



14 August 2002

To: DG Rates Workgroup
From: John Jaffray, Prairie Gen Corp.
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Re: Standby Tariffs

As we review the costs to implement DG at the customer side, we think it is helpful to have some context and perspective. Our analysis shows that both as a percentage of market capacity rates and as a percentage of a given energy cost, the Standby Tariff is too high, a disincentive to a robust DG sector, and unreasonable.

Here is how I view just the "Standby Tariff" **from a capacity standpoint:**

	per kW/mos.
Standby Tariff	\$ 3.15
Peaker Capacity Charge ¹	\$ 4.85
Standby Tariff, as a percentage of new, permanent capacity	65%
<u>Footnotes</u>	
1) New, permanent capacity, rough current market rate, 11,000 heat rate.	

This seems a bit out of line. If the standby charge is intended to compensate the tariff entity for MAPP reserves, then the charges should be closer to market rates for NON-PERMANENT capacity, e.g. \$2-3.00 per kw/mos in summer, \$.25 winter. However, there should be a discount as the emergency (capacity) is rarely used, and then not for long periods of time.

Further, there should be a clause whereby the private, DG, commercial interest can opt away, somewhat, in a fashion that legally allows the tariff entity to reduce its capacity reserve requirements by a like amount for a fixed period of time.

Without the above construct, the true value of a significantly grown DG power supply scenario will not be realized by Minnesota consumers.

From a cost of energy standpoint:

As an example, then, assume I am a 1 MW (1,000 kW) distributed generation commercial interest ("X Company", "Xco"). Xco puts in a gas-fired turbine and uses it with an average capacity factor of 85%, for 7,446 mwh per year.

Xco is NOT planning on selling to the grid. Xco is presently connected to the grid, intends to stay connected, but buy less energy (because they are self-generating), and NEVER SELL BACK.

Excluding capital and O&M, here's the financial profile of Xco, under DG:

85% load factor
7,446 mwhs
10,000 heat rate
\$3.50 gas
\$35.00 energy cost
Annual energy cost \$260,610
Add: 3.15 per kW/mos: \$37,800

Increase in energy costs due to standby tariff: 14.5%

To summarize varying capacity factors, and the increase in energy costs **TO THE CONSUMER:**

Capacity Factor	Percentage Increase In Energy Cost from Standby Tariff
85%	14.5%
65%	19%
45%	28%

Also, this seems a little out of line with actual services provided and the market.

Thank you.