Southern Idaho/Nevada/Wyoming

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

Welcome and Introductions

- Energy Efficiency Representative (EER), Kathy Yi.
- Attendees, please share:
  - Name and Utility/Organization.
  - Role in Energy Efficiency (EE) and how long you've been working in EE!

Housekeeping

- Thank you to **Chris Seibold from United Electric Cooperative** for providing the food and beverages!
- Thank you to the **Best Western Burley Plus Inn and Convention Center**!
- Safety Moment.

Be Thinking About

- What are your goals for the upcoming rate period?
- How can Bonneville Power Administration (BPA) help you reach those goals?
- What else would you like to share with us?

BPA Updates

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

Overview

- BPA EE Objectives.
- Fiscal Year (FY) 2024-2025 rate period wrap up/look ahead:
  - FY 2024-2025 savings by sector.
  - BP-22 rate case vs. BP-25 rate case.
- Three-year rate period:
  - Why a three-year rate period?
  - EEI budget.
- Implementation Manual (IM):
  - Two IMs.
  - Reporting changes.

BPA EE Objectives

1

Acquire energy efficiency savings that provide the greatest power resource benefits for the region.

2

Meet BPA's share of the energy efficiency goals established in the 8th Power Plan and prioritize cost-effective measures.

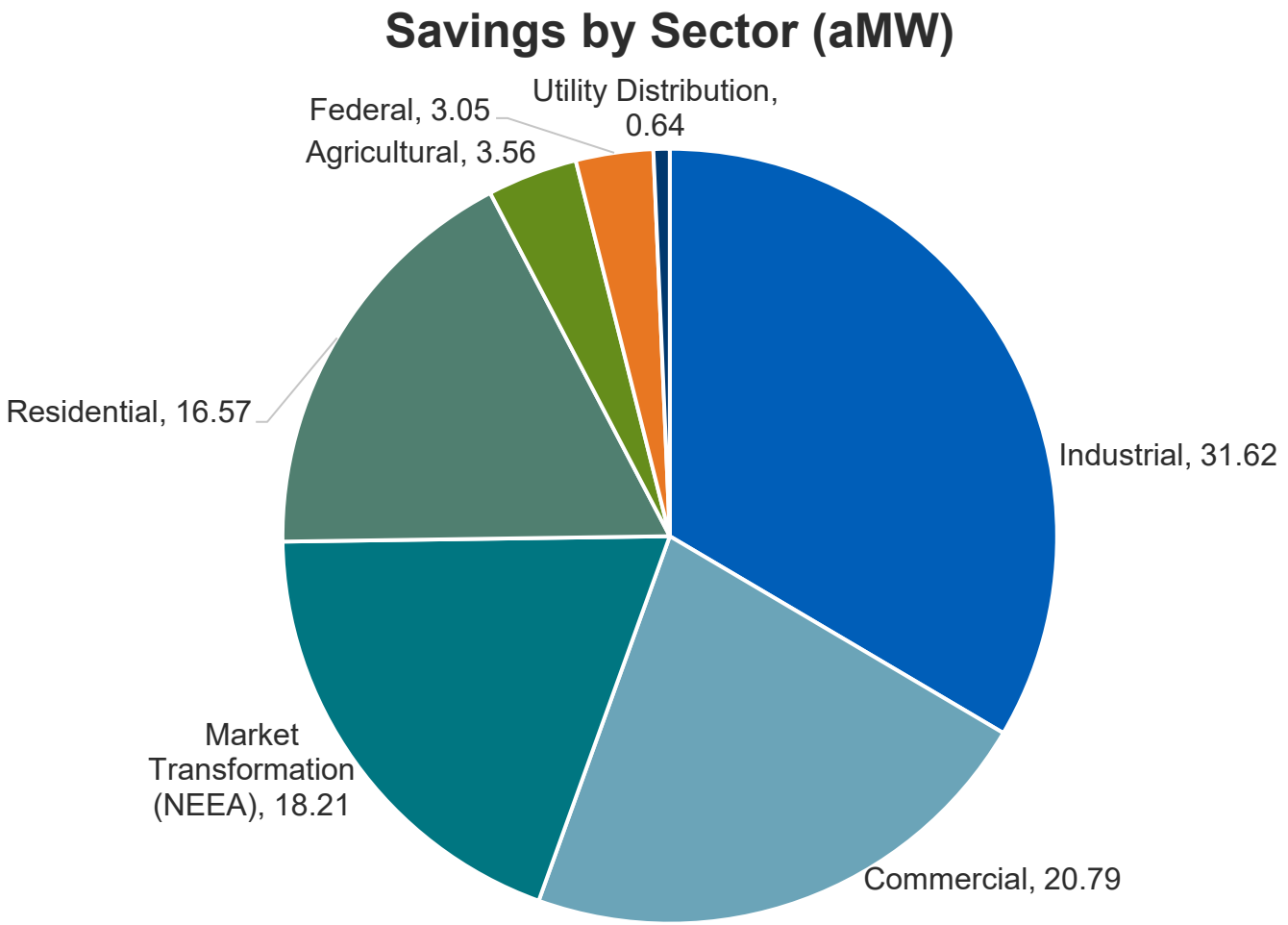
3

Offer a broad suite of measures that supports **all** BPA customers and their rate-payers in all sectors and demographics.

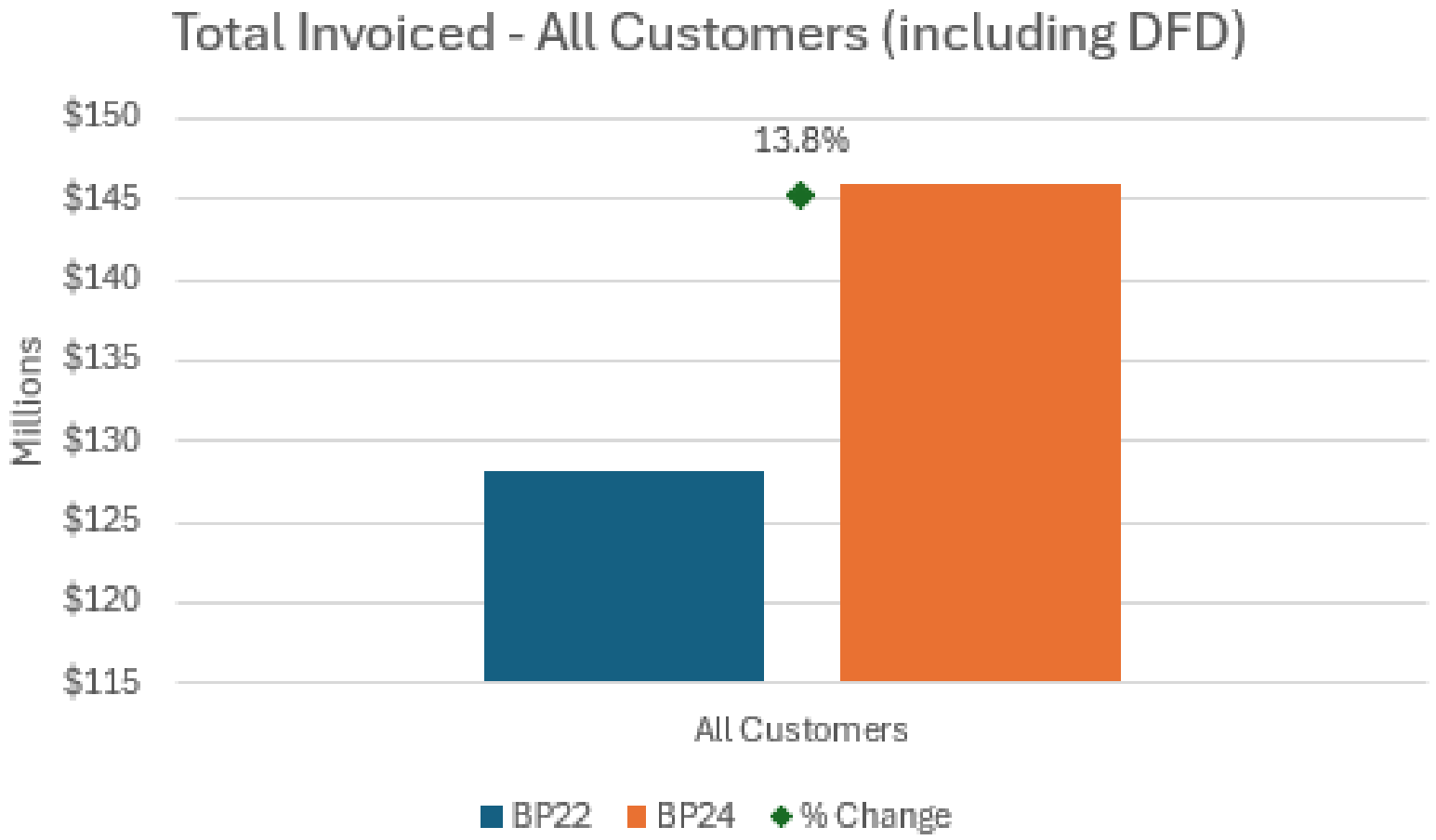
Fiscal Year 2024-2025 Wrap Up/Look Ahead

