



400 North Fourth Street  
Bismarck, ND 58501  
(701) 222-7900

July 23, 2010

Ms. Patricia Van Gerpen  
Executive Director  
South Dakota Public Utilities  
Commission  
State Capitol Building  
500 East Capitol  
Pierre, SD 57501

Re: Avoided Cost Updates 2010-2011  
Docket No. EL10-006

Dear Ms. Van Gerpen:

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group Inc., electronically submits responses to Staff Data Requests in the above referenced Docket.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tamie A. Aberle', is placed over a horizontal line.

Tamie A. Aberle  
Pricing and Tariff Manager

Attachments

**Montana-Dakota Utilities Co.  
Updated Avoided Cost Rates  
Docket No. EL10-006**

**Request No. 1**

I see on Attachment A, page 2 of 8 that you estimate the cost of a combustion turbine to be \$750 per kW. Can you describe how you obtained this cost?

**Response:** The cost estimate is for a 75 MW turbine that we have used in the IRP plan (dated July 2009). The 75 MW plant is estimated to cost approximately \$56 million equating to a cost of \$750 per kW ( $\$56.25\text{ million}/75/1000 = \$750\text{ per kW}$ )

**Request No. 2**

Regarding the effect that lower MISO costs are having on your energy rate, is there any information you can provide showing the increased effect MISO rates are having as compared to CT costs? In other words, can it be quantified that MISO costs are now weighted heavier than previously and CT costs are weighted less than previously? I'm not looking for a detailed study but only summary data if available.

**Response:** As shown in the following table representing the percent of time at the margin by generation station taken from the ProSym run underlying the marginal energy prices, MISO Purchases for 2010 are on the Margin (a) 36.7% of the time during the Winter periods, (b) 38.4% during Summer off peak periods, and (c) 73.9% during Summer on peak as compared to 0.0%, 0.0%, and 0.4% for CTs during the same periods.

Percent time at Margin, by Station Group

Group	Winter Off/On	Summer Off	Summer On
1. Lignite	47.1	39.8	25.7
2. Subbituminous	16.2	21.8	0.0
3. CTs	0.0	0.0	.04
4. Purchases	36.7	38.4	73.9

**Request No. 3**

Regarding the effect of wind, is there any information you can provide that quantifies the effect of increased wind on the energy cost as compared to prior? Again, summary information would be appreciated if available.

**Response:** Wind has several effects on energy costs. The first effect is that wind has zero fuel cost and will displace baseload generation when the wind is available. The net effect is an increased amount of time that Coal (Lignite and Subbituminous) is on the Margin. See the Table provided in Response No. 2.

A second effect is that wind is a non-dispatchable resource and normally a price taker in the MISO Energy Market. Wind energy will displace other sources of generation when it is available to run. The net effect is reduced LMP prices (lower MISO purchase prices) when the wind is available on the system and less time that CTs are on the Margin as compared to no wind energy available.

Another current effect on energy costs is that the reduced energy demand across the MISO footprint, caused by the national recession, has reduced the need for CTs to serve MISO load as compared to other lower cost sources of generation. This has caused a general overall reduction in LMP prices across the MISO footprint.

#### **Request No. 4:**

Regarding the requested removal of time of day energy pricing for rates 96 and 97, explain why the company thinks this will be an ongoing permanent situation with regard to on peak and off peak costs. Do current recessionary conditions (which may disappear over time) affect this situation? Are there other factors which could cause this situation to return to the way it was? Would the Company agree to continue the present TOD pricing for another year to see if the situation still exists next year (advantages, disadvantages)?

**Response:** It is unknown whether the current pricing trend will continue. Montana-Dakota proposed to eliminate the time differentiated purchase rate at this time for the following reasons:

- Montana-Dakota only has 1 customer on Rate 95 so time differentiated pricing is not an issue with the current customer.
- With a differential of only \$.00098 customers may be confused as to why it is offered and would see little to no benefit in trying to structure their requirements and production to take advantage of time differentiated pricing.
- Other customers are not harmed by Montana-Dakota purchasing at the average price given the minimal differential in avoided costs.