

It is worth the change

By Dino Muggeo, Fun State Pool Service

Sitting in the Energy Committee meeting at the June's FSPA Board meeting, I heard some complaining about whether or not Florida's new energy efficient pool pump requirements are really worth it. When I first got approached by Gainesville Regional Utilities to help develop their pool pump rebate program, I had not installed a variable speed pump and had to rely on the data that was available from various manufactures websites. The numbers looked really good on paper but does it work in the real world?

It was not until I actually installed my first variable speed pump and programmed it to the pool's needs that I was able to verify the savings, but that was just one pool. GRU has an annual meeting with all their Partnering Pool Contracts to review their rebate program. At this years meeting on June 8, 2011, GRU's Jim Gilmartin presented the performance statistics for the rebate program. Of the approximate 6,000 residential pools they provide electric for, they issued 715 rebates since 2008. The average annual savings for customers using a variable speed pool pumps was 2241 kWh or \$336.15 at an average of \$.15 per kWh. Below is a breakdown of the different types of pumps installed and their average annual savings:

<u>Pump Type</u>	<u># of Rebates</u>	<u>kWh Savings</u>	<u>\$ Savings</u>
2 Speed	32	885	\$132.75
Variable Speed	313	2405	\$360.75
Variable Speed with Controller	209	2268	\$340.20
Variable Flow	161	2044	\$306.60

The chart shows the best performing pump was the variable speed pump installed without a controller. These are typically installed on pools that did not have any water features so it was set on one speed and the customer had to manually change the speeds. Whereas the other variable speed pumps were installed on pools with water features and programmed to change speeds to run the water features and automatic pool cleaners. GRU initially anticipated an annual savings of 1680 kWh for the variable speed pumps and 2200 kWh for variable flow pumps. Obviously the variable speed pumps have out performed themselves. GRU is convinced that the variable speed pumps save their customers money by cutting their electrical consumption and they plan to continue their rebate program through 2012. Gulf Power who provides electric in the panhandle has also joined GRU in giving rebates for the variable speed pool pumps.

If this data is not enough to convince you that these pumps are worth installing, the National Resource Defense Council published some interesting information between 2005 and 2008. Using the Orlando and Tampa areas, they estimated the annual energy bill savings for a 2,500 sq. ft. single story home brought up to Energy Star levels to be 4,218 kWh. The savings comes from replacing all the appliances (refrigerator, dishwasher, washer, dryer, etc) in the house with Energy Star appliances, replacing the A/C system, replacing the water heater with a tankless water heater, adding insulation to the attic, and replacing the windows with energy efficient low E windows and a few other things at a cost to the homeowner in the tens of thousands of dollars. The Return on Investment (ROI) is in the decades. However, with a pump at cost of about one to two thousand dollars, the homeowner can see a significant reduction in their electric bill and see a ROI in just a few years.