

**Planning Committee**  
**PJM Conference and Training Center**  
**September 13, 2018**  
**9:00 a.m. – 12:00 p.m.**

## Administration (9:00-9:05)

1. Ms. Suzanne Glatz, PJM, called the meeting to order and Ms. Anisha Fernandes, PJM, reviewed the Anti-trust, Code of Conduct, media participation, and WebEx guidelines. An announcement was made about the upcoming Planning 201 Training offered by PJM on October 15, 2018.
2. Ms. Anisha Fernandes reviewed the Agenda for the September 13, 2018 Planning Committee meeting. It was noted that endorsement of Item 5 will be deferred to the next month, and the presentation at today's meeting would be considered a second First Read. The Planning Committee approved the Agenda.
3. Ms. Anisha Fernandes reviewed the draft minutes posted for the August 09, 2018 meeting and the Planning Committee approved the minutes.

## Endorsements (9:05-10:15)

4. **DER Ride Through Problem Statement & Issue Charge**  
Mr. Emanuel Bernabeu, PJM, presented the inverter-based DER Ride Through Problem Statement and Issue Charge, and the revised IEEE 1547-2018 standard. PJM and Stakeholders engaged in discussions around the changes that were made after the First Read last month. Additional requests received during the meeting to incorporate amendments to the Issue Charge and provide further clarifications resulted in the endorsement being deferred. Feedback on the updated Issue Charge and Problem Statement will also be sought from the TOA-AC prior to the endorsement request at the PC next month. The PJM Ride-Through Workshop scheduled for October 1-2, 2018 will proceed as scheduled. The committee will be requested to endorse this Problem Statement and Issue Charge at the next meeting.
5. **Manual 21 Proposed Changes**  
Mr. Jerry Bell, PJM, presented the proposed changes to Manual 21 Rules & Procedures for Determination of Generating Capability. Mr. Patricio Rocha Garrido, PJM, also presented information on the results of the Wind Effective Load Carrying Capability (ELCC) Analysis to support these proposed changes. The endorsement of these proposed changes was deferred in order to provide additional clarification requested. The committee will be requested to endorse these changes at the next meeting.
6. **Manual 14F Updates**  
Mr. Jason Shoemaker, PJM, presented proposed changes to Manual 14F, Competitive Planning Process related to Cost Containment. **By vote of acclamation the Planning Committee endorsed the related Manual 14F updates with 1 objection and 1 abstention.**

## First Reads (10:15-10:30)

### 7. 2018 Installed Reserve Margin Study Results

Mr. Patricio Rocha Garrido, PJM, reviewed the 2018 Reserve Requirement Study results (IRM, FPR). The committee will be requested to endorse the study results at the next meeting.

## Informational Updates (10:30-12:00)

### 8. Cost Commitment Status and Next Steps

Mr. Mark Sims, PJM, discussed the status and next steps for the Consideration of Cost Commitment for Evaluation of Competitive Transmission Proposals.

### 9. Preliminary 2019 Project Budget

Mr. Jim Snow, PJM, reviewed the Preliminary 2019 Capital Project Budget.

### 10. Contact Management Update

Ms. Amanda Egan, PJM, provided an update on the Contact Management feature.

### 11. Planning Resilience

Mr. Aaron Berner, PJM, provided educational information regarding possible methods of employing resilience analyses in the RTEP study processes.

### 12. NERC Retirements Study Results

Mr. Aaron Berner, PJM, provided a brief outline of a special assessment being performed by NERC in relation to accelerated generation retirements.

### 13. Model Build Activity Update

Mr. Jonathan Thompson, PJM, provided an update regarding current model build activities, including the 2018 series MMWG/MOD-032 cases.

### 14. Reliability Compliance Update

Mr. Christopher Moran, PJM, provided an update on the activities, issues and items of interest at NERC, SERC, and RFC.

## Information Only

### Elections for Winter Capacity Interconnection Rights (CIRs) 2022/2023

To further support resource aggregation for which the PJM Tariff already provides, PJM is pursuing formation of a long term process for winter Capacity Interconnection Rights ("CIRs") that would be incorporated in the New Services Queue which will be discussed at the Planning Committee. Pending formation of a final process PJM established in 2016 through Docket No. ER17-367, a process for a year by year transitional period during which intermittent resources and environmentally limited generation resources may request additional winter CIRs. This transitional study period is being continued for an additional year pending completion of those discussions held at the Planning Committee. This transitional study would be a study to make additional capability available for only the 2022/2023 Delivery Year and is the same as PJM used during the first year for the 2020/2021 Delivery Year.

