## For Coggon Municipal Light Plant Residential Customers Cost of Operating Home Appliances

Here is an extensive list of electric appliances and an estimate of how much electricity each may use in a average home with average usage patterns. Note the assumptions that were made for each appliance, especially how much electricity the appliance draws (watts) and how often the appliance might be used in a typical household. These two factors along with the age of the appliance are the most important variables that determine operating costs.

The assumptions listed for each appliance determine the "Monthly Cost Estimate," The assumptions examples. These references allow you to compare your appliance and your personal usage patterns with the estimate shown below. Your exact usage will likely vary from these examples, but a list like this is still very helpful to learn which appliances affect your electric bill the most.

Your electric bill will always include a meter charge of $\$ 12$ for the first residential meter and $\$ 6$ for the second meter at the same property address.

## Electric Appliance Operating Cost List

| Appliance Description | Appliance wattage, size and usage assumptions listed, determine the monthly kWh and cost estimate | Monthly kWh Estimate | Monthly Cost Estimate |  |
| :---: | :---: | :---: | :---: | :---: |
| Air compressor | 1000 watts, 3 uses per week, 1 HP, 2 hrs. per use |  |  |  |
|  |  | 8.5 | \$ | 1.23 |
| Air purifier, portable for one room | 100 watts, 24 hours per day, fan and filter type (wattage varies widely) | 72 | \$ | 10.44 |
| Air purifier, portable for one room | 40 watts, 24 hours per day, ultraviolet light(s) always on | 28.8 | \$ | 4.18 |
| Air purifier, UV in furnace | 70 watts, 24 hours per day, uv light(s) always on |  |  |  |
|  |  | 50.4 | \$ | 7.31 |
| Appliance power adaptor | 6 watts, 24 hours per day, plug-in transformer converting AC power to DC (wattage varies widely) |  |  |  |
|  |  | 4.3 | \$ | 0.62 |
| Aquarium air pump | 5 watts, 24 hours per day, always on | 3.6 | \$ | 0.52 |
| Automobile battery charger | 235 watts, 1 use per week, 2 hours per use | 2 | \$ | 0.29 |
| Automobile engine heater | 1000 watts, 12 hours per day, winter months, coolant flow heater | 360 | \$ | 52.20 |
| Automobile engine heater | 300 watts, 12 hours per day, winter months, block heater | 108 | \$ | 15.66 |
| Battery recharger for cordless appliance | 6 watts, 24 hours per day, always on (wattage varies widely) | 4.3 | \$ | 0.62 |


