



**PJM Interconnection
Load Analysis Subcommittee
Minutes of the 283rd Meeting
Conference Call
September 8, 2009**

Members Present:

Thomas Falin, Sitting in for Chairman	PJM Interconnection, L.L.C.
Debbie Kanner	Allegheny Power
Randy E. Holliday	American Electric Power
Mark Bock	Baltimore Gas & Electric Company
Dale Flaherty	Duquesne Light Company
William C. Moll	FirstEnergy
Kemm Farney	Pepco Holdings Inc.
Susan M. Mushock	PPL Electric Utilities
Michael E. Prendergast	Public Service Electric & Gas
Ayana Wood	UGI Utilities, Inc.
Molly A. Mooney , Secretary	PJM Interconnection, L.L.C.

Others Present:

Rebecca Shaver	Allegheny Power
Jeff Brown	American Electric Power
Takis Laios	American Electric Power
Leon Brunson	Baltimore Gas & Electric Company
Dean Bickerstaf	Constellation Energy Commodities Group, Inc.
Dibyendu Das	Constellation Energy Commodities Group, Inc.
Juan Diaz	Customized Energy Solutions, Ltd.
John Horstmann	Dayton Power & Light Company
Patrick McCullar	Delaware Municipal Electric Corporation
Allen Mitchem	Dominion Virginia Power
Todd Allen	Downes Associates, Inc.
George Owens	Downes Associates, Inc.
Valerie Martin	FERC
Hemant Jain	Hess Corporation
James Wilson	Independent Consultant
Charles Vansant	Longview Power, L.L.C.
Michael Krauthamer	Maryland PSC
Craig Taborsky	Maryland PSC
Steve Cochrane	Moody's Economy.com
Robin Heid	Moody's Economy.com
Rishi Garg	NRDC/FERC Project



Pat Esposito	NRG Power Marketing, L.L.C.
Dave Scarp	ODEC
Kathy McHugh	PECO Energy Company
Randy Kreider	PPL Electric Utilities Corporation
Matt Webb	PPL Electric Utilities Corporation
David Woodruff	PPL Electric Utilities Corporation
Tom Hyzinski	PPL Energy Plus, L.L.C.
John J. Slivka	PJM Interconnection, L.L.C.
Jennifer Warner-Freeman	PJM Interconnection, L.L.C.

1. MEETING ARRANGEMENTS AND INTRODUCTIONS

Mr. Falin temporarily acting as chairman in place of John Reynolds started the conference call and asked for any additional agenda items.

2. PRICE-RESPONSIVE DEMAND

Mr. Falin summarized PJM's initiative to include price-responsive demand (PRD) in the PJM Load Forecast Report and RPM Market. Mr. Falin explained that PRD is load that will be interrupted not at the direction of PJM Operations but will be implemented once Location Margin Pricing (LMP) meets a certain threshold. There will be a new table in the PJM Load Forecast for PRD. Questions about registration and how PRD would be offered in RPM were raised. PJM responded that the Capacity Markets Evolution Committee (CMEC) and Markets group are working on details for implementing PRD. Another comment was that PJM should consider forecasting a projection of PRD once more data is acquired.

3. REVIEW OF LAS ASSIGNMENT

PJM reviewed the assignment from the Planning Committee. LAS is assigned to consider the revised proposal to use a consensus economic forecast to drive the PJM Load Forecast model and come up with a Pro/Con list which will be shared with the Planning Committee at their September 16th meeting.

4. PRESENTATION OF REVISED LECG PROPOSAL

Mr. Wilson presented his revised proposal in which a consensus economic forecast would be used in the PJM Load Forecast model. The consensus economic forecast would be based on a GDP forecast from Blue Chip.



5. RESPONSE BY MEDC TO REVISED LECG PROPOSAL

Mr. Cochrane stated that Moody's Economy.com could be flexible in using the Blue Chip Economic Indicators to create GMP series. He warned that these alternative forecasts would be created using a reverse approach, which is different from what they have done before. If PJM proceeds with this request Moody's would need additional time the first time they are asked to create GMP forecast using the Blue Chip forecast.

6. LAS ROUNDTABLE DISCUSSION OF REVISED LECG PROPOSAL

Comments received from the LAS group included a request to send the Planning Committee a sense of the LAS meeting in which the number in favor and those opposed to the proposal are relayed. Another comment raised was that Moody's Economy.com is the expert on economic forecasting and not PJM. In order to get a sense of the room an informal survey was taken in which 2 were in favor of the revised proposal of switching the economic forecast used in the Load Forecast model to the Blue Chip consensus and 12 were opposed, with 1 abstention.

7. DEVELOPMENT OF REVISED PRO/CON LIST

The revised Pro/Con list attached at the end of the minutes was developed.

