**EXHIBIT NO. \_\_\_(MBM-4)
DOCKETS UE‑151871/UG-151872
PSE EQUIPMENT LEASING SERVICE
WITNESS:  MALCOLM B. MCCULLOCH**

**BEFORE THE**

**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

|  |  |  |
| --- | --- | --- |
| **WASHINGTON UTILITIES AND****TRANSPORTATION COMMISSION,****Complainant,** **v.****PUGET SOUND ENERGY,****Respondent.** |  | **Dockets UE-151871** **UG-151872** |

**THIRD EXHIBIT TO THE PREFILED DIRECT TESTIMONY OF**

**MALCOLM B. MCCULLOCH**

**ON BEHALF OF PUGET SOUND ENERGY**

**February 25, 2016**

**Perkins Coie/Puget Sound Energy**

EQUIPMENT LEASING Topline

CONFIDENTIAL DRAFT

February 8, 2016

**Methodology**

Cocker Fennessy conducted an online survey of Puget Sound Energy (PSE) customers on behalf of Perkins Coie. Eligible respondents lived in the PSE service area, were homeowners and were responsible or informed household decisions about major appliance purchases. Data was collected from January 30 to February 4, 2016. The research sponsor was not disclosed.

Figures are percentages of respondents who gave each answer. Percentages may not add to 100 percent due to rounding. Percentages below 1.0 percent are indicated with an asterisk (\*). The total number of respondents (n) is 600 unless otherwise noted. Open-ended and other/specify responses are reported in a separate document.

**Results**

**1. Are you a Puget Sound Energy customer?**

Yes, electric 34%

Yes, gas 22%

Yes, gas and electric 44%

**2 Do you own or lease any of the following equipment in your home?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Own** | **Lease** | **Doesn’t apply** | **Don’t know** |
| Hot water heater | 95% | 4% | 1% | \* |
| Furnace | 88% | 1% | 12% | \* |
| Heat pump | 19% | \* | 77% | 4% |

**3. Why did you decide to lease your…?**

|  |  |  |
| --- | --- | --- |
|  | **Furnace****(n=3)** | **Water Heater****(n=22)** |
| Inclusive maintenance and repair service | 67% | 82% |
| No upfront costs | - | 55% |
| Warranty | - | 45% |
| Fixed monthly fee on energy bill | - | 41% |
| Energy-efficient equipment | - | 32% |
| Something else | 33% | 27% |

**HEATING EQUIPMENT PROFILE**

**4. Which of the following do you use to heat the majority of your home? (Select one.)**

Natural gas furnace 66%

Electric furnace 11%

Zone or room heating 8%

Air source heat pump 7%

Fireplace (gas or wood) 4%

Other 4%

Ductless heat pump 1%

**5. Approximately how old is this heating equipment?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TOTAL****(n=501)** | **Natural Gas Furnace (n=396)** | **Electric Furnace (n=63)** | **Heat Pump (n=42)** |
| Less than 5 years old | 21% | 21% | 8% | 40% |
| 6-10 years old | 28% | 29% | 21% | 31% |
| 11-15 years old | 20% | 22% | 11% | 14% |
| 16-20 years old | 17% | 17% | 24% | 7% |
| 20+ years old | 14% | 11% | 37% | 7% |

**6. Which of the following best describes your heating equipment? (Select all that apply.) [IF 6+ Y.O. EQUIPMENT (n=396)]**

