

Jefferson PUD Energy Efficiency Program

Citizens Advisory Board April 11, 2016 Four Corners Operations Center

Funding Source of PUD Program

- Bonneville Power Administration Energy Efficiency Incentives (EEI) Program.
- As a part of the power contract, BPA customer utilities are awarded funds to incentivize conservation projects for themselves and their customers.
- Since April 1, 2013, the PUD has spent about \$1.6 million on EEI projects and incentives.
- Nearly 3.6 GwH worth of electricity savings.
- Jefferson scheduled to receive just under \$900,000 for Rate Period 2015 – 2017 (Oct 1, 2015 – Sep 30, 2017).





It's a lot like new, clean generation

By reducing demand *predictably*, incentive programs based on actual savings can be used for power planning.

Energy efficiency = cost effective new generation

Reduces need for new power plants or expensive spot market contracts.

What else does it do?

Little things like:

Fosters a bond between us and our customers.

Gives them a little pocket change.

Bigger things like:

Incentivizing with \$\$\$\$ helps return on investment for customer.

Its a power purchase between the utility and our customer.

From 2016 Strategic Plan

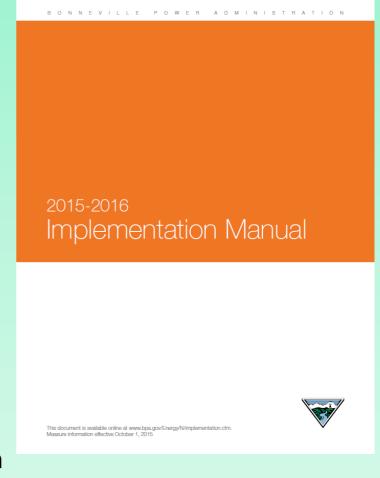
- Streamline the marketing and delivery of conservation programs and services.
- Develop an internal approach to implement and manage the PUD's Conservation Programs.
- Seek creative opportunities to benefit residents throughout Jefferson County and particularly low-income households.

Energy Savings Distribution (4/1/2013 - 12/31/2015)

SECTOR	MWH SAVED	NOTABLE PROJECTS/PROGRAMS SINCE APRIL 1, 2013 (Reported)
Industrial	1,179	Port Townsend Paper Lighting Retrofit
Commercial	1,179	Indian Island NavMag and CSD retrofit
Residential	1,276	Ductless Heat Pump, LED instant rebate program
TOTAL	3,634	

BPA Defines Program Guidelines

- Projects and rebate programs must follow BPA Implementation Manual to be eligible for rebate funding.
- Projects must result in verifiable electric energy(kWh) savings.
- BPA engineers through the Regional Technical Forum verify savings via scientific testing.
- Conservation savings/reimbursements are based on the amount of kilowatt hours saved in a calendar year.
- PUD lacks capacity to "do everything" BPA does.
- BPA does not incentivize distributed generation (solar, wind, etc.).



Current PUD EEI Program

- Limited in scope.
- First come, first serve basis.
- If we run out of money, we can offer incentive in the next rate period.
- Limited staff capacity; resource manager and customer service representatives.
- Using a third party rebate processor since 2014.
- Attempting to mimic processes of other PUDs rather than re-invent the wheel.
- BPA and other utilities serve as support and reference resources.