| Blanket, electric | 150 watts, 8 hours per day, $50 \%$ cycle time | 18 | \$ | 2.61 |
| :---: | :---: | :---: | :---: | :---: |
| Blender | 330 watts, 2 uses per week, 3 minutes per use | 0.1 | \$ | 0.01 |
| Bread maker | 650 watts, 1 use per week, 2 hours per use, cycles off |  |  |  |
|  | \& on | 2.8 | \$ | 0.41 |
| Broiler | 1350 watts, 1 use per week, 1 hour per use, cycles off |  |  |  |
|  | \& on | 2.9 | \$ | 0.42 |
| Bug killer light | 40 watts, 2 hours per day, used each evening | 2.4 | \$ | 0.35 |
| Can opener | 220 watts, 20 uses per week, 30 seconds each | 0.2 | \$ | 0.03 |
| Carving knife | 100 watts, 2 uses per week, 5 minutes per use | 0.1 | \$ | 0.01 |
| Christmas/holiday light strands | 600 watts 5 hours per day, older bulbs, 6 watts @ per strand of 100 | 90 | \$ | 13.05 |
| Christmas/holiday light strands | 40 watts, 5 hours per day, typical mini lights, .4 watts @, per strand of 100 | 1.2 | \$ | 0.17 |
| Christmas/holiday light strands | 8 watts, 5 hours per day, New LED lights, .08 watts@, per strand of 100 | 1.2 | \$ | 0.17 |
| Clocks | 2 watts, 24 hours per day, plug in, not battery | 1.4 | \$ | 0.20 |
| Clock radio | 10 watts, 6 hours per day, older model with radio on |  |  |  |
|  |  | 1.8 | \$ | 0.26 |
| Coffee maker | 350 watts, 1 hour per day, brew \& keep warm | 10.5 | \$ | 1.52 |
| Coffee maker | 1500 watts, 10 minutes per day, brew \& turn off |  |  |  |
|  |  | 5 | \$ | 0.73 |
| Coffee percolator | 660 watts, 15 minutes per day, percolate and then turn off | 5 | \$ | 0.73 |
| Compact disc player | 50 watts, 4 hours per day | 6 | \$ | 0.87 |
| Computer, desktop | 65 watts, 2 hours per day, actual wattage varies with different work loads | 3.9 | \$ | 0.57 |
| Computer, desktop in sleep mode | 15 watts, 24 hours per day, wattage varies with different units | 10.8 | \$ | 1.57 |
| Computer, laptop | 15 watts, 2 hours per day, wattage varies with different work loads | 0.9 | \$ | 0.13 |
| Computer monitor, 15" CRT | 35 watts, 2 hours per day, wattage varies with different units | 2.1 | \$ | 0.30 |
| Computer monitor, 17" CRT | 80 watts, 2 hours per day, wattage varies with different units | 4.8 | \$ | 0.70 |
| Computer monitor, 17" LCD | 35 watts, 2 hours per day, wattage varies with different units | 2.1 | \$ | 0.30 |
| Computer system left on | 150 watts, 24 hours per day, PC, monitor, printer all left on with no sleep mode | 108 | \$ | 15.66 |
| Convection oven | 1500 watts, 2 uses per week, bake 60 minutes per use | 6.5 | \$ | 0.94 |
| Crock cooker | 150 watts, 1 use per week on high power, cycling 4 hours | 1.3 | \$ | 0.19 |
| Crock cooker | 70 watts, 1 use per week, on low power, cycling 8 hours | 1.2 | \$ | 0.17 |
| Deep fryer | 1400 watts, 1 use per week, 1 hour per use | 3 | \$ | 0.44 |
| Dehumidifier, runs constantly | 400 watts, 24 hours per day, In "always-moist" location | 288 | \$ | 41.76 |
| Dehumidifier, cycles 50\% of time | 400 watts, 24 hours per day, normal application, cycling 50\% | 144 | \$ | 20.88 |
| Dishwasher and heater | 1200 watts, 4 uses per week, using heater to dry |  |  |  |
|  |  | 10.3 | \$ | 1.49 |
| Dishwasher | 300 watts, 4 uses per week, wash cycle only | 4.1 | \$ | 0.59 |