Reliable 53%

Functional 53%

Dependable 52%

Important 33%

Energy-efficient 29%

Old 23%

Never think about it 16%

Living on borrowed time 9%

New 3%

Fragile 2%

Innovative 1%

**7. How likely are you to buy new heating equipment for your home in the next 5 years? [IF 6+ Y.O. EQUIPMENT (n=396)]**

**VERY LIKELY/LIKELY 40%**

Very likely 18%

Likely 22%

Neither likely nor unlikely 36%

**VERY UNLIKELY/UNLIKELY 24%**

Unlikely 16%

Very unlikely 8%

**8. How much influence does each of the following have on your decision to replace your home heating equipment? [IF 6+ Y.O. EQUIPMENT (n=396)]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **INFLUENCE****None - - - - - - - - - - - - Great Deal** | **NET LOW** | **NET HIGH** | **MEAN** |
| **1** | **2** | **3** | **4** | **5** |
| Condition of current equipment | 2% | 2% | 12% | 34% | 51% | **4%** | **85%** | **4.3** |
| Your budget | 4% | 5% | 14% | 26% | 51% | **9%** | **77%** | **4.2** |
| Upfront cost | 2% | 3% | 19% | 33% | 42% | **5%** | **75%** | **4.1** |
| Availability of energy-efficient options | 2% | 4% | 16% | 38% | 40% | **6%** | **78%** | **4.1** |
| Ongoing maintenance costs | 2% | 6% | 17% | 35% | 40% | **8%** | **75%** | **4.1** |
| Recommendation of an expert | 3% | 7% | 30% | 42% | 19% | **10%** | **61%** | **3.7** |
| Overall sales experience | 9% | 15% | 37% | 24% | 14% | **24%** | **38%** | **3.2** |

**9. Why did you purchase new heating equipment? (Select all that apply.) [IF EQUIPMENT < 5 YRS OLD (n=105)]**

Equipment was old/time to be replaced 45%

Equipment broke or failed 36%

Wanted to improve energy-efficiency 28%

Something else (specify) 13%

Energy-efficiency rebate or program 12%

Was part of a home remodeling project 7%

Wanted to upgrade technology 5%

Equipment was on sale/promotion 4%

Dissatisfied with previous equipment 2%

**10 How difficult or easy were the following aspects of the equipment purchasing and maintenance experience? [IF EQUIPMENT < 5 YRS OLD (n=105]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **V. Difficult - -- - - - - -V. Easy** | **NET DIF.** | **NET EASY** | **MEAN** |
| **1** | **2** | **3** | **4** | **5** |
| Arranging for delivery and installation | 1% | 1% | 11% | 40% | 47% | **2%** | **87%** | **4.3** |
| Performing ongoing maintenance | 1% | 5% | 25% | 37% | 32% | **6%** | **69%** | **4.0** |
| Understanding your options | 1% | 5% | 25% | 39% | 30% | **6%** | **69%** | **3.9** |
| Understanding ongoing maintenance costs | 3% | 4% | 26% | 31% | 36% | **7%** | **67%** | **3.9** |
| Finding the equipment you wanted | 1% | 5% | 28% | 36% | 30% | **6%** | **66%** | **3.9** |
| Making a decision about who to buy from | 3% | 6% | 25% | 35% | 31% | **9%** | **66%** | **3.9** |
| Paying for/affording the equipment | - | 10% | 30% | 31% | 29% | **10%** | **60%** | **3.8** |

**WATER HEATER EQUIPMENT PROFILE**

**11. Which of the following water heater types are installed in your home?**

Gas tank-style 60%

Electric tank-style 32%

Gas tankless 6%

Electric heat pump 1%

Other 1%

Electric tankless \*

Boiler \*

**12. Approximately how old is your hot water heater? [IF GAS/ELEC. TANK-STYLE (n=553)]**

Less than 5 years old 27%

6-10 years old 32%

11-15 years old 26%

16-20 years old 12%

20+ years old 4%

**13. Which of the following best describes your hot water heater? (Select all that apply.) [IF 6+ Y.O. EQUIPMENT (n=404)]**

Reliable 51%

Functional 50%

Dependable 47%

Important 33%

Energy-efficient 24%

Never think about it 24%

Old 18%

Living on borrowed time 12%

Innovative 1%

New 1%

Fragile 1%

None of these \*

**14. How likely are you to buy new hot water heater for your home in the next 5 years? [IF 6+ Y.O. EQUIPMENT (n=404)]**

**VERY LIKELY/LIKELY 43%**

Very likely 19%

Likely 24%

Neither likely nor unlikely 35%

**VERY UNLIKELY/UNLIKELY 21%**

Unlikely 13%

Very unlikely 8%

**15. How much influence does each of the following have on your decision to replace your hot water heater? [IF 6+ Y.O. EQUIPMENT (n=404)]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | INFLUENCENone - - - - - -- - Great Deal | **NET LOW** | **NET HIGH** | **MEAN** |
| 1 | 2 | 3 | 4 | 5 |
| Condition of current equipment | 3% | 3% | 14% | 30% | 50% | **6%** | **80%** | **4.2** |
| Availability of energy-efficient options | 3% | 3% | 23% | 38% | 34% | **6%** | **72%** | **4.0** |
| Your budget | 4% | 5% | 20% | 27% | 43% | **9%** | **70%** | **4.0** |
| Upfront cost | 5% | 6% | 21% | 31% | 37% | **11%** | **68%** | **3.9** |
| Ongoing maintenance costs | 5% | 8% | 18% | 37% | 32% | **13%** | **69%** | **3.8** |
| Recommendation of an expert | 6% | 10% | 35% | 27% | 22% | **16%** | **49%** | **3.5** |
| Overall sales experience | 9% | 17% | 41% | 21% | 12% | **26%** | **33%** | **3.1** |