Author: Molly A. Mooney
DMS Document Number: 615433



PJM Interconnection	
Proposed: Replace Economy.com Baseline Forecast With Blue Chip Consensus U.S. GDP Forecast	
Pro	Rebuttal and Comments
1 Blue Chip Consensus reflects the views of a majority of forecasters participating in the Blue Chip survey.	*Majority is not always the best forecast (ex. Current recession was not forecasted by majority). *If one compares the list of forecasters participating in the Blue Chip Survey, the NABE survey and the Wall Street Journal survey of forecasters, there is very little overlap. Blue Chip does not include the views of a majority of forecasters.
2 MEDC's forecast of US GDP growth exceeds the "Top Ten Average" of the Blue Chip forecasters for 2011, 2012, and 2013 along with the cumulative growth rate	*Show chart 6 from original proposal. *It is very possible that Moodys will be correct. Even so, being right in one instance does not speak to the quality of the forecast. What should be of interest is how well Moodys has done over the past several decades, and how well the PJM Load Report has done over the past several decades. Such a study is a prerequisite to considering this proposal.
3 Studies show that as a general matter, pooled forecasts such as the Blue Chip Consensus tend to be more accurate than those of individual forecasters	*Issue needs to be studied more and a more thorough search of the literature needs to be done. *2012 is 3 years in the future. The time horizon on the forecast is more than a decade. The literature on forecast accuracy with time horizons this long is almost non-existent. The proper approach is for PJM LAS to actually conduct such a study as a prerequisite to considering this proposal. *Reports by the CBO (CBO's Economic Forecasting Record: 2009 Update) and by the Federal Reserve Board of Governors (Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors, November 2007) demonstrate that that non-consensus forecasts can perform just as well as consensus forecasts.
4 Studies show that pooled forecasts tend to be unbiased; studies also show that individual forecasters' forecasts may show statistical bias toward optimism or pessimism	*Issue needs to be studied more and a more thorough search of the literature needs to be done. *Studies co-authored by Dr. Bock (BGE) and Dr. Farney (PHI) and published in Electric Light and Power show that utility forecasts and NERC regional forecasts are generally unbiased. Bias is not the critical forecasting problem. Forecast efficiency or precision is the forecasting challenge, and the subject is not being discussed. *The FRB article referenced above explains how consensus forecasts are potentially vulnerable to bias that could not occur in a non-consensus forecast. MEDC has every incentive to put out a forecast they will believe will be correct. If MEDC is way off they will lose credibility and, along with it, a number of clients who will switch to competing forecasting firms who performed better over the period in question. Internal forecasters can very often be influenced by their management, as well as what other forecasters in their respective industries are saying.
5 The Blue Chip Consensus is a highly regarded and oft-cited indicator of expected economic growth, and by pooling over 40 forecasts, will never be extreme.	*Being in the middle of the pack is not necessarily an advantage if the pack is wrong. This has been a real estate driven recession. Because of MEDC's great expertise in real estate economics, their work during this recession has been very insightful, contributing to lower forecast variances. *Is there a risk for PJM that the consensus is too low? PJM needs to ensure that it has enough capacity to meet future needs. If Blue Chip Consensus forecast is incorrect, might PJM be caught short?
6 A median U.S. GDP growth forecast can be derived from the Blue Chip Consensus. MEDC's baseline is explicitly a "most likely", not a median, forecast.	Revised proposal would have economic forecast without a probability assigned to it. Alternative scenario will not be a median forecast. MEDC's informed opinions have been very helpful during this recession. Their insights have contributed to smaller forecast variances.
7 The Blue Chip consensus, as an average of many forecasts, will be a more stable forecast over time.	*In an unstable time why would being stable be an advantage? *This is an empirical question that has not been investigated. LAS needs to do a study rather than rely on unproven assertions.
8 MEDC has been one of the least accurate, if not the least accurate, of all the forecasters participating in the Blue Chip survey, based on forecasts of 2009 growth produced in 2007-2008.	*This is based on a forecast for a single year. Past performance is not an indicator of future forecast performance and accuracy. *Since the PJM forecast is based on GMP, it can't be answered, as the Blue Chip does not report GMP. The issues here are fundamental, such as whether the Mid-Atlantic will grow slower or faster than the US. MEDC has been having the Mid Atlantic grow more slowly, and they have been very close on a number of key indicators like employment. A study is needed. *Where is the proof that MEDC is one of the least accurate for 2009? We do not know of any economists that expected the downturn to be so large. What measure is being used to make this statement? We would like to see the evidence for this statement.
9 A majority of other forecasters assign very low probabilities to forecast rates of growth for 2011 and 2012 in the range of MEDC's forecast rates.	Anyone who compares local GMP with national GDP will observe large differences in historical and forecast growth rates.



