LLC	Generation Owner
Scoglietti, Barbara	Tangent Energy Solutions, Inc.	Other Supplier
Halay, Alina	FERC	Not Applicable
Sillin, John	FERC	Not Applicable
Snow, Robert	FERC	Not Applicable
Bommareddy, Chandana	TRC Solutions	Not Applicable
Jacobs, Mike	Union of Concerned Scientists	Not Applicable
Bailey, Ronnie	Virginia Electric & Power Company	Not Applicable
Batta, Michael	Virginia Electric & Power Company	Transmission Owner
Crider, Craig	Virginia Electric & Power Company	Transmission Owner
Haskins, Linda	Virginia Electric & Power Company	Transmission Owner
Hannah, Kyle	Virginia Electric & Power Company	Transmission Owner
Zhang, Frank	Virginia Electric & Power Company	Transmission Owner
Velez, Francisco	Virginia Electric & Power Company	Transmission Owner
Tan, Andrew	Eversource Energy	Transmission Owner



Draft Minutes

