

d35. How many persons are usually home on a weekday afternoon?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8 or more
- Prefer not to answer

d36. Are you planning on making any large purchases to improve energy efficiency in the next 3 years?

- Yes
- No
- DK/NS

The following questions are for classification purposes only and will not be used for any other purpose than to help Duke Energy continue to improve service.

d37. What is your age group?

Read all.

- 18-34
- 35-49
- 50-59
- 60-64
- 65-74
- Over 74
- Prefer not to answer

d38. Please indicate your annual household income.

Read all.

- Under \$15,000
- \$15,000-\$29,999
- \$30,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$100,000
- Over \$100,000
- Prefer Not to Answer
- DK/NS

We've reached the end of the survey. As I mentioned earlier, we would like to send you \$15 for your time and feedback today. Should we send it to {address on calling sheet}, or would a different address be better?

Confirm Name & complete address from calling sheet. If needed, make any changes to Name or Address on calling sheet, and mark "Changed Info" column.

You should receive your \$15 check in about 4-6 weeks. It will come in an envelope from our company: TecMarket Works.

(politely end call)

Thank you for taking our survey. Your response is very important to us.

Appendix G: Demographics and Household Characteristics

Participant Survey Households

One surveyed participant from Ohio did not answer all of the demographic questions; this customer's responses are included for the questions they answered (which show 128 total surveys) and is not included for questions they did not answer (which show 127 total surveys).

In what type of building do you live?

| | | | State | | Total |
|---------------------------------------|----------------------------------------------------------------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| In what type of building do you live? | Single-family home, detached construction | Count | 47 | 52 | 99 |
| | | % within State | 81.0% | 74.3% | 77.3% |
| | Single family home, factory manufactured/modular | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 2.9% | 1.6% |
| | Single family, mobile home | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Two or Three family attached residence-traditional structure | Count | 6 | 6 | 12 |
| | | % within State | 10.3% | 8.6% | 9.4% |
| | Apartment (4 + families)---traditional structure | Count | 4 | 8 | 12 |
| | | % within State | 6.9% | 11.4% | 9.4% |
| | Other: House divided into two dwellings; we live on the first floor. | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | Other: Converted store front, detached construction. | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Total | Count | 58 | 70 | 128 |
| | % within State | 100.0% | 100.0% | 100.0% | |

What year was your residence built?

| | | | State | | Total |
|-------------------------------------|-----------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What year was your residence built? | 1959 and before | Count | 40 | 46 | 86 |
| | | % within State | 69.0% | 65.7% | 67.2% |
| | 1960-1979 | Count | 3 | 9 | 12 |
| | | % within State | 5.2% | 12.9% | 9.4% |
| | 1980-1989 | Count | 2 | 1 | 3 |
| | | % within State | 3.4% | 1.4% | 2.3% |
| | 1990-1997 | Count | 0 | 4 | 4 |
| | | % within State | 0.0% | 5.7% | 3.1% |
| | 1998-2000 | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | 2001-2007 | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | 2008-present | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | DK/NS | Count | 10 | 10 | 20 |
| | | % within State | 17.2% | 14.3% | 15.6% |
| | Total | Count | 58 | 70 | 128 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many rooms are in your home (excluding bathrooms, but including finished basements)?

| | | | State | | Total |
|------------|----------------|--|----------|--------|--------|
| | | | Kentucky | Ohio | |
| 4 | Count | | 13 | 11 | 24 |
| | % within State | | 22.4% | 15.7% | 18.8% |
| 5 | Count | | 10 | 22 | 32 |
| | % within State | | 17.2% | 31.4% | 25.0% |
| 6 | Count | | 17 | 16 | 33 |
| | % within State | | 29.3% | 22.9% | 25.8% |
| 7 | Count | | 6 | 7 | 13 |
| | % within State | | 10.3% | 10.0% | 10.2% |
| 8 | Count | | 4 | 4 | 8 |
| | % within State | | 6.9% | 5.7% | 6.3% |
| 9 | Count | | 1 | 3 | 4 |
| | % within State | | 1.7% | 4.3% | 3.1% |
| 1-3 | Count | | 7 | 4 | 11 |
| | % within State | | 12.1% | 5.7% | 8.6% |
| 10 or more | Count | | 0 | 3 | 3 |
| | % within State | | 0.0% | 4.3% | 2.3% |
| Total | Count | | 58 | 70 | 128 |
| | % within State | | 100.0% | 100.0% | 100.0% |

| Which of the following best describes your home's heating system? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|-------------------------------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| | None | 0 | 0.0% | 0 | 0.0% | 0 |
| Central forced air furnace | 52 | 89.7% | 58 | 82.9% | 110 | 85.9% |
| Electric Baseboard | 2 | 3.4% | 5 | 7.1% | 7 | 5.5% |
| Heat Pump | 2 | 3.4% | 2 | 2.9% | 4 | 3.1% |
| Geothermal Heat Pump | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Space heater / personal furnace | 1 | 1.7% | 3 | 4.3% | 4 | 3.1% |
| Other: listed below | 1 | 1.7% | 2 | 2.9% | 3 | 2.3% |
| Don't know | 2 | 3.4% | 4 | 5.7% | 6 | 4.7% |

May total to more than 100% because respondents could give multiple responses.

Three respondents mentioned "other" types of heating system; these are listed below.

- Boiler (Ohio)
- Wood burning stove (Ohio)
- Gravity furnace (Kentucky)

How old is your heating system?

| | | | State | | Total |
|---------------------------------|-------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How old is your heating system? | 0-4 years | Count | 17 | 13 | 30 |
| | | % within State | 29.3% | 18.8% | 23.6% |
| | 5-9 years | Count | 10 | 15 | 25 |
| | | % within State | 17.2% | 21.7% | 19.7% |
| | 10-14 years | Count | 9 | 2 | 11 |
| | | % within State | 15.5% | 2.9% | 8.7% |
| | 15-19 years | Count | 2 | 1 | 3 |
| | | % within State | 3.4% | 1.4% | 2.4% |
| | 19 years or older | Count | 8 | 12 | 20 |
| | | % within State | 13.8% | 17.4% | 15.7% |
| | DK/NS | Count | 12 | 26 | 38 |
| | | % within State | 20.7% | 37.7% | 29.9% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What is the primary fuel used in your heating system?

| | | | State | | Total |
|-------------------------------------------------------|-------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What is the primary fuel used in your heating system? | Electricity | Count | 11 | 16 | 27 |
| | | % within State | 19.0% | 22.9% | 21.1% |
| | Natural Gas | Count | 45 | 47 | 92 |
| | | % within State | 77.6% | 67.1% | 71.9% |
| | Oil | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Propane | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Wood | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | DK/NS | Count | 2 | 4 | 6 |
| | | % within State | 3.4% | 5.7% | 4.7% |
| | Total | Count | 58 | 70 | 128 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What is the secondary fuel used in your primary heating system, if any?

| | | | State | | Total |
|-------------------------------------------------------------------------|---------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What is the secondary fuel used in your primary heating system, if any? | Electricity | Count | 15 | 24 | 39 |
| | | % within State | 25.9% | 34.3% | 30.5% |
| | Natural Gas | Count | 1 | 1 | 2 |
| | | % within State | 1.7% | 1.4% | 1.6% |
| | Propane | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Other, listed below | Count | 2 | 6 | 8 |
| | | % within State | 3.4% | 8.6% | 6.3% |
| | None | Count | 37 | 30 | 67 |
| | | % within State | 63.8% | 42.9% | 52.3% |
| | DK/NS | Count | 3 | 8 | 11 |
| | | % within State | 5.2% | 11.4% | 8.6% |
| | Total | Count | 58 | 70 | 128 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Eight respondents mentioned "other" types of heating fuel; these are listed below.

- Two electric space heaters (Ohio)
- Electric for blower on stove and a gas furnace (Ohio)
- Water (Ohio)
- Wood Fireplace (Ohio)
- Five gas fireplaces (Kentucky)
- Not specified (N=2 Ohio and N=1 Kentucky)

| Do you use one or more of the following to cool your home? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|------------------------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| None, do not cool the home | 0 | 0.0% | 2 | 2.9% | 2 | 1.6% |
| Heat pump for cooling | 2 | 3.4% | 1 | 1.4% | 3 | 2.3% |
| Central air conditioning | 32 | 55.2% | 41 | 58.6% | 73 | 57.0% |
| Through the wall or window air conditioning unit | 28 | 48.3% | 25 | 35.7% | 53 | 41.4% |
| Geothermal Heat pump | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Fans (ceiling, window, portable) | 1 | 1.7% | 1 | 1.4% | 2 | 1.6% |
| Don't know | 0 | 0.0% | 1 | 1.4% | 1 | 0.8% |

May total to more than 100% because respondents could give multiple responses.

How many window-unit or through the wall air conditioner(s) do you use?

| | | | State | | Total |
|----------------------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| d9 How many window-unit or through the wall air conditioner(s) do you use? | 1 | Count | 17 | 9 | 26 |
| | | % within State | 29.3% | 13.0% | 20.5% |
| | 2 | Count | 8 | 12 | 20 |
| | | % within State | 13.8% | 17.4% | 15.7% |
| | 3 | Count | 3 | 8 | 11 |
| | | % within State | 5.2% | 11.6% | 8.7% |
| | 4 | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | 5 | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | None | Count | 29 | 39 | 68 |
| | | % within State | 50.0% | 56.5% | 53.5% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

| What is the fuel used in your cooling system? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|-----------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| | Count | % | Count | % | Count | % |
| Electricity | 56 | 96.6% | 66 | 94.3% | 122 | 95.3% |
| Natural Gas | 2 | 3.4% | 0 | 0.0% | 2 | 1.6% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no cooling system) | 0 | 0.0% | 2 | 2.9% | 2 | 1.6% |
| DK/NS | 0 | 0.0% | 2 | 2.9% | 2 | 1.6% |

May total to more than 100% because respondents could give multiple responses.

How old is your cooling system?

| | | | State | | Total |
|---------------------------------|-------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How old is your cooling system? | 0-4 years | Count | 21 | 19 | 40 |
| | | % within State | 36.2% | 27.5% | 31.5% |
| | 5-9 years | Count | 10 | 15 | 25 |
| | | % within State | 17.2% | 21.7% | 19.7% |
| | 10-14 years | Count | 7 | 2 | 9 |
| | | % within State | 12.1% | 2.9% | 7.1% |
| | 15-19 years | Count | 4 | 1 | 5 |
| | | % within State | 6.9% | 1.4% | 3.9% |
| | 19 years or older | Count | 6 | 8 | 14 |
| | | % within State | 10.3% | 11.6% | 11.0% |
| | DK/NS | Count | 9 | 22 | 31 |
| | | % within State | 15.5% | 31.9% | 24.4% |
| | Do not have | Count | 1 | 2 | 3 |
| | | % within State | 1.7% | 2.9% | 2.4% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

| What is the fuel used by your water heater? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|---------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| Electricity | 16 | 27.6% | 28 | 40.0% | 44 | 34.4% |
| Natural Gas | 40 | 69.0% | 33 | 47.1% | 73 | 57.0% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| No water heater | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| DK/NS | 3 | 5.2% | 10 | 14.3% | 13 | 10.2% |

May total to more than 100% because respondents could give multiple responses.

