PacifiCorp

WA-CA-WY-ID Residential Energy Usage Survey

Draft Questionnaire

4/23/2014

## Landing Page

Thank you for participating in this home energy survey to help **[IF WA or CA:** Pacific Power**]**/ **[IF WY or ID:** Rocky Mountain Power**]** better understand how you use energy. This survey information will support **[IF WA or CA:** Pacific Power**]**/ **[IF WY or ID:** Rocky Mountain Power**]**’s efforts to forecast future energy requirements. The more accurate the forecast is, the more reliably **[IF WA or CA:** Pacific Power**]**/ **[IF WY or ID:** Rocky Mountain Power**]** can serve you in a cost-effective manner.

Please note that your answers are captured each time you click “next,” so if you leave and come back to the survey, it will start where you left off. To return to the survey, simply click on the link in the email.

For questions about the survey or data collection, please email **[IF WA or CA:** pacificpower@mdcinvite.com**]**/ **[IF WY or ID:** rockymountainpower@mdcinvite.com**]**.

To begin the survey, please click >>> below.

## HEATING

Q1. Which of the following types of heating systems are used at your home? **(Q1A: ALLOW MULTIPLE MENTIONS; Q1B: SINGLE MENTION; FORCE RESPONSE TO Q1A AND Q1B; AUTO PUNCH Q1A IF Q1B MENTION IS SELECTED)**

|  |  |  |
| --- | --- | --- |
|  | A. All Systems | B. Primary System |
|  | **Check all heating systems that are used at your home** | **Check the one heating system used most at your home** |
| **Type of Heating System** |  |  |
| **Natural gas heating** |  |  |
| Central forced air furnace | 11 | 11 |
| Hot water or steam | 12 | 12 |
| Boiler | 13 | 13 |
| Natural gas fireplace | 31 | 31 |
| Fireplace insert that uses natural gas | 34 | 34 |
| Other natural gas system | 14 | 14 |
| **Electric heating** |  |  |
| Baseboard, wall heaters (without fans) | 15 | 15 |
| Wall heaters with fan  | 16 | 16 |
| Central forced air furnace | 17 | 17 |
| Heat pump with natural gas furnace backup | 18 | 18 |
| Heat pump with electric furnace backup | 19 | 19 |
| Heat pump with other backup | 20 | 20 |
| Ductless heat pump | 21 | 21 |
| Radiant surface heating (floor/ceiling/wall) | 22 | 22 |
| Portable heaters | 23 | 23 |
| Electric fireplace | 38 | 38 |
| Fireplace insert that uses electricity | 39 | 39 |
| Other electric system (please type in your “other” electric heating system in the box)  | 24 | 24 |
| **Oil heating** |  |  |
| Central forced air furnace | 25 | 25 |
| Hot water or steam (upright radiators or baseboards) | 26 | 26 |
| **Propane, butane, or kerosene heat** |  |  |
| Central forced air | 27 | 27 |
| Portable heaters | 28 | 28 |
| **Other fuels** |  |  |
| Wood stove | 29 | 29 |
| Wood fireplace | 30 | 30 |
|  |  |  |
| Fireplace insert that uses wood | 32 | 32 |
| Fireplace insert that uses pellets | 33 | 33 |
|  |  |  |
| Solar with electric backup | 35 | 35 |
| Solar with gas backup | 36 | 36 |
| Biomass | 37 | 37 |
| **Other system** (please type in your “other” system in the box)  | 99 | 99 |
| **No heating system** | 88 | 88 |

Q2. What is the age of your primary heating system? **(SINGLE MENTION)**

 1 0-5 years

 2 6-10 years

 3 11-15 years

 4 16-20 years

 5 Older than 20 years

**IF Q1B=11-14, 18, 27, 28, 31, 34, 36**

Q3. You selected natural gas as your primary heating source. Did you replace an electric system? **(SINGLE MENTION)**

