

**MONTANA-DAKOTA UTILITIES CO.
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
DATA REQUEST NO. 1
DATED JUNE 29, 2012
DOCKET NO. EL012-044**

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 2011 Integrated Resource Plan (2011 IRP) filed with the North Dakota Public Service Commission and submitted to the South Dakota Public Utilities Commission on June 3, 2011.

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

Response:

As explained in more detail in Volume IV, Attachment C of the 2011 IRP Montana-Dakota's capacity expansion modeling included:

1. Simple cycle natural gas-fired combustion turbines
2. Combined cycle natural gas-fired combustion turbines
3. Coal-fired generation
4. Wind generation
5. Purchased gas-turbine capacity and energy
6. Purchased wind energy
7. Demand response and energy efficiency

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

Response:

Montana-Dakota considered the following assumptions in running sensitivity scenarios in its capacity expansion modeling:

1. Company demand response and energy efficiency programs
2. High and low natural gas prices
3. \$30 and \$50 carbon tax
4. High environmental case
5. High and low growth

**MONTANA-DAKOTA UTILITIES CO.
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
DATA REQUEST NO. 1
DATED JUNE 29, 2012
DOCKET NO. EL012-044**

6. High capital and operations & maintenance cost for combustion turbines
7. High cost of Big Stone air quality control system

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

Response:

The first generating resource selected by Montana-Dakota's capacity expansion modeling was a simple cycle combustion turbine in 2015.