| Disposer | 400 watts, 2 minutes per day, 430 second uses | 0.4 | \$ | 0.06 |
| :---: | :---: | :---: | :---: | :---: |
| Dryer, clothes | 5500 watts, 6 uses per week, average family of 4, 45 minutes per load | 83 | \$ | 12.04 |
| Dryer - clothes, portable | 1200 watts, 10 uses per week, one hour cycles | 51.6 | \$ | 7.48 |
| Electronic air filter - on central HVAC system | 40 watts, 24 hours per day, always on, (see furnace fan for additional) | 28.8 | \$ | 4.18 |
| Evaporative cooler | 325 watts, 24 hours per day, always on | 234 | \$ | 33.93 |
| Exercise, treadmill | 1500 watts, 5 uses per week, 2 HP treadmill, 30 minutes per use | 16.1 | \$ | 2.33 |
| Fan, attic fan | 400 watts, 12 hours per day, in home ceiling, exhaust to attic | 144 | \$ | 20.88 |
| Fan, furnace fan | 500 watts, 24 hours per day, $1 / 2 \mathrm{HP}$, always on | 360 | \$ | 52.20 |
| Fan, ceiling fan | 65 watts, 12 hours per day, high efficiency, Energy Star ceiling fan on high speed | 23.4 | \$ | 3.39 |
| Fan, ceiling fan | 8 watts, 12 hours per day, high efficiency, Energy Star ceiling fan on low speed | 2.9 | \$ | 0.42 |
| Fan | 60 watts, 12 hours per day, portable - 12" | 21.6 | \$ | 3.13 |
| Fan | 180 watts, 12hours per day, portable - 20" | 64.8 | \$ | 9.40 |
| Fax machine | 10 watts, 24 hours per day, newer, Energy Star model, always on | 7.2 | \$ | 1.04 |
| Fax machine | 43 watts, 24 hours per day, older model always on |  |  |  |
|  |  | 31 | \$ | 4.50 |
| Floor polisher | 400 watts, 1 use per week, 15 minutes per use | 0.4 | \$ | 0.06 |
| Food processor | 400 watts, 1 use per week, 5 minutes per use | 0.1 | \$ | 0.01 |
| Freezer, new | 335 watts, 24 hours per day, medium size | 60.3 | \$ | 8.74 |
| Freezer, old | 450 watts, 24 hours per day, medium size | 97.2 | \$ | 14.09 |
| Gaming, electronic | 50 watts, 1 hours per day, PlayStation 2 | 1.5 | \$ | 0.22 |
| Gaming, electronic | 74 watts, 1 hours per day, $x$-box original | 2.2 | \$ | 0.32 |
| Gaming, electronic | 160 watts, 1 hours per day, x-box 360 |  | \$ | - |
| Garage door opener, small size, (with light) | 250 watts, 2 minutes per day, 1/4HP, 4 cycles per day | 0.5 | \$ | 0.07 |
| Garage door opener, medium size, (with light) | 500 watts, 2 minutes per day, 1/2HP, 4 cycles per day | 0.5 | \$ | 0.07 |
| Grill, outdoor electric | 1500 watts, 2 uses per week, 40 minutes per use |  |  |  |
|  |  | 8.6 | \$ | 1.25 |
| Grill - sandwich | 1200 watts, 2 uses per week, 10 minutes per use |  |  |  |
|  |  | 1 | \$ | 0.15 |
| Hair curling iron | 100 watts, 15 minutes per day | 0.8 | \$ | 0.12 |
| Hair dryer | 1200 watts, 14 uses per week, 5 minutes per use |  |  |  |
|  |  | 6 | \$ | 0.87 |
| Hair rollers | 400 watts, 3 uses per week, 15 minutes per use | 1.3 | \$ | 0.19 |
| Heater, high heat setting | 1500 watts, 3 uses per week, portable heater, cycling $50 \%, 12 \mathrm{Hrs}$. per use | 116.1 | \$ | 16.83 |
| Heater, low heat setting | 750 watts, 3 uses per week, portable heater, cycling $50 \%, 12 \mathrm{Hrs}$. per use | 58.1 | \$ | 8.42 |
| Heater, constant use in warm space | 1000 watts, 24 hours per day, portable heater, cycling $50 \%$ in warm living space | 360 | \$ | 52.20 |
| Heater, constant use in cold space | 1500 watts, 24 hours per day, portable heater, maximum heat in cold space | 1080 |  | 156.60 |
| Heating pad | 60 watts, 3 uses per week, 30 minutes per use | 0.4 | \$ | 0.06 |
| Heating cable, roof overhang | 600 watts, 24 hours per day, always on, 6 watts/foot, cost per 100 ft . | 432 | \$ | 62.64 |


