

Cost of Delivered Energy per MMBTU of Heat

Natural Gas

	\$1.00	per therm
	100,000	BTU per therm
x	90%	high efficiency pulse furnace
	90,000	BTU
x	90%	duct and distribution loss
	81,000	BTU per therm

$$1,000,000 \text{ BTU} \div 81,000$$

	12.35	therm = 1 MMBTU
x	\$1.00	
	\$12.35	per MMBTU

Propane

	\$2.00	per gallon
	91,600	BTU per gallon
x	90%	high efficiency pulse furnace
	82,440	BTU
x	90%	duct and distribution loss
	74,196	BTU per gallon

$$1,000,000 \text{ BTU} \div 74,196$$

	13.48	gallon = 1 MMBTU
x	\$2.00	
	\$26.96	per MMBTU

Standard Electric

	10.66¢	per kWh
	3,413	BTU per kWh
x	100%	delivered
	3,413	BTU
x	100%	transfer
	3,413	BTU per kWh

$$1,000,000 \text{ BTU} \div 3,413$$

	293	kWh = 1 MMBTU
x	10.66¢	
	\$31.23	per MMBTU

Monthly Service Charge \$9.60

January 2010

Recommended Equipment for Effective Time-of-Day Rate

- 240 volt Mechanical Time Clock, hard-wired on hot water heater – \$70 mechanical or \$70 with battery backup. OR wire TOD Control Panel.
- Small 120 volt timer for each waterbed and car block heater – \$15 each.
- Must manually turn on electric heat at 9 p.m. or later, and off at 2 p.m. or earlier, OR install Automatic TOD Control Panel – \$350.
- Utilize solid fuel heating appliance wood and pellet stoves, not fireplaces or more costly propane furnace between 2 p.m. and 9 p.m. in the evenings, OR install ETS.
- Shift bathing and as many household chores (laundry, dishwashing, baking) as possible away from the on-peak hours of 2 p.m. to 9 p.m. Utilize crockpots, frying pans and microwaves as much as possible for cooking afternoon, and evening meals.

Electric Time-of-Day Rate

Off Peak - 9 p.m. - 2 p.m.

	3.96¢	per kWh
	3,413	BTU per kWh
x	100%	delivered
	3,413	BTU
x	100%	transfer
	3,413	BTU per kWh

	1,000,000	BTU ÷ 3,413
	293	kWh = 1 MBTU
x	3.96¢	
	\$11.60	per MMBTU

Electric Time-of-Day Rate

On Peak - 2 p.m. - 9 p.m.

	15.34¢	per kWh
	3,413	BTU per kWh
x	100%	delivered
	3,413	BTU
x	100%	transfer
	3,413	BTU per kWh

	1,000,000	BTU ÷ 3,413
	293	kWh = 1 MBTU
x	15.34¢	
	\$44.95	per MMBTU

Monthly Service Charge \$17.05



Your Touchstone Energy® Cooperative



500 Cooperative Way
Brighton, CO 80603
303-659-0551 or 800-468-8809
www.unitedpower.com