

Planning Committee
PJM Interconnection
July 9, 2015
9:30 a.m. – 12:00 p.m. [EST]

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 June 11, 2015 Planning Committee meeting. Mr. Pratzon then made a motion to approve the minutes. Mr. Kopinski seconded the motion. In a voice vote, the Planning Committee approved the June 11, 2015 Planning Committee minutes.
- C. 2015 RTEP Proposal Window Update
Mr. Sims discussed the 2015 RTEP Proposal Window. The first proposal window opened on June 19th and will close on July 20th. Participants were given until August 4th to refine detailed documentation and cost estimate. The first window included the Baseline, Generation Deliverability, Common Mode Outage, Load Deliverability, and N-1-1 thermal and voltage analyses. The next window is anticipated to open in August for TO Criteria and Light Load analysis.
- D. Long Term Firm Transmission Service Requests Update
Mr. McGlynn provided an update regarding the June 30th Long Term Firm Transmission Service Request meeting. At that meeting PJM discussed the current modeling, Capacity Import Limit and Generation Deliverability studies. Mr. McGlynn informed the Planning Committee that the next meeting will be July 31st.
- E. MOD-032 Procedure Document
Mr. Thompson provided an update regarding the MOD-032 Procedure document. MOD-32 Requirement 1 became effective July 1st 2015. Requirement 2 which will be effective July 1st 2016, will require the TOs, GOs, and LSEs to submit the modeling data based on the MOD-032 R1 standards. In preparation for the future data submittal, PJM will have a pilot at the end of the year going into the beginning of 2016 to have GOs submit data to the new web portal that is currently being developed.
- F. PARTF Update
Mr. McGlynn provided an update regarding the Phase Angle Regulator Task Force. Currently the task force is comparing PAR to variable frequency technology and HVDC technology to determine if PARs can be controllable. The task force is also determining the Operational impacts of PARs as well as establishing the megawatt value that a PAR may be able to control. The next meeting is July 16th.

Endorsements/Approvals

2. Design, Engineering, and Construction Standards

Ms. Glatz discussed the problem statement and issue charge for standards for competitively solicited projects. Under Order 1000 Lessons Learned problem statement, PJM staff will be asking the Planning Committee to form a taskforce to develop guidelines and standards for design, engineering, and construction of transmission equipment for non-incumbent designated entities. Mr. Herling asked the Planning Committee to endorse the problem statement and issue charge. Mr. Scarpignato made a motion to endorse the charter and Mr. Trayers seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE PROBLEM STATEMENT AND ISSUE CHARGE FOR DESIGNING STANDARDS FOR COMPETITIVELY SOLICITED PROJECTS.**

3. Merchant Network Upgrade

Mr. Connell discussed the tariff language changes to merchant network upgrades. There are four tariff changes related to the merchant network upgrade definition, queue entry, agreements, and RPM. Mr. Herling asked the Planning Committee to endorse the language changes. Mr. Scarpignato made a motion to endorse and Mr. Trayers seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE TARIFF LANGUAGE CHANGES RELATED TO MERCHANT NETWORK UPGRADES.**

4. Order 1000 Proposal Fee

Mr. Barrett reviewed the Order 1000 proposal fees for future RTEP Proposal Windows. The proposal fee structure has been tiered to include different fees depending on the cost of the proposed upgrade or greenfield project. Mr. Herling asked the Planning Committee to endorse the proposal fees. Mr. Khadr made a motion to endorse and Mr. Johnson seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE UNANIMOUSLY ENDORSED THE ORDER 1000 PROPOSAL FEES WITH NO ABSTENTIONS.**

5. Manual 20 Update

Mr. Falin reviewed the Manual 20 additions relating to the determination of Limited-Availability Resource Constraints under Capacity Performance. This new section to Manual 20 describes the technical procedures PJM uses to compute the Limited Availability Resource Constraints for use in the RPM auctions. Mr. Herling asked the Planning Committee to endorse the Manual 20 changes. Mr. Scarpignato made a motion to endorse and Mr. Manning seconded. **IN A VOICE VOTE, THE PLANNING COMMITTEE ENDORSED THE MANUAL 20 ADDITIONS FOR THE DETERMINATION OF LIMITED AVAILABILITY RESOURCE CONSTRAINTS.**

6. Load Model Selection for 2015 IRM Study

Mr. Rocha reviewed the 10 year load model selected for use in the 2015 IRM study. Mr. Herling asked the Planning Committee to endorse the load model to be used in the base case for the 2015 IRM study.. Mr. Scarpignato made a motion to endorse and Mr. Pratzon seconded. **IN A VOICE**

VOTE, THE PLANNING COMMITTEE ENDORSED THE LOAD MODEL FOR USAGE IN THE 2015 IRM STUDY.

First Readings

7. Winter Study Criteria

Mr. Sims provided a first read of Manual 14B additions regarding Winter Study Criteria. Mr. Sims reviewed the winter case topology and dispatch guidelines. Mr. Sims discussed the planning studies that would be conducted, specifically the Winter Generator Deliverability, Common Mode Outage, Winter Load Deliverability, N-1, and N-1-1 for both thermal and voltage. Mr. Sims noted that future queues will be studied under this new criteria. Members asked for clarity regarding temperature rating sets that should be used when submitting winter ratings since TOs have varying guidelines for winter ratings applications.

