



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

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

- 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.
- 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 <a href="mailto:TransitionalCIRrequests@pim.com">TransitionalCIRrequests@pim.com</a>. If you have any questions regarding this communication, please contact <a href="mailto:TransitionalCIRrequests@pim.com">TransitionalCIRrequests@pim.com</a>.

#### **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	Appalachain Power Company	Transmission Owner
Evan Wilcox	Appalachain 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 Rehan Gilani Carl Johnson Guy Filomena Jonathan Sasser John Horstmann

Tim Bockhorn Joseph DeLosa David Hastings

James Davis Connie Lowe George Owens Steve Steinkuhl

Julie Mason
Breanne Melius

Breanne Melius Elizabeth Cook Tonja Wicks

Iker Chocarro Aguirrebengoa

Amanda Stacy
Darrin Adams
John Brodbeck
Malcolm Ainspan
Bruce Campbell
Melanie Sanders
Pablo Ovando

Robert Taylor
Sharon Midgley
Christopher Nekolny

Christopher Nekolny Roozbeh Shegarfi Aasawari Pawar Enrique Silva Sally Thomas

Andrew Horne
Jeff Stuchell
Jim Benchek
Jon Schneider
Juan Bueno
Lawrence Hozempa
Lou D'Alessandris
Thomas Bainbridge
Travis Stewart
Laurie Oppel
Robert Gramlich
Rachel Hulett

Tom Hyzinski Mike Gahimer

David Pratzon

Aatif Musani Kent Chandler Sharon Segner David Mabry Erik Hanser Christin Domian David Brown Zainab Nawaz George Kogut Ed Benson Gabriel Hollis

Miles Taylor Brian Kauffman

Frederick Heinle Yohannes Mariam Tom Schmidt

Tom Schmidt
Adrien Ford
Mark Ringhausen
William Pezalla

Gregory Carmean

Commonwealth Edison Company

ConEdison Energy, Inc.

Customized Energy Solutions, Ltd.
Customized Energy Solutions, Ltd.
Customized Energy Solutions, Ltd.
Customized Energy Solutions, Ltd.
Dayton Power & Light Company (The)
Dayton Power & Light Company (The)
DE Public Service Commission

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Dominion Energy Marketing, Inc. Dominion Virginia Power Downes Associates, Inc.

Duke Energy Business Services LLC

Duke Energy Ohio, Inc.
Duquesne Light Company
Duquesne Light Company
Duquesne Light Company

E.ON Climate & Renewables North America, Inc. East Kentucky Power Cooperative, Inc. East Kentucky Power Cooperative, Inc. EDP Renewables North America, LLC Energy Curtailment Specialists, Inc.

EnergyConnect, Inc.

First Solar

Exelon Business Services Company, LLC Exelon Business Services Company, LLC Exelon Business Services Company, LLC Exelon Business Services Company, LLC

Exelon Generation Co., LLC Exelon Generation Co., LLC

First Solar
FirstEnergy Corp.
FirstEnergy Solutions Corp.
Gabel and Associates
Grid Advisers Inc
Grid Strategies LLC
Gridliance, GP, LLC
GT Power Group

GT Power Group

IN Office of Utility Consumer Counselor

IN Office of Utility Consumer Counselor
ITC Interconnection, LLC
Kentucky Government
LS Power Transmission, LLC
Michigan Public Service Commission
Mitsubishi Electric Power Products Inc.
New Jersey Board of Public Utilities
New Jersey Board of Public Utilities
New York Power Authority
NextEra Energy Marketing LLC
Northern Indiana Public Service Company

NRG Curtailment Solutions

Office of the Peoples Counsel for the District of Columbia Office of the Peoples Counsel for the District of Columbia

Ohio Electric Cooperatives
Old Dominion Electric Cooperative
Old Dominion Electric Cooperative
Old Dominion Electric Cooperative

OPSI

Transmission Owner Other Supplier

Not Applicable Not Applicable Not Applicable

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Not Applicable Generation Owner Not Applicable Other Supplier Transmission Owner

