

**Exhibit No. BTC-8
Dockets UE-151871/UG-151872
Witness: Bradley T. Cebulko**

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**DOCKETS UE-151871/UG-151872
(consolidated)**

**EXHIBIT TO
TESTIMONY OF**

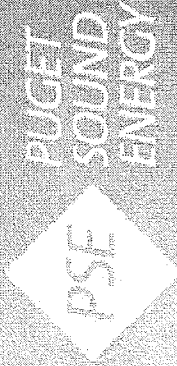
BRADLEY T. CEBULKO

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

Excerpt of PSE Response to Public Counsel Data Request 13 – Attachment C

June 7, 2016

Leasing



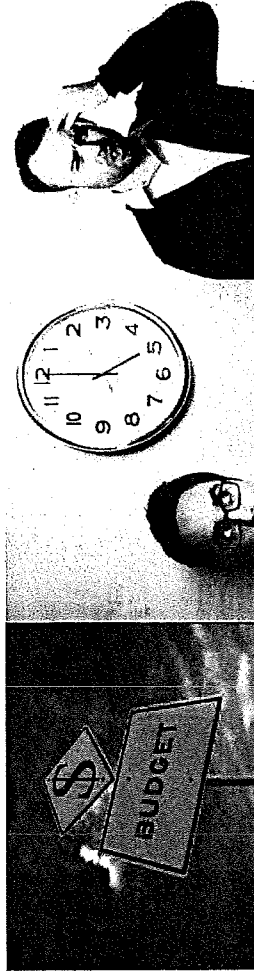
Energy Efficiency

Malcolm McCulloch

May 21, 2015

Customer Evolution

- Customer often lack
 - budget
 - time
 - expertise

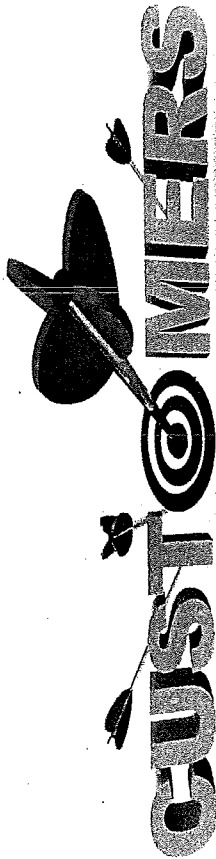


Expanding PSE's energy equipment leasing business will;

- Increase customer choice.
- Stimulate energy efficient product installations.
- Expand market opportunities for our partners.
- Build flexibility to serve an evolving energy market.



Market Analysis



- 70% of PSE's single-family residential customers use gas forced-air furnaces or air-source heat pumps to heat their homes.
- In Washington State 97% of single-family residential water heat equipment is tank-style; 60% of PSE customers use natural gas while 35% use electricity.
- In the commercial market 80% of PSE customers use self-contained water heaters, and the largest sector within that is tank-style; both natural gas 42% and electric 54%.

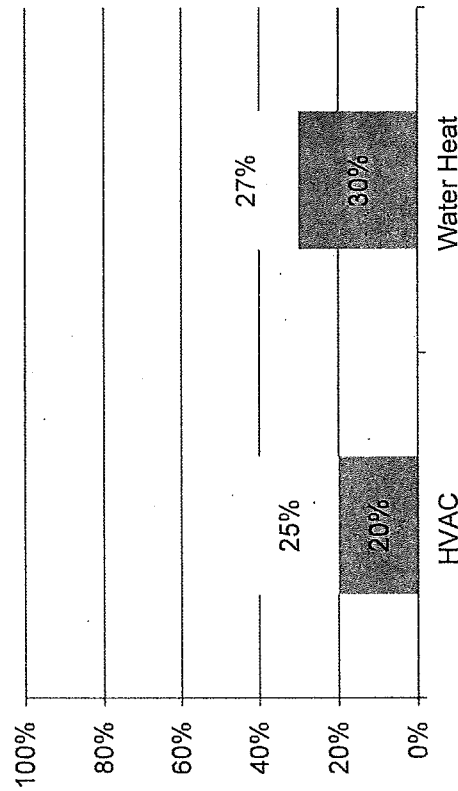
Source: 2012 Northwest Energy Efficiency Alliance Regional Building Stock Assessment, 2012 PSE Factbook



