

# COWLITZ PUD WATT WATCHERS GUIDE

Effective October 1, 2025

| EQUIPMENT/APPLIANCE              | CONSTRAINTS                   | Average<br>Watts | kWh/<br>Use | Hours/<br>Month | kWh/<br>Month | Cost/<br>Month |
|----------------------------------|-------------------------------|------------------|-------------|-----------------|---------------|----------------|
| <b>Heating &amp; Cooling</b>     |                               |                  |             |                 |               |                |
| Air Conditioner (1 Room)         | 15 times/day (6 months/year)  | 1340             | 0.045       | 218             | 194           | \$14.88        |
| Electric Heat (& Aux.Heat)       | 14 times/day (6 months/year)  | 7000             | 0.233       | 215             | 1,505         | \$115.28       |
| Fan (Furnace)                    | 14 times/day (year-round)     | 490              | 0.011       | 209             | 102           | \$7.84         |
| Fans (Built-in ceiling)          | 6 hours/day                   | 60               | 0.360       | 180             | 10.8          | \$0.83         |
| Fans (Portable)                  | 30 hours/month                | 66               | 0.066       | 30              | 2.0           | \$0.15         |
| Heat Pump (Heat & A/C)           | 14 times/day (year-round)     | 4500             | 0.150       | 209             | 939           | \$71.96        |
| Space Heater                     | 4 hours/day                   | 1300             | 5.2         | 120.0           | 158.1         | \$12.11        |
| <b>Kitchen</b>                   |                               |                  |             |                 |               |                |
| Blender                          | 20 seconds, once/day          | 300              | 0.002       | 0.17            | 0.050         | \$0.004        |
| Coffee Maker-Drip                | 60 pots/month                 | 1500             | 0.18        | 8               | 10.5          | \$0.80         |
| Coffee Maker-Percolator          | 60 pots/month                 | 600              | 0.12        | 12              | 7.2           | \$0.55         |
| Crockpot                         | 32 hours/month                | 100              | 0.80        | 20              | 3.2           | \$0.25         |
| Dishwasher (with Drying)         | 6 days/week                   | 1400             | 3.6         | 26              | 109           | \$8.36         |
| Dishwasher (without Drying)      | 6 days/week                   | 1400             | 1.2         | 26              | 36            | \$2.79         |
| Electric Knife                   | 5 minutes, 1 time/week        | 92               | 0.008       | 0.36            | 0.033         | \$0.003        |
| Food Dehydrator                  | 36 hours/month                | 500              | 1.80        | 24              | 18            | \$1.38         |
| Food Processor                   | 12 minutes/month              | 370              | 0.006       | 0.20            | 0.074         | \$0.006        |
| Freezer                          | 20 cu.ft. frost-free          | 440              | 0.01        | 340             | 106           | \$8.09         |
| Freezer                          | 20 cu.ft. conventional        | 351              | 0.01        | 250             | 84            | \$6.45         |
| Frying Pan                       | 12 hours/month                | 1150             | 1.06        | 12.00           | 13.8          | \$1.06         |
| Garbage Disposal                 | 40 seconds, 4 times/day       | 445              | 0.02        | 3               | 0.59          | \$0.05         |
| Hot Water Dispenser              | 65 hours/month (1 gallon/day) | 750              | 1.63        | 65              | 49            | \$3.73         |
| Microwave Oven                   | 20 minutes/day                | 1500             | 0.50        | 8               | 15            | \$1.15         |
| Mixer (Hand)                     | 3 minutes, 3 times/week       | 120              | 0.006       | 0.65            | 0.078         | \$0.006        |
