

Meeting Minutes PJM Interconnection Energy Storage Resources in RPM Discussion PJM Conference and Training Center Valley Forge, PA February 26th, 2014 2:00 PM

Members Present:

Marco Ferrara 24M Technologies, Inc.

Tom Rutigliano Achieving Equilibrium LLC

Praveen Kathpal AES Energy Storage, LLC

Takis Laios American Electric Power

Chris Norton American Municipal Power, Inc.
Gary Fuerst American Transmission Systems, Inc.

Brock Ondayko Appalachian Power Company

Marija Prica Booz Allen Hamilton Andrew Kaplan Brown Rudnick LLP

Joseph Kerecman Calpine Energy Services, L.P.

Stewart Harris Carmen Group Inc.
Rehan Gilani ConEdison Energy, Inc.

Dann Price Constellation NewEnergy, Inc.

Benjamin Levy Constellation NewEnergy, Inc.

Dan Griffiths Consumer Advocates of PJM States

Raj Chintapalli

Bill Dugan

Customized Energy Solutions, Ltd.

Judith Judson McQueeney

John Horstmann

John Farber

De Public Service Commission

Janhavi Dharmadhikari (ES)

Customized Energy Solutions, Ltd.

Dayton Power & Light Company

DE Public Service Commission

Dominion Energy Marketing, Inc

Catharine Lacy Dominion Virginia Power
Rick Feierabend Dominion Virginia Power
Jeff Currier Dominion Virginia Power
Emily Wilmoth Dominion Virginia Power
George Owens Downes Associates, Inc.

Kenneth Jennings Duke Energy Business Services LLC Steve Steinkuhl Duke Energy Business Services LLC Spencer Hanes Duke Energy Business Services LLC

Jason Harchick Duquesne Light Company



Jason Cox Dynegy Power Marketing, Inc

Edgardo Manansala East Kentucky Power Cooperative, Inc.
Chuck Dugan East Kentucky Power Cooperative, Inc.

Katherine Hamilton Energy Storage Association

Bruce Campbell EnergyConnect, Inc.

Rebecca Stadelmeyer Exelon Business Services Company, LLC

Ron Chu Exelon Generation

David Marton FirstEnergy Corporation

Martin Bolan FirstEnergy Corporation

Michael Borgatti Gable and Associates

David Pratzon GT Power Group

Alex Ma Invenergy

Kenneth Foladare Iron Mountain Generation LLC

Robert O'Connell JPMorgan Ventures Energy Corporation

Kevin Dean McNees Wallace & Nurick LLC

Christin Domian Mitsubishi Electric Power Products Inc.

Skyler Marzewski Monitoring Analytics, LLC

Richard Baxter Mustang Prairie

Larry Barth New Jersey Resources

Vijay Singh NextEra Energy

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

Michele Greening PPL EnergyPlus, L.L.C.

John Fernandes RES Americas

Tom Hoatson Riverside Generating, LLC Roleto Mangonon Rockland Electric Company

Eric Wolf SNL

Barbara Scoglietti Tangent Energy Solutions, Inc.
Louis Slade Virginia Electric & Power Company

Mike Jacobs Xtreme Power

PJM Staff Present:

Michael Herman, Facilitator PJM Interconnection, LLC Aaron Berner PJM Interconnection, LLC Adrien Ford PJM Interconnection, LLC **David Hislop** PJM Interconnection, LLC **David Pomian** PJM Interconnection, LLC Jeremy Lin PJM Interconnection, LLC Jerry Bell PJM Interconnection, LLC Joseph Ciabattoni PJM Interconnection, LLC Scott Baker PJM Interconnection, LLC



Tom Falin PJM Interconnection, LLC Andrew Gledhill, Secretary PJM Interconnection, LLC

1. ADMINISTRATION

- A. Mr. Herman called the meeting to order and then asked Mr. Gledhill to call the roll. Mr. Herman then asked for additional items for the agenda, and there were no suggestions.
- B. Mr. Herman gave an overview of process and meeting logistics, explaining that the group would be using the CBIR "lite" process.

2. REVIEW OF PROBLEM STATEMENT AND ISSUE CHARGE

- A. Mr. Herman reviewed the Problem/Opportunity Statement and Issue Charge. The goal is to have consensus on a single proposal (Tier I). Failing that, the group may put forth multiple proposals (Tier II).
- B. Ms. Hamilton from the Energy Storage Association made a prepared statement outlining their support for Energy Storage in the Reliability Pricing Market (RPM) program.

3. 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 for the May 2015 Base Residual Auction.

4. EDUCATION

- A. Mr. Herman reviewed the CBIR "lite" process which will be followed in this group. The group will ultimately report up through parent committees with Tier I or II proposal(s), with them typically requiring one to two meetings for review and approval. Within the group, no voting will take place, only polling.
- B. Mr. Ciabattoni led a discussion of the Frequently Asked Questions document, with stakeholders asking clarifying questions.

5. INTEREST IDENTIFICATION

PJM led a discussion on interest identification. PJM will make available the interest identification spreadsheet on the meeting's website, and will continue to solicit further interests from stakeholders.



6. ACTION ITEMS

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

- What is a Capacity Resource?
- What was the reason for the focused interest on 10 hours of operation for pumped hydro resources?
- Education on the Pumped Hydro model of scheduling/operation and how it might apply to energy storage resources.

7. FUTURE MEETINGS

March 26, 2014

2:00-4:00 pm

Webinar/CTC, Norristown, PA

Author: Andrew Gledhill, PJM

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