 1 Yes

 2 No

Q4. Do you **use** a programmable thermostat for heating? **(SINGLE MENTION)**

 1 Yes

 2 No

## Cooling

Q5. Which of the following types of cooling systems are used at your home? **(SINGLE MENTION; FORCE RESPONSE; AUTO PUNCH Q5A IF Q5B MENTION IS SELECTED)**

|  |  |  |
| --- | --- | --- |
|  | A. All Systems | B. Primary System |
|  | **Check all cooling systems that are used at your home** | **Check the one cooling system used most at your home** |
| Ductless heat pump | 11 | 11 |
| Window/wall air conditioner | 12 | 12 |
| Portable air conditioner | 13 | 13 |
| Heat pump (a unit that can both heat and cool your home) | 14 | 14 |
| Central electric air conditioner | 15 | 15 |
| Evaporative cooler or swamp cooler | 16 | 16 |
| Ground source heat pump | 17 | 17 |
| Electric portable fan/ceiling fan  | 18 | 18 |
| Other cooling system (please type in your “other” system in the box) \_\_\_\_\_\_\_\_\_\_ | 99 | 99 |
| There is no cooling system in my home | 88 | 88 |

**ASK IF Q5A = 12**

Q6. How many window/wall air conditioners are in your home? **(USE DROP DOWN LIST FOR 0-5; FORCE RESPONSE)**

**ASK Q7-Q8 IF Q5 NOT 88; SHOW Q7 AND Q8 ON ONE PAGE**

Q7. What is the age of your primary cooling system? **(SINGLE MENTION)**

 1 0-5 years

 2 6-10 years

 3 11-15 years

 4 16-20 years

 5 Older than 20 years

Q8. Do you **use** a programmable thermostat for cooling? **(SINGLE MENTION)**

 1 Yes

 2 No

## SQUARE FOOTAGE

Q9. What is the square footage of your living space? **(ALLOW 100-10,000; FORCE RESPONSE)**

 *(Please do not include unheated garage, attic, or unfinished space. If you’re unsure please provide your best estimate.)*

 **RECORD SQ FT:**

## WATER HEATING

Q10. What type of energy is used to heat all/most of your water? **(SINGLE MENTION; FORCE RESPONSE)**

11 Electricity (includes tankless electric water heaters)

12 Natural gas (includes tankless gas water heaters)

13 Propane, kerosene or butane

14 Solar with gas backup

15 Solar with electric backup

16 Oil

99 Other (specify) \_\_\_\_\_\_\_

## APPLIANCE USAGE

Q11. In the table below please type in the number of each type of light bulb you use for inside and outside your home. **(AUTOSUM TOTALS; DO NOT FORCE RESPONSE)**

*Please be as accurate as you can. Lighting can make up a large percentage (20%) of a household’s usage and it is important to know the different bulb types in the home so that* **[IF WA OR CA:** *Pacific Power***]**/ **[IF WY or ID:** *Rocky Mountain Power***]** *can better forecast your electricity demand.*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Inside | Outside | Total |
| Incandescent bulbs (filament) |  |  |  |
| Compact fluorescent bulbs (spiral or bent tubes) |  |  |  |
| Fluorescent tubes |  |  |  |
| Halogen tubes |  |  |  |
| Halogen bulbs |  |  |  |
| LED bulbs |  |  |  |

Q12. How many refrigerators are plugged in and operating at your home (not including wine coolers)? **(USE DROP DOWN LIST FOR 0-4; FORCE RESPONSE)**

**IF Q12>0, SHOW Q13A-D ON THE SAME PAGE**

Q13A. What is the age of your newest refrigerator? **(SINGLE MENTION)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**ASK Q13B IF Q12>1**

Q13B. What is the age of your 2nd newest refrigerator? **(SINGLE MENTION; Q13B RESPONSE MUST BE >=Q13A RESPONSE)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**ASK Q13C IF Q12>2**

Q13C. What is the age of your 3rd newest refrigerator? **(SINGLE MENTION; Q13C RESPONSE MUST BE >=Q13B RESPONSE)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**ASK Q13D IF Q12>3**

