

<u>Meeting Minutes</u> <u>PJM Interconnection</u> <u>Energy Storage Resources in RPM Discussion</u> <u>PJM Conference and Training Center</u> <u>Valley Forge, PA</u> <u>April 30th, 2014</u> <u>10:00 AM - 12:00 PM</u>

Members Present:

Jeff Cramer 38 North Solutions Eric Hsieh A123 Systems Tom Rutigliano Achieving Equilibrium LLC David Canter AEP Pat Hayes Ameren Takis Laios American Electric Power Joseph Kerecman Calpine Energy Services, L.P. Bill Dugan Customized Energy Solutions, Ltd. Carl Johnson Customized Energy Solutions, Ltd. Guv Filomena Customized Energy Solutions, Ltd. Judith Judson McQueeney Customized Energy Solutions, Ltd. John Horstmann Dayton Power & Light Company John Farber DE Public Service Commission Pamela Knotts **DE Public Service Commission** Mingwei Chen Dominion Energy Marketing, Inc. Catharine Lacy **Dominion Virginia Power** George Owens Downes Associates, Inc. **Duke Energy Business Services LLC** Kenneth Jennings Steve Steinkuhl **Duke Energy Business Services LLC** Chuck Dugan East Kentucky Power Cooperative, Inc. Alan Cordova EDP RENOVÁVEIS, S.A. Mike Grimes EDP RENOVÁVEIS, S.A. Bruce Campbell EnergyConnect, Inc. Rebecca Stadelmeyer Exelon Business Services Company Eva Gardow FirstEnergy Corporation FirstEnergy Solutions Corporation Martin Bolan Michael Borgatti Gable and Associates Neal A. Fitch GenOn Energy Management, LLC David Pratzon **GT** Power Group John Webster Icetec.com, Inc.



Alex Ma Fred Rohs Ralph De Geeter Kevin Dean Mariann Wilczek George Kogut David Applebaum **Brian Hamilton** Nicole Sitaraman Fred Heizer **Melanie Sanders** Melanie Santiago-Mosier Michele Greening John Citrolo Frank Czigler John Fernandes Tom Hoatson Barbara Scoglietti Mike Jacobs Louis Slade

PJM Staff Present:

Michael Herman, Facilitator	PJM Interconnection, LLC
Aaron Berner	PJM Interconnection, LLC
Adam Keech	PJM Interconnection, LLC
Dave Pomian	PJM Interconnection, LLC
David Anders	PJM Interconnection, LLC
Ed Hoey	PJM Interconnection, LLC
Francis Barrett	PJM Interconnection, LLC
Jerry Bell	PJM Interconnection, LLC
Jim Kirby	PJM Interconnection, LLC
Jonathan Sasser	PJM Interconnection, LLC
Joseph Ciabattoni	PJM Interconnection, LLC
Mike Bryson	PJM Interconnection, LLC
Mike Ward	PJM Interconnection, LLC
Murty Bhavaraju	PJM Interconnection, LLC
Scott Baker	PJM Interconnection, LLC
Tom Falin	PJM Interconnection, LLC
Jason Quevada, Secretary	PJM Interconnection, LLC

Invenergy Marina Energy, LLC Maryland Public Service Commission McNees Wallace & Nurick LLC New York ISO New York Power Authority NextEra Energy Power Marketing, LLC North American Electric Reliability Corporation Office of the Peoples Counsel for the District of Columbia Ohio PUC Other Other PPL EnergyPlus, L.L.C. PSEG Public Service Electric & Gas Company **RES** Americas Riverside Generating, LLC Tangent Energy Solutions, Inc. Union of Concerned Scientists Virginia Electric & Power Company



1. ADMINISTRATION

Mr. Herman called the meeting to order and then asked Mr. Quevada to call the roll. Mr. Herman then asked for additional items for the agenda, and there were no suggestions.

2. DISCUSS TARGETED WORK PLAN

Mr. Herman reviewed a targeted work plan for the discussion. The plan roughly calls for monthly meetings until August 2014, leaving time for any recommended proposal to be implemented in advance of the May 2015 Base Residual Auction.

3. DESIGN COMPONENTS

PJM continued gathering design components from the members, and will continue to solicit further design components in future meetings. PJM will make available the initial design component matrix on the meeting's website.

4. ACTION ITEMS

Through discussion, several action items (and questions) were identified for PJM to discuss in future meetings:

- What are PJM's thoughts/proposals on Emergency condition obligations?
- Education
 - What are the obligations of a Capacity Resource?
 - What is the current process for determine UCAP?
 - Describe how opportunity cost is modeled in energy markets.

5. FUTURE MEETINGS

TBD

TBD

Webinar/CTC, Norristown, PA

Author: Jason Quevada, PJM Draft: 5/6/2014 Final: 6/16/14 Docs: 793415 v2