8. Order 1000 Lesson Learned

Mr. Herman discussed various templates to incorporate into the Proposal Window process such as Proposal Redaction Guidelines, Greenfield RTEP Template Proposal, and RTEP Upgrade Proposal Template. Members asked questions about submitting templates for multiple routes and the proposal fee for each submission. PJM clarified that the different templates should be submitted if the electrical characteristics are different.

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

Ms. Glatz will provided a first read of draft Operating Agreement language regarding voltage threshold and administrative changes. PJM proposed a 200kV voltage floor for the competitive process for reliability violations, excluding Market Efficiency competitive process. Sue also discussed administrative changes to the Operating Agreement language regarding pre-qualification updates and timing of the process steps for notification and acceptance of designation for RTEP projects

Education

10. NERC/RRO Update

Mr. Kappagantula provided the Planning Committee with an update on recent NERC activities and PJM compliance activities. Comments for on-going standard reviews can be found under the July 9th Planning Committee Material. NERC Standards subject to future enforcement can be found under the June 11th Planning Committee Material.

11. Light Load Criteria Update

Mr. Sims will discuss next steps for light load criteria changes. Mr. Sims discussed next steps for light load criteria changes. Mr. Sims reviewed results from the sensitivity analysis done for the light load study specifically surrounding the dispatch of wind, coal, and gas generators. Mr. Sims will provide a first read of Manual 14B language changes at the conclusion of the sensitivity analysis. Members expressed concern over the impacts that the new criteria would have on future wind

developers entering the queue. Members expressed their preference to have the option to curtail wind power instead of being required to build infrastructure to address violations in the light load criteria.

12. PJM Manuals Update for Multi-Driver Approach

Mr. Herman discussed PJM Manual 14 series updates regarding Multi-Driver Approach. Manual 14B and other related manuals will be updated to include Multi-Driver Method Approach to be consistent with FERC filings. PJM is requesting members to provide feedback for these changes in anticipation for the first reading of redline manual language changes at the August Planning Committee meeting.

13. Load Forecast Update

Mr. Gledhill provided an update regarding potential changes to the load forecast model. Inclusion of a customer usage variable, use of a new weather specification, and the addition of an autoregressive error term are among the changes being considered. Mr. Gledhill discussed that PJM is also investigating the appropriate amount of weather history that should be included in the model. Members inquired how these changes would affect the winter load forecast. Mr. Gledhill explained that there would be more updates to come with Manual 19 language changes to be provided..

14. Energy Market Uplift

Mr. McGlynn provided an update regarding energy market uplift in the planning process. Mr. McGlynn provided examples of uplift charges, specifically informing members that uplift associated with Reactive Services will be the focus of the Planning Committee evaluation. Mr. McGlynn discussed next steps of performing sensitivity studies, designing benefit to cost metric tests, and Manual 14 B changes.

Future Agenda Items

There were no future agenda items suggested.

Future Meeting Dates

August 13, 2015	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
September 10, 2015	9:30 AM	PJM Conference and Training Center, Valley Forge, PA
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

Patrick Hayes
David Canter
Takis Laios
Chris Norton
Mike Schlindwein
Dale Burmester
Gary Fuerst
Brock Ondayko
Craig Lockwood
David Bloom
John McDaniel
Zelalem Tekle
Barry Trayers
Connie Davis
Deral Danis
William Allen
Thomas Leeming
Ronald Regner
Mark Tribett
Dan Griffiths
Guy Filomena
Carl Johnson
Jonathan Sasser
John Horstmann
Hertzel Shamash
Mark Price
Joseph DeLosa
John Farber
Michael Natrin
Rongda Zhao (ES)
George Owens
Greg Pakela
Steve Steinkuhl
Julie Mason
Judith Stubbe
Jason Harchick
Darrin Adams
Nathan Bradley
Rebecca Davis
Chuck Dugan

Ameren Control Area
American Electric Power
American Electric Power
American Municipal Power, Inc.
American Transmission Company LLC
American Transmission Company, LLC
American Transmission Systems, Inc.
Appalachian Power Company
Appalachian Power Company
Baltimore Gas and Electric Company
Baltimore Gas and Electric Company
Baltimore Gas and Electric Company
Citigroup Energy, Inc.
City of Cleveland, DPU
CLEAN LINE ENERGY PARTNERS LLC
Commonwealth Edison Company
Commonwealth Edison Company
Commonwealth Edison Company
Constellation Energy Commodities Group, Inc.
Consumer Advocates of PJM States
Customized Energy Solutions, Ltd.*
Customized Energy Solutions, Ltd.*
Customized Energy Solutions, Ltd.*
Dayton Power & Light Company (The)
Dayton Power & Light Company (The)
DC Energy Mid-Atlantic, LLC
DE Public Service Commission
DE Public Service Commission
Delmarva Power & Light Company
Dominion Virginia Power
Downes Associates, Inc.
DTE Energy Trading, Inc.
Duke Energy Business Services LLC
Duke Energy Ohio, Inc.
Duke Energy Ohio, Inc.
Duquesne Light Company
East Kentucky Power Cooperative, Inc.
East Kentucky Power Cooperative, Inc.
East Kentucky Power Cooperative, Inc.
East Kentucky Power Cooperative, Inc.