Q13D. What is the age of your 4th newest refrigerator? **(SINGLE MENTION; Q13D RESPONSE MUST BE >=Q13C RESPONSE)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

Q14. How many standalone freezers are plugged in at your home? (not including the one attached to a refrigerator)? **(FORCE RESPONSE)**

 1 One

 2 Two

 3 Three

 4 Four

**IF Q14>0, SHOW Q15A-D ON THE SAME PAGE**

Q15A. What is the age of your newest freezer? **(SINGLE MENTION)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**ASK Q15B IF Q14>1**

Q15B. What is the age of your 2nd newest freezer? **(SINGLE MENTION; Q15B RESPONSE MUST BE >=Q15A RESPONSE)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**ASK Q15C IF Q14>2**

Q15C. What is the age of your 3rd newest freezer? **(SINGLE MENTION; Q15C RESPONSE MUST BE >=Q15B RESPONSE)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**ASK Q15D IF Q14>3**

Q15D. What is the age of your 4th newest freezer? **(SINGLE MENTION; Q15D RESPONSE MUST BE >=Q15C RESPONSE)**

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

**SHOW Q16 AND Q17 ON ONE PAGE**

Q16. Please describe your stove top (range) and oven fuel.

1 Electric

2 Natural gas

3 Electric and natural gas

Q17. How many ovens do you have in your home? (FORCE RESPONSE)

 0 None

 1 One

 2 Two

 3 Three

 4 Four

SHOW Q18-Q20 ON ONE PAGE

Q18. How many microwave ovens do you have in your home? (FORCE RESPONSE)

 1 One

 2 Two

 3 Three

 4 Four

Q19. Do you have a dishwasher in your home? (SINGLE MENTION)

 1 Yes

 2 No

Q20. Is there a clothes washing machine at your home? (SINGLE MENTION; FORCE RESPONSE)

 1 Yes

 2 No

ASK Q21 AND Q22 ON SAME PAGE IF Q20=1

Q21. How many clothes washing machines are at your home?

 1 One

 2 Two

 3 Three

 4 Four

Q22. Is your washing machine top loading or front loading? (SINGLE MENTION)

 1 Top loading

 2 Front loading

Q23. Do you have a clothes dryer at your home? (SINGLE MENTION; FORCE RESPONSE)

 1 Yes

 2 No

ASK Q24-Q26 ON SAME PAGE IF Q23=1

Q24. How many clothes dryers are at your home?

 1 One

 2 Two

 3 Three

 4 Four

Q25. What type of clothes dryer? (SINGLE MENTION)

1 Electric

2 Natural gas

Q26. What is the age of your clothes dryer? (SINGLE MENTION)

 1 0-3 years

 2 4-6 years

 3 7-10 years

 5 Older than 10 years

ASK IF Q20 = 1 OR Q23 = 1

Q27. How many loads of laundry do you average per week? (ALLOW 0-50)

 RECORD:

Q28. Is there an outdoor spa or hot tub at your home? (SINGLE MENTION)

 1 Yes

 2 No

IF Q28=1

Q29. How is the spa heated? (SINGLE MENTION)

1 Electric

2 Natural gas

Q30. Does your home have a swimming pool? (SINGLE MENTION)

 1 Yes

 2 No

Q30A. Do you use any pumping devices (sump pump, recirculation pump, well pump)?

