

RESOURCE INTEGRATION

APPENDIX 4-A

MISSOURI REPORTING REQUIREMENTS

Missouri Reporting Requirements (4 CSR 240-22.060)

Resource Integration

(6) **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:

(A) A description of each alternative resource plan including the type and size of each resource addition and a listing of the sequence and schedule for retiring existing resources and acquiring each new resource addition;

See sections 4.3 and 4.4 (specifically Table 4-3) of the IRP for a description and resource additions for all alternative resource plans.

(B) A summary tabulation that shows the performance of each alternative resource plan as measured by each of the measures specified in section (2) of this rule;

See section 4.4 of the IRP for tabulations of all performance measures listed in Section 2 of the rule.

(C) For each alternative resource plan, a plot of each of the following over the planning horizon:

1. The combined impact of all demand-side resources on the base-case forecast of summer and winter peak demands;

See Figures 4-1 and 4-2.

2. The composition, by program, of the capacity provided by demand-side resources:

See Figure 4-3.

3. The composition, by supply resource, of the capacity (including reserve margin) provided by supply resources. Existing supply-side resources may be shown as a single resource;

See Appendices 4-B through 4-F for tables and figures of the balance of loads and resources for each ARP.

4. The combined impact of all demand-side resources on the base-case forecast of annual energy requirements;

See Figure 4-4.

5. The composition, by program, of the annual energy provided by demand-side resources;

See Figure 4-5.

6. The composition, by supply resource, of the annual energy (including losses) provided by supply resources. Existing supply-side resources may be shown as a single resource;

See Appendices 4-B through 4-F for tables of the annual energy provided by resource for each ARP.

7. The values of the three (3) measures of financial condition identified in subsection (4)(A);

See Appendices 4-G and 5-E for the three measures of financial condition.

8. Annual average rates;

See Table 4-5 for the average annual rates of all ARPs.

9. Annual emissions of each environmental pollutant identified pursuant to 4 CSR 240-22.040(2)(B)1.; and

See Table 4-9 for annual emissions of NO_x, SO₂, Hg, and CO₂.

10. Annual probable environmental costs.

See Table 4-10 for annual probable emissions costs of NO_x, SO₂, Hg, and CO₂.

(D) A discussion of how the impacts of rate changes on future electric loads were modeled and how the appropriate estimates of price elasticity were obtained;

A discussion of the sensitivity of annual energy sales and summer peak demand to the real price of electricity is provided in Section 1.3.4 of Part 1 of the IRP.

(E) A description of the computer models used in the analysis of alternative resource plans; and

See Appendices 2-B and 2-C for a description of the computer models.

(F) A description of any proposed load-building programs, a discussion of why these programs are judged to be in the public interest, and for all resource plans that include these programs, plots of the following over the planning horizon:

There are no proposed load-building programs.

1. Annual average rates with and without the load-building programs; and

N/A

2. Annual utility costs and probable environmental costs with and without the load-building.

N/A