**16. Why did you purchase a new hot water heater? (Select all that apply.) [IF EQUIPMENT < 5 Y.O. (n=149)]**

Equipment broke or failed 58%

Equipment was old/time to be replaced 32%

Something else 13%

Wanted to improve energy-efficiency 7%

Was part of a home remodeling project 6%

Energy-efficiency rebate or program 3%

Dissatisfied with previous equipment 1%

Wanted to upgrade technology 1%

Equipment was on sale/promotion 1%

**17. How difficult or easy were the following aspects of the equipment purchasing and maintenance experience? [IF EQUIPMENT < 5 Y.O. (n=149)]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **V. Difficult -- - -V. Easy** | **NET DIF.** | **NET EASY** | **MEAN** |
| **1** | **2** | **3** | **4** | **5** |
| Arranging for delivery and installation | 1% | 3% | 16% | 32% | 48% | **3%** | **80%** | **4.3** |
| Understanding your options | 1% | 3% | 22% | 37% | 37% | **4%** | **74%** | **4.1** |
| Finding the equipment you wanted  | - | 5% | 21% | 35% | 39% | **5%** | **74%** | **4.1** |
| Paying for/affording the equipment | 1% | 4% | 23% | 35% | 37% | **5%** | **72%** | **4.0** |
| Understanding ongoing maintenance costs | 2% | 3% | 25% | 34% | 36% | **5%** | **70%** | **4.0** |
| Making a decision about who to buy from | 3% | 5% | 23% | 32% | 37% | **8%** | **69%** | **4.0** |
| Performing ongoing maintenance | 1% | 5% | 26% | 33% | 36% | **6%** | **69%** | **4.0** |

**EQUIPMENT LEASING CONCEPT TEST**

[FOR QUESTIONS IN THIS SECTION Q. 20-34, n=597. Those having either a tank-less hot water heater or natural gas furnace, electric furnace or air source heat pump.]

Puget Sound Energy (PSE) is considering offering a new service where customers would pay an all-inclusive fixed monthly fee to lease various types of energy equipment.  These monthly fees would cover the cost of the equipment, installation, permitting fees, and future maintenance and repair costs. Puget Sound Energy would manage the service to provide additional convenience to customers. The lease would also feature the below service amenities and lease components: No upfront cost, energy-efficient equipment, 24-hour customer service, ability to transfer the lease when you sell your home and the option to start a new lease when the term has ended.

**NATURAL GAS OR ELECTRIC TANK-STYLE WATER HEATER**

|  |  |
| --- | --- |
| **PROPOSED LEASING PROGRAM CHARACTERISTICS** | **Natural Gas or Electric Tank-Style Water Heater** |
| Estimated Monthly Fee | $18/month |
| Lease Term | 15 years |
| Maintenance | Years 6 and 15 |
| Warranty | 6 years |

**18. Which of the following best describes your interest in the Natural Gas or Electric Tank-Style Water Heater leasing program?**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **TOTAL** | **Equipment <11 (n=325)** | **Equipment 11+ (n=228)** |
| **VERY INTERESTED/INTERESTED**  | **25%** | **21%** | **32%** |
| Very interested | 8% | 7% | 11% |
| Interested | 17% | 14% | 21% |
| Neutral | 29% | 31% | 25% |
| **VERY UNINTERESTED/UNINTERESTED**  | **46%** | **48%** | **43%** |
| Uninterested | 24% | 25% | 24% |
| Very uninterested | 22% | 23% | 19% |

