



A  Sempra Energy utilitySM

Facts About Spas & Hot Tubs

Heating and filtering costs for spas and hot tubs* are very similar. And ways to save money on their operating costs are similar too.

There are three major factors that affect operating costs:

1. Weather
2. Spa size
3. How you use it

Here are some tips to help you save both money and energy. And when you use less energy, you'll be helping the environment by conserving natural resources.

* For simplicity, all units will be referred to as spas.

Weather

The wind, air temperature and the amount of sunlight that strikes the surface of the water can affect the cost of using your spa.

Wind affects evaporation and heat loss. The more wind, the more it costs to heat your spa. If the air temperature is low, it will cost more to heat your spa than on warmer days. Spas will cost less to heat when sunlight strikes the water surface.

Size of the spa

Spa heating costs also depend on the number of gallons the spa contains. The more gallons in the spa, the more it will cost to heat initially.*

* The major continuing heat losses occur from surface losses to the atmosphere.

How you use it

The most important factor contributing to spa heating costs is the difference between the beginning water temperature and the final temperature. The larger the difference, the higher the operating costs.



For example, the cost to heat a 6' X 6' 500 gallon spa from 70°F to 100°F is \$5.50¹ if you have an electric water heater and \$2.34² if you have a gas water heater. It then costs 36¢ per hour¹ using electricity and 15¢ per hour² using gas to maintain the spa at 100°F.

WARM UP SPA FROM 70°F TO 100°F	
Using electricity ¹	\$5.50
Using natural gas ²	\$2.34

WHILE IN USE: MAINTAIN SPA AT 100°F	
Using electricity ¹	36¢ per hour
Using natural gas ²	15¢ per hour

OPERATING COSTS FOR SPA FILTER PUMP AND AERATOR ¹	
2-hp Filter Pump	30¢ per hour
1-hp Aerator	15¢ per hour

¹ Operating costs are based on 15¢ per kWh. Actual price may vary based on market prices, your tiered rate, and other factors.

² Costs are based on \$1.30 per therm, which reflects recent natural gas prices.

Conservation suggestions

Here are some suggestions to help you save energy and money on spa heating.

- Heat the spa only when you plan to use it, allowing time for warm-up.
- Heat your spa to 102°F or lower to save money without sacrificing comfort.
- Cover the spa when not using it and when warming it.
- Check the accuracy of your spa's thermostat. An accurate thermostat can save you hundreds of dollars each year.

Filtering

- Filter enough to maintain water clarity, which means filtering for about one-half to one hour of filtering each day for the average spa. If you have a pool maintenance service, be sure to check with them before reducing the hours of filtration.
- Have your filter pump operation checked yearly by a qualified pool maintenance company. A malfunctioning filter pump costs more to operate.
- When it's not needed, switch off your aerator.

Solar heating

Consider installing a solar heating system to heat your spa. Spas require solar panels with at least two times the surface area of the spa. Take into consideration of several factors before deciding on a solar heating system for your spa.

- The initial cost of a solar heating system.
- A back-up heating system of either gas or electricity is required.
- To be effective, a solar heated spa should be covered when not being used.
- Solar heating systems work only during daylight hours and will not heat the spa at night.

For more information

Helping you understand and manage your energy costs is one of the ways that SDG&E® strives to provide exceptional customer service. If you'd like more information on energy-saving information, contact SDG&E at **1-800-411-SDGE (7343)**, or by e-mail at info@sdge.com. You can also visit our Web site at www.sdge.com.



*Serving you today.
Planning for tomorrow.™*

1-800-411-SDGE (7343)
www.sdge.com