

**Rockland Electric Comments on
PJM Market Efficiency Analysis Assumptions**

November 29, 2006

PJM has requested the members of the Transmission Expansion Advisory Committee to review and suggest changes to PJM's documents entitled "Market Efficiency Analysis Assumptions" and "Draft Business Rules for Economic Planning Process", both of which address the methods and procedures PJM is proposing to use when evaluating "economic" transmission projects proposed under PJM's Regional Transmission Expansion Plan. Rockland Electric Company's comments are as follows:

1. Fuel Cost Assumptions. It is unclear from PJM's documentation if the fuel prices (including coal, heavy oil and light oil, and natural gas) are "delivered prices" or market hub prices which are distant from the PJM territory. PJM should use some form of delivered price for the fuel costs, which would include estimating delivery costs for coal, and using gas prices which are relevant to the PJM territory, for example delivery in Transco Zone 6 for natural gas or NYMEX NY Harbor oil prices plus some additional transportation fee to the PJM territory.
2. Coal Price Assumptions. In addition to updating coal prices to reflect delivered cost of coal, we urge PJM to run a "high-high" coal price sensitivity to account for a rise in prices due to increased demand for coal in the US caused by a high number of new coal plants planned for the US in the next decade, the emergence of a robust Coal-to-Liquids industry, high transportation costs due to rail congestion and minimal gains in future mine productivity. In a recent EIA study (Annual Energy Outlook 2006 with Projections to 2030", Report #:DOE/EIA-0383(2006), this type of analysis suggested that coal prices in 2030 could be 50% higher than EIA's base cost estimates.
3. Load and Energy Assumptions. While the "base energy" and "low energy" scenarios, which use a "1-in-2" (i.e. 50/50) and "9-in-10" (i.e. 10/90) load forecasts are appropriate, the "high energy" scenario, which uses a "1-in-10" (i.e. 90/10) load forecast, is too extreme, suitable for a reliability project but not for an economic project. We suggest that a 1-in-3 or 1-in-4 scenario be used instead of the 1-in-10 load forecast currently proposed.
4. Generation Assumptions. As discussed at the October 30, 2006 TEAC, the base generation scenario should reflect PJM meeting its IRM, which can be estimated to be 15% throughout the planning horizon. Furthermore, RECO believes that the base generation scenario, in addition to meeting the IRM, should take into account the price signals being transmitted via the new RPM capacity construct, and locate new generation in areas where capacity price forecasts are highest.
5. Emissions Assumptions. Given the likelihood that carbon will be a regulated pollutant at some point in the next 30 years, RECO urges PJM to at least perform a sensitivity to show the effect of carbon regulations on prices, using appropriately weighted prices for various fuel sources. A rough proxy may be the prices of carbon emissions currently being traded on the European Climate Exchange (http://www.europeanclimateexchange.com/index_flash.php).

6. Discount Factors. RECO believes that only high quality projects should be approved. The discount factors PJM uses to analyze economic transmission projects can be used effectively as a quality screen, and therefore we urge PJM to use discount factors which place some degree of rigor on the projects. As a base discount factor, we suggest 13% - similar to the ROE which many transmission projects have asked FERC for. High and low discount factors can be a sensitivity around 13%, e.g. +/- 2%.
7. NPV Time Horizon. Currently the PJM business rules stipulate evaluating projects on 10-, 20- and 30-year horizons. While this may be appropriate, we suggest weighting the results of the 10-year analysis more heavily than the results of the 20-year analysis or the 30-year analysis, and using a “weighted composite” to determine the overall NPV of the project being evaluated. For example, a 60%-30%-10% split would weight the NPV results of the 10-year analysis twice as much as the 20-year analysis, and six times as much as the 30-year analysis. This will have the effect of placing a higher value on projects which have immediate benefits and that do not rely on long-term (i.e. 30 year) price and energy forecasts, which are more likely to be in error than shorter-term (i.e. 10 year) price and energy forecasts.
8. Alternative Project Evaluation. As discussed in FERC’s November 21, 2006 Order on the PJM Market Efficiency process, PJM needs to provide data on the cost effectiveness of economic projects by comparing them to alternatives. This should include the analysis of not just generation alternatives, but also demand side response alternatives. Generation construction prices can be estimated using the Cost of New Entry utilized in the new RPM capacity construct, or can be based on publicly disclosed construction prices for similar projects; demand side resource project costs can be provided by load serving utilities with expertise in this area. These resources should be assessed using the same time horizon as transmission solutions so that the cost-effectiveness of alternatives can be appropriately considered. In addition, the comparison of transmission projects to alternatives should include the net societal benefits of the alternative and the transmission project, including the production cost of the generators, producer’s benefits, FTR rents or Transmission Owner benefits, and the energy and capacity benefits which may benefit consumers in some zones but cause increased costs for consumers in other zones.