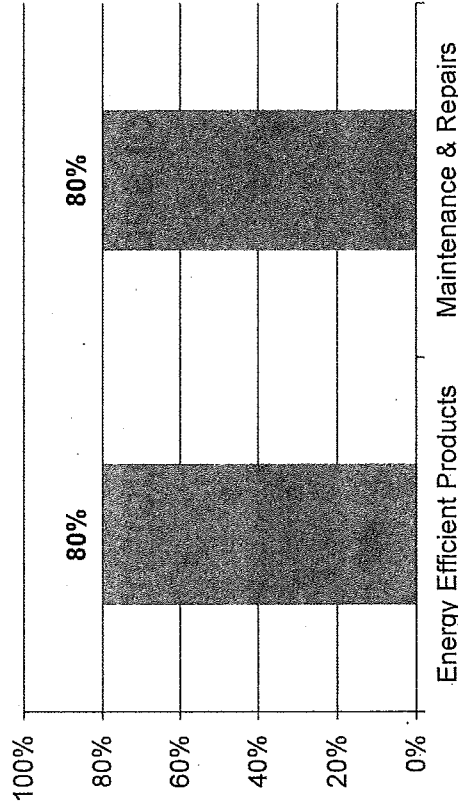
Customer Insights

Customers were provided a scenario regarding a lease package, including what would be included, and asked how likely they would be to lease and what was important.

Lease Likelihood by Current Customers



Most Important Aspects of Lease



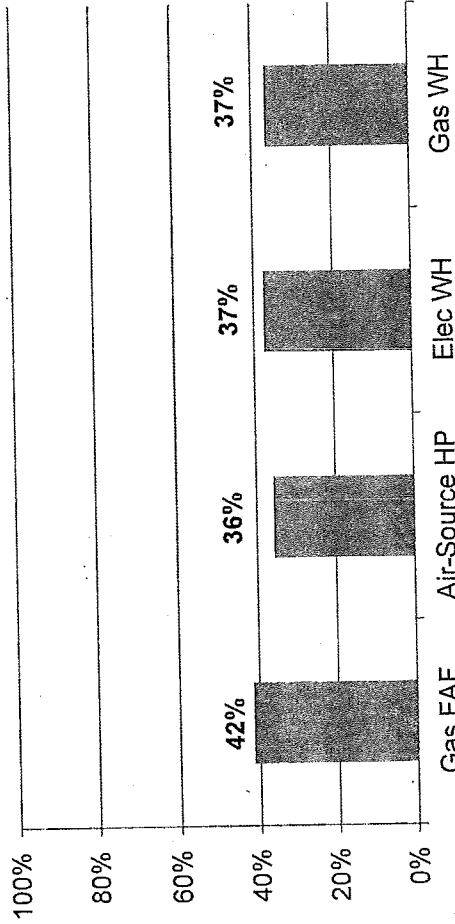
Source: PSE residential lease HVAC survey, (n = 805), PSE residential lease WH survey (n=797)



Market Potential

A high percentage of units have exceeding product life expectancy

Product Vintage: 1966-2000



Source: 2012 Northwest Energy Efficiency Alliance Regional Building Stock Assessment

By introducing a leasing option into the market, PSE believes the market potential will grow between 5-10%.



Lease Components

Based on customer expectations equipment leases will include:

- Energy efficient equipment choices,
- Inclusive maintenance and repairs,
- 24 hour customer service,
- 24-48 hour service window,
- The ability to transfer the lease when the property is sold.



Building a Platform for The Future

Launch Products

Future Expansion

| Category | Launch Products | Future Expansion |
|------------------|------------------------|--|
| Residential HVAC | Gas forced air furnace | Ductless heat pump |
| | Air-source heat pump | A/C |
| Commercial HVAC | | Packaged heat/DX cooling Boiler/chiller |
| | | Boiler |
| Residential WH | Gas tank-style | Gas tankless |
| | Electric tank-style | Electric heat pump Boiler |
| Commercial WH | Gas tank-style | Boiler |
| | Electric tank-style | Boiler with storage tank |

Additional Product Lines

- Solar
- Generators
- EV equipment
- Storage/Batteries
- ...



