

PJM Long-Term Load Forecasting Methodology:
Proposal Regarding Economic Forecast
Further Proposal Details, Some Revisions in
Response to Reactions and Concerns

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Main Concerns Expressed at 8/25 Meeting

- Potential difficulties in developing a macroeconomic scenario to match Blue Chip
 - Internal consistency; the story
 - Many assumptions to determine
 - Potential time required
 - Resulting details available; transparency
- Novelty of the approach
 - Moody's economy.com has produced many macro scenarios but not with exactly this specification
 - Other RTOs, PJM members have not done this

Further Proposal Details and Some Revisions

- Further details, some revisions to make the proposed process clearer, address some misunderstandings and expressed concerns, ensure required information is produced
- Proposal distributed September 2; also included as final 3 slides of this presentation

Summary of Further Detailed, Revised Proposal

- Moody's to develop alternative macroeconomic scenario within 0.5% of Blue Chip (US GDP)
 - Proposal only kicks in only if Moody's Baseline differs from Blue Chip by this amount in any year
 - Moody's analysts to further relax the 0.5% constraint in unlikely event that they can't produce a scenario they feel comfortable with under this constraint
 - Moody's analysts to provide descriptive story, full details, as with Baseline
 - All guidance is ex ante and general (such as, might use other Blue Chip values); rely on Moody's analysts, no back and forth during main process

Summary of Further Detailed, Revised Proposal (continued)

- One iteration for PJM/LAS to review the forecast and all details, comment (as in past); Moody's to revise if very good cause
- In years the alternative scenario is created:
 - PJM will calculate peak load forecasts using both scenarios and include both in the load forecast report
 - PJM will recommend which scenario should be considered the official forecast and provide the basis for its recommendation

The Further Detailed, Revised Proposal Addresses Most of the Perceived “Cons” in the 8/29 Draft List

- Additional flexibility for Moody’s analysts
 - Alternative scenario can be produced more quickly, easily; an existing Moody’s scenario may be close
 - Ensures internal consistency, sound story
 - Moody’s confirms the alternative scenario can be produced in a matter of days
- All guidance ex ante: PJM/stakeholders will not get into the macro forecasting business
- Full details to be produced

Proposal to develop economic forecasts for use in PJM's long-term peak load forecasting based on an alternative macroeconomic scenario close to the Blue Chip Consensus (proposal further detailed and revised August 31, 2009):

1. Moody's "Baseline" US GDP scenario (October update) is compared to the Blue Chip Consensus long-term forecast (October update) on an absolute basis (GDP in each future year is compared, not annual growth values) for all future years of the Blue Chip long-term forecast (in 2009, it goes out to 2020). If the Blue Chip and Moody's Baseline forecasts differ by less than 0.5% each year (as was the case in 2007 for the 2008 Load Forecast Report), the Moody's Baseline is accepted and used to calculate the GMPs, as in the past.
2. If instead Moody's Baseline US GDP scenario differs from the Blue Chip Consensus by more than 0.5% in one or more future years, Moody's is retained to develop an alternative macroeconomic scenario that does meet this criteria. In particular, Moody's is provided the following guidance with respect to development of the alternative macroeconomic scenario:
 - a. Moody's will develop a complete alternative macroeconomic scenario, and corresponding state and metropolitan details, with the full detail available in the Baseline.
 - b. Moody's will provide the type of descriptive "story" about the alternative scenario that it typically provides with its Baseline and other alternative scenarios, however, Moody's is not asked to provide its opinion of the probability of the scenario, or of the economy performing better or worse.
 - c. The alternative scenario's US GDP will be within 0.5% of the Blue Chip Consensus US GDP in all future years covered by the Blue Chip long-term forecast. In the unlikely event that Moody's analysts are unable to develop an internally consistent macroeconomic scenario that they feel comfortable with under this constraint, the analysts will further relax that constraint as they deem necessary.

Further detailed, revised proposal (continued)

3. Other guidance to Moody's in developing the alternative macroeconomic scenario:
 - a. Moody's analysts may choose to use one of its alternative scenarios that is close to the Blue Chip Consensus as a starting point in developing the alternative macroeconomic scenario.
 - b. Moody's analysts may choose to use the various other October Blue Chip consensus values (personal income, housing starts, auto sales, etc. etc.) in developing the alternative macroeconomic scenario.
 - c. PJM retains Moody's to have their analysts use their judgment in developing the alternative macroeconomic scenario, exactly as Moody's analysts do in developing their Baseline and other alternative scenarios. All guidance on development of the alternative macroeconomic scenario will be provided ex ante (before development of the alternative scenario begins), not during the process. It is expected that this proposal contains sufficient guidance and flexibility for this process to be workable. However, if Moody's feels that further general advance guidance or flexibility may be needed, they will request it well in advance.
 - d. Once development of the alternative macroeconomic scenario has begun, Moody's analysts will use their judgment in developing the alternative macroeconomic scenario and will not present PJM/LAS/stakeholders with issues to resolve. As noted above, the final product will entail the scenario description and all details, as in Moody's Baseline and other alternative scenarios.

Further detailed, revised proposal (continued)

4. PJM/LAS will have an opportunity to review and comment on the alternative macroeconomic scenario and all details, as they always have in the past with the Moody's Baseline. In the unlikely event that there is very good cause (as judged by Moody's analysts), Moody's analysts may revise the alternative macroeconomic scenario based on that feedback (one iteration).
5. If an alternative macroeconomic scenario is developed, both peak load forecasts (based on the alternative macroeconomic scenario, and Moody's Baseline) will be included in the PJM Load Forecast Report. PJM staff will recommend which of the two forecasts to adopt as the official PJM forecast, and provide the basis for its recommendation.