Generation Owners of Intermittent Resources and Environmentally Limited Resources which seek to obtain additional Capacity Interconnection Rights related to the winter period (defined as November through April of a Delivery Year) for the purposes of aggregation under the Tariff, Attachment DD, must submit the following

information to be eligible for this study:

- Resource name
- Location (e.g. substation name)
- Queue Number
- Company
- Generation type (intermittent or Environmentally Limited Generation Resource)
- Total amount of CIR (MW) being requested (CIR amount = current CIR + incremental CIR for this transitional study)

The projects will be queued in the order the request has been received for allocating Winter CIRs based on the available transmission capability.

**PJM will start to accept requests starting Friday August 31, 2018. All requests must be submitted no later than Wednesday, October 31, 2018 by 5:00PM Eastern Time. Please submit this information to [TransitionalCIRrequests@pjm.com](mailto:TransitionalCIRrequests@pjm.com).** If you have any questions regarding this communication, please contact [TransitionalCIRrequests@pjm.com](mailto:TransitionalCIRrequests@pjm.com).

### **FERC Order 845 Compliance Requirements**

PJM hosted a Special Planning Committee meeting on August 20 to review potential changes to PJM Manuals and the OATT to meet compliance with FERC Order 845. PJM assessed that seven of the ten reforms will result in minimal changes to the Interconnection Process. The remaining three (Option to Build, Reporting Requirements, and Surplus Interconnection Service) will require extensive changes including new processes. PJM will host a follow up session on September 21.

### **Future Meeting Dates**

September 21, 2018	1:00 p.m.	Special PC: Order 845 Compliance Requirements	Teleconference / WebEx
October 11, 2018	9:00 a.m.	Planning Committee	PJM Conference & Training Center/ WebEx
November 8, 2018	9:00 a.m.	Planning Committee	PJM Conference & Training Center/ WebEx
December 13, 2018	9:00 a.m.	Planning Committee	PJM Conference & Training Center/ WebEx

### **Attendance List**

Suzanne Glatz (Chair)	PJM Interconnection, LLC	Not Applicable
Anisha Fernandes (Secretary)	PJM Interconnection, LLC	Not Applicable
Edward Achaab	AEP Energy Partners, Inc.	Other Supplier
Robert Cundiff	AEP Energy Partners, Inc.	Other Supplier
Nicolas Koehler	AEP Indiana-Michigan Transmission Company, Inc.	Transmission Owner
Jamie Lejcar	Allegheny Electric Cooperative, Inc.	Electric Distributor
Ryan Dolan	American Municipal Power	Electric Distributor
Steven Lieberman	American Municipal Power, Inc.	Electric Distributor
Gary Fuerst	American Transmission Systems, Inc.	Transmission Owner
Brock Ondayko	Appalachian Power Company	Transmission Owner
Evan Wilcox	Appalachian Power Company	Transmission Owner
Takis Laios	Appalachian Power Company	Transmission Owner
Hugh Scott	Baltimore Gas and Electric Company	Transmission Owner
Eric Yeh	Baltimore Gas and Electric Company	Transmission Owner
Stephen Kelly	Brookfield Energy Marketing LP	Other Supplier
Greg Poulos	CAPS	Not Applicable
Barry Trayers	Citigroup Energy, Inc.	Other Supplier
John Garavaglia	Commonwealth Edison Company	Transmission Owner
Kevin Chamberlain	Commonwealth Edison Company	Transmission Owner
Paul Mills	Commonwealth Edison Company	Transmission Owner
Ronald Regner	Commonwealth Edison Company	Transmission Owner
Thomas Leeming	Commonwealth Edison Company	Transmission Owner