 1 Yes

 2 No

Q31. How many of the following appliances are used at your home? (SINGLE MENTION)

 *Please select one response for each row.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | None | One | Two | Three | Four | Five or more |
| Tube type TV (27 inches or less) | 0 | 1 | 2 | 3 | 4 | 5 |
| Tube type TV (more than 27 inches) | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition DLP/rear projection TV | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition plasma (49 inches or less) | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition plasma (50 inches or more) | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition LCD (49 inches or less) | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition LCD (50 inches or more) | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition LED (49 inches or less) | 0 | 1 | 2 | 3 | 4 | 5 |
| High definition LED (50 inches or more) | 0 | 1 | 2 | 3 | 4 | 5 |
| Digital Video Recorder (DVR or TiVo) | 0 | 1 | 2 | 3 | 4 | 5 |
| Digital Video Disk Player (DVD) | 0 | 1 | 2 | 3 | 4 | 5 |
| Stereo system | 0 | 1 | 2 | 3 | 4 | 5 |
| Laptop computer | 0 | 1 | 2 | 3 | 4 | 5 |
| Tablet computer | 0 | 1 | 2 | 3 | 4 | 5 |
| Desktop computer | 0 | 1 | 2 | 3 | 4 | 5 |
| Video game console | 0 | 1 | 2 | 3 | 4 | 5 |
| Home theater (at least 5 speakers) | 0 | 1 | 2 | 3 | 4 | 5 |
| Mobile phone or smartphone | 0 | 1 | 2 | 3 | 4 | 5 |

**Understanding Your Electric Bill**

**IF WA ASK Q32-Q46; IF WY, ID or CA, SKIP TO Q47**

Q32. The next series of questions is about billing for electricity usage. Which of the following statements best describes how you typically review and pay your electric bill?

1 You review the detailed items on your bill including how many kilowatt-hours of electricity you have used

2 You just look for the amount due and due date and don’t look at the detailed items

3 Your bill is paid automatically and you never even look at your bill

4 You only look at the graph on the bill

Q33. Averaged across all seasons of the year, how much do you spend per month on electricity?

 Monthly electricity bill: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q34. Are you aware that electric utilities charge customers based on how many kilowatt-hours of electricity they use each month?

1 Yes

2 No

Q35. Do you typically keep track of how many kilowatt-hours of electricity your household uses each month?

1 Yes

2 No **🡪 SKIP TO Q38**

Q36. How do you keep track of your monthly kilowatt-hour usage of electricity: by reviewing your electric bill, by reading your electric meter, or both?

1 I review the bill **🡪 SKIP TO Q38**

2 I read the meter

3 I review the bill and read the meter

4 Neither **🡪 SKIP TO Q38**

Q37. On average, how many times a month do you read your electric meter?

1 Once

2 Two times

3 Three times

4 Four times or more

5 I don’t read my electric meter

Q38. On average, how many kilowatt-hours of electricity do you use in a typical month for your home? Please ***exclude*** kilowatt-hours of electricity to serve outlying buildings that may also be reflected on your bill.

1 Less than 600

2 601 to 1000

3 More than 1000

7 Don’t know

Q39. Are you aware that Pacific Power charges residential customers a tiered rate where you pay a higher amount per kilowatt-hour as you use more electricity?

1 Yes

2 No **🡪 SKIP TO Q42**

Q40. How aware are you of the levels or tiers and the different amounts charged depending on how much electricity you use?

4 Very aware

3 Somewhat aware

2 Not very aware

1 Not at all aware

Q41. Which of the following best represents the kilowatt-hour point at which residential customers start to pay a higher rate for their monthly energy usage?

1 250 kWh

2 600 kWh

3 1000 kWh

4 2000 kWh

7 Don’t know

Q42. With Pacific Power’s tiered rate, customers pay an increasing amount per kilowatt-hour of electricity used. There are two levels or tiers:

* The first level or tier charges customers about 6 ½ cents per kilowatt-hour for each of the first 600 kilowatt-hours of electricity used per month.
* The second level or tier charges customers about 10 cents per kilowatt-hour over 600 kilowatt-hours of electricity used per month. Customers still pay about 6 ½ cents for each of their first 600 kilowatt-hours.

Before now, were you aware of these levels or tiers and the different amounts charged depending on how much electricity you use?

1 Yes

2 No

Q43. How easy or difficult do you think a tiered rate structure is to understand? Would you say it’s…

4 Very easy

3 Somewhat easy

2 Somewhat difficult

1 Very difficult

Q44. Has the tiered rate structure influenced your electricity usage decisions?

