



# ESTIMATING YOUR ELECTRIC BILL

Typical Appliance	Watts	\$/Use (13¢/kWh)	x Your Estimated Use	\$/Month
<b>KITCHEN</b>				
refrigerators				
frost free (14-16 cu ft)	473	\$11.07 /month	(180 hours/month) = \$ _____ /month	
frost free (17-18 cu ft)	503	\$11.77 /month	(180 hours/month) = \$ _____ /month	
frost free (19-22 cu ft)	557	\$13.03 /month	(180 hours/month) = \$ _____ /month	
frost free (over 22 cu ft)	606	\$14.18 /month	(180 hours/month) = \$ _____ /month	
freezers (15-21 cu ft)				
manual defrost	347	\$10.83 /month	(240 hours/month) = \$ _____ /month	
frost free	533	\$16.63 /month	(240 hours/month) = \$ _____ /month	
dishwasher (hot water extra)	1200	\$0.16 /load	x _____ loads/month = \$ _____ /month	
microwave	1500	\$0.02 /use	x _____ uses/month = \$ _____ /month	
coffee maker: brew cycle	800	\$0.02 /brew	x _____ brews/month = \$ _____ /month	
coffee maker: keep warm	70	\$0.01 /hour	x _____ hours/month = \$ _____ /month	
reg. deep fryer	1800	\$0.23 /hour	x _____ hours/month = \$ _____ /month	
mini deep fryer	800	\$0.10 /hour	x _____ hours/month = \$ _____ /month	
crook pot/"slow" cooker	200	\$0.03 /hour	x _____ hours/month = \$ _____ /month	
range top or frypan	1200	\$0.16 /meal	x _____ meals/month = \$ _____ /month	
oven: baking	3500	\$0.46 /hour	x _____ meals/month = \$ _____ /month	
oven: self cleaning feature	6000	\$1.56 /clean	x _____ cleans/month = \$ _____ /month	
toaster	1100	\$0.03 /use	x _____ uses/month = \$ _____ /month	
toaster-oven: oven	1500	\$0.04 /use	x _____ uses/month = \$ _____ /month	
toaster-oven: broiling	3100	\$0.08 /use	x _____ uses/month = \$ _____ /month	
<b>LAUNDRY</b>				
dryer	4800	\$0.47 /load	x _____ loads/month = \$ _____ /month	
iron	1200	\$0.16 /hour	x _____ uses/month = \$ _____ /month	
washing machine (cold H2O)	500	\$0.07 /load	x _____ loads/month = \$ _____ /month	
<b>ENTERTAINMENT</b>				
computer & monitor	200	\$0.02 /hour	x _____ hours/month = \$ _____ /month	
DVD / VCR	60	\$0.01 /hour	x _____ hours/month = \$ _____ /month	
T.V. (35" Standard)	210	\$0.03 /hour	x _____ hours/month = \$ _____ /month	
T.V. (42" Plasma)	290	\$0.04 /hour	x _____ hours/month = \$ _____ /month	
T.V. (60" Plasma)	450	\$0.06 /hour	x _____ hours/month = \$ _____ /month	
T.V. (40" LCD)	180	\$0.02 /hour	x _____ hours/month = \$ _____ /month	
Older Gaming Systems	20-70	<b>Look at the power requirements on back of unit</b>		/month
Newer Gaming Systems	145-400	<b>Look at the power requirements on back of unit</b>		/month
<b>PERSONAL</b>				
hand-held hair dryer	1500	\$0.05 /use	x _____ uses/month = \$ _____ /month	
heating pad	60	\$0.01 /use	x _____ uses/month = \$ _____ /month	
<b>LIGHTING</b>				
60 watt incandescent bulb	60	\$1.40 /month	(180 hours or 6 hours/day) = \$ _____ /month	
15 watt compact fluorescent	15	\$0.35 /month	(180 hours or 6 hours/day) = \$ _____ /month	
9.5 watt LED bulb	9.5	\$0.22 /month	(180 hours or 6 hours/day) = \$ _____ /month	
outdoor flood light	75	\$0.01 /hour	x _____ hours/month = \$ _____ /month	
<b>OTHER</b>				
hot tub	1200	\$0.16 /hour	x _____ hours/month = \$ _____ /month	
water pump	½ h.p.	547	\$0.07 /hour	x _____ hours/month = \$ _____ /month
@ 75% Eff	1 h.p.	1094	\$0.14 /hour	x _____ hours/month = \$ _____ /month
	1 ½ h.p.	1641	\$0.21 /hour	x _____ hours/month = \$ _____ /month
	2 h.p.	2188	\$0.28 /hour	x _____ hours/month = \$ _____ /month
<b>WINTER</b>				
electric blanket	150	\$0.16 /night	x _____ nights/month = \$ _____ /month	
space heater	1500	\$0.20 /hour	x _____ hours/month = \$ _____ /month	
<b>SUMMER</b>				
ceiling fan (medium speed)	75	\$0.01 /hour	x _____ hours/month = \$ _____ /month	
<b>YOUR ESTIMATED TYPICAL APPLIANCE USE SUB-TOTAL:</b>				\$ _____ /month

## Water Heating

Assumptions: 20 Gallons of water per person per day heated to 125°F; \$10.83/Month/Person @ \$0.13/kWh.  
40 kWh/month heat loss from electric water heater or \$5.20/month

WATER HEATING SUBTOTAL: \$10.83/month/person x \_\_\_\_\_ people + \$5.20/month = \$\_\_\_\_\_/month

**YOUR ESTIMATED BASE BILL (appliance use + water heating sub-totals):** \$ \_\_\_\_\_

## Central Air Conditioning Systems

Assumptions Design temperatures = 93°F outside; 78°F inside.  
Operates 2,640 hours for moderate season. Costs \$0.13/kWh.