William Allen	Commonwealth Edison Company	Transmission Owner
Rehan Gilani	ConEdison Energy, Inc.	Other Supplier
Carl Johnson	Customized Energy Solutions, Ltd.	Not Applicable
Guy Filomena	Customized Energy Solutions, Ltd.	Not Applicable
Jonathan Sasser	Customized Energy Solutions, Ltd.	Not Applicable
John Horstmann	Dayton Power & Light Company (The)	Transmission Owner
Tim Bockhorn	Dayton Power & Light Company (The)	Transmission Owner
Joseph DeLosa	DE Public Service Commission	Not Applicable
David Hastings	Dhast Co	Not Applicable
James Davis	Dominion Energy Marketing, Inc.	Generation Owner
Connie Lowe	Dominion Virginia Power	Not Applicable
George Owens	Downes Associates, Inc.	Other Supplier
Steve Steinkuhl	Duke Energy Business Services LLC	Transmission Owner
Julie Mason	Duke Energy Ohio, Inc.	Transmission Owner
Breanne Melius	Duquesne Light Company	Transmission Owner
Elizabeth Cook	Duquesne Light Company	Transmission Owner
Tonja Wicks	Duquesne Light Company	Transmission Owner
Iker Chocarro Aguirrebengoa	E.ON Climate & Renewables North America, Inc.	Generation Owner
Amanda Stacy	East Kentucky Power Cooperative, Inc.	Transmission Owner
Darrin Adams	East Kentucky Power Cooperative, Inc.	Transmission Owner
John Brodbeck	EDP Renewables North America, LLC	Other Supplier
Malcolm Ainspan	Energy Curtailment Specialists, Inc.	Not Applicable
Bruce Campbell	EnergyConnect, Inc.	Other Supplier
Melanie Sanders	Exelon Business Services Company, LLC	Transmission Owner
Pablo Ovando	Exelon Business Services Company, LLC	Transmission Owner
Robert Taylor	Exelon Business Services Company, LLC	Transmission Owner
Sharon Midgley	Exelon Business Services Company, LLC	Transmission Owner
Christopher Nekolny	Exelon Generation Co., LLC	Generation Owner
Roozbeh Shegarfi	Exelon Generation Co., LLC	Generation Owner
Aasawari Pawar	First Solar	Not Applicable
Enrique Silva	First Solar	Not Applicable
Sally Thomas	FirstEnergy Corp.	Transmission Owner
Andrew Horne	FirstEnergy Solutions Corp.	Transmission Owner
Jeff Stuchell	FirstEnergy Solutions Corp.	Transmission Owner
Jim Benchek	FirstEnergy Solutions Corp.	Transmission Owner
Jon Schneider	FirstEnergy Solutions Corp.	Transmission Owner
Juan Bueno	FirstEnergy Solutions Corp.	Transmission Owner
Lawrence Hozempa	FirstEnergy Solutions Corp.	Transmission Owner
Lou D'Alessandris	FirstEnergy Solutions Corp.	Transmission Owner
Thomas Bainbridge	FirstEnergy Solutions Corp.	Transmission Owner
Travis Stewart	Gabel and Associates	Not Applicable
Laurie Oppel	Grid Advisers Inc	Not Applicable
Robert Gramlich	Grid Strategies LLC	Not Applicable
Rachel Hulett	Gridliance, GP, LLC	Not Applicable
David Pratzon	GT Power Group	Not Applicable
Tom Hyzinski	GT Power Group	Not Applicable
Mike Gahimer	IN Office of Utility Consumer Counselor	End User Customer
Aatif Musani	ITC Interconnection, LLC	Transmission Owner
Kent Chandler	Kentucky Government	Not Applicable
Sharon Segner	LS Power Transmission, LLC	Transmission Owner
David Mabry	McNeese Wallace & Nurick LLC	Not Applicable
Erik Hanser	Michigan Public Service Commission	Not Applicable
Christin Domian	Mitsubishi Electric Power Products Inc.	Not Applicable
David Brown	New Jersey Board of Public Utilities	Not Applicable
Zainab Nawaz	New Jersey Board of Public Utilities	Not Applicable
George Kogut	New York Power Authority	Other Supplier
Ed Benson	NextEra Energy Marketing LLC	Other Supplier
Gabriel Hollis	NextEra Energy Transmission, LLC	Other Supplier
Miles Taylor	Northern Indiana Public Service Company	Other Supplier
Brian Kauffman	NRG Curtailment Solutions	Other Supplier
Frederick Heinle	Office of the Peoples Counsel for the District of Columbia	End User Customer
Yohannes Mariam	Office of the Peoples Counsel for the District of Columbia	End User Customer
Tom Schmidt	Ohio Electric Cooperatives	Not Applicable
Adrien Ford	Old Dominion Electric Cooperative	Electric Distributor
Mark Ringhausen	Old Dominion Electric Cooperative	Electric Distributor
William Pezalla	Old Dominion Electric Cooperative	Electric Distributor
Gregory Carmean	OPSI	Not Applicable