| Heating mad, sidewalk | 5000 watts, 24 hours per day, average 50 watts/sq. ft., 100 sq. ft., cycles off \& on $50 \%$ | 1800 | \$ 261.00 |  |
| :---: | :---: | :---: | :---: | :---: |
| Heating tape, water line | 150 watts, 24 hours per day, average 6 watts/foot 25 ft., cycles off \& on 50\% | 54 | \$ | 7.83 |
| Heat lamp | 250 watts, 24 hours per day, always on, in a cold location | 180 | \$ | 26.10 |
| Hedge clipper | 300 watts, . 25 uses per week, 1 hour per use | 0.3 | \$ | 0.04 |
| Hot tub heater, electric | 5500 watts, 24 hours per day, heater left on, insulated tub and covered, heat cycles $15 \%$ | 594 | \$ | 86.13 |
| Hot tub heater, electric | 5500 watts, 3 uses per week, 2 hours per use, heating only when tub is used | 141.9 | \$ | 20.58 |
| Hot tub heater, electric | 5500 watts, 24 hours per day, heater left on, poorly insulated tub and covered, heat cycles 15\% |  |  |  |
|  |  | 1980 |  | 287.10 |
| Hot tub pump | 1800 watts, 3 uses per week, jets, $11 / 2$ HOP, 2 hours per use | 46.4 | \$ | 6.73 |
| Hot tub pump | 300 watts, 24 hours per day, low speed, circulation pump | 216 | \$ | 31.32 |
| Humidifier, tabletop warm mist | 300 watts, 24 hours per day, always on |  |  |  |
|  |  | 216 | \$ | 31.32 |
| Humidifier, tabletop cool mist | 90 watts, 24 hours per day, always on |  |  |  |
|  |  | 64.8 | \$ | 9.40 |
| Humidifier, console cool mist | 170 watts, 24 hours per day, always on | 122.4 | \$ | 17.75 |
| Humidifier, on furnace | 25 watts, 24 hours per day, fan powered model, always on | 18 | \$ | 2.61 |
| Ice cream maker | 140 watts, 0.25 uses per week, 1 hour per use | 0.2 | \$ | 0.03 |
| Iron | 1100 watts, 4 uses per week, 30 minutes per use |  |  |  |
|  |  | 6.6 | \$ | 0.96 |
| Jacuzzi (see hot tub) |  |  | \$ | - |
| Kiln, small | 1000 watts, 1 use per week, 8 hours per use | 34.4 | \$ | 4.99 |
| Kiln, large | 10,000 watts, 1 use per week, 8 hours per use, cycling $50 \%$ of time | 172 | \$ | 24.94 |
| Lawn edger | 600 watts, 1 use per week, 30 minutes per use | 1.3 | \$ | 0.19 |
| Lawn mower | 1200 watts, 1 use per week, 60 minutes per use | 5.2 | \$ | 0.75 |
| Lawn trimmer | 460 watts, 1 use per week, 30 minutes per use | 1 | \$ | 0.15 |
| Lighting, by the hour, compact fluorescent | 25 watts, 1 hour per day equivalent light of a 100 watt incandescent | 0.8 | \$ | 0.12 |
| Lighting, by the hour, incandescent | 100 watts, 1 hour per day, bulb or spot light | 3 | \$ | 0.44 |
| Lighting, indoors, small home | 600 watts, 5 hours per day, for average family of four, 8) 75 watt bulbs | 90 | \$ | 13.05 |
| Lighting, indoors, small home, 5 most used lights are CFLs | 325 watts, 5 hours per day, 5) 20 watt compact fluorescent lights \& 3)75 watt bulbs |  |  |  |
|  |  | 48.8 | \$ | 7.08 |
| Lighting, indoors, well lit larger home | 1875 watts, 8 hours per day, 25) 75 watt bulbs, many ceiling can lights or home office well let | 450 | \$ | 65.25 |
| Lighting, shop light | 80 watts, 1 hours per day, 2, four foot fluorescent bulbs | 2.4 | \$ | 0.35 |
| Lighting, outdoors | 50 watts, 12 hours per day small mercury vapor | 18 | \$ | 2.61 |
| Lighting, outdoor, quartz | 150 watts, 12 hours per day, quartz light | 54 | \$ | 7.83 |
| Lighting, outdoor pole light with photocell | 175 watts, 12 hours per day, mercury vapor security light | 63 | \$ | 9.14 |