**19. What is most appealing about the proposed Natural Gas or Electric Tank-Style Water Heater program? [SELECT ONE]**

No upfront costs 25%

None of these 22%

Inclusive maintenance and repair service 21%

Fixed monthly fee on energy bill 11%

Energy-efficient equipment 10%

Convenience of PSE managing equipment 8%

Warranty 2%

Lease term 1%

**20. What is least appealing about the proposed Natural Gas or Electric Tank-Style Water Heater program? [SELECT ONE]**

Fixed monthly fee on energy bill 32%

Lease term 29%

None of these 25%

Warranty 7%

Convenience of PSE managing equipment 3%

Energy-efficient equipment 2%

No upfront costs 1%

Inclusive maintenance and repair service 1%

**NATURAL GAS FURNACE**

|  |  |
| --- | --- |
| **PROPOSED LEASING PROGRAM CHARACTERISTICS** | **Natural Gas Furnace** |
| Estimated Monthly Fee | $60/month |
| Lease Term | 17 years |
| Maintenance | every 2 years |
| Warranty | 10 years |

**21. Which of the following best describes your interest in the Natural Gas Furnace leasing program? [SELECT ONE]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TOTAL** | **Use Natural Gas Furnace (n=396)** | **Equipment <16 (n=344)** | **Equipment 16+ (n=157)** |
| **VERY INTERESTED/INTERESTED**  | **18%** | **23%** | **19%** | **25%** |
| Very interested | 5% | 6% | 6% | 6% |
| Interested | 13% | 17% | 13% | 19% |
| Neutral | 22% | 25% | 24% | 21% |
| **VERY UNINTERESTED/UNINTERESTED**  | **60%** | **53%** | **56%** | **54%** |
| Uninterested | 26% | 28% | 26% | 25% |
| Very uninterested | 34% | 25% | 30% | 29% |

**22. What is most appealing about the proposed Natural Gas Furnace program? [SELECT ONE]**

None of these 30%

No upfront costs 24%

Inclusive maintenance and repair service 18%

Energy-efficient equipment 9%

Fixed monthly fee on energy bill 7%

Convenience of PSE managing equipment 8%

Warranty 3%

Lease term 1%

**23. What is least appealing about the proposed Natural Gas Furnace program? [SELECT ONE]**

None of these 33%

Fixed monthly fee on energy bill 32%

Lease term 26%

Warranty 4%

Convenience of PSE managing equipment 2%

Energy-efficient equipment 1%

No upfront costs 1%

Inclusive maintenance and repair service 1%

**ELECTRIC AIR SOURCE HEAT PUMP**

|  |  |
| --- | --- |
| **PROPOSED LEASING PROGRAM CHARACTERISTICS** | **Electric Air Source Heat Pump** |
| Estimated Monthly Fee | $85/month |
| Lease Term | 17 years |
| Maintenance | every 2 years |
| Warranty | 10 years |

**24. Which of the following best describes your interest in the Electric Air Source Heat Pump leasing program? [SELECT ONE]**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TOTAL** | **Use Heat Pump (n=48)** | **Equipment <16 (n=344)** | **Equipment 16+ (n=157)** |
| **V. INTERESTED/INTERESTED** | **13%** | **16%** | **12%** | **16%** |
| Very interested | 5% | 8% | 4% | 8% |
| Interested | 8% | 8% | 8% | 8% |
| Neutral | 20% | 29% | 21% | 19% |
| **V. UNINTERESTED/UNINTERESTED**  | **67%** | **54%** | **67%** | **65%** |
| Uninterested | 25% | 10% | 24% | 27% |
| Very uninterested | 42% | 44% | 43% | 38% |

**25. What is most appealing about the proposed Electric Air Source Heat Pump program? [SELECT ONE]**

None of these 40%

No upfront costs 20%

Energy-efficient equipment 13%

Inclusive maintenance and repair service 13%

Convenience of PSE managing equipment 6%

Fixed monthly fee on energy bill 4%

Warranty 3%

Lease term 2%

**26. What is least appealing about the proposed Electric Air Source Heat Pump program? [SELECT ONE]**

None of these 40%

Fixed monthly fee on energy bill 31%

Lease term 19%

Warranty 5%

No upfront costs 2%

Energy-efficient equipment 2%

Inclusive maintenance and repair service 1%

Convenience of PSE managing equipment 1%

**27. If a leasing program were available, would you replace your home heating or hot water equipment earlier than you would if you had to purchase the equipment and maintain it yourself?**