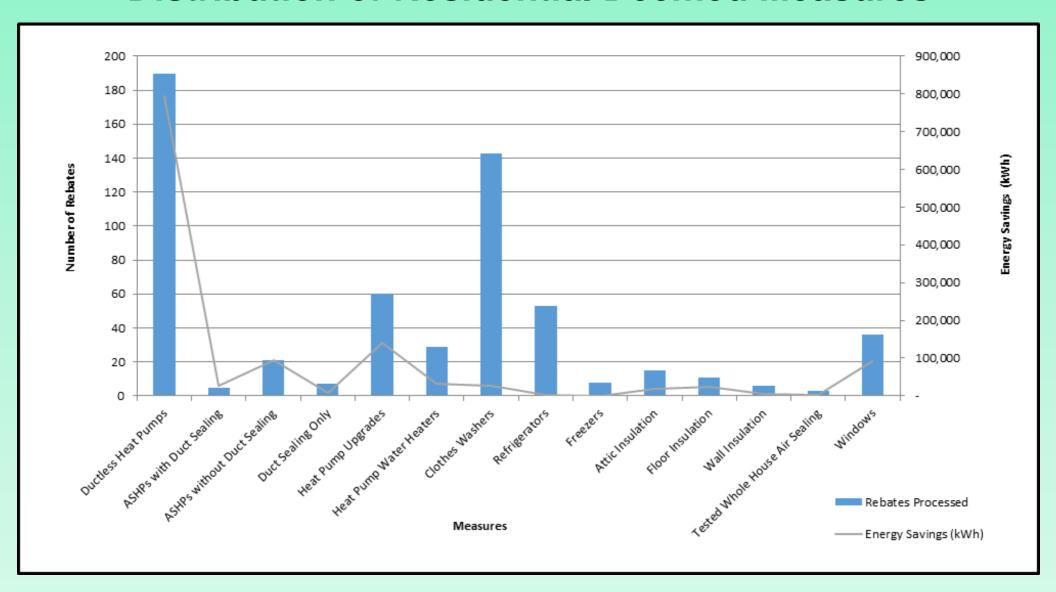
Custom Measures

- Can be Commercial, Industrial and Agricultural.
- Requires pre-project modeling and post-project verification.
- Can be new construction, retrofits (typically heating and controls).
- Must work with BPA engineer early to determine eligibility.
 Obtain base conditions from which to quantify savings.
- Project must be developed with a higher standard than existing code.
- Incentive amount is based on kWh saved over the course of the year.
- School districts (Chimacum) exploring options.

Deemed measures

- Measures with calculated energy savings per unit based on a history of measured results and an ability to replicate energy savings.
 - Quantified by BPA engineers at RTF.
 - Prescribed estimates of energy savings for various installations of heat pumps, washer/driers, windows, etc.
 - Reimbursements set based upon difference between base case (industry average) and an efficiency case (specific to a model or type).
 - For appliances, the differences are becoming negligible, affecting rebate amounts.

Distribution of Residential Deemed Measures



Deemed Residential Measures

- Each has an administrative cost to process.
- Ductless heat pumps most popular and the greatest energy savings by far.
- Household appliances vary in popularity, but lack significant energy savings.
- Proposing to use third party exclusively for appliance rebates (Clear Results).
- Already using third party for lamps and showerheads (Clear Results).

Heat Pumps

- Most popular rebate item to date.
- Ductless and ducted systems have rebates
- Also, the largest in terms of draw on funds.
 Rebates range between \$500 and \$1,900.
- As economy improves, expect more applications for heat pump rebates.
- Use vendors vetted by Clallam PUD.
- Also have a low income program for ductless heat pumps, but with limited contractor capacity.
- No on staff expertise.



Process, Process!

- Customer selects a contractor.
- Residential customer submits rebate information (receipts, proof of purchase, application) to PUD.
- PUD submits rebate packet to Cascadia Consulting for processing, they check for completeness and format invoice spreadsheet for BPA.
- PUD submits invoice spreadsheet to BPA's Customer Portal in batches.
- PUD must receive the rebate from BPA via wire transfer prior to mailing checks to customers.
- Board approves the rebates.
- Checks mailed to customers.

EEI Budget

EEI Budget	\$910,574.39
City of Port Townsend	\$40,000.00
PDA	\$30,000.00
Residential	\$124,000.00
Cascadia Consulting	\$52,550.00
Energy Smart Grocer	\$18,000.00
Clear Results	\$45,000.00
LED giveaway	\$15,000.00
COMMITTED	\$324,550.00
UNCOMMITTED	\$586,024.39

Where to spend?

No large scale commercial or industrial projects so far. Navy next rate period. Mill not ready.

Commercial lighting offering.

Low income weatherization.

School districts interested in projects.

Memorial Field Lighting Project.

JPUD street light replacement.

Questions?

Feel free to contact PUD Resource Manager, Bill Graham at 385-8375 or

More info available at www.jeffpud.org