| Lighting, outdoor pole light with photocell | 100 watts, 12 hours per day, high pressure sodium, security light | 36 | \$ | 5.22 |
| :---: | :---: | :---: | :---: | :---: |
| Lighting, outdoor with photocell | 100 watts, 12 hours per day, typical incandescent yard light | 36 | \$ | 5.22 |
| Medical, Nebulizer | 100 watts, 30 minutes per day, average size | 1.5 | \$ | 0.22 |
| Medical, Oxygen Concentrator | 400 watts, 12 hours per day, average size \& output |  |  |  |
|  |  | 144 | \$ | 20.88 |
| Microwave oven | 800 watts, 30 minutes per day, average usage | 12 | \$ | 1.74 |
| Mixer, portable | 100 watts, 2 uses per week, 5 minutes per use | 0.1 | \$ | 0.01 |
| Mixer, standard | 350 watts, 2 uses per week, 5 minutes per use | 0.3 | \$ | 0.04 |
| Oven, electric | 3500 watts, 3 uses per week, single oven, one hour per use, cycling | 42 | \$ | 6.09 |
| Oven, electric, cleaning | 3500 watts, . 25 uses per week, self clean cycle, 3 hrs. |  |  |  |
|  |  | 5.6 | \$ | 0.81 |
| Popcorn popper | 500 watts, 2 uses per week, small, 5 minutes per use |  |  |  |
|  |  | 1 | \$ | 0.15 |
| Tool, grinder | 370 watts, 1 use per week, 5 minutes per use | 0.1 | \$ | 0.01 |
| Tool, electric chain saw | 1200 watts, 1 use per week, 30 minutes per use | 2.6 | \$ | 0.38 |
| Tool, circular saw | 1320 watts, 1 use per week, 10 minutes per use | 0.9 | \$ | 0.13 |
| Tool, cordless tool battery charger | 6 watts, 24 hours per day, Always charging | 4.3 | \$ | 0.62 |
| Tool, drill | 360 watts, 1 use per week, 15 minutes per use | 0.4 | \$ | 0.06 |
| Tool, belt sander | 900 watts, 1 use per week, 15 minutes per use | 1 | \$ | 0.15 |
| Tool, pad sander | 360 watts, 1 use per week, 15 minutes per use | 0.4 | \$ | 0.06 |
| Tool, scroll saw | 420 watts, 1 use per week, 15 minutes per use | 0.5 | \$ | 0.07 |
| Tool, soldering gun | 600 watts, 1 use per week, 15 minutes per use | 0.6 | \$ | 0.09 |
| Radio | 15 watts, 6 hours per day, small desk radio | 2.7 | \$ | 0.39 |
| Range/stove top | 1600 watts 5 uses per week, small surface unit, 20 minutes per use | 10.66 | \$ | 1.55 |
| Range/stove top | 2700 watts, 3 uses per week, large surface unit, 20 minutes per use | 10.8 | \$ | 1.57 |
| Refrigerator, new, medium size | 300 watts, 24 hours per day, rough estimate based on 4 in family | 71.9 | \$ | 10.43 |
| Refrigerator, over 10 years old, medium size | 600 watts, 24 hours per day, rough estimate based on 4 in family | 143.9 | \$ | 20.87 |
| Septic tank aerator | 300 watts, 24 hours per day, always on | 216 | \$ | 31.32 |
| Sewing machine | 120 watts, 1 use per week, 60 minutes per use | 0.3 | \$ | 0.04 |
| Shaver | 15 watts, 10 minutes per day, plug in, not battery |  |  |  |
|  |  | 0.1 | \$ | 0.01 |
| Shoe buffer | 175 watts, 2 minutes per day, once each day | 0.2 | \$ | 0.03 |
| Skillet | 1250 watts, 3 uses per week, 30 minutes per use |  |  |  |
|  |  | 4 | \$ | 0.58 |
| Smoke detector | 2 watts, 24 hours per day, always on | 1.4 | \$ | 0.20 |
| Sound equipment | 5 watts, 3 hours per day, single audio appliance using plug instead of batteries | 0.5 | \$ | 0.07 |
| Sound equipment | 50 watts, 3 hours per day, single, older audio appliance using 120 AC volts | 4.5 | \$ | 0.65 |
| Sound equipment | 300 watts, 3 hours per day, 4 to 5 components in system | 27 | \$ | 3.92 |
| Sun lamp, single bulb | 60 watts, 3 uses per week, 15 minutes per use | 0.2 | \$ | 0.03 |
| Sun lamp, tanning device | 800 watts, 3 uses per week, 15 minutes per use | 2.6 | \$ | 0.38 |
| Swimming pool filter pump | 700 watts, 24 hours per day, 1/2 horse power | 504 | \$ | 73.08 |