1 Yes

2 Somewhat

3 No

Q45. Using a scale of ‘strongly agree’, ‘somewhat agree’, ‘somewhat disagree’ and ‘strongly disagree’, how much do you agree with the following statement:

*I would rather pay the same rate for each kilowatt-hour than have the tiered rate structure.*

4 Strongly agree

3 Somewhat agree

2 Somewhat disagree

1 Strongly disagree

Q46. Using a scale of ‘strongly agree’, ‘somewhat agree’, ‘somewhat disagree’ and ‘strongly disagree’, how much do you agree with the following statement:

*I would rather pay a higher Basic Charge and lower energy tier rates for each kilowatt-hour.*

4 Strongly agree

3 Somewhat agree

2 Somewhat disagree

1 Strongly disagree

## HOUSEHOLD INFORMATION

Q47. How many people including yourself live at your home? (ALLOW 1-25; FORCE RESPONSE)

 RECORD:

Q48. What type of building is your home? (SINGLE MENTION; FORCE RESPONSE)

11 Single family home

12 Duplex or triplex or fourplex

13 An apartment building

14 A townhouse, row house, or condominium with 2 or more units

15 Manufactured home

99 Other (Specify)

Q49. Since January 2009 has your home been remodeled to change the amount of energy you use, such as ceiling or attic insulation, double or triple glazed windows, caulk or weather-strip doors or windows? (SINGLE MENTION)

 1 Yes

 2 No

 3 Don’t know

ASK IF Q49 = 1

Q50. Did you receive an incentive from [IF WA OR CA: Pacific Power]/ [IF WY or ID: Rocky Mountain Power] for your remodeling project?

 1 Yes

 2 No

 3 Don’t know

Q51. In what year was your residence built? You best estimate is fine.

 RECORD (RANGE = 1850-2013)

 99 Don’t know

Q51A. Do you generate solar or wind power at your residence?

 1 Yes

 2 No

## WA-ONLY HOUSEHOLD INFORMATION

IF WA ASK Q52-Q55 and Q57; IF WY, CA or ID, SKIP TO Q56

Q52. Do you own or rent your home?

1 Own

2 Rent

Q53. Are you aware that Pacific Power has programs to help you buy more energy efficient appliances and equipment for your home?

1 Yes

2 No

Q54. Including you, how many people in each of the following age ranges usually live in your home?

|  |  |
| --- | --- |
|  | ***Fill in how many people in each of the age ranges live in your home*** |
| < 4 years old |  |
| 5 to 12 years old |  |
| 13 to 18 years old |  |
| 19 to 24 years old |  |
| 25 to 34 years old |  |
| 35 to 44 years old |  |
| 45 to 54 years old |  |
| 55 to 64 years old |  |
| 65 + years old |  |

Q55. Which of the following best represents your age?

1 18 to 25

2 26 to 35

3 36 to 45

4 46 to 55

5 56 to 65

6 Over 65

Q56. Which of the following best describes your total annual household income before taxes and deductions?

11 Under $10,000

12 $10,000 to $19,999

13 $20,000 to $29,999

14 $30,000 to $39,999

15 $40,000 to $49,999

16 $50,000 to $59,999

17 $60,000 to $69,999

18 $70,000 to $79,999

19 $80,000 to $89,999

20 $90,000 to $100,000

21 $100,001 or more

98 Prefer not to answer

**IF WY OR CA OR ID, SKIP TO END**

Q57. Have you received energy financial assistance from any state agency or non-profit organization?

1 Yes

2 No

## Exit

Thank you very much for your cooperation and assistance!

IF WA or CA, DIRECT RESPONDENTS TO [WWW.PACIFICPOWER.NET](http://WWW.PACIFICPOWER.NET)

IF WY or ID, DIRECT RESPONDENTS TO [WWW.ROCKYMOUNTAINPOWER.NET](http://WWW.ROCKYMOUNTAINPOWER.NET)