### YEARLY COSTS FOR SEASONAL ENERGY EFFICIENCY RATING (SEER)

SIZE		10	11	12	13	14	15	16	17	18
6,000 BTU's	(0.5-ton)	\$206	\$187	\$172	\$158	\$147	\$137	\$129	\$121	\$114
12,000 BTU's	(1.0-ton)	\$412	\$374	\$343	\$317	\$294	\$275	\$257	\$242	\$229
18,000 BTU's	(1.5-ton)	\$618	\$562	\$515	\$475	\$441	\$412	\$386	\$363	\$343
24,000 BTU's	(2.0-ton)	\$824	\$749	\$686	\$634	\$588	\$549	\$515	\$485	\$458
30,000 BTU's	(2.5-ton)	\$1,030	\$936	\$858	\$792	\$735	\$686	\$644	\$606	\$572
36,000 BTU's	(3.0-ton)	\$1,236	\$1,123	\$1,030	\$950	\$883	\$824	\$772	\$727	\$686
42,000 BTU's	(3.5-ton)	\$1,441	\$1,310	\$1,201	\$1,109	\$1,030	\$961	\$901	\$848	\$801
48,000 BTU's	(4.0-ton)	\$1,647	\$1,498	\$1,373	\$1,267	\$1,177	\$1,098	\$1,030	\$969	\$915
60,000 BTU's	(5.0-ton)	\$2,059	\$1,872	\$1,716	\$1,584	\$1,471	\$1,373	\$1,287	\$1,211	\$1,144

MONTHLY COOLING SUBTOTALS:

April	\$ _____	/ year x	0.06	= \$ _____
May	\$ _____	/ year x	0.13	= \$ _____
June	\$ _____	/ year x	0.18	= \$ _____
July	\$ _____	/ year x	0.19	= \$ _____
August	\$ _____	/ year x	0.19	= \$ _____
September	\$ _____	/ year x	0.17	= \$ _____
October	\$ _____	/ year x	0.08	= \$ _____

**ESTIMATED SUMMER MONTH BILL {for desired month} ( base + cooling )** \$ \_\_\_\_\_

## Central Electric Heating Systems

Assumptions Design temperatures = 31°F outside; 68°F inside.  
Operates 1,159 hours - a moderate season. Costs \$0.13/kWh.

Size	Heat Strip	HEAT PUMP YEARLY COSTS - HEATING SEASON PERFORMANCE FACTOR								
		HSPF:	5.1	6.8	7.7	8.5	9.4	10.2	11.1	11.9
24,000 (2.0-ton)	\$ 1,060	\$ 709	\$ 532	\$ 470	\$ 425	\$ 385	\$ 355	\$ 326	\$ 304	
30,000 (2.5-ton)	\$ 1,325	\$ 886	\$ 665	\$ 587	\$ 532	\$ 481	\$ 443	\$ 407	\$ 380	
36,000 (3.0-ton)	\$ 1,590	\$ 1,064	\$ 798	\$ 704	\$ 638	\$ 577	\$ 532	\$ 489	\$ 456	
42,000 (3.5-ton)	\$ 1,855	\$ 1,241	\$ 931	\$ 822	\$ 744	\$ 673	\$ 620	\$ 570	\$ 532	
48,000 (4.0-ton)	\$ 2,120	\$ 1,418	\$ 1,064	\$ 939	\$ 851	\$ 769	\$ 709	\$ 652	\$ 608	
60,000 (5.0-ton)	\$ 2,650	\$ 1,773	\$ 1,329	\$ 1,174	\$ 1,064	\$ 962	\$ 886	\$ 814	\$ 760	
72,000 (6.0-ton)	\$ 3,179	\$ 2,127	\$ 1,595	\$ 1,409	\$ 1,276	\$ 1,154	\$ 1,064	\$ 977	\$ 912	

MONTHLY HEATING SUBTOTALS:

November	\$ _____	/ year x	0.04	= \$ _____
December	\$ _____	/ year x	0.33	= \$ _____
January	\$ _____	/ year x	0.34	= \$ _____
February	\$ _____	/ year x	0.26	= \$ _____
March	\$ _____	/ year x	0.03	= \$ _____

**ESTIMATED WINTER MONTH BILL {for desired months} ( base + heating )** \$ \_\_\_\_\_

## >> Disclaimer <<

While GRU can guarantee neither the accuracy of these estimates nor assume liability for their use, these estimates are reasonable and can be used as general guidelines for estimating your monthly bill. The magnitude of error of these estimates will be affected by equipment and condition, a home's heat loss and heat gain characteristics, operational and family usage patterns, and weather intensity.