- ✓ In FY 2022-2023 (BP-22), BPA acquired 89.6 aMW.
- ✓ In FY 2024-2025 (BP-24), BPA's goal was to achieve 90 aMW. Tentatively acquired 94.44 aMW.
- ✓ FY 2026-2027, BPA's goal is 90 aMW
- ✓ BPA remains on track to meet its 300 aMW energy conservation goal!

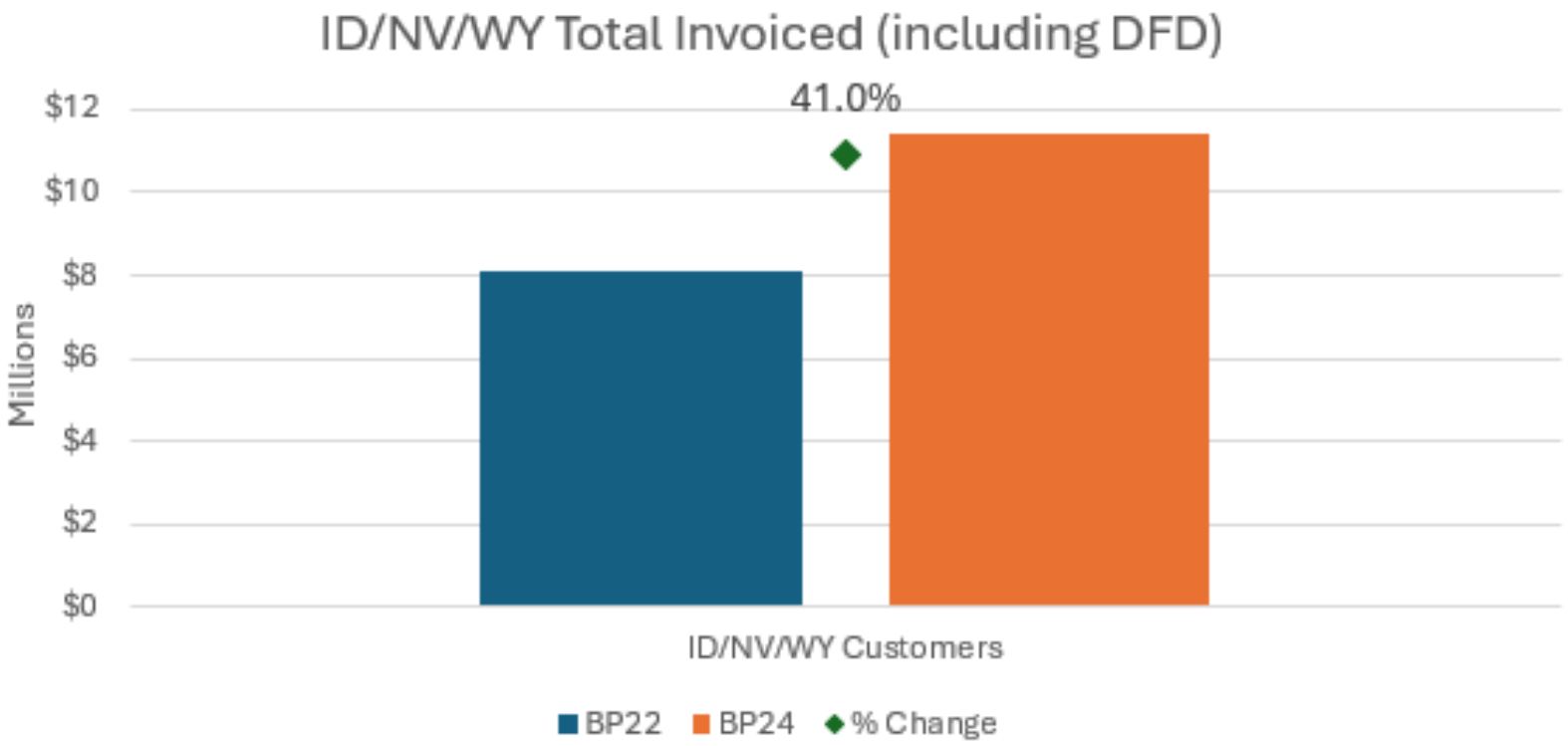
BP-24 Savings by Sector



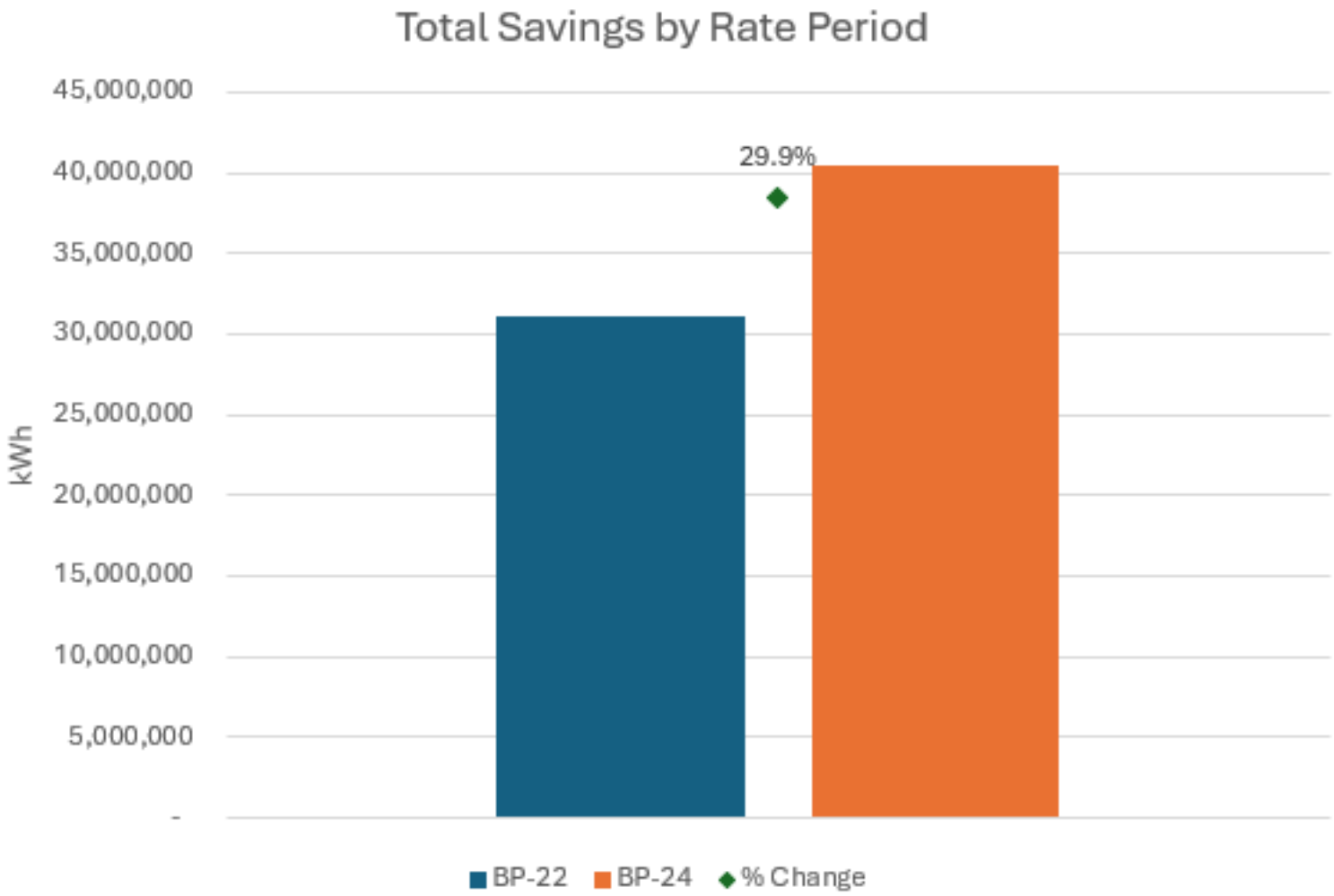
BP-22 vs. BP-24 Total Invoiced



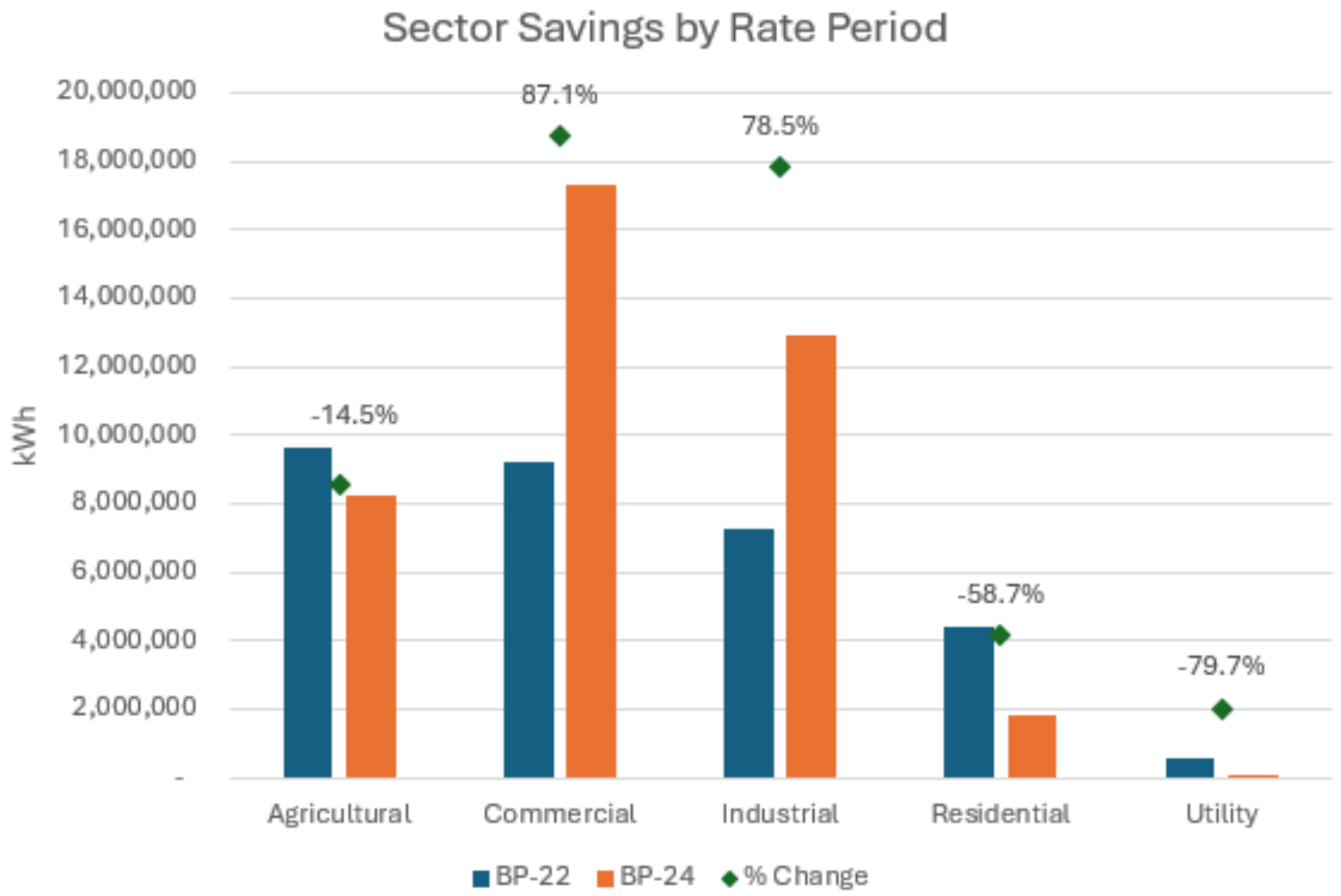
ID/NV/WY – BP-22 vs. BP-24 Invoiced



ID/NV/WY – BP-22 vs. BP-24 Savings



ID/NV/WY – BP-22 vs. BP-24 Savings by Sector



(Why) A Three-Year Rate Period?