Amanda Stacy	East Kentucky Power Cooperative, Inc.
Bruce Campbell	EnergyConnect, Inc.
Jason Barker	Exelon Business Services Company, LLC
Melanie Sanders	Exelon Business Services Company, LLC
Rebecca Stadelmeyer	Exelon Business Services Company, LLC
Robert Taylor	Exelon Business Services Company, LLC
Thomas Bainbridge	FirstEnergy Solutions Corporation
Martin Bolan	FirstEnergy Solutions Corporation
Laura DiNicola	FirstEnergy Solutions Corporation
David Marton	FirstEnergy Solutions Corporation
Jeff Stuchell	FirstEnergy Solutions Corporation
John Syner (FE)	FirstEnergy Solutions Corporation
Michael Borgatti	Gable and Associates
Charles Vansant	GenPower Coal III, LLC
Derek Hagaman	GT Power Group
David Pratzon	GT Power Group
James Nash	Hudson Transmission Partners, LLC
Bob Thomas	Illinois Municipal Electric Agency
Kenneth Foadare	IMG Midstream LLC
Brenda Prokop	ITC Mid-Atlantic Development LLC
Robert O'Connell	Main Line Electricity Market Consultants
David Hastings	Market Interconnection LLC
Ralph De Geeter	Maryland Public Service Commission
Kevin Dean	McNees Wallace & Nurick LLC
John Kopinski	MidAtlantic
Christin Domian	Mitsubishi Electric Power Products Inc.
George Kogut	New York Power Authority
David Davis	Nextera Energy
Steve Huntoon	NextEra Energy Power Marketing, LLC
James Manning	North Carolina Electric Membership Corporation
Miles Taylor	Northern Indiana Public Services Company
Neal Fitch	NRG Power Marketing LLC
John Donelson	Old Dominion Electric Cooperative
Steven Lieberman	Old Dominion Electric Cooperative
Gregory Carmean	OPSI
Abe Azar	Other
iris boci	PECO Energy Company
Pulin Shah	PECO Energy Company
Patricia Kurowski	PEPCO Holdings, Inc.
Amber Young	PEPCO Holdings, Inc.

Francisco Sanchez	PJM Interconnection
David Anders	PJM Interconnection, LLC
Francis Barrett	PJM Interconnection, LLC
Jason Connell	PJM Interconnection, LLC
Bridgid Cummings	PJM Interconnection, LLC
Phil Dantonio	PJM Interconnection, LLC
Paula DuPont-Kidd	PJM Interconnection, LLC
Janell Fabiano	PJM Interconnection, LLC
Tom Falin	PJM Interconnection, LLC
Anisha Fernandes	PJM Interconnection, LLC
Ed Franks	PJM Interconnection, LLC
Andrew Gledhill	PJM Interconnection, LLC
James Glennon	PJM Interconnection, LLC
Jacob Grande	PJM Interconnection, LLC
Michael Herman	PJM Interconnection, LLC
Frank Koza	PJM Interconnection, LLC
Matthew LaRocque	PJM Interconnection, LLC
Melissa Maxwell	PJM Interconnection, LLC
Paul McGlynn	PJM Interconnection, LLC
Molly Mooney	PJM Interconnection, LLC
Raul Perez - Guerrero	PJM Interconnection, LLC
Jason Quevada	PJM Interconnection, LLC
John Reynolds	PJM Interconnection, LLC
Mark Sims	PJM Interconnection, LLC
Alex Worcester	PJM Interconnection, LLC
John Brodbeck	Potomac Electric Power Company
Chandler Brenneman	PPL Electric Utilities Corp.
Cleveland Richards Jr	Price Waterhouse Cooper
Kenneth Carretta	PSEG Energy Resources and Trade LLC
Frank Czigler	Public Service Electric & Gas Company
Leonid Lyakhovich	Public Service Electric & Gas Company
massamba samb	Public Service Electric & Gas Company
Roleto Mangonon	Rockland Electric Company
Rich Heidorn	RTO Insider
Suzanne Herel	RTO Insider
Gerry Binder	SESCO Enterprises LLC
Andy Peebles	Shell Energy North America (US), LP
Jack Halpern	Stantec
Shadab Ali	Talen Energy Marketing, LLC
Leah Bonano	Talen Energy Marketing, LLC



Draft Minutes

David Gladey
Michele Greening
Joe Scialabba
Jonathan Fernandez
Eric Sorber
Adam Weber
Ronnie Bailey
Michael Batta
James Wilson

Talen Energy Marketing, LLC
Talen Energy Marketing, LLC
Talen Energy Marketing, LLC
The Federal Energy Regulatory Commission
UGI Utilities, Inc.
Union Electric Company d/b/a Ameren Missouri
Virginia Electric & Power Company
Virginia Electric & Power Company
Wilson Energy Economics

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