| Mixer (Standing)                 | 6 minutes, 1 time/week        | 225              | 0.023       | 0.43            | 0.097         | \$0.007        |
| Oven (Conventional)              | 12 hours/month                | 3500             | 9.7         | 15              | 42            | \$3.22         |
| Oven (Self-cleaning cycle alone) | 1 time/month                  | 3500             | 3.5         | 1               | 3.5           | \$0.27         |
| Range Top (6" element)           | 10 minutes, 3 times/day       | 1600             | 0.27        | 15              | 24            | \$1.84         |
| Range Top (8" element)           | 10 minutes, 1 time/day        | 2100             | 0.35        | 10              | 10.5          | \$0.80         |
| Refrigerator                     | 20 cu.ft. frost-free          | 615              | 0.01        | 240             | 148           | \$11.31        |
| Refrigerator                     | 24 cu.ft. ENERGY STAR         | 1270             | 0.01        | 60              | 76            | \$5.84         |
| Toaster (two-slice)              | 3 minutes, 2 times/day        | 1100             | 0.06        | 2               | 3.3           | \$0.25         |
| Toaster Oven                     | 6 hours/month                 | 1200             | 0.83        | 8               | 7.2           | \$0.55         |
| Trash Compactor                  | 30 seconds, 1 time/day        | 400              | 0.003       | 0.25            | 0.10          | \$0.008        |
| <b>Bed &amp; Bath</b>            |                               |                  |             |                 |               |                |
| Curling Iron                     | 15 minutes, 1 time/day        | 40               | 0.01        | 7.5             | 0.30          | \$0.023        |
| Electric Blanket                 | 4 hours every night           | 177              | 0.708       | 120             | 21.2          | \$1.63         |
| Electric Shaver                  | 4 minutes, 1 time/day         | 15               | 0.001       | 2               | 0.03          | \$0.002        |
| Fans (Built-in Exhaust)          | 1 hour/day                    | 200              | 0.200       | 1               | 0.2           | \$0.02         |
| Hair Curlers                     | 15 minutes, 1 time/day        | 400              | 0.10        | 7.5             | 3.00          | \$0.23         |
| Hair Dryer                       | 15 minutes, 1 time/day        | 1200             | 0.3         | 7               | 9.00          | \$0.69         |
| Water Bed (King at 95°)          | 9 hours/day                   | 400              | 3.6         | 273.6           | 109.4         | \$8.38         |
| <b>Laundry</b>                   |                               |                  |             |                 |               |                |
| Clothes Dryer                    | 15 loads/month                |                  |             |                 |               |                |
| Clothes Washer                   | 15 one-hour loads/month       | 4800             | 3.60        | 15              | 72            | \$5.52         |
| Hot Wash/Warm Rinse              | 30 gallons hot water/load     | 1180             | 7.30        | 15              | 146           | \$11.18        |
| Hot Wash/Cold Rinse              | 22 gallons hot water/load     | 1180             | 5.50        | 15              | 110           | \$8.43         |
| Warm Wash/Warm Rinse             | 25 gallons hot water/load     | 1180             | 6.18        | 15              | 124           | \$9.46         |
| Warm Wash/Cold Rinse             | 12 gallons hot water/load     | 1180             | 3.25        | 15              | 65            | \$4.98         |
| Cold Wash/Cold Rinse             | 0 gallons hot water/load      | 550              | 0.55        | 15              | 11            | \$0.84         |
| Iron                             | 4 hours/month                 | 1000             | 1.000       | 2               | 4.0           | \$0.31         |