- 20-year Regional Dialogue contracts expire at the end of FY 2028.
- BPA rate periods for EE are in two-year increments, which would leave FY 2028 stranded.

Complexities of a Three-Year Rate Period

- The 9th Power Plan will tentatively be published in 2026 – possibly changing the underlying details of many measures.
- Activity tends to cluster in the latter part of the rate periods.
- Delayed reporting creates risk that BPA may not reach savings targets.
- There may be significant measure changes from the evolving EE market landscape during three years.

Implementation Manual and Budget

- Two Implementation Manuals.
  - FY 2026-2027.
  - FY 2028 (full suite of changes).
- Access to the entire three-year rate period budget at the start of the rate period.
- Seamless budget to utilities but allocated by each FY.

Reporting Changes

- Projects to be submitted into BPA Energy Efficiency Tracking System (BEETS) within six months of completion date.
- Projects to be invoiced within 30 days of “Ready to Invoice” status.
- BPA requests utilities report activity into BEETS at least once every six months.

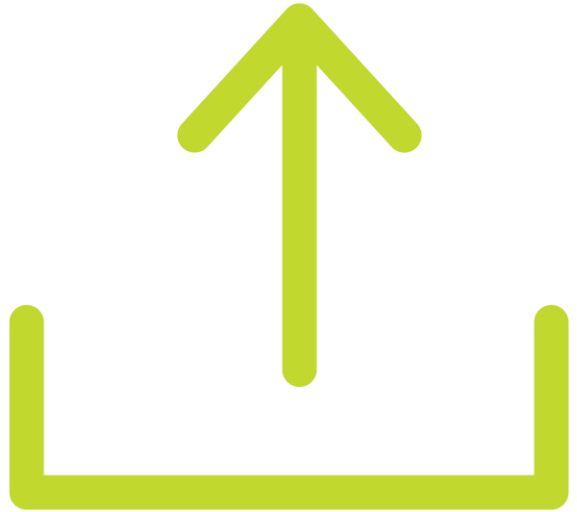
Reporting Changes

Now – As of October 1, 2025.

- Installed costs for all residential measures.
- Installed and repair costs (if applicable) for income qualified measures.
- See **Oct. 2, 2025 Webinar.**

Later – April 1, 2026.

- Upload cost documentation.
- Utility Site Inspections **are not** required; required to indicate **yes/no** if conducted.
- BPA Site Inspections on a small portion of sites.
- See **Sept. 25, 2025 Webinar.**



Questions or Comments?

Residential and Income Qualified Sector

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

Agenda

- **Residential Sector Updates:**
  - Residential Accomplishments.
  - Rate Period IM Updates.
  - CRH Updates.
  - Residential Pipeline.
- **Income Qualified Updates.**
- **Discussion.**

