ENERGY AND DEMAND FORECAST

APPENDIX 1-A

MISSOURI REPORTING REQUIREMENTS

Missouri Filing Requirements (4 CSR 240-22.030) Load Analysis and Forecasting

(8)	***Reporting Requirements.*** **To demonstrate compliance with the provisions of this rule, and pursuant to the requirements of 4 CSR 240-22.080, the utility shall prepare a report that contains at least the following information:**
(8)(A)	**For each major class specified in subsection (1)(A), the utility shall provide plots of number of units, energy usage per unit and total class energy usage.**
(8)(A)1.	**Plots shall be produced for the summer period (June through September), the remaining nonsummer months and the calendar year.**
(8)(A)2.	**The plots shall cover the historical data base period and the forecast period of at least twenty (20) years.**
(8)(A)2.A.	**The historical period shall include both actual and weather-normalized energy usage per unit and total class energy usage.**
(8)(A)2.B.	**The plots for the forecast period shall show each end-use component of major class energy usage per unit and total class energy usage for the base-case forecast.**
(8)(B)	**For each major class specified in subsection (1)(A), the utility shall provide plots of class demand per unit and class total demand at time of summer and winter system peak. The plots shall cover the historical data base period and the forecast period of at least twenty (20) years.**
(8)(B)1.	**The plots for the historical period shall include both actual and weather-normalized class demands per unit and total demands at the time of summer and winter system peak demands.**
(8)(B)2.	**The plots for the forecast period shall show each end-use component of major class coincident demands per unit and total class coincident demands for the base-case forecast.**
(8)(C)	**For the forecast of class energy and peak demands, the utility shall provide a summary of the sensitivity analysis required by section (6) of this rule that shows how changes in the driver variables affect the forecast.**
(8)(D)	**For the net system load, the utility shall provide plots of energy usage and peak demand.**
(8)(D)1.	**The energy plots shall include the summer, nonsummer and total energy usage for each calendar year.**
(8)(D)2.	**The peak demand plots shall include the summer and winter peak demands.**
(8)(D)3.	**The plots shall cover the historical data base period and the forecast period of at least twenty (20) years. The historical period shall include both actual and weather-normalized values. The forecast period shall include the base-case, low-case and high-case forecasts.**

(8)(D)4. **The utility shall describe how the subjective probabilities assigned to each forecast were determined.**

(8)(E) **For each major class, the utility shall provide estimated load profile plots for the summer and winter system peak days.**

(8)(E)1. **The plots shall show each end-use component of the hourly load profile.**

(8)(E)2. **The plots shall be provided for the base year of the load forecast and for the fifth, tenth and twentieth years of the forecast.**

(8)(F) **For the net system load profiles, the utility shall provide plots for the summer peak day and the winter peak day.**

(8)(F)1. **The plots shall show each of the major class components of the net system load profile in a cumulative manner.**

(8)(F)2. **The plots shall be provided for the base year of the forecast and for the fifth, tenth and twentieth years of the forecast.**

(8)(G) **The data presented in all plots shall also be provided in tabular form.**

(8)(H) **The utility shall provide a description of the methods used to develop all forecasts required by this rule, including an annotated summary that shows how these methods comply with the specific provisions of this rule. If end-use methods have not been used in forecasting, and explanation as to why they have not been used shall be included. Also included shall be the utilities schedule to acquire end-use information and to develop end-use forecasting techniques, or a discussion as to why the acquisition of end-use information and the development of end-use forecasting techniques are either impractical or not cost-effective.**

See Appendices B and C for MPS and SJLP models (Itron MetrixND statistically-adjusted end-use models) and methods, which were used to develop long-term energy forecasts in compliance with section (8)(H) reporting requirements of this rule.
See Appendices D and E for MPS and SJLP plots and tables which comply with sections (8)(A) through (8)(G) reporting requirements of this rule.