

### Discussion

**Michael S. Hyrnick** (Ohio Edison, Akron, OH): This paper's introduction alludes to the complexity of the electric utility fuel-procurement decision-making process. As the authors note, not only is the success of this process highly dependent upon forecasting such uncertain parameters as individual unit generation, fuel requirements, and future fuel prices, but it is also dependent upon the proper integration of these highly uncertain variables. All of this is further complicated by the magnitude of the expenditures involved for most electric utility companies. Typically fuel expenses for many electric utilities are of the order of magnitude of hundreds of millions of dollars, and are generally as significant as the expenditures required for even the most ambitious construction programs.

It has only been very recently that utility fuel planners have been able to develop analytic methods and tools to address and quantitatively deal with the significant uncertainties involved in longterm fuel procurement. Included among the method and tools that have been developed are computerized probabilistic fuel requirements forecasting models and probabilistic spot and contract price forecasting method. In spite of these

developments, fuel planners have continued to be faced with the difficult problem of having to integrate these uncertainties in the decision-making process. In that regard, the model described in this paper represents a significant contribution to the business of longterm fuel planning.

The Contract Mix Model can be used to develop the quantitative information needed to guide longterm electric utility fuel procurement programs. Part of the strength of the model is its flexibility which permits it to be utilized throughout the longterm fuel procurement process, from the planning and strategy development phases through implementation and contract negotiation. This model, which was developed as part of an extensive Electric Power Research Institute project, should be a valuable and welcome tool for electric utility fuel planners which should enable them to better analyze and document what are often complex and difficult fuel planning and procurement decisions.

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Closure unavailable at this time.