How old is your water heater?

| | | | State | | Total |
|-------------------------------|--------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How old is your water heater? | 0-4 years | Count | 26 | 13 | 39 |
| | | % within State | 44.8% | 18.8% | 30.7% |
| | 5-9 years | Count | 14 | 12 | 26 |
| | | % within State | 24.1% | 17.4% | 20.5% |
| | 10-14 years | Count | 4 | 9 | 13 |
| | | % within State | 6.9% | 13.0% | 10.2% |
| | 15-19 years | Count | 3 | 5 | 8 |
| | | % within State | 5.2% | 7.2% | 6.3% |
| | More than 19 years | Count | 0 | 8 | 8 |
| | | % within State | 0.0% | 11.6% | 6.3% |
| | DK/NS | Count | 11 | 22 | 33 |
| | | % within State | 19.0% | 31.9% | 26.0% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

| What type of fuel do you use for indoor cooking on the stovetop or range? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|---------------------------------------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| | Electricity | 29 | 50.0% | 44 | 62.9% | 73 |
| Natural Gas | 29 | 50.0% | 25 | 35.7% | 54 | 42.2% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no stove) | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| DK/NS | 0 | 0.0% | 1 | 1.4% | 1 | 0.8% |

May total to more than 100% because respondents could give multiple responses.

| What type of fuel do you use for indoor cooking in the oven? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|--------------------------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| | Electricity | 29 | 50.0% | 44 | 62.9% | 73 |
| Natural Gas | 29 | 50.0% | 25 | 35.7% | 54 | 42.2% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no oven) | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| DK/NS | 0 | 0.0% | 1 | 1.4% | 1 | 0.8% |

May total to more than 100% because respondents could give multiple responses.

| What type of fuel do you use for clothes drying? | Kentucky N=58 | | Ohio N=70 | | Total N=128 | |
|--------------------------------------------------|---------------|-------|-----------|-------|-------------|-------|
| Electricity | 42 | 72.4% | 58 | 82.9% | 100 | 78.1% |
| Natural Gas | 9 | 15.5% | 3 | 4.3% | 12 | 9.4% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no dryer) | 5 | 8.6% | 7 | 10.0% | 12 | 9.4% |
| DK/NS | 2 | 3.4% | 2 | 2.9% | 4 | 3.1% |

May total to more than 100% because respondents could give multiple responses.

About how many square feet of living space are in your home?

| | | | State | | Total |
|--------------------------------------------------------------|---------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| About how many square feet of living space are in your home? | Less than 500 | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | 500 to 999 | Count | 6 | 12 | 18 |
| | | % within State | 10.3% | 17.1% | 14.1% |
| | 1000 to 1499 | Count | 15 | 11 | 26 |
| | | % within State | 25.9% | 15.7% | 20.3% |
| | 1500 to 1999 | Count | 4 | 11 | 15 |
| | | % within State | 6.9% | 15.7% | 11.7% |
| | 2000 to 2499 | Count | 3 | 3 | 6 |
| | | % within State | 5.2% | 4.3% | 4.7% |
| | 2500 to 2999 | Count | 1 | 2 | 3 |
| | | % within State | 1.7% | 2.9% | 2.3% |
| | DK/NS | Count | 28 | 31 | 59 |
| | | % within State | 48.3% | 44.3% | 46.1% |
| | Total | Count | 58 | 70 | 128 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Do you own or rent your home?

| | | | State | | Total |
|-------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Do you own or rent your home? | Own | Count | 35 | 39 | 74 |
| | | % within State | 60.3% | 56.5% | 58.3% |
| | Rent | Count | 23 | 30 | 53 |
| | | % within State | 39.7% | 43.5% | 41.7% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

How many levels are in your home (not including your basement)?

| | | | State | | Total |
|-----------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| How many levels are in your home (not including your basement)? | One | Count | 24 | 39 | 63 |
| | | % within State | 41.4% | 55.7% | 49.2% |
| | Two | Count | 31 | 30 | 61 |
| | | % within State | 53.4% | 42.9% | 47.7% |
| | Three | Count | 3 | 1 | 4 |
| | | % within State | 5.2% | 1.4% | 3.1% |
| Total | Count | 58 | 70 | 128 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Does your home have a heated or unheated basement?

| | | | State | | Total |
|----------------------------------------------------|-------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Does your home have a heated or unheated basement? | Heated | Count | 30 | 28 | 58 |
| | | % within State | 51.7% | 40.6% | 45.7% |
| | Unheated | Count | 16 | 13 | 29 |
| | | % within State | 27.6% | 18.8% | 22.8% |
| | No basement | Count | 11 | 28 | 39 |
| | | % within State | 19.0% | 40.6% | 30.7% |
| | DK/NS | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Does your home have an attic?

| | | | State | | Total |
|-------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your home have an attic? | Yes | Count | 33 | 44 | 77 |
| | | % within State | 56.9% | 63.8% | 60.6% |
| | No | Count | 25 | 23 | 48 |
| | | % within State | 43.1% | 33.3% | 37.8% |
| | DK/NS | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 2.9% | 1.6% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Are your central air/heat ducts located in the attic?

| | | | State | | Total |
|-------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Are your central air/heat ducts located in the attic? | Yes | Count | 4 | 3 | 7 |
| | | % within State | 6.9% | 4.3% | 5.5% |
| | No | Count | 27 | 41 | 68 |
| | | % within State | 46.6% | 59.4% | 53.5% |
| | N/A | Count | 19 | 19 | 38 |
| | | % within State | 32.8% | 27.5% | 29.9% |
| DK/NS | Count | 8 | 6 | 14 | |
| | % within State | 13.8% | 8.7% | 11.0% | |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Does your house have cold drafts in the winter?

| | | | State | | Total |
|-------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your house have cold drafts in the winter? | Yes | Count | 30 | 38 | 68 |
| | | % within State | 51.7% | 55.1% | 53.5% |
| | No | Count | 28 | 29 | 57 |
| | | % within State | 48.3% | 42.0% | 44.9% |
| | DK/NS | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 2.9% | 1.6% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Does your house have sweaty windows in the winter?

| | | | State | | Total |
|----------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your house have sweaty windows in the winter? | Yes | Count | 20 | 17 | 37 |
| | | % within State | 34.5% | 24.6% | 29.1% |
| | No | Count | 36 | 49 | 85 |
| | | % within State | 62.1% | 71.0% | 66.9% |
| | DK/NS | Count | 2 | 3 | 5 |
| | | % within State | 3.4% | 4.3% | 3.9% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Do you notice uneven temperatures between the rooms in your home?

| | | | State | | Total |
|-------------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Do you notice uneven temperatures between the rooms in your home? | Yes | Count | 34 | 40 | 74 |
| | | % within State | 58.6% | 58.0% | 58.3% |
| | No | Count | 24 | 27 | 51 |
| | | % within State | 41.4% | 39.1% | 40.2% |
| | DK/NS | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 2.9% | 1.6% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Does your heating system keep your home comfortable in winter?

| | | | State | | Total |
|----------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your heating system keep your home comfortable in winter? | Yes | Count | 44 | 60 | 104 |
| | | % within State | 75.9% | 87.0% | 81.9% |
| | No | Count | 12 | 8 | 20 |
| | | % within State | 20.7% | 11.6% | 15.7% |
| | DK/NS | Count | 2 | 1 | 3 |
| | | % within State | 3.4% | 1.4% | 2.4% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Does your cooling system keep your home comfortable in summer?

| | | | State | | Total |
|----------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your cooling system keep your home comfortable in summer? | Yes | Count | 50 | 63 | 113 |
| | | % within State | 86.2% | 91.3% | 89.0% |
| | No | Count | 7 | 4 | 11 |
| | | % within State | 12.1% | 5.8% | 8.7% |
| | DK/NS | Count | 1 | 2 | 3 |
| | | % within State | 1.7% | 2.9% | 2.4% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Do you have a programmable thermostat?

| | | | State | | Total |
|----------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Do you have a programmable thermostat? | Yes | Count | 30 | 31 | 61 |
| | | % within State | 51.7% | 44.9% | 48.0% |
| | No | Count | 27 | 35 | 62 |
| | | % within State | 46.6% | 50.7% | 48.8% |
| | DK/NS | Count | 1 | 3 | 4 |
| | | % within State | 1.7% | 4.3% | 3.1% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

How many thermostats are there in your home?

| | | | State | | Total |
|----------------------------------------------|-----------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many thermostats are there in your home? | 0 | Count | 1 | 1 | 2 |
| | | % within State | 1.7% | 1.4% | 1.6% |
| | 1 | Count | 50 | 57 | 107 |
| | | % within State | 86.2% | 81.4% | 83.6% |
| | 2 | Count | 7 | 9 | 16 |
| | | % within State | 12.1% | 12.9% | 12.5% |
| | 4 or more | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 2.9% | 1.6% |
| | DK/NS | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Total | Count | 58 | 70 | 128 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What temperature is your thermostat set to on a typical summer weekday afternoon?

| | | | State | | Total |
|-----------------------------------------------------------------------------------|------------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What temperature is your thermostat set to on a typical summer weekday afternoon? | Less than 69 degrees | Count | 4 | 6 | 10 |
| | | % within State | 6.9% | 8.7% | 7.9% |
| | 69-72 degrees | Count | 14 | 22 | 36 |
| | | % within State | 24.1% | 31.9% | 28.3% |
| | 73-78 degrees | Count | 17 | 18 | 35 |
| | | % within State | 29.3% | 26.1% | 27.6% |
| | Higher than 78 degrees | Count | 3 | 6 | 9 |
| | | % within State | 5.2% | 8.7% | 7.1% |
| | Off | Count | 18 | 13 | 31 |
| | | % within State | 31.0% | 18.8% | 24.4% |
| | DK/NS | Count | 2 | 4 | 6 |
| | | % within State | 3.4% | 5.8% | 4.7% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What temperature is your thermostat set to on a typical winter weekday afternoon?

| | | | State | | Total |
|----------------------|----------------|--|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Less than 67 degrees | Count | | 12 | 2 | 14 |
| | % within State | | 20.7% | 2.9% | 11.0% |
| 67-70 degrees | Count | | 18 | 26 | 44 |
| | % within State | | 31.0% | 37.7% | 34.6% |
| 71-73 degrees | Count | | 13 | 17 | 30 |
| | % within State | | 22.4% | 24.6% | 23.6% |
| 74-77 degrees | Count | | 10 | 12 | 22 |
| | % within State | | 17.2% | 17.4% | 17.3% |
| 78 degrees or higher | Count | | 2 | 6 | 8 |
| | % within State | | 3.4% | 8.7% | 6.3% |
| Off | Count | | 0 | 1 | 1 |
| | % within State | | 0.0% | 1.4% | 0.8% |
| DK/NS | Count | | 3 | 5 | 8 |
| | % within State | | 5.2% | 7.2% | 6.3% |
| Total | Count | | 58 | 69 | 127 |
| | % within State | | 100.0% | 100.0% | 100.0% |