PJM Interconnection	
Proposed: Replace Economy.com Baseline Forecast With Blue Chip Consensus U.S. GDP Forecast	
Con	Rebuttal and Comments
1 All referenced studies examining accuracy of consensus vs. individual forecasts consider only current year and next year forecasts. Studies do not measure relative accuracy of long-term forecasts (years 2-15).	*This could be viewed as a rebuttal of Pro #3 *Before making any change, we need to understand how the forecasts have performed over longer time periods (5-10 years). More analysis is needed before making such a dramatic change in the PJM forecast procedure.
2 PJM is not aware of any PJM company or ISO/RTO who has adopted a consensus forecast approach.	MEDC was close to the consensus until recently so this was not needed before.
3 Blue Chip forecasts does not include the detail of quarterly values that PJM needs.	* MEDC will produce the quarterly values that PJM needs. *Blue Chip says nothing at all about productivity growth. Because the sectoral growth rates in Blue Chip are averages, they imply that productivity behaves in strange ways. More important, Blue Chip says nothing about whether particular regions will grow faster or slower than the national average. This assignment will leave MEDC making assumptions for about 40 variables where the Blue Chip does not give guidance. Important examples include the price of oil and natural gas.
4 Averaging growth rates (as Blue Chip does) will mask the detail of individual's year-to-year growth, which is especially important at turning points.	The Blue Chip consensus provide annual values for the next five years (and in both Moody's and Blue Chip, values are close to constant beyond that), so it does not "mask the detail of individual year-to-year growth".
5 The proposal would ask MEDC to do something they have not done before (fix the dependent variable then determine independent variables).	*MEDC produces alternative scenarios all the time. Some may be close to the consensus. *In solving this problem, MEDC has no choice but to recycle the assumptions and biases that are embedded in their own forecast. The result will not be a Consensus forecast. *Moody's representatives have repeatedly stated that they develop alternative scenarios for clients "all the time" according to a wide range of specifications, and undoubtedly many of those alternative scenarios are close to the Blue Chip, in light of the fact that nearly all forecasters's views are closer to the Blue Chip.
6 Proposal would result in an economic forecast that is not a consistent scenario; the underlying factors of GDP growth can not be explained to stakeholders, commissions, etc.	*Moody's will prepare a complete alternative scenario with all details just like its Baseline. *Internal consistency is very important, as is the ability to completely understand the data and the assumptions behind the economic forecasts. MEDC is very willing to listen to concerns about their forecasts, and to make adjustments when warranted. They are also able to defend their forecast assumptions and provide a reasonable story about their economic outlook. In addition, they are able to communicate what is changing between forecasts, which is very important in explaining why load forecasts are what they are to management. We really do not like the idea of MEDC manipulating inputs to arrive at the Blue-Chip answer. This is bound to lead to inconsistencies within the forecast. MEDC may not be able to provide reasonable explanations for the assumptions used in the Blue-chip "scenario".
7 Having MEDC produce a customized forecast to replicate Blue Chip GDP forecast may potentially introduce inconsistencies among GDP drivers.	Moody's may further relax the constraint if necessary.
8 Two month lead time needed to develop proposed customized forecast by MEDC. Multiple iterations between MEDC and PJM required, annually.	*Mr. Cochrane at the September 8 meeting, he said he would like an early start but did not say that providing results by first week of November was not feasible. At the earlier meeting he said he "would like to have" two months, he did not say it would take two months. *A two-month lead time makes for a less flexible forecast schedule. If there are questions about data, as there was this past year, PJM could not easily incorporate updated data in a timely manner.
9 If MEDC is looking to PJM to develop inputs, PJM will be in the business of developing US macroeconomic forecasts.	All guidance is general and ex ante.
10 To use Blue Chip forecast, legal issues related to replicating their proprietary forecast must be addressed.	This is addressed by the flexibility provided under the revised proposal.
11 LAS has an established practice of studying proposals before implementation. This proposal does not allow for that.	*This proposal follows the process established by PJM for considering changes to the load forecasting methodology. *Before making any change, we need to understand how the forecasts have performed over longer time periods (5-10 years). More analysis is needed before making such a dramatic change in the PJM forecast procedure.
12 The proposal will lead to winners and losers at the regional level. Stakeholders will not have access to underlying data to validate the assumptions which determine this.	Full details will be available, as for the Baseline. It is not clear what "winners and losers" means; the alternative scenario will result in differences in the GMP values and peak load forecasts, presumably values with a more sound basis due to consistency with the Blue Chip forecast.
13 PJM would likely pursue a brief stakeholder process before deciding to implement the Blue Chip proposal, and to determine any guidance to provide on preparation of the Blue Chip scenario	The stakeholder process is already happening.
14 Past forecasts have used MEDC's baseline US GDP scenario. Continuing to do so would maintain consistency with past forecasting.	
15 Proposal calls for PJM to forecast load using two economic forecasts. PJM hired MEDC to do the economic forecast because PJM is not staffed and does not have the expertise to produced the economic forecast. However, by having PJM select the forecast to adopt, PJM is being put into the role of economic expert.	
16 Two thirds of PJM EDCs use MEDC in their forecast models which is consistent with the economic forecast used in the PJM models. If a consensus forecast is used there will be inconsistencies between member and PJM forecasts which will make it very difficult to explain to management or a Public Service Commission.	
17 Additional cost of asking MEDC to develop an alternative scenario. To produce two load forecasts would require double the effort by PJM staff in a very tight timeframe.	