



**PJM Interconnection  
Load Analysis Subcommittee  
Minutes of the 288<sup>th</sup> Meeting  
Conference Call  
December 7, 2010**

**Members Present:**

John Reynolds, Chairman	PJM Interconnection, L.L.C.
Debbie Kanner	Allegheny Power
Randy E. Holliday	American Electric Power
John Goodenough	Baltimore Gas & Electric Company
Bill Moll	FirstEnergy Solutions Corp.
Timothy Devitt	PECO Energy Company
Kemm Farney	Pepco Holdings Inc.
Susan M. Mushock	PPL Electric Utilities
Steve Wreschnig	Public Service Electric & Gas
Ayana Wood	UGI Utilities, Inc.
Molly Mooney, Secretary	PJM Interconnection, L.L.C.

**Others Present:**

Jeff Brown	American Electric Power
Mark Bock	Baltimore Gas & Electric Company
Duane Dahlquist	Blue Ridge Power Agency
John Citrolo	Calpine Energy Services, L.P.
Haibin Yu	Calpine Energy Services, L.P.
Matt Suhr	Calpine Energy Services, L.P.
Robert Zacher	Commonwealth Edison Company
Jeff Burke	Dominion Retail, Inc.
James Habberfield	Duquesne Light Company
Audrey Lyke	Exelon Generation Co., L.L.C.
Valerie Martin	Federal Energy Regulatory Commission
Michael Stansky	FirstEnergy Solutions Corporation
James Wilson	Independent Consultant
Frank Monforte	Itron
Andy Sukenik	Itron
Charles Fenner	Macquarie Energy L.L.C.
David Hamilton	Old Dominion Electric Cooperative
James Wright	Old Dominion Electric Cooperative
Yasmin Snowberger	PA PUC
David Woodruff	PPL Electric Utilities
Jim Hebson	PSEG Energy Resources and Trade L.L.C.
Mike Batta	Virginia Electric & Power Company
Yashodhan Dongre	Virginia Electric & Power Company
Abhijit Rajan	Virginia Electric & Power Company
John J. Slivka	PJM Interconnection, L.L.C.
Jennifer Warner-Freeman	PJM Interconnection, L.L.C.



## **1. ADMINISTRATIVE**

PJM took attendance and asked for any additional agenda items.

## **2. MINUTES**

Minutes from the November 18, 2010 meeting were reviewed and approved. Ms. Lyke from Exelon asked that the Exelon comments from the November 18<sup>th</sup> meeting be posted to the Load Analysis Subcommittee (LAS) webpage. The Exelon comments and final minutes will be posted to the LAS webpage.

## **3. PREPARATION FOR 2011 PJM LOAD REPORT**

Mr. Reynolds requested any potential forecast adjustments to be considered in the 2011 Load Report. The adjustments should be for large load changes and can be emailed to PJM.

## **4. STATUS OF IMPLEMENTATION OF ITRON RECOMMENDATIONS**

Ms. Warner-Freeman reviewed analysis related to the implementation of the Itron recommendations. Analysis of out of sample tests comparing fitted values to actual values was shared. There were six models that were analyzed and the estimation end period for these six models was varied to end in years 2003 through 2009. Each zonal NCP and CP model has a one-year-out through seven-year-out Mean Absolute Percent Error (MAPE). There is also an average MAPE for each forecast horizon, as well as a summary of each instance each model had the lowest MAPE among all model specifications.

Ms. Warner-Freeman next reviewed analysis comparing weather-normalized results to model forecast results for the six models with estimation end periods of 2003 through 2009. Again, each zonal NCP and CP model has a one-year-out through seven-year-out percent error and average MAPE. A summary counts each instance each model had the lowest MAPE.

Finally, Ms. Warner-Freeman discussed results of implementing Itron recommendation #7 concerning CP allocation. Results for continuing with a status quo model and a model which includes all of Itron's recommendations were shared.

## **5. MEMBER RESPONSE TO PRELIMINARY MODEL RESULTS**

PJM received three written responses to Itron's recommendations. Mr. Farney from PHI spoke about an article that disproves the misconception that long range studies for forecast accuracy have not been done. He said that the PJM forecast has pretty amazing forecast accuracy for his zones. He mentioned that, going forward, PJM should try to make their good track record even more accurate by discussing possible changes and choosing improvements. Mr. Farney mentioned that PJM has done a good job and can be trusted to work through their research agenda. Mr. Wilson commented that over the last couple of years the weather normalized peaks have been lower than the forecast and questioned PJM's accuracy.

The second response was received from Public Power Association of New Jersey (PPANJ). One of the signatories of the letter, Mr. Dahlquist stated that he believed the Itron recommendations were sound and that recommendation #1 and recommendation #3 should be implemented. He stated that he thought currently the forecast is producing numbers that are overly conservative.



The third response was received from Calpine. Mr. Suhr questioned how the weights for Index1 were done and thought there should be a more systematic way to come up with the weights. He also raised the concern that the higher weights for Index1 for both population and households caused a downward bias for Index1. Mr. Wilson disagreed that the higher weights for population and households would cause a downward bias for Index1. Mr. Suhr also thought that using Index1 makes the model a lot more complicated.

At the request of the Planning Committee (PC), PJM asked LAS to get on the record and vote on each of the Itron recommendations. Recommendations #4, #5, #6 are not at issue at this time, so only recommendations #1, #2, #3 and #7 were voted upon. The possible votes were laid out as follows:

Yes – include recommendation in the 2011 Load Forecast

No – do not include recommendation in the 2011 Load Forecast

Further Study – do not include recommendation in the 2011 Load Forecast but continue to study

Votes were taken and will be sent to the Planning Committee for review at their December 8<sup>th</sup> meeting. A summary of the voting is below:

<b>Itron Recommendation #1 - Index1 Economic Driver</b>			
<u>Yes</u>	<u>No</u>	<u>No. Further Study</u>	<u>Abstain</u>
8	3	11	1
<b>Itron Recommendation #2 - Price Shift Variable</b>			
<u>Yes</u>	<u>No</u>	<u>No. Further Study</u>	<u>Abstain</u>
0	6	14	3
<b>Itron Recommendation #3 - Average Forecast of Economic Vendors</b>			
<u>Yes</u>	<u>No</u>	<u>No. Further Study</u>	<u>Abstain</u>
8	5	9	2
<b>Itron Recommendation #7 - CP Allocation Methodology</b>			
<u>Yes</u>	<u>No</u>	<u>No. Further Study</u>	<u>Abstain</u>
1	7	14	2

Revised 12/9/10

## 6. NEXT STEPS

LAS voting results will be shared with the Planning Committee on December 8<sup>th</sup> and the Planning Committee voting results will be shared with the Members Reliability Committee on December 15<sup>th</sup>. PJM will work on a draft load report that will be shared with LAS.

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