Do you have a swimming pool, hot-tub or spa?

| | | | State | | Total |
|-------|----------------|--|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Yes | Count | | 2 | 4 | 6 |
| | % within State | | 3.4% | 5.7% | 4.7% |
| No | Count | | 56 | 66 | 122 |
| | % within State | | 96.6% | 94.3% | 95.3% |
| Total | Count | | 58 | 70 | 128 |
| | % within State | | 100.0% | 100.0% | 100.0% |

Would a two-degree increase in the summer afternoon temperature in your home affect your comfort

| | | | State | | Total |
|--------------------------------------------------------------------------------------------------|----------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Would a two-degree increase in the summer afternoon temperature in your home affect your comfort | Not at all | Count | 18 | 32 | 50 |
| | | % within State | 31.0% | 46.4% | 39.4% |
| | Slightly | Count | 21 | 17 | 38 |
| | | % within State | 36.2% | 24.6% | 29.9% |
| | Moderately, or | Count | 6 | 13 | 19 |
| | | % within State | 10.3% | 18.8% | 15.0% |
| | Greatly | Count | 12 | 5 | 17 |
| | | % within State | 20.7% | 7.2% | 13.4% |
| | DK/NS | Count | 1 | 2 | 3 |
| | | % within State | 1.7% | 2.9% | 2.4% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many people live in this home?

| | | | State | | Total |
|------------------------------------|-----------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many people live in this home? | 1 | Count | 21 | 27 | 48 |
| | | % within State | 36.2% | 39.1% | 37.8% |
| | 2 | Count | 15 | 16 | 31 |
| | | % within State | 25.9% | 23.2% | 24.4% |
| | 3 | Count | 9 | 9 | 18 |
| | | % within State | 15.5% | 13.0% | 14.2% |
| | 4 | Count | 7 | 12 | 19 |
| | | % within State | 12.1% | 17.4% | 15.0% |
| | 5 | Count | 2 | 2 | 4 |
| | | % within State | 3.4% | 2.9% | 3.1% |
| | 6 | Count | 2 | 1 | 3 |
| | | % within State | 3.4% | 1.4% | 2.4% |
| | 7 | Count | 2 | 0 | 2 |
| | | % within State | 3.4% | 0.0% | 1.6% |
| | 8 or more | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 2.9% | 1.6% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many of them are teenagers?

| | | | State | | Total |
|---------------------------------|-------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many of them are teenagers? | 0 | Count | 50 | 59 | 109 |
| | | % within State | 86.2% | 85.5% | 85.8% |
| | 1 | Count | 6 | 7 | 13 |
| | | % within State | 10.3% | 10.1% | 10.2% |
| | 2 | Count | 2 | 2 | 4 |
| | | % within State | 3.4% | 2.9% | 3.1% |
| | 3 | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many persons are usually home on a weekday afternoon?

| | | | State | | Total |
|-----------------------------------------------------------|----------------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| How many persons are usually home on a weekday afternoon? | 0 | Count | 6 | 2 | 8 |
| | | % within State | 10.3% | 2.9% | 6.3% |
| | 1 | Count | 29 | 31 | 60 |
| | | % within State | 50.0% | 44.9% | 47.2% |
| | 2 | Count | 13 | 25 | 38 |
| | | % within State | 22.4% | 36.2% | 29.9% |
| | 3 | Count | 3 | 5 | 8 |
| | | % within State | 5.2% | 7.2% | 6.3% |
| | 4 | Count | 3 | 2 | 5 |
| | | % within State | 5.2% | 2.9% | 3.9% |
| | 5 | Count | 1 | 3 | 4 |
| | | % within State | 1.7% | 4.3% | 3.1% |
| | 6 | Count | 1 | 0 | 1 |
| | | % within State | 1.7% | 0.0% | 0.8% |
| | 7 | Count | 2 | 0 | 2 |
| | | % within State | 3.4% | 0.0% | 1.6% |
| | Prefer not to answer | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 1.4% | 0.8% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Are you planning on making any large purchases to improve energy efficiency in the next 3 years?

| | | | State | | Total |
|--------------------------------------------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Are you planning on making any large purchases to improve energy efficiency in the next 3 years? | Yes | Count | 8 | 10 | 18 |
| | | % within State | 13.8% | 14.5% | 14.2% |
| | No | Count | 44 | 54 | 98 |
| | | % within State | 75.9% | 78.3% | 77.2% |
| | DK/NS | Count | 6 | 5 | 11 |
| | | % within State | 10.3% | 7.2% | 8.7% |
| Total | Count | 58 | 69 | 127 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

What is your age group?

| | | | State | | Total |
|-------------------------|---------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What is your age group? | 18-34 | Count | 9 | 4 | 13 |
| | | % within State | 15.5% | 5.8% | 10.2% |
| | 35-49 | Count | 7 | 12 | 19 |
| | | % within State | 12.1% | 17.4% | 15.0% |
| | 50-59 | Count | 23 | 18 | 41 |
| | | % within State | 39.7% | 26.1% | 32.3% |
| | 60-64 | Count | 5 | 8 | 13 |
| | | % within State | 8.6% | 11.6% | 10.2% |
| | 65-74 | Count | 9 | 14 | 23 |
| | | % within State | 15.5% | 20.3% | 18.1% |
| | Over 74 | Count | 5 | 13 | 18 |
| | | % within State | 8.6% | 18.8% | 14.2% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Please indicate your annual household income

| | | | State | | Total |
|----------------------------------------------|----------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Please indicate your annual household income | Under \$15,000 | Count | 12 | 21 | 33 |
| | | % within State | 20.7% | 30.4% | 26.0% |
| | \$15,000-\$29,999 | Count | 13 | 12 | 25 |
| | | % within State | 22.4% | 17.4% | 19.7% |
| | \$30,000-\$49,999 | Count | 12 | 8 | 20 |
| | | % within State | 20.7% | 11.6% | 15.7% |
| | \$50,000-\$74,999 | Count | 1 | 5 | 6 |
| | | % within State | 1.7% | 7.2% | 4.7% |
| | \$75,000-\$100,000 | Count | 1 | 3 | 4 |
| | | % within State | 1.7% | 4.3% | 3.1% |
| | Over \$100,000 | Count | 4 | 0 | 4 |
| | | % within State | 6.9% | 0.0% | 3.1% |
| | Prefer Not to Answer | Count | 9 | 15 | 24 |
| | | % within State | 15.5% | 21.7% | 18.9% |
| | DK/NS | Count | 6 | 5 | 11 |
| | | % within State | 10.3% | 7.2% | 8.7% |
| | Total | Count | 58 | 69 | 127 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Non-Participant Survey Households

In what type of building do you live?

| | | State | | Total | |
|---------------------------------------|-------------------------------------------------------------------|----------------|--------|--------|-------|
| | | Kentucky | Ohio | | |
| In what type of building do you live? | Single-family home, detached construction | Count | 22 | 16 | 38 |
| | | % within State | 71.0% | 31.4% | 46.3% |
| | Single family home, factory manufactured/modular | Count | 1 | 0 | 1 |
| | | % within State | 3.2% | 0.0% | 1.2% |
| | Two or Three family attached residence-traditional structure | Count | 5 | 14 | 19 |
| | | % within State | 16.1% | 27.5% | 23.2% |
| | Apartment (4 + families)---traditional structure | Count | 1 | 18 | 19 |
| | | % within State | 3.2% | 35.3% | 23.2% |
| | Condominium---traditional structure | Count | 1 | 0 | 1 |
| | | % within State | 3.2% | 0.0% | 1.2% |
| | Other: <i>Single-family home, insulated concrete construction</i> | Count | 1 | 0 | 1 |
| | | % within State | 3.2% | 0.0% | 1.2% |
| | Other: <i>Duplex</i> | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 2.0% | 1.2% |
| | Other: <i>Townhouse</i> | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 2.0% | 1.2% |
| | Other: <i>not specified</i> | Count | 0 | 1 | 1 |
| | % within State | 0.0% | 2.0% | 1.2% | |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

What year was your residence built?

| | | | State | | Total |
|-------------------------------------|-----------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What year was your residence built? | 1959 and before | Count | 14 | 22 | 36 |
| | | % within State | 45.2% | 43.1% | 43.9% |
| | 1960-1979 | Count | 3 | 5 | 8 |
| | | % within State | 9.7% | 9.8% | 9.8% |
| | 1980-1989 | Count | 2 | 0 | 2 |
| | | % within State | 6.5% | 0.0% | 2.4% |
| | 1990-1997 | Count | 1 | 1 | 2 |
| | | % within State | 3.2% | 2.0% | 2.4% |
| | 2001-2007 | Count | 2 | 0 | 2 |
| | | % within State | 6.5% | 0.0% | 2.4% |
| | 2008-present | Count | 1 | 1 | 2 |
| | | % within State | 3.2% | 2.0% | 2.4% |
| | DK/NS | Count | 8 | 22 | 30 |
| | | % within State | 25.8% | 43.1% | 36.6% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many rooms are in your home (excluding bathrooms, but including finished basements)?

| | | | State | | Total |
|------------------------------------------------------------------------------------------|------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many rooms are in your home (excluding bathrooms, but including finished basements)? | 1 to 3 | Count | 5 | 12 | 17 |
| | | % within State | 16.1% | 23.5% | 20.7% |
| | 4 | Count | 9 | 11 | 20 |
| | | % within State | 29.0% | 21.6% | 24.4% |
| | 5 | Count | 8 | 8 | 16 |
| | | % within State | 25.8% | 15.7% | 19.5% |
| | 6 | Count | 6 | 7 | 13 |
| | | % within State | 19.4% | 13.7% | 15.9% |
| | 7 | Count | 1 | 3 | 4 |
| | | % within State | 3.2% | 5.9% | 4.9% |
| | 10 or more | Count | 1 | 9 | 10 |
| | | % within State | 3.2% | 17.6% | 12.2% |
| | DK/NS | Count | 1 | 1 | 2 |
| | | % within State | 3.2% | 2.0% | 2.4% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

| Which of the following best describes your home's heating system? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|-------------------------------------------------------------------|---------------|-------|-----------|-------|------------|-------|
| None | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Central forced air furnace | 27 | 87.1% | 35 | 68.6% | 62 | 75.6% |
| Electric Baseboard | 2 | 6.5% | 7 | 13.7% | 9 | 11.0% |
| Heat Pump | 1 | 3.2% | 2 | 3.9% | 3 | 3.7% |
| Geothermal Heat Pump | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Radiators / hot water heat | 1 | 3.2% | 6 | 11.8% | 7 | 8.5% |
| Space heater / personal furnace | 1 | 3.2% | 3 | 5.9% | 4 | 4.9% |
| Other: listed below | 0 | 0.0% | 2 | 3.9% | 2 | 2.4% |
| Don't know | 1 | 3.2% | 1 | 2.0% | 2 | 2.4% |

May total to more than 100% because respondents could give multiple responses.

Two respondents mentioned "other" types of heating system; these are listed below.