| Swimming pool filter pump | 1400 watts, 24 hours per day, 1 horse power | 1008 | \$ 146.16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Swimming pool filter pump | 2100 watts, 24 hours per day, 1.5 horse power | 1512 |  | 19.24 |
| Swimming pool sweep pump | 900 watts, 15 minutes per day, 3/4 horse power |  |  |  |
|  |  | 6.8 | \$ | 0.99 |
| Telephone, charger \& answering machine | 6 watts, 24 hours per day, always on (wattage varies widely) | 4.3 | \$ | 0.62 |
| Television, standard | 100 watts, 6 hours per day, CRT tube, small | 18 | \$ | 2.61 |
| Television, standard | 150 watts, 6 hours per day, CRT tube, large | 27 | \$ | 3.92 |
| Television, projection | 220 watts, 6 hours per day, rear projection, average size and wattage | 39.6 | \$ | 5.74 |
| Television, LCD | 150 watts, 6 hours per day, 32 inch LCD screen average size and wattage | 27 | \$ | 3.92 |
| Television, plasma | 350 watts, 6 hours per day, plasma, average size and wattage | 63 | \$ | 9.14 |
| Television, standby electric use | 20 watts, 24 hours per day, power use when TV is off, (usage varies widely) | 14.4 | \$ | 2.09 |
| Toaster | 1100 watts, 10 uses per week, 2 minutes per use |  |  |  |
|  |  | 1.6 | \$ | 0.23 |
| Toaster - broiler oven | 1500 watts, 3 uses per week, 10 minutes per use |  |  |  |
|  |  | 3.2 | \$ | 0.46 |
| Trash compactor | 750 watts, 2 minutes per day, once each day | 0.8 | \$ | 0.12 |
| Vacuum cleaner | 740 watts, 1 use per week, 30 minutes per use | 1.6 | \$ | 0.23 |
| Vaporizer | 30 watts, 1 use per week, mini, 4 hour capacity | 0.5 | \$ | 0.07 |
| Video, DVD | 25 watts, 3 uses per week, 2 hours per use | 0.6 | \$ | 0.09 |
| Video, VCR | 35 watts, 3 uses per week, 2 hours per use | 0.9 | \$ | 0.13 |
| Waffle iron | 1400 watts, 1 use per week, 30 minutes per use | 1.5 | \$ | 0.22 |
| Washing machine | 665 watts, 8 uses per week, average for family of four, 45 min cycles (Does not include hot water usage) | 12 | \$ | 1.74 |
| Water bed heater | 400 watts, 24 hours per day, cycling 33\% on time |  |  |  |
|  |  | 95.9 | \$ | 13.91 |
| Water heater, electric, general use | 4500 watts, 24 hours per day, cycles on $8 \%$, average for family of four. Heater located in warm space |  |  |  |
|  |  | 259.2 | \$ | 37.58 |
| Water heater (this is additional use if clothes washer uses hot wash) | 4500 watts, 8 uses per week, average for family of four, hot wash, cold rinse ( 40 minutes recovery time) | 103.2 | \$ | 14.96 |
| Water, well pump | 100 watts, 24 hours per day, $3 / 4 \mathrm{HP}$, run time totals, $15 \mathrm{~min} /$ day for family of four | 15.8 | \$ | 2.29 |
| Water, well pump used for irrigation | 1600 watts, 4 hours per day, 1 HP | 192 | \$ | 27.84 |
| Wok | 1000 watts, 1 use per week, 20 minutes per use | 0.7 | \$ | 0.10 |

Due to the number of factors beyond Coggon Municipal Light Plants control, CMLP in no way represents or warrants that your electric costs will correspond with these estimates. CMLP disclaims any obligation to update or revise the estimates and expressly disclaims any and all liability for any damages of any nature (including direct, indirect, incidental and consequential) arising in connection with the use of the estimates.

