

Example Calculation for Value of Generation

This is an example of how to calculate the average value in dollars of a grid tied generator, either PV or SW. The capacity factor was chosen for demonstration purposes only. The actual value should be obtained from the manufacturer of the system. The 50kW power rating was chosen to show a close number of kWh to the average monthly residential usage.

Average Residential Usage per Month: 1183.3 kWh

Assuming 5.5kW Generator:

Hours in Month: 730

Capacity Factor: 0.30

$$\text{Total kWh} = 5.5 \text{ kW} \times 730 \text{ hr} \times 0.30 = 1204.5 \text{ kWh in Month}$$

Monthly Rate:

Highline Combined Demand and Energy Charge

January – December

First 750 kWh/month: \$0.1145

All Additional kWh/month: \$0.0782

$$\text{Additional kWh} = \text{Total kWh} - 750 \text{ kWh}$$

$$\text{Additional kWh} = 1204.5 \text{ kWh} - 750 \text{ kWh} = 454.5 \text{ kWh}$$

$$750 \text{ kWh/month} \times \$0.1145/\text{kWh} = \$85.88/\text{month}$$

$$454.5 \text{ kWh/month} \times \$0.0782/\text{kWh} = \$35.54/\text{month}$$

$$\$85.88 + \$35.54 = \$121.42 \text{ Total Dollars Generated Per Month}$$