CURRICULUM VITA

Michael S. Proctor

Education:

1965, B.A. in Economics, University of Missouri, Columbia

1967, MA in Economics, University of Missouri, Columbia

1970, PhD in Economics, Texas A&M University

Work Experience:

1970 – 1973: Assistant Professor of Economics at Purdue University

1973-1977: Assistant Professor of Economics at University of Missouri, Columbia

1977-2009: Missouri Public Service Commission (Retired August 31, 2009)

2009-Current: Consultant on Issues Related to Electricity Markets and Transmission Expansion

Areas of Expertise and Experience:

Economics: University Professor (1970 – 1977)

<u>Micro-economics:</u> Specialized in investment theory for the firm and taught senior and graduate level micro-economics and macro-economics at Purdue and Missouri Universities.

Optimization: Taught optimization methods in MBA programs at Purdue and Missouri Universities.

Econometrics & Statistics: Taught statistics in undergraduate business courses at Purdue University.

Regulatory: Manager of Economic Analysis Department (1978-1992)

- <u>Class cost of service studies</u>: Classify natural gas and electric utility costs with respect to usage factors that relate to cost causers and beneficiaries, and use of load research data to develop allocation factors corresponding to class usage.
 - Managed a department at the Missouri Public Service Commission that was responsible for performing class cost of service studies.

Advanced moving from the strict cost causation method of peak demand allocations
to the beneficiary pays method of capacity utilization and the associated average and
peak allocation factor.

Rate design: For natural gas and electric utilities, develop various rate structures that collect targeted costs, allocate costs to individual customers within a class and provide customers with price incentives for energy use.

 Advanced the use of billing determinants and class load curves for the purpose of implementing new rate designs, including time-of-use rates.

Resource Planning: Review economic analysis of both supply-side and demand-side alternatives to meet utilities resource needs.

• Led the development of the Missouri Commission's first integrated resource planning rule, and application of this rule for the Missouri, Investor-Owned Utilities.

<u>Load Analysis</u>: Use of econometric and end-use modeling techniques for both short-term and long-term forecasts of utility customers demand for energy.

 Developed statistical techniques for analysis of the relationship of demand for electricity to weather, and implemented these methods in rate cases for estimation of weather normalized usage.

Regulatory: Chief Economist for MoPSC (1992-2009)

Analysis of electricity markets:

- Participated in the design of regional markets for the Midwest ISO and Southwest Power Pool.
- Represented the Missouri Commission on various working groups of the Organization of Midwest ISO States, and chaired the working group for the allocation of Financial Transmission Rights.
- Chaired the Cost Allocation Working Group of the Regional State Committee at the Southwest Power Pool.
- Regularly participated in electric rate cases before the Missouri Commission as an
 expert witness on utility purchases and sales of electricity, as well as in electric
 merger cases as an expert in evaluating potential increases in market power resulting
 from a merger.

Consultant: Regional Electricity Markets, Transmission Planning and Cost Allocation (1999-Present)

Transmission planning and allocation of the costs of transmission upgrades:

Consult with the Southwest Power Pool's (SPP's) Regional State Committee (RSC)
in the economics related to cost allocations for what the SPP calls Integrated
Transmission Planning – a process that develops cost-effective transmission upgrades
on a forward-looking basis.

Transmission planning and benefit metrics related to transmission upgrades:

 Participate in the SPP's Economics Study Group with a focus on the specification of and metrics for benefits from transmission upgrades designed to meet the reliability, public policy and economic needs of the SPP region.

<u>Miscellaneous consulting activities</u>: Several contracts on various issues related to wholesale electricity markets:

- <u>Missouri Public Service Commission</u>: Provided educational information on regional electricity markets.
- Organization of MISO States: Provided technical information on Extended Locational Marginal Pricing.
- <u>Show-Me Power Cooperative</u>: Provided reports and testimony on wholesale rate design.
- <u>City of Owensville</u>: Provided information on stranded cost related to wholesale electricity contract.