

Q: What other ways can I conserve energy and save money?

A: A few simple techniques include trees, bushes or shrubs around your pool that don't impede vision from the pool and don't "shed" their parts. These green assets will reduce wind and surface area heat loss. "Non-shedding" plants that don't drop leaves or flowers also reduce pool cleaning, which reduces the workload on your pool system, which in turn, reduces electricity usage and extends its energy life. Use an efficient robotic vacuum that runs at night during off peak hours after the pool has settled for two or more hours opposed to running it immediately before or after swimming. Lastly, regular maintenance and proper pump and filter cleaning can reduce energy consumption and save you money.

Q: I heard there's new CA Title 20 and Title 24 Regulations that relate to swimming pools and spas. Can you tell me a little about them?

A: These areas focus on energy efficiency requirements for pool pumps and the construction of building new swimming pools and spas. The mandates mimic many areas we've described already, reinforcing the ability to save energy and money. A few highlights include net 1 horsepower pumps or larger will require at least two speeds or variable speeds that can be set for off-peak usage. New pools will also be made to accommodate the installation of future solar heaters. Pools or spas that have heat pumps or gas heaters will be required to have a pool cover. These are just a few ways to help improve the future of your community and your pocketbook.

SMUD's Pools and Spas Energy Efficiency Program

The backyard pool and spa are a great place to escape the heat and relax with family and friends. The cost to operate these wet retreats though can soak your pocketbook. A typical swimming pool during the summer can use enough energy to power an entire home for three months. Two steps to help you save energy and money with your pool:

Step 1: Help reduce peak demand and the need for SMUD to buy expensive peak period power by shifting pool and spa equipment usage to run off peak hours before 4:00 p.m. or after 7:00 p.m.

Open to find frequently asked questions (FAQs) from pool and spa owners like yourself designed to help you save energy and money around your pool.

Step 2: Install or replace your old, inefficient pool pump and motor equipment with a high efficiency multi- or two-speed pool pump and motor.



For more information on SMUD's Pool and Spa Energy Efficiency Program:

1-888-742-SMUD
www.smud.org

SMUD Pool and Spa partner:

FPSIE
916-922-8895 • www.fpsie.org



SMUD's Pools and Spas Energy Efficiency Program

Your Pool Guide to Energy Savings

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SMUD's Pools and Spas Energy Efficiency Program

F.A.Q.s

Q: I've heard that it's possible to save a lot of energy on our electric bill by upgrading our pool pump and motor to a more energy efficient one. What can you tell me about this?

A: Motor manufacturers are making several different types of motors today for pools and spas that can save you energy and money on your bill. First, there is the "Energy Efficient" motor that customers have achieved 10-15% savings in comparison to their older model, single speed motor. By upgrading to the next level, a two (2) speed motor, savings of 12-20% is typical. Then, there is the more efficient "variable" speed motor that is even more energy efficient that customers report savings of 25-40%. Yet even greater savings can be achieved by the addition of a controller for use in conjunction with the variable speed motor. Customers report 40-60% savings over the old single speed motors.

Q: How can we get specific information about these new energy efficient pool motors and potential savings if we invest in them?

A: We recommend that you contact a pool/spa professional that has been trained in the SMUD-sponsored Aquatic Energy Auditor course which was developed by and is taught



at the Foundation for Pool and Spa Industry Education Center right here in Sacramento. Ask your pool/spa professional if he/she has taken this training.

Q: We thought that we'd save money by taking care of our pool ourself, but we've become concerned about keeping all the chemicals here at home. Do you have any recommendations about this?

A: We posed this question to the Foundation for Pool and Spa Industry Education (FPSIE) and this is their reply: "Saving money by taking care of the pool yourself may look good on the surface, but without professional knowledge and care, your equipment, energy and chemical expenses can cost you thousands more below the surface. Lack of expertise can mean having to replace mechanical equipment and much larger structural failures (i.e. your pool shell cracking) a lot sooner than necessary. Many

pool chemicals can be VERY dangerous if mishandled, mixed, spilled or stored improperly. With safety training as our first priority, we don't recommend keeping chemicals at home, but if you do, make sure they are stored in another room away from gasoline and your lawn mower. Keep them in a dry, secure place out of reach from children. Wear proper protective equipment and know how to use chemicals safely."

Q: What is the best time to operate my pool equipment for maximum energy efficiency and cleaning?

A: You can help everyone by filtering your pool during off-peak hours. Based on SMUD's peak hours, with the exception to solar heated pools, customers should avoid running equipment during peak hours of 4 p.m. to 7 p.m. This will help reduce the demand for electricity, conserve natural resources, and save money.

Q: We've heard that pool covers not only save energy but save water as well. What can you tell us about covers?

A: Did you know that as much as 50% of your heat loss from a pool can be from evaporation? Convection losses (the coolness you feel as you get out of the water) can add another 25% of heat loss. A pool cover not only significantly slows heat loss from the water, but also drastically reduces water loss. These covers are a MUST for any spa or pool with temperatures warmer than the air.

Q: A few years ago a SMUD representative told us about how a new energy efficient air conditioner would pay for itself over time. Sure enough, we financed a new unit and the savings on our electric bill was enough to make the payments. It's all paid for now and we're still enjoying the savings. Is this also true for our pool motor?

A: Let's do the math: Your old 2-horse power single speed motor in SMUD service territory costs about 60 cents per hour to operate if you run it 8 hours per day during a 6 month swim season (182 days x 8 hours x 60 cents = \$873.60), and you save say 40% of that is \$399.44 in savings that you can apply towards the new equipment you purchase. Then, once it has paid for itself, the savings just keep on coming.

Q: What is the recommended temperature for my pool?

A: The American Red cross recommends that swimming pool temperature is 78°F-82°F. Be sure to use an accurate pool thermometer, since a variance of just four degrees above 78° could use as much as 40% more energy.