Residential Accomplishments

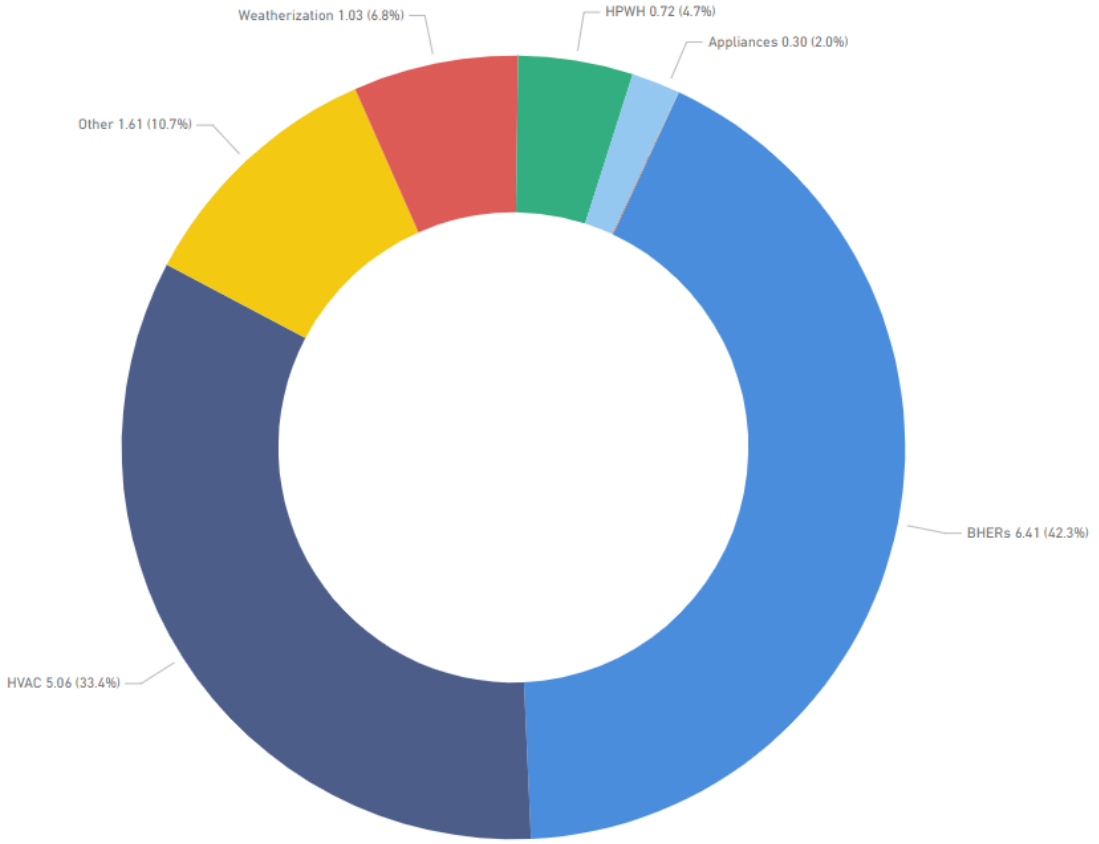
	Savings (aMW)			Reimbursement		
	BP22	BP24	% Change	BP22	BP24	% Change
Total Residential	**17.63**	**15.14**	**-14.1%**	**$61,254,291**	**$73,919,012**	**20.7%**
EEI Only	*17.41*	*14.29*	*-17.9%*	*$50,072,291*	*$60,405,896*	*20.6%*
DFD	*0.01*	*0.29*	*2800.0%*	*$75,486*	*$2,787,602*	*3592.9%*
Low Income	**0.87**	**1.98**	**128.2%**	**$22,699,020**	**$47,573,891**	**109.6%**
EEI Only	*0.65*	*1.33*	*104.6%*	*$11,577,456*	*$34,695,062*	*199.7%*
DFD	*0.0041*	*0.09*	*2086.5%*	*$15,050*	*$2,153,315*	*14207.7%*

Residential Accomplishments continued

Total Residential Savings FY 2024-2025

- Behavioral Home Energy Report (HER) = 42.3%
- Heating, ventilation, air conditioning (HVAC) = 33.4%
- Other* = 10.7%
- Weatherization = 6.8%
- Heat Pump Water Heaters (HPWH) = 4.7%
- Appliances = 2.0%

***Other** includes electric vehicles (EV) chargers, thermostats, new construction, and custom projects.



Residential Accomplishments continued

Thanks in part to the DFD program, **Minidoka** was able to weatherize three (3) Low Income homes for a total of $42,188 in incentives. As the smallest of BPA's customers, Minidoka's initial implementation budget is barely $2,000 per rate period. They were able to finally utilize their entire EEI budget which consisted of over two rate periods of carryover and virtually no conservation activity due to lack of funding. Kudos to Minidoka!