- Electric furnace
- Two furnaces

How old is your heating system?

| | | | State | | Total |
|---------------------------------|-------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How old is your heating system? | 0-4 years | Count | 8 | 6 | 14 |
| | | % within State | 25.8% | 11.8% | 17.1% |
| | 5-9 years | Count | 6 | 6 | 12 |
| | | % within State | 19.4% | 11.8% | 14.6% |
| | 10-14 years | Count | 2 | 3 | 5 |
| | | % within State | 6.5% | 5.9% | 6.1% |
| | 15-19 years | Count | 1 | 5 | 6 |
| | | % within State | 3.2% | 9.8% | 7.3% |
| | 19 years or older | Count | 5 | 8 | 13 |
| | | % within State | 16.1% | 15.7% | 15.9% |
| | DK/NS | Count | 9 | 23 | 32 |
| | | % within State | 29.0% | 45.1% | 39.0% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What is the primary fuel used in your heating system?

| | | | State | | Total |
|-------------------------------------------------------|-------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What is the primary fuel used in your heating system? | Electricity | Count | 6 | 9 | 15 |
| | | % within State | 19.4% | 17.6% | 18.3% |
| | Natural Gas | Count | 21 | 35 | 56 |
| | | % within State | 67.7% | 68.6% | 68.3% |
| | DK/NS | Count | 4 | 7 | 11 |
| | | % within State | 12.9% | 13.7% | 13.4% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What is the secondary fuel used in your primary heating system, if any?

| | | | State | | Total |
|-------------------------------------------------------------------------|-------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What is the secondary fuel used in your primary heating system, if any? | Electricity | Count | 6 | 12 | 18 |
| | | % within State | 19.4% | 23.5% | 22.0% |
| | Natural Gas | Count | 1 | 0 | 1 |
| | | % within State | 3.2% | 0.0% | 1.2% |
| | None | Count | 18 | 31 | 49 |
| | | % within State | 58.1% | 60.8% | 59.8% |
| | DK/NS | Count | 6 | 8 | 14 |
| | | % within State | 19.4% | 15.7% | 17.1% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

| Do you use one or more of the following to cool your home? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|------------------------------------------------------------|----------------------------|-------|-----------|-------|------------|-------|
| | None, do not cool the home | 0 | 0.0% | 4 | 7.8% | 4 |
| Heat pump for cooling | 1 | 3.2% | 1 | 2.0% | 1 | 2.4% |
| Central air conditioning | 13 | 41.9% | 18 | 35.3% | 31 | 37.8% |
| Through the wall or window air conditioning unit | 16 | 51.6% | 29 | 56.9% | 45 | 54.9% |
| Geothermal Heat pump | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Fans (ceiling, window, portable) | 3 | 9.7% | 3 | 5.9% | 6 | 7.3% |
| Don't know | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |

May total to more than 100% because respondents could give multiple responses.

How many window-unit or through the wall air conditioner(s) do you use?

| | | | State | | Total |
|-------------------------------------------------------------------------|-------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many window-unit or through the wall air conditioner(s) do you use? | 1 | Count | 6 | 15 | 21 |
| | | % within State | 19.4% | 29.4% | 25.6% |
| | 2 | Count | 8 | 8 | 16 |
| | | % within State | 25.8% | 15.7% | 19.5% |
| | 3 | Count | 3 | 4 | 7 |
| | | % within State | 9.7% | 7.8% | 8.5% |
| | 4 | Count | 0 | 3 | 3 |
| | | % within State | 0.0% | 5.9% | 3.7% |
| | None | Count | 14 | 21 | 35 |
| | | % within State | 45.2% | 41.2% | 42.7% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

| What is the fuel used in your cooling system? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|-----------------------------------------------|---------------|------|-----------|-------|------------|------|
| | Electricity | 29 | 93.5% | 40 | 78.4% | 69 |
| Natural Gas | 1 | 3.2% | 3 | 5.9% | 4 | 4.9% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no cooling system) | 0 | 0.0% | 3 | 5.9% | 3 | 3.7% |
| DK/NS | 1 | 3.2% | 6 | 11.8% | 7 | 8.5% |

May total to more than 100% because respondents could give multiple responses.

How old is your cooling system?

| | | | State | | Total |
|---------------------------------|-------------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| How old is your cooling system? | 0-4 years | Count | 5 | 15 | 20 |
| | | % within State | 16.1% | 29.4% | 24.4% |
| | 5-9 years | Count | 10 | 11 | 21 |
| | | % within State | 32.3% | 21.6% | 25.6% |
| | 10-14 years | Count | 2 | 2 | 4 |
| | | % within State | 6.5% | 3.9% | 4.9% |
| | 15-19 years | Count | 1 | 4 | 5 |
| | | % within State | 3.2% | 7.8% | 6.1% |
| | 19 years or older | Count | 2 | 1 | 3 |
| | | % within State | 6.5% | 2.0% | 3.7% |
| | DK/NS | Count | 10 | 14 | 24 |
| | | % within State | 32.3% | 27.5% | 29.3% |
| | Do not have | Count | 1 | 4 | 5 |
| | | % within State | 3.2% | 7.8% | 6.1% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

| What is the fuel used by your water heater? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|---------------------------------------------|---------------|-------|-----------|-------|------------|-------|
| Electricity | 9 | 29.0% | 7 | 13.7% | 16 | 19.5% |
| Natural Gas | 17 | 54.8% | 24 | 47.1% | 41 | 50.0% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Other: two water heaters | 0 | 0.0% | 1 | 2.0% | 1 | 1.2% |
| No water heater | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| DK/NS | 5 | 16.1% | 20 | 39.2% | 25 | 30.5% |

May total to more than 100% because respondents could give multiple responses.

How old is your water heater?

| | | | State | | Total |
|-------------------------------|--------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How old is your water heater? | 0-4 years | Count | 13 | 7 | 20 |
| | | % within State | 41.9% | 13.7% | 24.4% |
| | 5-9 years | Count | 5 | 6 | 11 |
| | | % within State | 16.1% | 11.8% | 13.4% |
| | 10-14 years | Count | 4 | 4 | 8 |
| | | % within State | 12.9% | 7.8% | 9.8% |
| | 15-19 years | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 3.9% | 2.4% |
| | More than 19 years | Count | 1 | 3 | 4 |
| | | % within State | 3.2% | 5.9% | 4.9% |
| | DK/NS | Count | 8 | 29 | 37 |
| | | % within State | 25.8% | 56.9% | 45.1% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

| What type of fuel do you use for indoor cooking on the stovetop or range? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|---------------------------------------------------------------------------|---------------|-------|-----------|-------|------------|-------|
| | Electricity | 13 | 41.9% | 25 | 49.0% | 38 |
| Natural Gas | 18 | 58.1% | 27 | 52.9% | 45 | 54.9% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no stove) | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| DK/NS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |

May total to more than 100% because respondents could give multiple responses.

| What type of fuel do you use for indoor cooking in the oven? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|--------------------------------------------------------------|---------------|-------|-----------|-------|------------|-------|
| | Electricity | 13 | 41.9% | 25 | 49.0% | 38 |
| Natural Gas | 18 | 58.1% | 27 | 52.9% | 45 | 54.9% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no oven) | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| DK/NS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |

May total to more than 100% because respondents could give multiple responses.

| What type of fuel do you use for clothes drying? | Kentucky N=31 | | Ohio N=51 | | Total N=82 | |
|--------------------------------------------------|---------------|-------|-----------|-------|------------|-------|
| Electricity | 21 | 67.7% | 25 | 49.0% | 46 | 56.1% |
| Natural Gas | 2 | 6.5% | 7 | 13.7% | 9 | 11.0% |
| Oil | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Propane | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| None (no dryer) | 8 | 25.8% | 19 | 37.3% | 27 | 32.9% |
| DK/NS | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |

May total to more than 100% because respondents could give multiple responses.

About how many square feet of living space are in your home?

| | | | State | | Total |
|--------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| About how many square feet of living space are in your home? | Less than 500 | Count | 1 | 2 | 3 |
| | | % within State | 3.2% | 3.9% | 3.7% |
| | 500 to 999 | Count | 2 | 7 | 9 |
| | | % within State | 6.5% | 13.7% | 11.0% |
| | 1000 to 1499 | Count | 3 | 2 | 5 |
| | | % within State | 9.7% | 3.9% | 6.1% |
| | 1500 to 1999 | Count | 2 | 2 | 4 |
| | | % within State | 6.5% | 3.9% | 4.9% |
| | 2000 to 2499 | Count | 1 | 3 | 4 |
| | | % within State | 3.2% | 5.9% | 4.9% |
| | 2500 to 2999 | Count | 0 | 3 | 3 |
| | | % within State | 0.0% | 5.9% | 3.7% |
| | 3500 to 3999 | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 2.0% | 1.2% |
| | 4000 or more | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 2.0% | 1.2% |
| | DK/NS | Count | 22 | 30 | 52 |
| | | % within State | 71.0% | 58.8% | 63.4% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Do you own or rent your home?

| | | | State | | Total |
|-------------------------------|------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Do you own or rent your home? | Own | Count | 11 | 17 | 28 |
| | | % within State | 35.5% | 33.3% | 34.1% |
| | Rent | Count | 20 | 34 | 54 |
| | | % within State | 64.5% | 66.7% | 65.9% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many levels are in your home (not including your basement)?

| | | | State | | Total |
|-----------------------------------------------------------------|-------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many levels are in your home (not including your basement)? | One | Count | 13 | 22 | 35 |
| | | % within State | 41.9% | 43.1% | 42.7% |
| | Two | Count | 16 | 15 | 31 |
| | | % within State | 51.6% | 29.4% | 37.8% |
| | Three | Count | 2 | 14 | 16 |
| | | % within State | 6.5% | 27.5% | 19.5% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Does your home have a heated or unheated basement?

| | | | State | | Total |
|----------------------------------------------------|-------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Does your home have a heated or unheated basement? | Heated | Count | 13 | 25 | 38 |
| | | % within State | 41.9% | 49.0% | 46.3% |
| | Unheated | Count | 13 | 13 | 26 |
| | | % within State | 41.9% | 25.5% | 31.7% |
| | No basement | Count | 5 | 13 | 18 |
| | | % within State | 16.1% | 25.5% | 22.0% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Does your home have an attic?

| | | | State | | Total |
|-------------------------------|-----|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Does your home have an attic? | Yes | Count | 14 | 16 | 30 |
| | | % within State | 45.2% | 31.4% | 36.6% |
| | No | Count | 17 | 35 | 52 |
| | | % within State | 54.8% | 68.6% | 63.4% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Are your central air/heat ducts located in the attic?

| | | | State | | Total |
|-------------------------------------------------------|-------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Are your central air/heat ducts located in the attic? | Yes | Count | 3 | 5 | 8 |
| | | % within State | 9.7% | 9.8% | 9.8% |
| | No | Count | 8 | 9 | 17 |
| | | % within State | 25.8% | 17.6% | 20.7% |
| | N/A | Count | 17 | 30 | 47 |
| | | % within State | 54.8% | 58.8% | 57.3% |
| | DK/NS | Count | 3 | 7 | 10 |
| | | % within State | 9.7% | 13.7% | 12.2% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Does your house have cold drafts in the winter?

