

Residential Sector

Spokane Regional Utility Roundtable

Inland Power & Light August 21-22, 2023



Discussion Topics

- HVAC
- Home Energy Reports
- Multifamily
- Comfort Ready Home
- Water Heaters

HVAC



Residential HVAC is entering an interesting time

- Increased messaging from many sources on the benefits of heat pumps
- Opportunities to braid incentive/rebates together from multiple sources
 - Inflation Reduction Act (IRA) tax credits and incentives
 - State heat pump programs
 - Utility incentives
- Expanded heat pump offerings and improved technology
 - o VSHPs
 - High performance, high capacity
 - Cold climate

Updating HVAC Strategy

- Residential HVAC is a strategic component of BPA's 2022-2027 Energy Efficiency Action Plan
- Lots of market actors in the region (RTF, NEEA, etc.) are asking similar questions and we are working together to answer them.
 - What will the HVAC market look like in 2, 5 and 10 years?
- We will ask for utility insights on the strategy in the coming months

Best Practice Resources and Forms

BPA created accessible resources that will easily fit into an existing or new utility program structure for gathering information from contractors

- Changed PTCS materials from requirements to best practices with an in-depth engineering review.
- Changed specifications to match rate period requirement updates.
- Reflected on forms and ensured the information gathered was appropriate for measure incentive requirements.
- Optional Data Collection Forms: DHP, ASHP/VSHP, GSHP, Smart Thermostat
- Required Data Collection Form: Prescriptive Duct Sealing
- Installation Best Practices Documents: ASHP/VSHP, DHP

Home Energy Reports



Home Energy Reports (HER)

- Targeted reports sent to a sampled group of a utility's residential customers that provide information on home energy use compared to similar households
- Contains behavior change tips and information on energy efficient technology to reduce energy use in the home
- Reports can be distributed via hard copy in the mail, a digital report over email, or a combination of both delivery methods

How are HERs Generated?

- A utility contracts with an approved vendor who provides the energy reports
- Utility and vendor collaborate and define what to include in home energy reports and to perform data integration of customer use data
- Vendor pulls a sample of residential customers who will receive the reports, *Treatment Group*, and customers who don't receive reports are called the *Control Group*.
- Vendor tracks energy usage, generates and distributes reports, provides on-going program tracking metrics to utility

BPA HER Program

- Available for all residential housing types:
 - Single-family
 - Multifamily
 - Manufactured
- Program requirements:
 - Reports delivered on a minimum quarterly basis
 - Households must be enrolled for one continuous year

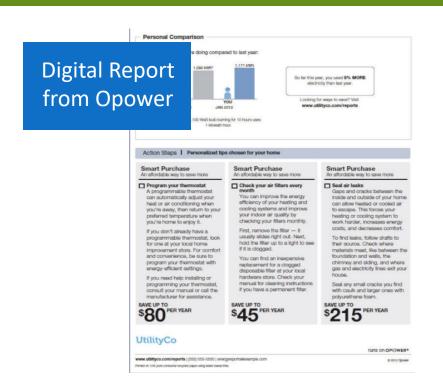
- Report delivery pathways:
 - Paper
 - Digital
 - Combination of Paper and Digital
- Reports from vendor must include the following:
 - Seasonal household energy consumption information
 - A normative comparison of household energy consumption to similar households
 - Tips and strategies to reduce home energy consumption

Considerations for Report Delivery

- Residential customer mix high energy users, low income households
- Quantity of reports send combo of paper/digital reports during peak seasons
- Frequency of reports more reports can generate more behavior change; seasonal targeting
- Cost of implementation paper is more expensive than digital because of printing/mailing costs

HER Examples





HER '24-'25 Rate Period Changes

- Incentive levels differ by age of program and by delivery channel:
 - First year program costs are higher data integration, sample draw, program design
 - BPA provides higher incentive for first program year to account for cost

Savings differ by delivery channel

- Utilities wishing to offer some customers paper reports and some digital reports would be considered a hybrid program.
- The utility would claim "paper" with X customers and "digital" with Y customers.

	First Year Incentive (per household)	Second and Beyond Year Incentive (per household)
Paper	\$14	\$7
Digital	\$12	\$5

	Site Savings per Household (kWh)	
Paper	417.27	
Digital	469.85	

Why Consider HERs?

- Ability to get energy saving information out to a large subset of residential customers
- Promotes conversation with customers about energy saving technologies and available incentives for upgrade to energy efficient equipment
- A great "first touch" for customers who may not have considered ways to reduce energy use

Challenges and Support

- Challenge: Data integration phase can be challenging.
- **Support**: Upcoming opportunity to hear lessons learned from utilities who have participated in HER program
- Challenge: Small utilities have a hard time finding a vendor to work with them to develop a HER program.
- Support: BPA is in early stages of researching the possibility of a Master Services Agreement for regional vendor support

Multifamily



Multifamily Strategy

Updating strategy for Multifamily offerings

Low-Income and Standard-Income customers

More opportunities

Multifamily New Construction

- Energy Efficient New Multifamily Construction
- Zero Energy Ready New Multifamily Construction

Updated QPL

Comfort Ready Home

Continue single family home retrofit help

Expanding support role for multifamily retrofit

Comfort Ready Home

- Live trainings in your area
- eLearning online courses
 - Continuing Education Credits (CEC)
- Videos, resources, guides, and more
 - CRH Webpage: comfortreadyhome.com
- Marketing kits

Water Heating



Water Heating

- Big increases in BPA HPWH payments
 - o \$700-\$1,100

Custom project support available

Questions?

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Thank you!

