

5. The Rules encourage utilities to treat rate design as a key element in the planning process. Although rate designs are determined in contested proceedings, a utility should explicitly recognize and utilize the ability of rate design to yield demand-side resources. An IRP should be consistent with the established goals and objectives of rate design, including rate stability and the assignment of external costs to their appropriate causes when possible. ARM 38.5.2008(1).

6. On August 15, 2011 MDU filed its 2011 IRP with the Commission. On August 29, 2011, the Commission issued a Notice of Filing with a comment deadline of October 28, 2011. The Department of Environmental Quality filed comments on October 19, 2011. On June 28, 2012, MDU presented its 2011 IRP to the Commission in an open meeting.

2011 IRP – MDU Findings

7. MDU's 2011 IRP relies upon a 20-year load forecast. It adjusted estimates of annual energy sales and seasonal peak demands for the expected effects of demand-side management (DSM) programs, interruptible loads, and system losses. MDU projected net energy needs to increase from 2.75 million megawatt-hours (MWh) in 2011 to 4.03 million MWh in 2030 (2.1%/year). It projected summer net peak demand to increase from 500 MW in 2011 to 703 MW in 2030 (1.8%/year), and winter net peak demand to increase from 450 MW in 2011 to 645 MW in 2030 (1.9%/year).

8. MDU plans to meet future load requirements using a combination of new generation, upgrades to existing resources, demand-side resources, and purchased power and capacity from other sources, including the Midwest Independent Transmission System Operator (MISO) energy and capacity markets. MDU has committed to building an 88 MW simple cycle combustion turbine at Mandan, ND, and to participating with other owners in a \$490 million upgrade to the Big Stone plant in order to meet federal haze and mercury standards. MDU owns 22.7% of Big Stone, a 475 MW coal-fired thermal plant. MDU has also committed to install less expensive upgrades to the Coyote Station and Heskett II lignite plants, in order to meet requirements in the federally approved North Dakota State Implementation Plan.

9. MDU plans to meet some capacity needs through a 10 MW residential air conditioning cycling program, a 25 MW third-party demand response program, and 13 MW through adjustments to the Interruptible Large Power Demand Response Rate 38 Tariff. MDU also plans to maintain and extend existing demand-side programs in the residential and commercial sectors,

including energy efficient lighting, air conditioning, brick thermal storage, and commercial motors. Finally, MDU is planning to request proposals for energy and capacity resources, and to monitor the development of MISO energy and capacity markets.

Commission Comments

10. The Commission supports the effort made by MDU in its 2011 IRP to describe market development and MDU participation in the MISO energy, capacity, and ancillary services markets. The Commission anticipates updates to market profiles and MDU market participation in the 2013 IRP.

11. The Commission also appreciates efforts made to describe the purpose, MDU cost impact, and current status of MISO's market efficiency, multi-value, and baseline reliability projects. The 2013 IRP should include updates to all MISO transmission expansion planning projects with expected MDU rate impacts.

12. The 2013 IRP should contain progress reports on the installation of the Big Stone air quality control system and all other significant modifications to MDU generating plants. MDU should inform the Commission when it determines that significant upgrades to plants are needed.

13. If MDU has considered the merits of small hydro, geothermal, nuclear, biofuels, or other alternative energy resources, MDU should summarize its analyses in the 2013 IRP.

14. The 2013 IRP should address the expected cost and benefit of distributed generation to customers and to MDU. The discussion should describe MDU's activities and proposed actions regarding distributed generation.

15. The 2013 IRP should include critical analysis of the rate design tools that MDU is using to achieve energy conservation and demand response. The analysis should address the effect of time-of-day and interruptible rates on system peak demand, participation by customers, and overall benefit to customers. The analysis should also consider design modifications to improve rate performance with respect to these parameters.

16. MDU should continue to update the Commission on the status of all DSM programs. In particular, the Commission is interested in the status of demand response programs that will affect MDU's conformance with resource adequacy attainment in MISO's Module E.

17. MDU should provide results and conclusions drawn from its Energy Efficiency Potential and Market Assessment study.

BY THE MONTANA PUBLIC SERVICE COMMISSION

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