MONTANA-DAKOTA UTILITIES CO. SOUTH DAKOTA PUBLIC UTILITIES COMMISSION DATA REQUEST NO. 1 DATED JUNE 27, 2014 DOCKET NO. EL14-059

1-1) Did MDU run any capacity expansion models?

Response:

Yes.

1-2) If so, when was the most recent?

Response:

Montana-Dakota ran capacity expansion modeling as part of its 2013 Integrated Resource Plan (2013 IRP) filed with the North Dakota Public Service Commission on July 1, 2013 and submitted to the South Dakota Public Utilities Commission on July 2, 2013.

1-3) What types of futures were considered in the modeling?

Response:

Future resources included:

- 1. Simple cycle natural gas-fired combustion turbines
- 2. Combined cycle natural gas-fired combustion turbines
- 3. Internal combustion engine
- 4. Coal-fired generation
- 5. Wind generation (self-built)
- 6. Solar generation
- 7. Geothermal
- 8. Biomass
- 9. Wind generation (purchased)
- 10. Lewis & Clark options

1-4) What are the key sensitivities included in these futures?

Response:

Key sensitivities included:

- 1. High and low natural gas prices
- 2. \$30 and \$50 per ton carbon tax
- 3. High and low customer growth
- 4. High capital cost for combustion turbines
- 5. Lewis & Clark options
- 6. Current MISO Resource Adequacy Requirements

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1-5) What did you reflect from the capacity expansion modeling in your PLEXOS model?

Response:

Committed resources included in the PLEXOS Model used to determine the 2014 – 2015 avoided energy costs reflect existing resources, which includes MISO purchases and the addition of the 88 MW Heskett III simple cycle combustion turbine scheduled to come online in 2014.

1-6) What is the proposed date of the modified rate? If Staff receives information for this data request by July 11, 2013, this docket could be on the July 22, 2013 Commission meeting. The next Commission meeting is on August 6, 2013.

Response:

Montana-Dakota suggests an effective date of service rendered on and after August 1, 2014.