

**Planning Committee
PJM Interconnection
October 8, 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 September 10, 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 September 10, 2015 Planning Committee minutes.
- C. Mr. Sims provided an update regarding the 2015 RTEP Proposals Windows. There will be 21 proposals recommended at the October PJM Board from Window 1. Proposal Window 2 recommendations will be discussed at the October 8th TEAC.
- D. Mr. Gledhill provided an update regarding the Earlier Queue Submittal Task Force. The first meeting was September 17th to work on charter, education and design components. The next meeting will be on October 29th.
- E. Mr. Herman provided an update regarding the DEDSTF. The first meeting will be October 12th.
- F. Mr. Thompson provided an update on Model On Demand. There are 240 projects that have been uploaded so far. All projects for 2017 should be uploaded by Friday, October 9th. All project models through 2020 should be submitted by mid-November.
- G. Mr. Berner provided the Long Term Firm Meeting Update. Several educational sessions have taken place. The next meeting will be Friday, October 9th.
- H. Mr. Fraley, from First Energy, discussed the removal of the Black Oak 500/138kV #3 SPS.
- I. Ms. Glatz discussed the Voltage Threshold language changes. Based on member feedback, PJM is evaluating the proposed Voltage Threshold language and will provide a first read at the upcoming Planning Committee meetings.
- J. The 2016 PJM Meeting schedule has been posted on pjm.com under the Planning Committee site.
- K. The Manual 03 Version 48 has been posted online.

Endorsements/Approvals

2. 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. For the Winter Study Criteria, Load Deliverability, Generator Deliverability, N-1-1 Thermal and Voltage analysis were performed. Gas

contingencies were analyzed for the Winter Study and further evaluation will be performed as to the likelihood of these extreme events. Members asked what would be the study year of the Winter analysis and if Immediate Need projects would be assigned to Transmission Owners with violations. Mr. Sims explained that analysis would begin on the 2021 case and possibly a near term 3 year case where violations would be reviewed individually. Mr. Herling asked the Planning Committee to endorse the Winter Criteria changes. Ms. Syners made a motion to endorse and Ms. Krizenoskas seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE MANUAL 14B WINTER STUDY CRITERIA CHANGES.** There were no votes of opposition or abstention.

3. Energy Market Uplift

Mr. McGlynn reviewed the Manual 14B additions regarding incorporating energy market uplift in the planning process. Mr. Herling asked the Planning Committee to endorse the 2015 IRM Study Results. Mr. Kopinski made a motion to endorse and Mr. Bailey seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE MANUAL 14B CHANGES REGARDING INCORPORATING ENERGY MARKET UPLIFT IN THE PLANNING PROCESS.** There were no votes of opposition or abstention.

4. PARTF Update

Mr. Berner reviewed the requirements which will be established to allow PAR's to obtain transmission and withdrawal rights. Mr. Berner explained that injection or withdrawal rights are not for existing PARs. Members requested that draft manual language explicitly state that injection and withdrawal rights are for new PARs. Mr. Berner will be back to present manual language changes to meet the PARTF requirements when the remaining M14E language changes are prepared for the Planning Committee.

5. NERC TPL Standards Update

Mr. Herman reviewed the Manual 14B changes regarding NERC TPL -001-4 standards including administrative changes made after the initial September 10th posting. The NERC TPL -001-4 standards are effective January 1st 2016. Mr. Herman will be providing a first read at the October 22nd MRC. Mr. Herling asked the Planning Committee to endorse the TPL Standards changes. Mr. Trayers made a motion to endorse and Mr. Scarpignato seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE MANUAL 14B NERC TPL -001-4 CHANGES.** There were no votes of opposition or abstention.

6. Earlier Queue Submittal Task Force

Mr. Gledhill reviewed the charter for the Earlier Queue Submittal Task Force. The charter details the mission, group objectives, and expected deliverables to be completed by mid-2016. The charter is posted with the October 10th Planning Committee material. Mr. Herling asked the Planning Committee to endorse the charter. Mr. Pratzon made a motion to endorse and Mr. Kopinski seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE EARLIER QUEUE SUBMITTAL CHARTER.** There were no votes of opposition or abstention.

7. 2015 IRM Study Results

Mr. Rocha reviewed the 2015 IRM Study Results. The 2015 IRM study results are based on the study assumptions and load model endorsed by the Planning Committee earlier this year. Mr. Wilson from Wilson Economics presented a recommendation to allow IRM and FPR to remain as is or to rerun the study with a different load model. Mr. Rocha answered members' questions regarding IRM study inputs and results. Mr. Herling asked the Planning Committee to endorse the 2015 IRM Study Results. Mr. Scarpignato made a motion to endorse and Mr. Trayers seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE 2015 IRM STUDY RESULTS.** There were 110 approvals, 2 votes of opposition, and 36 abstentions.

