How much energy/electricity will I be using?

The simple answer is that firing a kiln costs less than you'd imagine. Even though a kiln draws electricity, it does not draw it continually, so during a typical glass firing, a kiln's elements are drawing power only a fraction of the time. Most digital controllers allow you to enter your cost per kilowatt hour for electricity and they will report back the cost of the firing.

Here's one formula for calculating the cost of firing your kiln:

1 = Amps
2 = Volts
3 = Estimated Firing time in hours time x .75 (kiln is only on full power intermittently)
4 = Cost per kilowatt hr from your electric bill

1 x 2 x 3 x 4 = Firing Cost 1,000

A longer firing will increase the energy cost, it will not be a large increase because the kiln will not be on full power any longer and the .75 factor in "3" of the formula would be lower. The formula assumes a normal, even increase per hour.

Here's another way to calculate electric usage and costs:

Step 1: Determine the wattage of the kiln (Volts x Amps = Watts... ex. 120 volts x 15 Amps = 1800 Watts)

Step 2: Multiply wattage by 1000 (ex. 1800 Watts / 1000 = 1.8 KW)

Step 3: Multiply kilowatts (KW) by KW cost on your energy bill (ex. 1.8 KW x $0.15 = $0.27 per KWH for each hour the kiln is on high and not cycling on and off)

Step 4: Multiply the answer you received above by .75 (ex. $.27 x .75 = $.20 per hour to run the kiln)

We assume the kiln is cycling on and off during this firing so the actual amount of time the kiln is running a program is about 66% to 75% on. This is not much for a 120v small kiln, but can add up over a month of firing a 240v 45 amp kiln.