Launch Portfolio Flexibility

| Product | High-Efficiency | Code | Rationale |
|---|-----------------|------|---|
| Gas furnaces | ✓ | OR ✓ | Facilitates financing, access to efficiency and flexibility if installation limitations arise |
| Air Source Heat Pumps | ✓ | | No significant price or installation differences between code and high-efficient |
| Gas Water Heaters (residential and commercial) | ✓ | OR ✓ | Facilitates financing, access to efficiency and flexibility if installation limitations arise |
| Electric Water Heaters (residential and commercial) | ✓ | | No significant price or installation differences between code and high-efficient |



Market Forecast

Annual Steady State Installations (units)

| | |
|--------------------------|-------|
| Residential Gas Furnace | 2,860 |
| Residential Heat Pump | 208 |
| Residential Water Heater | 3,277 |
| Commercial Water Heater | 149 |

Cumulative Units Installed

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| | 2,480 | 8,207 | 14,701 | 21,195 | 27,689 | 34,183 | 40,677 | 47,171 | 53,665 | 60,159 |

Over a 10 year period, growth is expected to reach 60,000 units.



Field Operating Model

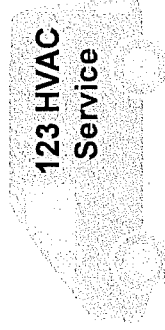
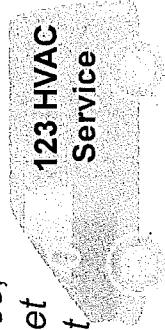
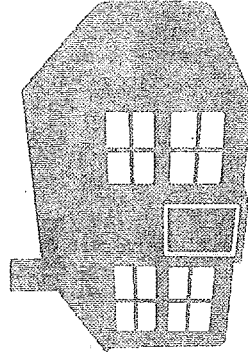
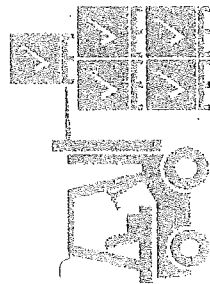
PSE Roles



Customer Education

Credit Assessment & Sales

Customer Service, Partner & Asset Management



Fulfillment Partner Roles



Lead generation/qualification

Obtain permits & install units

Removal & salvage

Maintenance, repairs, replacements



Build Considerations

- Modeled pricing recovers all fixed costs related to each leased unit, including regularly scheduled maintenance, from participating customers.
- All eligible customers can access applicable energy efficiency rebates.
- Credit check and buy-out mechanisms will mitigate impacts to participating customers.
- Customers can transfer lease to new homeowner willing to take on lease.
- Lease agreement and associated bills will be issued in the name of the property owner, not the tenant.



Tariff Structure Considerations

| Tariff Type | Benefits | Hindrances |
|-----------------------|---|--|
| <p>Formula</p> | <ul style="list-style-type: none"> Allows PSE to expedite service to an evolving customer base Delivers capability to customize product pricing Creates flexibility to pass along fair market costs to customers | <ul style="list-style-type: none"> Tariff won't list specific costs of service for customers to review |
| <p>Banded</p> | <ul style="list-style-type: none"> Creates flexibility to pass along fair market costs to customers Tariff would provide cost of service range for customers to review | <ul style="list-style-type: none"> Possible delays of service to evolving customer base Requires a waiver to WAC 480-80-112(2) for Residential Customers. Increases administrative activities |
| <p>Fixed</p> | <ul style="list-style-type: none"> Tariff would provide specific cost of service for customers to review | <ul style="list-style-type: none"> Possible delays of service to evolving customer base Increases administrative activities |



Leasing Project Timeline

2014

- Phase 1: (JAN-MAR) Validated general leasing platform
- Phase 2: (APR-JUN) Built detailed business case

2015

- Phase 3: (JAN-FEB) Engage market partners
- Phase 4: (MAR-JUL) Build platform and submit regulatory filing
Staff team, solidify partnerships and conduct system testing and training
- Phase 5: (AUG-DEC) Launch platform & run business

- Phase 6: (Q1 2016)