First Readings

8. Load Forecast Update

Mr. Reynolds reviewed proposed changes to Manual 19 related to enhancements to the load forecast model. The three main changes relate to using End-Use Trends, Weather Variables, and Distributed Solar Generation.

Education

9. 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 October 8th Planning Committee Material. NERC Standards subject to future enforcement can be found under the September 10th Planning Committee Material.

10. Light Load Update Criteria

Mr. Sims reviewed sensitivity analysis regarding Light Load criteria. Mr. Sims discussed updating the MVAR loading to reflect what is happening during the light load period. Mr. Sims discussed using the average capacity factors as bright line to determine if coal or natural gas units should be dispatch in the light load base case.

Future Meeting Dates

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

Steve Herling (Chair)	PJM Interconnection, LLC
Amber Thomas (secretary)	PJM Interconnection, LLC
Kiran Thammineni	Ameren
Chris Norton	American Municipal Power, Inc.
Dale Burmester	American Transmission Company, LLC
Chris Hagman	American Transmission Company, LLC

Mike Schlindwein	American Transmission Company, LLC
Gary Fuerst	American Transmission Systems, Inc.
David Canter	Appalachian Power Company
Takis Laios	Appalachian Power Company
Craig Lockwood	Appalachian Power Company
Brock Ondayko	Appalachian Power Company
Kevin Patten	Appalachian Power Company
Sharlene Rivera Gonzalez	Appalachian Power Company
Eric Rodriguez	Appalachian Power Company
Brian Swain	Appalachian Power Company
Deniz Ozkan	Atlantic Grid Operations A, LLC
David Bloom	Baltimore Gas and Electric Company
John McDaniel	Baltimore Gas and Electric Company
Hugh Scott	Baltimore Gas and Electric Company
Eric Yeh	Baltimore Gas and Electric Company
Kishan Ellepola	Baltimore Gas and Electric Company
Eric Yeh	Baltimore Gas and Electric Company
James Jablonski	Borough of Butler, Butler Electric Division
Ron Pezon	Borough of Chambersburg
Travis Bouslog	Burns McDonnell
David Scarpignato	Calpine Energy Services, L.P.
Jakob Metzler	Castleton Commodities Merchant Trading L.P.
Barry Trayers	Citigroup Energy, Inc.
Connie Davis	City of Cleveland, Div of Cleveland Public Pwr
Jonathan Abebe	Clean Line Energy Partners LLC
William Allen	Commonwealth Edison Company
Thomas Leeming	Commonwealth Edison Company
Paul Mills	Commonwealth Edison Company
Ronald Regner	Commonwealth Edison Company
Tom Rutigliano	Constellation NewEnergy, Inc
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)
Hertzel Shamash	Dayton Power & Light Company (The)
Joseph DeLosa	DE Public Service Commission
John Farber	DE Public Service Commission
Michael Natrin	Delmarva Power & Light Company

David Hastings	Dhast Co
Janhavi Dharmadhikari	Dominion Virginia Power
Sarah Vannatta	Dominion Virginia Power
Frank Zhang	Dominion Virginia Power
Rongda Zhao (ES)	Dominion Virginia Power
George Owens	Downes Associates, Inc.
Allen Todd	Downes Associates, Inc.
Allen Todd	Downes Associates, Inc.
Greg Pakela	DTE Energy Trading, Inc.
Steve Steinkuhl	Duke Energy Business Services LLC
Julie Mason	Duke Energy Ohio, Inc.
Stephen Abate	Duquesne Light Company
Jason Harchick	Duquesne Light Company
Chad Hirsh	Duquesne Light Company
Iker Chocarro	E.ON Climate & Renewables North America, Inc
Chris Adams	East Kentucky Power Cooperative, Inc.
Darrin Adams	East Kentucky Power Cooperative, Inc.
Rebecca Davis	East Kentucky Power Cooperative, Inc.
Wesley Fluty	East Kentucky Power Cooperative, Inc.
John Brodbeck	EDP Renewables North America, LLC
Malcolm Ainspan	Energy Curtailment Specialists, Inc.
Andrew Tan	Eversource Energy
Andrew Tan	Eversource Energy
Roozbeh Shegarfi	Exelon
Melanie Sanders	Exelon Business Services Company, LLC
Thomas Bainbridge	FirstEnergy Solutions Corp.
Jim Benchek	FirstEnergy Solutions Corp.
Lou D'Alessandris	FirstEnergy Solutions Corp.
Craig Fraley	FirstEnergy Solutions Corp.
M Henry	FirstEnergy Solutions Corp.
David Marton	FirstEnergy Solutions Corp.
John Syner	FirstEnergy Solutions Corp.
Mike Borgatti	Gabel & Associates
Travis Stewart	Gabel & Associates
Charles Vansant	GenPower Coal III, LLC
Derek Hagaman	GT Power Group
David Pratzon	GT Power Group
Kenneth Foadare	IMG Midstream LLC
Thomas Piascik	IMG Midstream LLC
Thomas Fecho	Indiana Michigan Power Company