# Draft Meeting Minutes

Aimee O'Neill	Other	Not Applicable
Gregory Goss	Other	Not Applicable
Melanie Goss	Other	Not Applicable
Dolores Krick	Other	Not Applicable
Patti Hankins	Other	Not Applicable
Douglas Dale	PECO Energy Company	Transmission Owner
Amber Young	PEPCO Holdings, Inc.	Not Applicable
Patricia Kurowski	PEPCO Holdings, Inc.	Transmission Owner
Aaron Berner	PJM Interconnection, LLC	Not Applicable
Alex Worcester	PJM Interconnection, LLC	Not Applicable
Alexandra Scheirer	PJM Interconnection, LLC	Not Applicable
Andrew Levitt	PJM Interconnection, LLC	Not Applicable
Andrew Gledhill	PJM Interconnection, LLC	Not Applicable
Anupama Janapareddy	PJM Interconnection, LLC	Not Applicable
Art Wolfe	PJM Interconnection, LLC	Not Applicable
Brian Chmielewski	PJM Interconnection, LLC	Not Applicable
Brindavani Malladi	PJM Interconnection, LLC	Not Applicable
David Anders	PJM Interconnection, LLC	Not Applicable
Ed Franks	PJM Interconnection, LLC	Not Applicable
Emma Nix	PJM Interconnection, LLC	Not Applicable
Eric Hsia	PJM Interconnection, LLC	Not Applicable
Henry (Jack) Thomas	PJM Interconnection, LLC	Not Applicable
Janell Fabiano	PJM Interconnection, LLC	Not Applicable
Jason Quevada	PJM Interconnection, LLC	Not Applicable
Jason Shoemaker	PJM Interconnection, LLC	Not Applicable
Jeffrey Goldberg	PJM Interconnection, LLC	Not Applicable
Jerry Bell	PJM Interconnection, LLC	Not Applicable
Jim Glennon	PJM Interconnection, LLC	Not Applicable
Jim Snow	PJM Interconnection, LLC	Not Applicable
John Reynolds	PJM Interconnection, LLC	Not Applicable
Ken Schuyler	PJM Interconnection, LLC	Not Applicable
Larry Farmer	PJM Interconnection, LLC	Not Applicable
Laura Walter	PJM Interconnection, LLC	Not Applicable
Madalyn Beban	PJM Interconnection, LLC	Not Applicable
Marilyn Jayachandran	PJM Interconnection, LLC	Not Applicable
Mark Sims	PJM Interconnection, LLC	Not Applicable
Mary Ellen Driscoll	PJM Interconnection, LLC	Not Applicable
Matthew LaRocque	PJM Interconnection, LLC	Not Applicable
Megan McLavery	PJM Interconnection, LLC	Not Applicable
Michele Greening	PJM Interconnection, LLC	Not Applicable
Molly Mooney	PJM Interconnection, LLC	Not Applicable
Nicolae Dumitriu	PJM Interconnection, LLC	Not Applicable
Nicole Bugay	PJM Interconnection, LLC	Not Applicable
Patricio Rocha-Garrido	PJM Interconnection, LLC	Not Applicable
Pauline Foley	PJM Interconnection, LLC	Not Applicable
Phil Yum	PJM Interconnection, LLC	Not Applicable
Rachel Buck	PJM Interconnection, LLC	Not Applicable
Rebecca Carroll	PJM Interconnection, LLC	Not Applicable
Jonathan Thompson	PJM Interconnection, LLC	Not Applicable
Amanda Egan	PJM Interconnection, LLC	Not Applicable
Scott Baker	PJM Interconnection, LLC	Not Applicable
Steve Herling	PJM Interconnection, LLC	Not Applicable
Susan Snyder	PJM Interconnection, LLC	Not Applicable
Suzanne Coyne	PJM Interconnection, LLC	Not Applicable
Tom Falin	PJM Interconnection, LLC	Not Applicable
Emanuel Bemabeu	PJM Interconnection, LLC	Not Applicable
Joseph Tutino	PJM Interconnection, LLC	Not Applicable
Collin Edgar-Smith	PJM Interconnection, LLC	Not Applicable
Christopher Moran	PJM Interconnection, LLC	Not Applicable
Zelalem Tekle	PowerGEM	Not Applicable
Chip Richardson	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Cleveland Richards	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
John Feller	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Phil Penny	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Shadab Ali	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Steven Nadel	PPL Electric Utilities Corp. dba PPL Utilities	Transmission Owner
Gary Greiner	PSEG Energy Resources and Trade LLC	Transmission Owner



# Draft Meeting Minutes

Mohamed Zahidi  
Richard Wemsing  
William Lavista  
Alexander Stern  
Daniel Hutt  
Esam Khadr  
Josh Rawley  
Leonid Lyakhovich  
Tom Hoatson  
Brian O'Boyle  
Roleto Mangonon  
Rory Sweeney  
Andy Peebles  
Kenneth Foladare  
Weili Yi  
Edrissa Cham  
Adam Weber  
David Essah  
Ronnie Bailey  
James Wilson

PSEG Energy Resources and Trade LLC  
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Public Service Electric & Gas Company  
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Public Service Electric & Gas Company  
Public Service Electric & Gas Company  
Riverside Generating, LLC  
Rockland Electric Company  
Rockland Electric Company  
RTO Insider  
Saracen Energy East LP  
Tangibl  
The Energy Authority, Inc  
Tradewind Energy, Inc.  
Union Electric Company d/b/a Ameren Missouri  
Virginia State Corporation Commission  
Virginia Electric & Power Company  
Wilson Energy Economics

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

Author: Anisha Fernandes