

South Dakota Public Utilities Commission
Docket GE14-001
MidAmerican Energy Company
3rd Information Data Requests
Submitted 4/23/14

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South Dakota Data Request

- 3-3) If not already included in response to data request 3-1 or 3-2, please explain the tiered structure for furnace rebates and explain how the rebates are calculated using the tiered structure.

Response:

The tiered structure for nonresidential furnace rebates provides higher incentives as the efficiency of the equipment is increases. In the case of MidAmerican's nonresidential gas furnaces, as the annual fuel utilization efficiency (AFUE) increases, so does the amount of the incentive paid to the customer based on the overall heating capacity of the furnace being installed. MidAmerican's current incentive structure for commercial natural gas furnaces with heating capacity less than 250 MBtuh consist of three tiers:

92-93.9% AFUE	Incentive is equal to \$10 x Capacity in MBtu
94-95.9% AFUE	Incentive is equal to \$15 x Capacity in MBtu
96% and above AFUE	Incentive is equal to \$20 x Capacity in MBtu

Heating Capacity in MBtu = Furnace input Btu / 1,000

Example: 120,000btu natural gas furnace size / 1,000 = 120MBtu

Incentive examples for first tier: 120,000/140,000 btu natural gas furnaces with AFUE 92-93.9%

$120,000/1000 = 120\text{MBtu}$	or	$140,000/1000 = 140\text{MBtu}$
$\$10 \times 120 = \$1,200\text{ incentive}$		$\$10 \times 140 = \$1,400\text{ incentive}$

Incentive examples for second tier: 120,000/140,000 btu natural gas furnaces with AFUE 94-95.9%

$120,000/1000 = 120\text{MBtu}$	or	$140,000/1000 = 140\text{MBtu}$
$\$15 \times 120 = \$1,800\text{ incentive}$		$\$15 \times 140 = \$2,100\text{ incentive}$

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Incentive examples for third tier: 120,000/140,000 btu natural gas furnaces with AFUE 96% or above

$120,000/1000 = 120\text{MBtu}$	or	$140,000/1000=140\text{MBtu}$
$\$20 \times 120 = \$1,800$ incentive		$\$20 \times 140=\$2,800$ incentive

Generally, manufacturers do not provide larger than 140,000 Btu energy efficient natural gas furnaces. Some units larger than 140,000 Btu are available. However, they tend to be available in only standard efficiencies. Customers in need of additional heating capacity would generally change over to an efficient rooftop unit or use two smaller efficient units in parallel to provide the required heating capacity.