John Kopinski	ITC Mid-Atlantic Development LLC
Brenda Prokop	ITC Mid-Atlantic Development LLC
Yan Du	LS Power Transmission, LLC
Joshua York	LS Power Transmission, LLC
Ralph De Geeter	Maryland Public Service Commission
David Mabry	McNees Wallace & Nurick LLC
Fred Kelley	MD Power Plant Research Program
Bruce Burcat	Mid-Atlantic Renewable Energy Coalition
Adam Solomon	MISO
Jennifer Chen	Natural Resources Defense Council
George Kogut	New York Power Authority
Fred Von Pinho	NextEra Energy Power Marketing, LLC
James Manning	North Carolina Electric Membership Corporation
Miles Taylor	Northern Indiana Public Service Company
Neal Fitch	NRG Power Marketing LLC
Yohannes Mariam	Office of the Peoples Counsel for the DC
Michael Cocco	Old Dominion Electric Cooperative
John Donelson	Old Dominion Electric Cooperative
John Gouda	Old Dominion Electric Cooperative
Steven Lieberman	Old Dominion Electric Cooperative
James Wright	Old Dominion Electric Cooperative
Robert Duan	Ontario Power Generation Inc.
Brandon Pierce	PA Office of Consumer Advocate
Iris Boci	PECO Energy Company
Mike Donnelly	PECO Energy Company
Pulin Shah	PECO Energy Company
Dhruv Acharya	PEPCO Holdings, Inc.
Patricia Kurowski	PEPCO Holdings, Inc.
Amber Young	PEPCO Holdings, Inc.
Francis Barrett	PJM Interconnection, LLC
Aaron Berner	PJM Interconnection, LLC
Murty Bhavaraju	PJM Interconnection, LLC
Eliseo Carrasco	PJM Interconnection, LLC
Jason Connell	PJM Interconnection, LLC
Mary Ellen Driscoll	PJM Interconnection, LLC
David Egan	PJM Interconnection, LLC
Tom Falin	PJM Interconnection, LLC
Zhenyu Fan	PJM Interconnection, LLC
Suzanne Glatz	PJM Interconnection, LLC
Andrew Gledhill	PJM Interconnection, LLC

Jim Glennon	PJM Interconnection, LLC
Michael Herman	PJM Interconnection, LLC
Frank Koza	PJM Interconnection, LLC
Matthew LaRocque	PJM Interconnection, LLC
Chuck Liebold	PJM Interconnection, LLC
Melissa Maxwell	PJM Interconnection, LLC
Susan McGill	PJM Interconnection, LLC
Paul McGlynn	PJM Interconnection, LLC
Molly Mooney	PJM Interconnection, LLC
Raul Perez	PJM Interconnection, LLC
Chris Pulong	PJM Interconnection, LLC
Jason Quevada	PJM Interconnection, LLC
John Reynolds	PJM Interconnection, LLC
Patricio Rocha-Garrido	PJM Interconnection, LLC
Francisco Sanchez	PJM Interconnection, LLC
Ken Schuyler	PJM Interconnection, LLC
Jason Shoemaker	PJM Interconnection, LLC
Mark Sims	PJM Interconnection, LLC
Julia Spatafore	PJM Interconnection, LLC
Amber Thomas	PJM Interconnection, LLC
Jonathan Thompson	PJM Interconnection, LLC
Glenn Weiss	PJM Interconnection, LLC
Jeffrey Palermo	PJP Consulting
Shadab Ali	PPL Electric Utilities Corp. dba PPL Utilities
Lisa Krizonoskas	PPL Electric Utilities Corp. dba PPL Utilities
Frank Richardson	PPL Electric Utilities Corp. dba PPL Utilities
Bryan Mills	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
Leonid Lyakhovich	Public Service Electric & Gas Company
Massamba Samb	Public Service Electric & Gas Company
Debbie Gebolys	Public Utilities Commission of Ohio (The)
Raj Pudhota	Quanta Technologies
Tom Hoatson	Riverside Generating, LLC
Roleto Mangonon	Rockland Electric Company
Joel Yu	Rockland Electric Company
Amanda Cook	RTO Insider
Rich Heidorn	RTO Insider
Gerry Binder	SESCO Enterprises LLC



Draft Minutes

Andy Peebles
Mashiur Bhuiyan
Michele Greening
Tom Hyzinski
Syed Ahmad
Alina Halay
John Sillin
Adam Weber
Ronnie Bailey
Michael Batta
Steve Chafin
James Wilson

Shell Energy North America (US), LP
Talen Energy Marketing, LLC
Talen Energy Marketing, LLC
Talen Energy Marketing, LLC
The Federal Energy Regulatory Commission
The Federal Energy Regulatory Commission
The Federal Energy Regulatory Commission
Union Electric Company d/b/a Ameren Missouri
Virginia Electric & Power Company
Virginia Electric & Power Company
Virginia Electric & Power Company
Wilson Energy Economics