| | | | State | | Total |
|-------------------------------------------------|-----|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Does your house have cold drafts in the winter? | Yes | Count | 23 | 39 | 62 |
| | | % within State | 74.2% | 76.5% | 75.6% |
| | No | Count | 8 | 12 | 20 |
| | | % within State | 25.8% | 23.5% | 24.4% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Does your house have sweaty windows in the winter?

| | | | State | | Total |
|----------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your house have sweaty windows in the winter? | Yes | Count | 14 | 18 | 32 |
| | | % within State | 45.2% | 35.3% | 39.0% |
| | No | Count | 15 | 32 | 47 |
| | | % within State | 48.4% | 62.7% | 57.3% |
| | DK/NS | Count | 2 | 1 | 3 |
| | | % within State | 6.5% | 2.0% | 3.7% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Do you notice uneven temperatures between the rooms in your home?

| | | | State | | Total |
|-------------------------------------------------------------------|-------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Do you notice uneven temperatures between the rooms in your home? | Yes | Count | 23 | 36 | 59 |
| | | % within State | 74.2% | 70.6% | 72.0% |
| | No | Count | 8 | 15 | 23 |
| | | % within State | 25.8% | 29.4% | 28.0% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Does your heating system keep your home comfortable in winter?

| | | | State | | Total |
|----------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your heating system keep your home comfortable in winter? | Yes | Count | 23 | 35 | 58 |
| | | % within State | 74.2% | 68.6% | 70.7% |
| | No | Count | 8 | 14 | 22 |
| | | % within State | 25.8% | 27.5% | 26.8% |
| | DK/NS | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 3.9% | 2.4% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Does your cooling system keep your home comfortable in summer?

| | | | State | | Total |
|----------------------------------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Does your cooling system keep your home comfortable in summer? | Yes | Count | 26 | 39 | 65 |
| | | % within State | 83.9% | 76.5% | 79.3% |
| | No | Count | 4 | 10 | 14 |
| | | % within State | 12.9% | 19.6% | 17.1% |
| | DK/NS | Count | 1 | 2 | 3 |
| | | % within State | 3.2% | 3.9% | 3.7% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Do you have a programmable thermostat?

| | | | State | | Total |
|----------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| Do you have a programmable thermostat? | Yes | Count | 17 | 31 | 48 |
| | | % within State | 54.8% | 60.8% | 58.5% |
| | No | Count | 14 | 18 | 32 |
| | | % within State | 45.2% | 35.3% | 39.0% |
| | DK/NS | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 3.9% | 2.4% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

How many thermostats are there in your home?

| | | | State | | Total |
|----------------------------------------------|-----------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many thermostats are there in your home? | 0 | Count | 2 | 8 | 10 |
| | | % within State | 6.5% | 15.7% | 12.2% |
| | 1 | Count | 28 | 34 | 62 |
| | | % within State | 90.3% | 66.7% | 75.6% |
| | 2 | Count | 1 | 4 | 5 |
| | | % within State | 3.2% | 7.8% | 6.1% |
| | 3 | Count | 0 | 3 | 3 |
| | | % within State | 0.0% | 5.9% | 3.7% |
| | 4 or more | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 3.9% | 2.4% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

What temperature is your thermostat set to on a typical summer weekday afternoon?

| | | | State | | Total |
|-----------------------------------------------------------------------------------|------------------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| What temperature is your thermostat set to on a typical summer weekday afternoon? | Less than 69 degrees | Count | 6 | 7 | 13 |
| | | % within State | 19.4% | 13.7% | 15.9% |
| | 69-72 degrees | Count | 6 | 8 | 14 |
| | | % within State | 19.4% | 15.7% | 17.1% |
| | 73-78 degrees | Count | 3 | 3 | 6 |
| | | % within State | 9.7% | 5.9% | 7.3% |
| | Higher than 78 degrees | Count | 1 | 0 | 1 |
| | | % within State | 3.2% | 0.0% | 1.2% |
| | Off | Count | 13 | 23 | 36 |
| | | % within State | 41.9% | 45.1% | 43.9% |
| | DK/NS | Count | 2 | 10 | 12 |
| | | % within State | 6.5% | 19.6% | 14.6% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

What temperature is your thermostat set to on a typical winter weekday afternoon?

| | | | State | | Total |
|-----------------------------------------------------------------------------------|----------------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| What temperature is your thermostat set to on a typical winter weekday afternoon? | Less than 67 degrees | Count | 3 | 3 | 6 |
| | | % within State | 9.7% | 5.9% | 7.3% |
| | 67-70 degrees | Count | 14 | 15 | 29 |
| | | % within State | 45.2% | 29.4% | 35.4% |
| | 71-73 degrees | Count | 11 | 6 | 17 |
| | | % within State | 35.5% | 11.8% | 20.7% |
| | 74-77 degrees | Count | 1 | 6 | 7 |
| | | % within State | 3.2% | 11.8% | 8.5% |
| | 78 degrees or higher | Count | 0 | 9 | 9 |
| | | % within State | 0.0% | 17.6% | 11.0% |
| | Off | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 2.0% | 1.2% |
| | DK/NS | Count | 2 | 11 | 13 |
| | | % within State | 6.5% | 21.6% | 15.9% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

Do you have a swimming pool, hot-tub or spa?

| | | | State | | Total |
|----------------------------------------------|----|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Do you have a swimming pool, hot-tub or spa? | No | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |
| Total | | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Would a two-degree increase in the summer afternoon temperature in your home affect your comfort

| | | | State | | Total |
|--------------------------------------------------------------------------------------------------|------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Would a two-degree increase in the summer afternoon temperature in your home affect your comfort | Not at all | Count | 14 | 28 | 42 |
| | | % within State | 45.2% | 54.9% | 51.2% |
| | Slightly | Count | 9 | 11 | 20 |
| | | % within State | 29.0% | 21.6% | 24.4% |
| | Moderately | Count | 4 | 7 | 11 |
| | | % within State | 12.9% | 13.7% | 13.4% |
| | Greatly | Count | 2 | 4 | 6 |
| | | % within State | 6.5% | 7.8% | 7.3% |
| | DK/NS | Count | 2 | 1 | 3 |
| | | % within State | 6.5% | 2.0% | 3.7% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many people live in this home?

| | | | State | | Total |
|------------------------------------|----------------|----------------|----------|--------|-------|
| | | | Kentucky | Ohio | |
| How many people live in this home? | 1 | Count | 6 | 21 | 27 |
| | | % within State | 19.4% | 41.2% | 32.9% |
| | 2 | Count | 12 | 14 | 26 |
| | | % within State | 38.7% | 27.5% | 31.7% |
| | 3 | Count | 9 | 6 | 15 |
| | | % within State | 29.0% | 11.8% | 18.3% |
| | 4 | Count | 2 | 1 | 3 |
| | | % within State | 6.5% | 2.0% | 3.7% |
| | 5 | Count | 1 | 6 | 7 |
| | | % within State | 3.2% | 11.8% | 8.5% |
| | 6 | Count | 1 | 1 | 2 |
| | | % within State | 3.2% | 2.0% | 2.4% |
| | 7 | Count | 0 | 2 | 2 |
| | | % within State | 0.0% | 3.9% | 2.4% |
| Total | Count | 31 | 51 | 82 | |
| | % within State | 100.0% | 100.0% | 100.0% | |

How many of them are teenagers?

| | | | State | | Total |
|---------------------------------|-------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| How many of them are teenagers? | 0 | Count | 22 | 37 | 59 |
| | | % within State | 71.0% | 72.5% | 72.0% |
| | 1 | Count | 6 | 10 | 16 |
| | | % within State | 19.4% | 19.6% | 19.5% |
| | 2 | Count | 2 | 2 | 4 |
| | | % within State | 6.5% | 3.9% | 4.9% |
| | 3 | Count | 1 | 1 | 2 |
| | | % within State | 3.2% | 2.0% | 2.4% |
| | 4 | Count | 0 | 1 | 1 |
| | | % within State | 0.0% | 2.0% | 1.2% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

How many persons are usually home on a weekday afternoon?

| | | | State | | Total |
|-------|----------------|--|----------|--------|--------|
| | | | Kentucky | Ohio | |
| 0 | Count | | 3 | 7 | 10 |
| | % within State | | 9.7% | 13.7% | 12.2% |
| 1 | Count | | 13 | 22 | 35 |
| | % within State | | 41.9% | 43.1% | 42.7% |
| 2 | Count | | 14 | 12 | 26 |
| | % within State | | 45.2% | 23.5% | 31.7% |
| 3 | Count | | 1 | 4 | 5 |
| | % within State | | 3.2% | 7.8% | 6.1% |
| 4 | Count | | 0 | 1 | 1 |
| | % within State | | 0.0% | 2.0% | 1.2% |
| 5 | Count | | 0 | 4 | 4 |
| | % within State | | 0.0% | 7.8% | 4.9% |
| 7 | Count | | 0 | 1 | 1 |
| | % within State | | 0.0% | 2.0% | 1.2% |
| Total | Count | | 31 | 51 | 82 |
| | % within State | | 100.0% | 100.0% | 100.0% |

Are you planning on making any large purchases to improve energy efficiency in the next 3 years?

| | | | State | | Total |
|-------|----------------|--|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Yes | Count | | 7 | 9 | 16 |
| | % within State | | 22.6% | 17.6% | 19.5% |
| No | Count | | 22 | 39 | 61 |
| | % within State | | 71.0% | 76.5% | 74.4% |
| DK/NS | Count | | 2 | 3 | 5 |
| | % within State | | 6.5% | 5.9% | 6.1% |
| Total | Count | | 31 | 51 | 82 |
| | % within State | | 100.0% | 100.0% | 100.0% |

What is your age group?

| | | | State | | Total |
|-------------------------|----------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| What is your age group? | 18-34 | Count | 7 | 12 | 19 |
| | | % within State | 22.6% | 23.5% | 23.2% |
| | 35-49 | Count | 8 | 9 | 17 |
| | | % within State | 25.8% | 17.6% | 20.7% |
| | 50-59 | Count | 9 | 8 | 17 |
| | | % within State | 29.0% | 15.7% | 20.7% |
| | 60-64 | Count | 2 | 10 | 12 |
| | | % within State | 6.5% | 19.6% | 14.6% |
| | 65-74 | Count | 0 | 4 | 4 |
| | | % within State | 0.0% | 7.8% | 4.9% |
| | Over 74 | Count | 3 | 4 | 7 |
| | | % within State | 9.7% | 7.8% | 8.5% |
| | Prefer not to answer | Count | 2 | 4 | 6 |
| | | % within State | 6.5% | 7.8% | 7.3% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Please indicate your annual household income

| | | | State | | Total |
|----------------------------------------------|----------------------|----------------|----------|--------|--------|
| | | | Kentucky | Ohio | |
| Please indicate your annual household income | Under \$15,000 | Count | 10 | 22 | 32 |
| | | % within State | 32.3% | 43.1% | 39.0% |
| | \$15,000-\$29,999 | Count | 6 | 8 | 14 |
| | | % within State | 19.4% | 15.7% | 17.1% |
| | \$30,000-\$49,999 | Count | 1 | 5 | 6 |
| | | % within State | 3.2% | 9.8% | 7.3% |
| | \$50,000-\$74,999 | Count | 4 | 4 | 8 |
| | | % within State | 12.9% | 7.8% | 9.8% |
| | Prefer Not to Answer | Count | 6 | 12 | 18 |
| | | % within State | 19.4% | 23.5% | 22.0% |
| | DK/NS | Count | 4 | 0 | 4 |
| | | % within State | 12.9% | 0.0% | 4.9% |
| | Total | Count | 31 | 51 | 82 |
| | | % within State | 100.0% | 100.0% | 100.0% |

Appendix H: Predicting Overall Program Satisfaction

Correlations and simple linear regression analysis were used to determine what drives overall satisfaction in this program. The conclusions from this analysis are listed below, followed by the statistical analyses which support these conclusions.