**DEFINITELY/PROBABLY YES 17%**

Definitely yes 4%

Probably yes 13%

Possibly 27%

**DEFINITELY/PROBABLY NO 56%**

Probably not 34%

Definitely not 22%

**28. Smart water heaters can adjust their operations to help the electric grid cope with periods of high demand without impacting your use of your hot water supply. If your leased water heater was equipped with the appropriate technology, would you enroll in such a program in exchange for a monthly incentive or a reduced monthly lease price? [THOSE WITH WATER HEATERS]**

**DEFINITELY/PROBABLY YES 39%**

Definitely yes 13%

Probably yes 26%

Possibly 32%

**DEFINITELY/PROBABLY NO 28%**

Probably not 19%

Definitely not 9%

**29. Web-enabled thermostats can adjust their operations to help the electric grid cope with periods of high demand without impacting your use of your heat supply. If your leased equipment had the appropriate technology, would you enroll in such a program in exchange for a monthly incentive or a reduced monthly lease price? [THOSE WITH FURNACE OR HEAT PUMP]**

**DEFINITELY/PROBABLY YES 38%**

Definitely yes 12%

Probably yes 26%

Possibly 31%

**DEFINITELY/PROBABLY NO 30%**

Probably not 20%

Definitely not 10%

**MESSAGE TESTING**

[ALL RESPONDENTS, n=600]

**30. Below are a few statements about the proposed space and water heat equipment leasing program, please rate your level of agreement with each.**

|  | **S. Disagree - - - S. Agree** | **NET NEGATIVE** | **NET POSITIVE** | **MEAN** |
| --- | --- | --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** |
| If something breaks, I want 24-hour customer service and same day repairs. | \* | 1% | 12% | 45% | 42% | **2%** | **87%** | **4.3** |
| The maintenance and repair service offered through a leasing program keeps equipment working and gives customers added peace-of-mind. | 2% | 4% | 23% | 53% | 19% | **6%** | **72%** | **3.8** |
| It’s important to help people make the switch to technologically advanced equipment to help them save money on their energy bills over the long term. | 2% | 4% | 24% | 53% | 17% | **6%** | **70%** | **3.8** |
| Puget Sound Energy is a trusted energy advisor and will help customers get the equipment and services they need. | 1% | 4% | 30% | 50% | 16% | **5%** | **66%** | **3.7** |
| Replacing space and water heat equipment before the end of their useful life helps prevent emergencies and is safer for homeowners. | 2% | 6% | 28% | 50% | 14% | **8%** | **64%** | **3.7** |
| Some households can’t afford to replace space and water heat equipment on a regular and safe basis. A leasing program would help keep people warm and safe in their homes. | 2% | 5% | 31% | 50% | 13% | **7%** | **63%** | **3.7** |
| It’s important to help people make the switch to technologically advanced equipment, because it allows consumers and utilities to remotely monitor and administer services (which will improve performance), it increases efficiency and it help the environment. | 4% | 9% | 29% | 44% | 15% | **13%** | **59%** | **3.6** |
| It’s important to me that my furnace, heat pump or water heater last. If a leasing program helps to extend the life of this equipment, it’s worth it. | 4% | 6% | 38% | 37% | 15% | **10%** | **52%** | **3.5** |
| Equipment leasing is unnecessary. Banks and stores provide financing so people can purchase and maintain the equipment they need. | 4% | 17% | 46% | 24% | 9% | **21%** | **33%** | **3.2** |

**DEMOGRAPHICS/BACKGROUND**

31. Sex/Gender

Female 59%

Male 42%

32. Age

-24 \*

25-34 4%

35-44 8%

45-54 18%

55-64 31%

65-74 31%

75 and older 8%

33. Annual Household Income Before Taxes

Less than $15,000 1%

$15,000 to less than $30,000 5%

$30,000 to less than $60,000 19%

$60,000 to less than $90,000 29%

$90,000 to less than $120,000 20%

$120,000 or more 26%

34. Race/Ethnicity (Select all that apply.)

Caucasian 86%

Asian 8%

Prefer not to answer 3%

Hispanic, Latino, or Latina 2%

American Indian or Native Alaskan 1%

Black or African American 1%

Mixed race 1%

Other 1%

Native Hawaiian or Other Pacific Islander \*

35. County (residence)

King 52%

Pierce 12%

Snohomish 9%

Thurston 9%

Kitsap 7%

Whatcom 7%

Island 2%

Skagit 2%

Lewis 1%

Kittitas \*%