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Other Supplier Not Applicable Other Supplier

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Not Applicable
End User Customer
Transmission Owner

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

Other Supplier
End User Customer
End User Customer
Not Applicable
Electric Distributor
Electric Distributor
Electric Distributor
Not Applicable



Aimee O'Neill Other **Gregory Goss** Other Melanie Goss Other Dolores Krick Other Patti Hankins Other Douglas Dale PECO Energy Company Amber Young PEPCO Holdings, Inc. PEPCO Holdings, Inc. Patricia Kurowski Aaron Berner PJM Interconnection, LLC Alex Worcester PJM Interconnection, LLC Alexandra Scheirer PJM Interconnection, LLC Andrew Levitt PJM Interconnection, LLC PJM Interconnection, LLC Andrew Gledhill Anupama Janapareddy PJM Interconnection, LLC Art Wolfe PJM Interconnection, LLC Brian Chmielewski PJM Interconnection, LLC Brindavani Malladi PJM Interconnection, LLC David Anders PJM Interconnection, LLC Ed Franks PJM Interconnection, LLC PJM Interconnection, LLC Emma Nix Eric Hsia PJM Interconnection, LLC Henry (Jack) Thomas PJM Interconnection. LLC Janell Fabiano PJM Interconnection, LLC PJM Interconnection, LLC Jason Quevada Jason Shoemaker PJM Interconnection, LLC Jeffrey Goldberg PJM Interconnection. LLC Jerry Bell PJM Interconnection, LLC Jim Glennon PJM Interconnection, LLC Jim Snow PJM Interconnection, LLC John Reynolds PJM Interconnection, LLC Ken Schuyler PJM Interconnection, LLC Larry Farmer PJM Interconnection, LLC Laura Walter PJM Interconnection, LLC Madalyn Beban PJM Interconnection, LLC Marilyn Jayachandran PJM Interconnection, LLC Mark Sims PJM Interconnection, LLC Mary Ellen Driscoll PJM Interconnection, LLC Matthew LaRocque PJM Interconnection, LLC Megan McLaverty PJM Interconnection, LLC Michele Greening PJM Interconnection, LLC Molly Mooney PJM Interconnection, LLC Nicolae Dumitriu PJM Interconnection, LLC Nicole Bugay PJM Interconnection, LLC Patricio Rocha-Garrido PJM Interconnection, LLC Pauline Foley PJM Interconnection, LLC Phil Yum PJM Interconnection, LLC Rachel Buck PJM Interconnection, LLC Rebecca Carroll PJM Interconnection, LLC Jonathan Thompson PJM Interconnection, LLC Amanda Egan PJM Interconnection, LLC Scott Baker PJM Interconnection, LLC Steve Herling PJM Interconnection, LLC Susan Snyder PJM Interconnection, LLC Suzanne Coyne PJM Interconnection, LLC Tom Falin PJM Interconnection, LLC Emanuel Bernabeu PJM Interconnection, LLC Joseph Tutino PJM Interconnection, LLC Collin Edgar-Smith PJM Interconnection, LLC Christopher Moran PJM Interconnection, LLC Zelalem Tekle PowerGEM Chip Richardson PPL Electric Utilities Corp. dba PPL Utilities

Cleveland Richards

John Feller

Phil Penny

Shadab Ali

Steven Nadel

Gary Greiner

Not Applicable Not Applicable Not Applicable Not Applicable Not Applicable Transmission Owner Not Applicable Transmission Owner Not Applicable Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner Transmission Owner

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PPL Electric Utilities Corp. dba PPL Utilities

PSEG Energy Resources and Trade LLC





Adam Weber

David Essah

Ronnie Bailey

James Wilson

PSEG Energy Resources and Trade LLC PSEG Energy Resources and Trade LLC PSEG Energy Resources and Trade LLC 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 Virgina State Corporation Commission Virginia Electric & Power Company Wilson Energy Economics

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

Author: Anisha Fernandes