- Consistently, satisfaction with the convenience of enrolling in the program is the most important predictor of program satisfaction. Since satisfaction ratings skew very high (most customers give “9” or “10 out of 10” ratings), this indicates that customers with unsatisfying enrollment experiences are significantly less satisfied with the program as a whole.
- Satisfaction with the measures received also has a significant relationship with program satisfaction; again, this indicates that customers who received measures they are less than satisfied with tend to be less satisfied with the program.
- Ratings of the auditors and Duke Energy overall are not significant in the presence of the two significant predictors listed above, nor is the number of measures received, nor whether or not the customer attended the community meeting.
- In the presence of the significant predictors above, there is also a significant difference between Kentucky and Ohio customers; Kentucky customers give the program slightly higher satisfaction ratings than Ohio customers when “everything else is equal.”
- In conclusion, if there is a need to improve program satisfaction, priority should be given to improving the enrollment process followed by the quality of measures.

Table 110 shows the correlations between overall program satisfaction and eight factors which could be used to predict program satisfaction. All of the satisfaction ratings with aspects of the program, mean satisfaction with measures received, and satisfaction with Duke Energy are highly correlated to satisfaction with the program at the $p < .01$ level (Pearson’s r); the number of measures received also correlates with program satisfaction, though only at the $p < .05$ level of significance. However, the customers’ state of residence (Kentucky or Ohio) and whether they attended the community meeting are not significantly correlated with overall program satisfaction.

Table 110. Correlations with Overall Program Satisfaction (N=128)

| | Correlation with program satisfaction (Pearson’s r) | Significance |
|------------------------------------------|--------------------------------------------------------------|--------------|
| Convenience of enrolling in the program | .545 | $p < .01$ |
| Knowledge of the auditor | .479 | $p < .01$ |
| Mean satisfaction with measures received | .452 | $p < .01$ |
| Helpfulness of the auditor | .389 | $p < .01$ |
| Satisfaction with Duke Energy | .253 | $p < .01$ |
| Number of measures received | .193 | $p < .05$ |
| State (Kentucky or Ohio) | .121 | - |
| Attended community meeting | .022 | - |

Next, simple linear regressions were performed to predict overall participant satisfaction with the program using ratings of satisfaction for eight different aspects of the program. Two models were used: a stepwise model that selects predictors based on incremental improvements to the model (producing the most efficient model that predicts the most variance using the fewest predictors), and a “complete” model that uses all predictors simultaneously (which represents the maximum variance that can be explained using this set of predictors).

The two regression models produce consistent results, as both indicate the aspects of the program that has the most influence on overall program satisfaction is being satisfied with the convenience of enrollment. The two models also produce very similar levels of variance explained, indicating that the non-significant predictors included in the complete model have little additional effect.

The stepwise algorithm is iterative, adding or subtracting predictors from the model based on predetermined criteria. For the model presented in Table 111, predictors are added to the model as long as their coefficients when added to the model are significant at the $p < .10$ level, and removed from the model if the significance of their coefficients falls below $p < .20$ (due to multicollinearity⁴¹ with other predictors added to the model on subsequent steps). The algorithm will take as many steps as necessary until all predictors that meet the criteria have been added to (or subtracted from) the model. For this model, the algorithm added three predictors (and removed none) in order to arrive at the final regression equation in three steps.

Table 111. Stepwise Regression to Predict Overall Program Satisfaction (N=108⁴²)

| Predictor | Beta coefficient | Significance |
|------------------------------------------|------------------|--------------|
| Convenience of enrolling in the program | .421 | $p < .01$ |
| Mean satisfaction with measures received | .270 | $p < .01$ |
| State (Kentucky or Ohio) | .241 | $p < .01$ |

The three-predictor regression model produced using the stepwise method predicts 42.9% of the variance in overall program satisfaction (R-squared) and is significant at the $p < .01$ level using ANOVA. Beta coefficients are standardized values and indicate the relative importance of the predictors in the model (absolute value of 1.0 would indicate that the predictor determines the predicted variable perfectly, and zero indicates no effect at all. Negative coefficients would represent negative influence, though for this model all coefficients are positive). The variable representing state of residence is coded so that a positive coefficient means higher satisfaction in Kentucky than in Ohio.

For the “complete” model, all eight predictors are used simultaneously to predict overall program satisfaction. Since there are no criteria used to determine which predictors are included in the

⁴¹ Multicollinearity is a statistical phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted from the others with a non-trivial degree of accuracy.

⁴² Though there are 128 participants in this survey, the number of valid cases used for regression models is 108 due to “listwise” deletion of missing data. In order to be included in the model, a participant had to give valid answers to all questions used in the model; 20 customers who are missing one or more ratings were excluded.

model, most of the predictors do not reach the level of statistical significance. However the complete model does show the maximum amount of variance in overall satisfaction that can be explained using this set of predictors.

Table 112. “Complete” Regression to Predict Overall Program Satisfaction (N=108)

| Predictor | Beta coefficient | Significance |
|------------------------------------------|------------------|--------------|
| Convenience of enrolling in the program | .368 | p<.01 |
| State (Kentucky or Ohio) | .239 | p<.01 |
| Knowledge of the auditor | .159 | - |
| Satisfaction with Duke Energy | .122 | - |
| Mean satisfaction with measures received | .110 | - |
| Attended community meeting | .049 | - |
| Number of measures received | .010 | - |
| Helpfulness of the auditor | -.012 | - |

The “complete” eight-predictor regression model predicts 45.5% of the variance in overall program satisfaction (R-squared) and is significant at the p<.01 level using ANOVA. The additional non-significant predictors in this model only increase the variance explained by 2.6% over the stepwise model. The negative beta coefficient seen in this model is not significantly different from zero at p<.10 or better.

Comparing the correlations in Table 110 (relationship between predictors and program satisfaction one-at-a-time) with the regression model in Table 112 (relationship between predictors and program satisfaction all-at-once) indicates that most of these predictors become non-significant in the presence of the most significant predictors in the regression model: satisfaction with the convenience of enrollment and the participant’s state of residence (in both regression models, Kentucky customers are predicted to give higher satisfaction scores than Ohio customers⁴³).

⁴³ Kentucky participants’ mean satisfaction rating for the program is 9.78 while Ohio participants’ mean rating is 9.63. However, both regression models predict that Kentucky customers will rate the program higher than Ohio customers by 0.27 points on a ten-point scale (unstandardized coefficient). This indicates that after taking all of the other predictors in the equations into account (“everything else being equal”), Kentucky customers are slightly (but significantly) more satisfied with the program.

Appendix I: Auditor Training Guide



Duke RNP 2014
Technican Manual.pdf

Appendix J: Flyer at Kick-off Event



Please join us to learn more about the **FREE** walk-through energy assessments we'll be performing in your neighborhood through our Residential Neighborhood Program. There will be demonstrations of our **FREE energy-saving products**, a **FREE meal** and a chance to **WIN a \$25 gift card**.

New Miami High School Cafeteria
600 Seven Mile Avenue
Hamilton, OH 45011

Tuesday, February 18, 2014

6 - 7:30 p.m.

RSVP by calling 855-RNP-DUKE



The Residential Neighborhood Program is a **FREE** walk-through energy assessment and improvement program for qualified customers.

In the days following this neighborhood event, an Energy Specialist will visit your house to perform a walk-through assessment that will show you where your home is wasting energy.

During the **FREE** walk-through assessment, we'll also provide you with up to 16 energy-saving products and services that could help you save money on your electric bill. These energy-saving measures can cost up to \$210, but we'll give them to you for free – and we'll install them, too. Services provided are based on your home's specific energy usage and needs.

Learn more at duke-energy.com/rnp



Appendix K: EISA Schedule and CFL Baseline

As stipulated in the Energy Independence and Security Act (EISA) of 2007, manufacturers of standard incandescent screw-based light bulbs must begin producing bulbs which use at least 27% less energy for a similar lumen output. The law is being phased in as seen in Table 113. As a result, it is necessary to adjust the baseline wattage that a CFL should be evaluated against throughout its effective useful life (EUL).

Table 113. EISA Schedule

| Current Bulb Wattage | New EISA Compliant Wattage | Standard Effective Date |
|----------------------|----------------------------|-------------------------|
| 100 | 72 | 1/1/2012 |
| 75 | 53 | 1/1/2013 |
| 60 | 43 | 1/1/2014 |
| 40 | 29 | 1/1/2014 |

TecMarket Works has developed a dynamic approach to estimating future CFL baseline wattages wherein each year of a CFL's EUL is prescribed a baseline value based on the most current research on the availability of standard incandescent light bulbs in the marketplace. Much of this research, to this point, has focused on 100-watt bulbs as they were the first to phase out and therefore offer the most robust data. The effect of EISA on the availability of other incandescent bulb wattages as they are phased out is expected to be similar.

Such an approach is necessary because of the difference in EUL between the efficient and baseline technologies in question (one year for an incandescent and five years for a CFL). In the absence of the program, it is assumed that each year a new incandescent bulb would have to be purchased. The average wattage of this purchase decreases each year with the eroding availability of the standard incandescent bulbs due to EISA. Table 114 contains the baseline wattages from which savings are estimated.

Table 114. Baselines by Year and Wattage

| 100-watt | | | 75-watt | | | 60-watt | | | 40-watt | | |
|----------|-------|----------|---------|-------|----------|---------|-------|----------|---------|-------|----------|
| Year | Phase | Baseline | Year | Phase | Baseline | Year | Phase | Baseline | Year | Phase | Baseline |
| 2012 | 0% | 100 | 2012 | 0% | 75 | 2012 | 0% | 60 | 2012 | 0% | 40 |
| 2013 | 55% | 84.6 | 2013 | 0% | 75 | 2013 | 0% | 60 | 2013 | 0% | 40 |
| 2014 | 60% | 83.2 | 2014 | 60% | 61.8 | 2014 | 0% | 60 | 2014 | 0% | 40 |
| 2015 | 70% | 80.4 | 2015 | 80% | 57.4 | 2015 | 55% | 50.65 | 2015 | 60% | 33.4 |
| 2016 | 80% | 77.6 | 2016 | 100% | 53 | 2016 | 60% | 49.8 | 2016 | 80% | 31.2 |
| 2017 | 90% | 74.8 | 2017 | 100% | 53 | 2017 | 70% | 48.1 | 2017 | 100% | 29 |
| 2018 | 100% | 72 | 2018 | 100% | 53 | 2018 | 80% | 46.4 | 2018 | 100% | 29 |

A study completed in January of 2013 found that nearly half of retailers surveyed (44.6% or 45 out of 101) still have a supply of 100-watt incandescent light bulbs in stock⁴⁴. The primary conclusion of this study was that 100-watt bulb availability for 2012 was not substantially impacted by EISA to the degree that energy impact baseline calculations should be adjusted for savings estimations in 2012, but that a phased-in calculation approach for 2013 and beyond is warranted. Accordingly, baselines are discounted starting in the year following the standard effective date of the respective wattage's phase out per EISA, not in the same year.



