



**PJM Interconnection
Load Analysis Subcommittee
DRAFT - Minutes of the 288th 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:

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|-------------------------|--|
| 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 18th 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.

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. 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 8th meeting. A summary of the voting is below:

| Itron Recommendation #1 - Index1 Economic Driver | | | |
|---|-----------|--------------------------|----------------|
| <u>Yes</u> | <u>No</u> | <u>No. Further Study</u> | <u>Abstain</u> |
| 8 | 3 | 11 | 1 |
| Itron Recommendation #2 - Price Shift Variable | | | |
| <u>Yes</u> | <u>No</u> | <u>No. Further Study</u> | <u>Abstain</u> |
| 0 | 6 | 14 | 3 |
| Itron Recommendation #3 - Average Forecast of Economic Vendors | | | |
| <u>Yes</u> | <u>No</u> | <u>No. Further Study</u> | <u>Abstain</u> |
| 8 | 5 | 9 | 2 |
| Itron Recommendation #7 - CP Allocation Methodology | | | |
| <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 8th and the Planning Committee voting results will be shared with the Members Reliability Committee on December 15th. PJM will work on a draft load report that will be shared with LAS.

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