**COWLITZ PUD WATT WATCHERS GUIDE (continued)**

| <b>EQUIPMENT/APPLIANCE</b>       | <b>CONSTRAINTS</b>          | <b>Average Watts</b> | <b>kWh/ Use</b> | <b>Hours/ Month</b> | <b>kWh/ Month</b> | <b>Cost/ Month</b> |
|----------------------------------|-----------------------------|----------------------|-----------------|---------------------|-------------------|--------------------|
| <b>Home/Office Electronics</b>   |                             |                      |                 |                     |                   |                    |
| Computer                         | 8 hours/day                 | 565                  | 4.520           | 30                  | 135.6             | \$10.39            |
| DishTV HR-DVR                    | continuous (phantom)        | 33                   | 0.033           | 720                 | 23.8              | \$1.82             |
| Electric Clock                   | continuous                  | 2                    | 0.002           | 720                 | 1.4               | \$0.11             |
| Nintendo Wii                     | 8 hours/day                 | 19                   | 0.152           | 240                 | 4.6               | \$0.35             |
| PlayStation                      | 8 hours/day                 | 200                  | 1.600           | 240                 | 48.0              | \$3.68             |
| Printer (Ink Jet)                | 16 minutes/day              | 25                   |                 | 8                   | 0.2               | \$0.02             |
| Printer (Laser)                  | 16 minutes/day              | 300                  |                 | 8                   | 2.4               | \$0.18             |
| Radio                            | 7 hours/day                 | 15                   | 0.105           | 210                 | 3.2               | \$0.24             |
| Stereo                           | 4 hours/day                 | 50                   | 0.024           | 120                 | 6.0               | \$0.46             |
| TV (Color: LED)                  | 7 hours/day                 | 101                  | 0.707           | 210                 | 21.2              | \$1.62             |
| TV (Color: Plasma)               | 7 hours/day                 | 301                  | 2.107           | 210                 | 63.2              | \$4.84             |
| TV (Color: Standard TV)          | 7 hours/day                 | 186                  | 1.302           | 180                 | 39.1              | \$2.99             |
| VCR/DVD Player                   | 2 hours/day                 | 30                   | 0.004           | 60                  | 1.8               | \$0.14             |
| Wireless Router                  | continuous (phantom)        | 7                    | 0.007           | 720                 | 5.0               | \$0.39             |
| Xbox Series X                    | 8 hours/day                 | 200                  | 1.600           | 240                 | 48.0              | \$3.68             |
| <b>General Household Items</b>   |                             |                      |                 |                     |                   |                    |
| Air Cleaner (Tabletop)           | 9 hours/day                 | 16                   |                 | 270                 | 4.3               | \$0.33             |
| Dehumidifier                     | 4 hours/day                 | 250                  | 1.0             | 122                 | 30.4              | \$2.33             |
| Fish Tank (pump, light & heater) | light & heater intermittent | 130                  |                 | 140                 | 18.2              | \$1.39             |
| Garage Door Opener               | 3 times/day                 | 350                  | 0.350           | 90                  | 31.5              | \$2.41             |
| Heating Pad                      | 2 hours/month               | 65                   | 0.065           | 2                   | 0.1               | \$0.01             |
| Lights (Compact fluorescent)     | 5 lights (7 hrs/day/bulb)   | 18                   | 0.54            | 180                 | 16.2              | \$1.24             |
| Lights (Incandescent)            | 5 lights (7 hrs/day/bulb)   | 75                   | 2.25            | 180                 | 67.5              | \$5.17             |
| Lights (LED)                     | 5 lights (7 hrs/day/bulb)   | 10                   | 0.30            | 180                 | 9.0               | \$0.69             |
| Sewing Machine                   | 4 hours/month               | 75                   | 0.075           | 4                   | 0.3               | \$0.02             |
| Vacuum Cleaner                   | 6 hours/month               | 630                  | 0.630           | 2                   | 3.8               | \$0.29             |
| Water Heater                     | 90 gallons/day at 120°      | 4500                 | 4.5             | 90                  | 405               | \$31.02            |
| <b>Other</b>                     |                             |                      |                 |                     |                   |                    |
| Well Pump                        | 4 hours/day(Family=4) 1.5HP | 1500                 | 0.75            | 120                 | 180               | \$13.79            |
| Well Pump                        | 2 hours/day(Family=2) 1.5HP | 1500                 | 0.75            | 60                  | 90                | \$6.89             |
| Electric Lawnmower               | 1 time/week                 | 1200                 |                 | 4                   | 4.8               | \$0.37             |
| EV Charger, 240 volt Station     | 4 hours, 6 days/week        | 5300                 | 15.9            | 104                 | 413               | \$31.67            |
| EV Charger, 120 volt Outlet      | 9 hours, 6 days/week        | 1800                 | 16.2            | 234                 | 421               | \$32.26            |
| Hot tub - Fiberglass             | 13 days/month (2 hours/use) | 2760                 | 41.4            | 26                  | 538               | \$41.23            |
| Hot tub - Dry Wood               | 13 days/month (2 hours/use) | 2760                 | 66.2            | 42                  | 861               | \$65.96            |
| Hot tub - Uninsulated            | 13 days/month (2 hours/use) | 2760                 | 113.2           | 71                  | 1,471             | \$112.68           |

**For items not shown on this list, use the following equation to calculate the monthly electric cost:**

$$\frac{\text{Average wattage of item} \times \text{hours used per month} \times \$0.0766}{1000} = \text{Monthly cost to operate}$$

**Watt:** Basic unit for measuring amounts of electricity

**Watts:** Volts x Amps. Use this formula to calculate the wattage if unknown.

**Kilowatt (kW):** 1,000 watts, a convenient measure for typical amounts of electricity consumed.

**Kilowatt hour (kWh):** 1,000 watts delivered for one hour. This is how electricity use (not capacity) is measured.

**Wattage:** The amount of electricity used by an appliance.

\*Electric cost: Cowlitz PUD's residential electric rate is \$0.0766 (7.66¢) per kilowatt hour as of October 1, 2025.

**Note: Each customer's costs will vary based on individual usage.**

**For more information about energy efficiency or Cowlitz PUD's rebate programs, please contact Energy Efficiency Services at (360) 501-9514 or eeservices@cowlitzpud.org.**

