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Appendix 7

Risk & Uncertainty – Internal Vetting Process and Decision Development

This memorandum documents discussions and results of the June 2, 2005 and June 30, 2005 Risk Analysis Workgroup Sessions. In addition to the Corporate Planning IRP team, each of these sessions included subject matter experts from within Ameren in the areas of coal markets, natural gas markets, emission allowance markets, generation plant engineering, corporate finance, and risk management.

The June 2nd session was largely a kickoff for the group; reviewing the IRP analysis timeline and approach. The session did, however, describe the risk related variables within the context of the IRP analysis and attempt to reduce the full list to only those with a material or significant impact. The impetuous for limiting the number of variables was, of course, to conserve computational time in the Latin Hypercube analysis employed in the MIDAS Risk Analyst platform. Table XX shows the risk variables decided upon for both the regional market analysis and the "single-area" analysis of the various capacity expansion plans for AmereUE:

Table XX – Risk Variables for the Regional and Single-Area Analyses

Regional Market Analysis	Single Area Analysis
Natural Gas Prices	All Regional Market Analysis Variables
Coal Prices	Interest Rates
SO2 Allowance Prices	Capital costs for New Generation
Peak Energy Growth	
Average Energy Growth	

The June 30th session finalized this list of variables with some discussion around variables that did not make the list. Specifically, the group decided to exclude NOx prices from the risk analysis as the consensus was that NOx prices are relatively stable and would not add to the richness of the risk analysis. Forced outage rate was also discussed in the context of the regional market analysis, but again, consensus was that it would not be material relative to other variables and would be treated in a deterministic fashion. CO2 was also discussed, but the group consensus was that potential carbon regimes should be treated as an uncertainty and modeled using scenario analysis as it would be very difficult to describe the issue or quantify it mathematically to the level required by MIDAS Risk Analyst. Lastly, the coal prices were discussed in the context of using a different mathematical description for Eastern Basin coal vs. PRB coal. Unfortunately, MIDAS Risk Analyst currently only allows for one mathematical description of coal prices. We have contacted Global Energy regarding this issue and have expressed our desire to see the model modified. They are already working on it, but the timing of the upgrade may not support our analysis timeline.

The June 30th session covered in detail the parameters that mathematically define the risk variables shown in Table 1. The group came to several consensus conclusions listed below:

- With respect to natural gas and coal, the group consensus was that a longer rather than shorter historical interval should be used to develop the mathematical description of these variables. The standard deviation and volatility associated with the longer time frame is greater than the shorter time frame. After discussion of the fundamental drivers in each market, the group concluded that a return to the historically low prices captured in the longer time frame in each commodity was possible as was significantly higher prices than we are experiencing today. The consensus of the group was that coal and natural gas commodity prices are becoming more positively correlated.
- SO2 allowance price behavior was discussed in detail. As we clearly showed, SO2 prices reacted significantly to announcement of the Clean Air Interstate Rule regulations in 2004. The market reaction to the new regulations resulted in a "jump event" or a step change in price levels from the $200/ton range to the $800/ton range. Including this step change in the mathematical description gave us very high standard deviations. The group consensus was that this level of volatility would not be experienced going forward. We also found that, coincidentally, the recent run-up in coal and natural gas prices correlated very highly to the step change in SO2 prices resulting from the change in regulation. The group consensus was that the high level of correlation was not likely to continue going forward. To control for this step change and to develop a more representative mathematical description of SO2 allowance prices, the group consensus was to use historical prices prior to the step change in prices.
- The peak demand and energy standard deviations were reasonable. The group consensus was that the peak and energy variable were inelastic and should therefore not be correlated with fluctuations in commodity prices. It is, however, likely that under some of the extreme scenario analysis cases, peak and energy growth rates will be effected.
- Similar to peak and energy, the group consensus was that interest rates would not have any correlation with commodity prices in the context of this analysis.

The group also discussed in some detail the uncertainties facing AmereUE which warrant scenario analysis. There was consensus around four general areas of uncertainty:

- Environmental legislation – specifically carbon legislation
- Comprehensive energy legislation – there are several potential impacts that could come from a compromise bill in the congress. National renewable portfolio standards, continuation of the renewable tax credits, implementation of tax credits for new nuclear capacity, etc. are some of the potential analyses that may be considered.

- Market evolution
- Security / terrorism issues

The group agrees that the next steps are to develop distributions or ranges for the capital costs associated with the various generation technologies being considered, finalize the risk analysis parameters, and begin to quantify the uncertainty scenarios.