An additional adjustment was considered that would further delay the effects of EISA to account for standard wattage incandescent bulbs that remain in storage beyond the time that they are no longer available for purchase. A review of Duke Energy's residential efficiency program evaluations for 2012 and 2013 revealed that the number of incandescent bulbs stored in a typical home is insufficient to justify the use of such an adjustment.

A more recent study has found that 100-watt bulbs reached 24% availability seven quarters after the EISA standard took effect⁴⁵. This approach assumes a 10% reduction in availability, for each year after the second until 100-watt bulbs are completely phased out. At this point, baseline wattage is set at EISA's minimally compliant wattage, taken from Table 113.

⁴⁴ Indiana Statewide Core Program Evaluation Team. "Indiana 2012 EISA Bulb Availability Study." June 20, 2013. Pg. 3.

⁴⁵ Cadmus Group. "Summary of EISA2007 Lighting Survey Results for DP&L Q1, Q2, &Q3 2013." Memorandum. October 11, 2013. Pg. 2.

Appendix L: DSMore Table

| Technology Impacts   | Product code | State | EM&V gross savings (kWh/unit) | EM&V gross kW (coincident peak/unit) | EM&V gross kW (non-coincident peak/unit) | Unit of measure | Combined spillover less freeridership adjustment | EM&V net savings (kWh/unit) | EM&V net kW (coincident peak/unit) | EM&V net kW (non-coincident peak/unit) | EM&V load shape (yes/no) | EUL (whole number) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------|-------------------------------|--------------------------------------|------------------------------------------|-----------------|--------------------------------------------------|-----------------------------|------------------------------------|----------------------------------------|--------------------------|--------------------|
| Residential Neighborhood Program | | OH, KY | 390 | 0.1151 | 0.1275 | participant | 4.1% | 375 | 0.1106 | 0.1225 | no | 8 |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| Program wide | | | 390 | 0.1151 | 0.1275 | | 4.1% | 375 | 0.1106 | 0.1225 | | 8 |

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~~Second~~ ~~First~~ Revised Sheet No.

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RESIDENTIAL SMART \$AVER® ENERGY EFFICIENT RESIDENCES PROGRAM

APPLICABILITY

Applicable to residential customers in the Company's electric service area who choose to participate by submitting, or having their contractor submit, a completed incentive application.

PURPOSE

The purpose of this program is to 1) encourage proper installation and utilization of high efficiency electric heat pumps and central air conditioning systems; 2) reduce energy usage for thermal conditioning in a residence through installation of energy efficiency measures and equipment maintenance to improve operating efficiency; and 3) encourage the adoption of high efficient heat pump water heating.

PROGRAM DESCRIPTION

PROGRAM DESCRIPTION

- Payments are available for electric heat pumps (HP) and central air conditioning (AC) systems that are installed in new or existing individually-metered residences, condominiums and mobile homes served by Duke Energy Kentucky's residential rate schedules from the Company's retail distribution system. Payments for quality installations and smart thermostats are only available in conjunction with qualifying electric heat pump or central air conditioning system installations.
- The new Heating, Ventilating and Air Conditioning (HVAC) system must have a minimum Seasonal Energy Efficiency Ratio (SEER) and an Energy Efficiency Ratio (EER) as described below:

| | HVAC TIER | | |
|-------|---------------------------------------------------|--------------------------------|---------------------------|
| | TIER 1 | TIER 2 | TIER 3 |
| AC/HP | <u>14 SEER WITH ECM AND QUALITY INSTALLATION</u> | <u>15&16 SEER WITH ECM</u> | <u>17+ SEER WITH ECM</u> |
| GEO | <u>11.5 EER WITH ECM AND QUALITY INSTALLATION</u> | <u>12.3 EER WITH ECM</u> | <u>13.26 EER WITH ECM</u> |

Payments are available for heat pumps and central air conditioning systems in new or existing individually-metered residences, condominiums and mobile homes served by Duke Energy Kentucky's residential rate schedules from Duke Energy Kentucky's retail distribution system. Payments are also available for central air conditioner tune-ups and heat pump tune-ups within an existing home.

The new central air conditioning system or heat pump must have a Seasonal Energy Efficiency Ratio (SEER) of 14 or more and also include an electronically commutative fan motor (ECM fan) on the indoor unit. Geothermal heat pumps must have an Energy Efficiency Ratio (EER) of 10.5 or more and include an ECM fan on the indoor unit.

The new HVAC system must include a properly matched outdoor unit and inside coil, which must be listed as such by the Air Conditioning, Heating and Refrigeration Institute (AHRI). This listing is available at www.ahridirectory.org

~~The new Heating Ventilation and Air Conditioning (HVAC) system must include a properly matched outdoor unit and inside coil, which must be listed as such by the Air Conditioning, Heating, and Refrigeration Institute (AHRI). This listing is available at www.ahridirectory.org.~~

- ~~Heat pumps may use natural gas or any fuel for supplemental or backup heating.~~
- ~~Quality Installations must be performed at the time of installation of a qualifying HVAC system by a Duke Energy participating HVAC contractor and achieve 90% net capacity of the system as rated by the AHRI.~~
- ~~Smart Thermostats must be purchased, installed and programmed at the time of installation of the qualifying HVAC system by a Duke Energy participating HVAC contractor.~~
- ~~Payments are available to the builder, or the builder's designee, of a new structure upon installation of the qualifying unit.~~
- ~~Payments are available for one or more of the following services performed at the customer's residence:~~
 1. ~~HVAC Tune Up for electric heat pump or central air conditioner~~
 - o ~~HVAC Tune-Up must include appropriate system checks, repairs, replacement of parts, correction of refrigerant charge, and adjustment of airflow~~
 - o ~~The customer is eligible for only one HVAC Tune Up payment over the life of the equipment~~
 2. ~~Attic Insulation and Air Sealing~~
 - o ~~The level of attic insulation in the residence must be increased from a level of R-19 or lower prior to at least R-30 or greater.~~
 - o ~~Air leakage must be reduced through sealing by at least 5% as demonstrated by test before and after sealing is performed.~~
 3. ~~Duct Insulation~~
 - o ~~A minimum of 1000 square feet of conditioned floor area must be served by the duct improvement~~
 - o ~~The level of duct insulation in attics must be increased from a minimum of R4.2 prior to at least R-19 or greater.~~
 - o ~~The level of duct insulation in unconditioned basements or crawlspaces must be increased from R-0 prior to at least R-6 or greater.~~
 4. ~~Duct Sealing~~
 - o ~~Ducts must be sealed such that duct leakage is reduced by at least 12% as demonstrated by test before and after sealing is performed.~~
 5. ~~Heat Pump Water Heaters~~
 - a. ~~Heat Pump Water Heaters must be Energy Star certified and have an Energy Factor rating of 2.0 or greater~~

~~All Smart Saver measures must be installed or performed by a Duke Energy Kentucky participating trade ally to be eligible.~~

~~Issued by authority of an Order of the Kentucky Public Service
Commission dated Case No. 2013-00395 dated December 19, 2013~~

~~Issued: December 23, 2013 August 17, 2015~~

Effective: September 17, 2015
Issued by James P. Henning, President /s/ James P. Henning

KY.P.S.C. Electric No. 2
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Erlanger, Kentucky 41018 Page 2 of 2

All improvements eligible for payment under this program must be installed based on manufacturer's recommendations and the Company's specifications. Detailed requirements are available on the Company's website at www.duke-energy.com.

To qualify for payment under this program, qualifying measures must be implemented on or after January 1, 2016 and the application for payment must be made within 90 days of completion.

Payment for qualifying HVAC equipment improvements or energy efficient measures will be made to the account owner or property owner in a rebate check or other payment method, including but not limited to a trade-ally rebate, gift card or prepaid credit card as follows:

Existing Residences

| SUGGESTED INCENTIVE | | | |
|----------------------------|---------------|---------------|---------------|
| MEASURE | TIER 1 | TIER 2 | TIER 3 |
| AC / HP / Geo | \$250 | \$300 | \$400 |
| Quality Installation | REQUIRED | \$75 | \$75 |
| Smart Thermostat | \$125 | \$125 | \$125 |

| | Incentive |
|----------------------------------|------------------|
| Attic Insulation and Sealing | \$250 |
| Duct Sealing | \$100 |
| Duct Insulation | \$75 |
| Central Air Conditioning Tune-up | \$50 |
| Electric Heat Pump Tune-up | \$50 |
| Heat Pump Water Heater | \$350 |

New Residences

- Incentives for HVAC equipment and Heat Pump Water Heater are available to the builder, or the builder's designee, of qualifying new single-family residences

~~Heat pumps may use natural gas or any fuel for supplemental or backup heating.~~

~~Other energy efficiency measures that qualify for payment are:~~

- ~~• Air sealing and attic insulation~~
- ~~• Duct sealing~~
- ~~• Duct insulation~~
- ~~• Heat pump tune-up~~
- ~~• Air conditioner tune-up~~
- ~~• Heat pump water heaters~~

~~Issued by authority of an Order of the Kentucky Public Service~~

~~Commission dated _____ in Case No. _____~~

~~Issued: November 15, 2013~~

~~Effective: December 15, 2013~~

~~Issued by James P. Henning, President~~

~~Duke Energy Kentucky, Inc.~~

~~4580 Olympic Blvd.~~

~~Erlanger, Kentucky 41018~~

~~Cancels and Supersedes~~

~~First Revised Sheet No. 104~~

~~Page 2 of 2~~

~~All Smart Saver measures must be installed or performed by a Duke Energy Kentucky participating trade ally to be eligible.~~

~~All improvements eligible for payment under this program must be installed based on manufacturer's recommendations and the Company's specifications. Detailed requirements are available on the Company's website at www.duke-energy.com.~~

~~To qualify for payment under this program, qualifying measures must be implemented on or after August 1, 2012 and the application for payment must be made within 90 days of completion.~~

~~Payments will be made for qualifying HVAC equipment or measures as follows:~~

~~New Residences~~

~~A payment of up to \$650 per unit will be made to the builder or the builder's designee.~~

~~Existing Residences~~

~~• A payment of up to \$550 per unit will be made to the owner of the residence (or designee), and a payment of up to \$100 per unit will be made to the HVAC dealer (or sales representative) who sells and installs the HVAC system.~~

~~• A payment of up to \$500 will be made to the owner of the residence (or designee) for air sealing and attic insulation~~

~~• A payment of up to \$300 will be made to the owner of the residence (or designee) for duct sealing~~

- ~~A payment of up to \$350 will be made to the owner of the residence (or designee) for duct insulation~~
- ~~A payment of up to \$125 will be made to the owner of the residence (or designee) for heat pump tune-up~~
- ~~A payment of up to \$80 will be made to the owner of the residence (or designee) for central air conditioner tune-up~~

SERVICE REGULATIONS

The provisions contained in this tariff sheet do not supersede or replace any of the charges and terms contained in the standard base rate and rider tariff sheets. The standard base rate and rider charges apply to all customers.

