

RISK ANALYSIS AND STRATEGY SELECTION

APPENDIX 5-A

MISSOURI REPORTING REQUIREMENTS

Missouri Reporting Requirements (4 CSR 240-22.070)

Risk Analysis and Strategy Selection

(11) **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 furnish at least the following information:

(A) A decision tree diagram for each of the alternative resource plans along with narrative discussions of the following aspects of the decision analysis:

1. A discussion of the sequence and timing of the decisions represented by decision nodes in the decision tree, and a description of the specific decision alternatives considered at each decision point; and

See Section 5.2 of the Integrated Resource Plan.

2. An explanation of how the critical uncertain factors were identified, how the ranges of potential outcomes for each uncertain factor were determined, and how the subjective probabilities for each outcome were derived;

See Sections 5.1 and 5.2 of the Integrated Resource Plan.

(B) Plots of the cumulative probability distribution of each performance measure for each alternative resource plan;

See Tables 2-9 and 2-10 and Figure 5-10 of the Integrated Resource Plan for probability distributions of key performance measures.

(C) For each performance measure, a table that shows the expected value and the risk of each resource plan;

See Figures 5-1 through 5-5 and Figure 5-8 for tornado charts of the variable sensitivities for each alternative resource plan and the preferred plan. See Appendix 5-B for the underlying data tables.

(D) A plot of the expected level of annual unserved hours for the preferred resource plan over the planning horizon;

See Section 5.4.8 for a discussion of the reliability analysis and Appendix 5-D (“Annual Load Output Summary” tab) for a plot of annual unserved energy.

(E) A discussion of the analysis of the value of better information required by section (8), a tabulation of the key quantitative results of that analysis, and a discussion of how those findings will be incorporated in ongoing research activities;

See Section 5.4.6 of the Integrated Resource Plan.

(F) A discussion of the process used to select the preferred resource plan, including the relative weights given to the various performance measures, and the rationale used by utility decision makers to judge the appropriate tradeoffs between competing planning objectives and between expected performance and risk; and

See Section 5.4 of the Integrated Resource Plan.

(G) The fully documented resource acquisition strategy that has been developed and officially adopted pursuant to the requirements of section (10) of this rule.

See Section 5.5 of the Integrated Resource Plan.