

Overview of the Bid Evaluation model (demo version): Economic Analysis and Analysis of Other Factors



September 13, 2006

Introduction: The purpose of the attached Excel-based model is to demonstrate how the costs and benefits are calculated for projects in the Economic Analysis portion of the Bid Evaluation process. In addition, this demonstration model also illustrates the application of point system for the Other Factors. Stakeholders should view this model as a companion tool to the Request for Proposal (RFP). *It is being provided for demonstration purposes only.* In addition to the demonstrated components in the model, the Bid Evaluation will also consider project execution risk; market power analysis; and the aggregate net benefits of the portfolio of selected projects. Demonstration of the Call Option on Energy that Bidders by elect in their bids is not included in the attached demonstration model.

Macros: This model has a built-in Macro that solves the Net Present Value (NPV) for the Economic Analysis. When opening the file, Excel will prompt you to Enable or Disable Macros. You should select "Enable Macros": it is not a virus.

Fictional inputs: All the numbers presented in this demonstration model are *fictional* and should not be viewed as actual modeling projections for the Bid Evaluation, preliminary or otherwise. The user is welcome to input other assumptions.

Model structure

This model contains ten worksheets

- The instruction for users is located on "User Guide" worksheet. In addition, this worksheet also includes descriptions of each worksheet.
- Followed the "User Guide" is the "Summary" worksheet where users can find the final output and run the Macro.
- "Project Proposals" worksheet is the place where users can enter their bid details (including Contract Quantity, Annual Contract Prices for FCM Settlement and Annual Contract Prices for LFRM Settlement).
- The next three worksheets, "Inputs_Baseline (No Projects)", "Inputs_Baseline with Project A", and "Inputs_Baseline with Project B", are the inputs pages that contain demand and pricing data for Energy, Capacity, and Locational Forward Reserves markets across three Cases. The Cases entirely hypothetical and were invented to represent a range of hypothetical outcomes in the Energy, Capacity, and Operating Reserves markets. Again, all numbers presented here are fictional. The final numbers used in the Bid Evaluation will be developed through modeling of the Energy, Capacity and Locational Forward Reserves markets outside of this Bid Evaluation model.
- The next three worksheets, "Benefit Analysis", "Cost Analysis", and "NPV Comparison", contain formulas used to calculate the benefits, costs and NPV of each project.
- The last worksheet "Other Factors" presents how other factors are evaluated.