The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Company's Service Regulations currently in effect, as filed with the Kentucky Public Service Commission, as approved by law.

Issued by authority of an Order of the Kentucky Public Service
Commission dated _____ in Case No. _____

Issued: ~~November 15, 2013~~ August 17, 2015

Effective: ~~December 15, 2013~~ September 17, 2015

Issued by James P. Henning, President

Duke Energy Kentucky, Inc.
4580 Olympic Blvd.
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KY.P.S.C. Electric No. 2
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RESIDENTIAL SMART \$AVER® ENERGY EFFICIENT RESIDENCES PROGRAM

APPLICABILITY

Applicable to residential customers in the Company's electric service area who choose to participate by submitting, or having their contractor submit, a completed incentive application.

PURPOSE

The purpose of this program is to 1) encourage proper installation and utilization of high efficiency electric heat pumps and central air conditioning systems; 2) reduce energy usage for thermal conditioning in a residence through installation of energy efficiency measures and equipment maintenance to improve operating efficiency; and 3) encourage the adoption of high efficient heat pump water heating.

PROGRAM DESCRIPTION

- Payments are available for electric heat pumps (HP) and central air conditioning (AC) systems that are installed in new or existing individually-metered residences, condominiums and mobile homes served by Duke Energy Kentucky's residential rate schedules from the Company's retail distribution system. Payments for quality installations and smart thermostats are only available in conjunction with qualifying electric heat pump or central air conditioning system installations.
- The new Heating, Ventilating and Air Conditioning (HVAC) system must have a minimum Seasonal Energy Efficiency Ratio (SEER) and an Energy Efficiency Ratio (EER) as described below:

| | HVAC TIER | | |
|-------|--------------------------------------------|---------------------|--------------------|
| | TIER 1 | TIER 2 | TIER 3 |
| AC/HP | 14 SEER WITH ECM AND QUALITY INSTALLATION | 15&16 SEER WITH ECM | 17+ SEER WITH ECM |
| GEO | 11.5 EER WITH ECM AND QUALITY INSTALLATION | 12.3 EER WITH ECM | 13.26 EER WITH ECM |

- The new HVAC system must include a properly matched outdoor unit and inside coil, which must be listed as such by the Air Conditioning, Heating and Refrigeration Institute (AHRI). This listing is available at www.ahridirectory.org
- Heat pumps may use natural gas or any fuel for supplemental or backup heating.
- Quality Installations must be performed at the time of installation of a qualifying HVAC system by a Duke Energy participating HVAC contractor and achieve 90% net capacity of the system as rated by the AHRI.
- Smart Thermostats must be purchased, installed and programmed at the time of installation of the qualifying HVAC system by a Duke Energy participating HVAC contractor.

Issued by authority of an Order by the Kentucky Public Service Commission dated _____, 2015 in Case No. _____.

Issued: August 17, 2015
Effective: September 17, 2015
Issued by James P. Henning, President /s/ James P. Henning

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- Payments are available to the builder, or the builder's designee, of a new structure upon installation of the qualifying unit.
- Payments are available for one or more of the following services performed at the customer's residence:
 1. HVAC Tune Up for electric heat pump or central air conditioner
 - HVAC Tune-Up must include appropriate system checks, repairs, replacement of parts, correction of refrigerant charge, and adjustment of airflow
 - The customer is eligible for only one HVAC Tune Up payment over the life of the equipment
 2. Attic Insulation and Air Sealing
 - The level of attic insulation in the residence must be increased from a level of R-19 or lower prior to at least R-30 or greater.
 - Air leakage must be reduced through sealing by at least 5% as demonstrated by test before and after sealing is performed.
 3. Duct Insulation
 - A minimum of 1000 square feet of conditioned floor area must be served by the duct improvement
 - The level of duct insulation in attics must be increased from a minimum of R4.2 prior to at least R-19 or greater.
 - The level of duct insulation in unconditioned basements or crawlspaces must be increased from R-0 prior to at least R-6 or greater.
 4. Duct Sealing
 - Ducts must be sealed such that duct leakage is reduced by at least 12% as demonstrated by test before and after sealing is performed.
 5. Heat Pump Water Heaters
 - Heat Pump Water Heaters must be Energy Star certified and have an Energy Factor rating of 2.0 or greater

All Smart Saver measures must be installed or performed by a Duke Energy Kentucky participating trade ally to be eligible.

All improvements eligible for payment under this program must be installed based on manufacturer's recommendations and the Company's specifications. Detailed requirements are available on the Company's website at www.duke-energy.com.

To qualify for payment under this program, qualifying measures must be implemented on or after January 1, 2016 and the application for payment must be made within 90 days of completion.

Issued by authority of an Order by the Kentucky Public Service
Commission dated _____, 2015 in Case No. _____.

Issued: August 17, 2015
Effective: September 17, 2015
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Payment for qualifying HVAC equipment improvements or energy efficient measures will be made to the account owner or property owner in a rebate check or other payment method, including but not limited to a trade-ally rebate, gift card or prepaid credit card as follows:

Existing Residences

| SUGGESTED INCENTIVE | | | |
|----------------------------------|----------|-----------|--------|
| MEASURE | TIER 1 | TIER 2 | TIER 3 |
| AC / HP / Geo | \$250 | \$300 | \$400 |
| Quality Installation | REQUIRED | \$75 | \$75 |
| Smart Thermostat | \$125 | \$125 | \$125 |
| | | | |
| | | Incentive | |
| Attic Insulation and Sealing | | \$250 | |
| Duct Sealing | | \$100 | |
| Duct Insulation | | \$75 | |
| Central Air Conditioning Tune-up | | \$50 | |
| Electric Heat Pump Tune-up | | \$50 | |
| Heat Pump Water Heater | | \$350 | |

New Residences

- Incentives for HVAC equipment and Heat Pump Water Heater are available to the builder, or the builder's designee, of qualifying new single-family residences

SERVICE REGULATIONS

The provisions contained in this tariff sheet do not supersede or replace any of the charges and terms contained in the standard base rate and rider tariff sheets. The standard base rate and rider charges apply to all customers.

The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Company's Service Regulations currently in effect, as filed with the Kentucky Public Service Commission, as approved by law.

Issued by authority of an Order by the Kentucky Public Service Commission dated _____, 2015 in Case No. _____.

Issued: August 17, 2015
Effective: September 17, 2015
Issued by: James P. Henning, President /s/ James P. Henning

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KY.P.S.C. Electric No. 2
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RESIDENTIAL ENERGY ASSESSMENT PROGRAM

APPLICABILITY

Available to residential customers in the Company's electric service area with individually-metered, single-family residences receiving concurrent service from the Company and choose to participate by enrolling through the marketing channels utilized by the program.

PROGRAM DESCRIPTION

The Residential Energy Assessment Program (REA) is part of Duke Energy Kentucky's portfolio of programs offered through Rider Demand Side Management Program (Rider DSM) and recovered through the Company's Rider DSMR (Demand Side Management Rate). The purpose of this program is to assist residential customers in assessing their energy usage and to provide recommendations for more efficient use of energy in their homes. The program will also help identify those customers who could benefit most by investing in new energy efficiency measures, undertaking more energy efficient practices and participating in Duke Energy Kentucky programs.

The Company may require a minimum number of months of historical usage data before performing an analysis to customers as follows:

On-site Audit and Analysis

Duke Energy Kentucky will perform on-site assessments of owner-occupied residences.; Duke Energy Kentucky reserves the right to determine eligibility throughout the life of the program. Duke Energy Kentucky will provide a detailed Residential Energy Assessment including energy efficiency recommendations.

Participating customers will be offered ~~home energy efficiency measures such as an energy efficiency starter kit and/or which includes compact fluorescent light bulbs~~ high efficiency water and lighting measures. The home energy efficiency measure incentives may be delivered in a variety of ways including but not limited to, in-home installation, direct mail, or online channels.

SERVICE REGULATIONS

The provisions contained in this tariff sheet do not supersede or replace any of the charges and terms contained in the standard base rate and rider tariff sheets. The standard base rate and rider charges apply to all customers.

The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Company's Service Regulations currently in effect, as filed with the Kentucky Public Service Commission, as approved by law.

Issued by authority of an Order by the Kentucky Public Service
Commission dated _____, 2015 in Case No. _____.

Issued: August 17, 2015

Effective: September 17, 2015

Issued by James P. Henning, President /s/ James P. Henning

~~Issued by authority of an Order of the Kentucky Public Service Commission dated June 29, 2012 in Case No. 2012-00085.~~

~~Issued: July 9, 2012~~

~~Effective: July 9, 2012~~

~~Issued by Julie Janson, President~~

Duke Energy Kentucky, Inc.
4580 Olympic Blvd.
Erlanger, Kentucky 41018

KY.P.S.C. Electric No. 2
Second Revised Sheet No. 109
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First Sheet No. 109
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RESIDENTIAL ENERGY ASSESSMENT PROGRAM

APPLICABILITY

Available to residential customers in the Company's electric service area with individually-metered, single-family residences receiving concurrent service from the Company and choose to participate by enrolling through the marketing channels utilized by the program.

PROGRAM DESCRIPTION

The Residential Energy Assessment Program (REA) is part of Duke Energy Kentucky's portfolio of programs offered through Rider Demand Side Management Program (Rider DSM) and recovered through the Company's Rider DSMR (Demand Side Management Rate). The purpose of this program is to assist residential customers in assessing their energy usage and to provide recommendations for more efficient use of energy in their homes. The program will also help identify those customers who could benefit most by investing in new energy efficiency measures, undertaking more energy efficient practices and participating in Duke Energy Kentucky programs.

The Company may require a minimum number of months of historical usage data before performing an analysis to customers as follows:

On-site Audit and Analysis

Duke Energy Kentucky will perform on-site assessments of owner-occupied residences.; Duke Energy Kentucky reserves the right to determine eligibility throughout the life of the program. Duke Energy Kentucky will provide a detailed Residential Energy Assessment including energy efficiency recommendations.

Participating customers will be offered an energy efficiency starter kit which includes high efficiency water and lighting measures. The home energy efficiency measure incentives may be delivered in a variety of ways including but not limited to, in-home installation, direct mail, or online channels.

SERVICE REGULATIONS

The provisions contained in this tariff sheet do not supersede or replace any of the charges and terms contained in the standard base rate and rider tariff sheets. The standard base rate and rider charges apply to all customers.

The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to Company's Service Regulations currently in effect, as filed with the Kentucky Public Service Commission, as approved by law.

Issued by authority of an Order by the Kentucky Public Service
Commission dated _____, 2015 in Case No. _____.

Issued: August 17, 2015

Effective: September 17, 2015

Issued by James P. Henning, President /s/ James P. Henning