Rate Period IM Updates

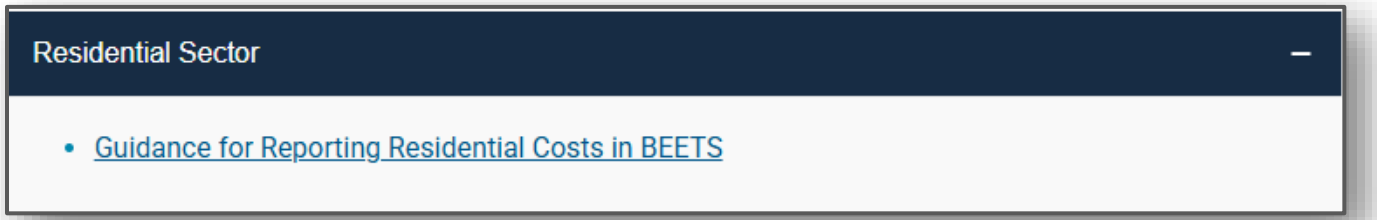
- Installed Cost requirement.
- *By Request* Distribution Channel removal.
- Energy Savings & Incentive Payments.
- Multifamily New Construction Qualified Products List (QPL) update* (*coming soon*).
- Unitary HPWHs– New Construction.
- Prime Window and Patio Door Replacement.
- Residential Custom Projects.

Webinar on Reporting Residential Costs in BEETS

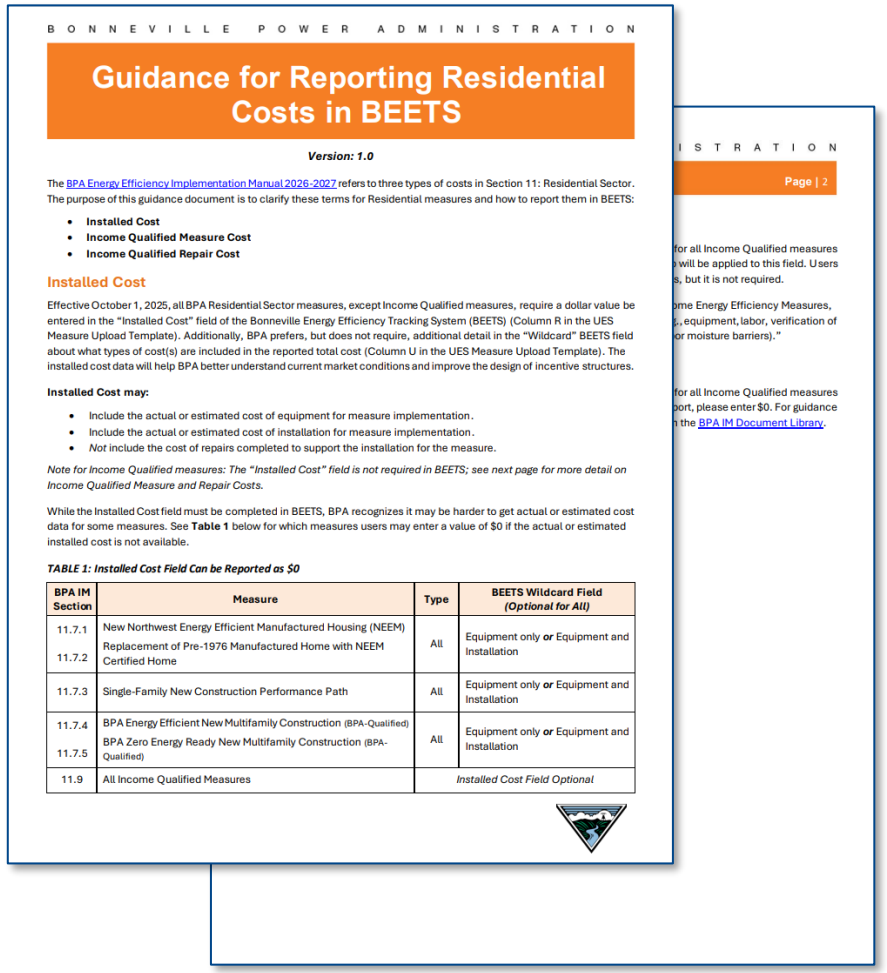
Webinar hosted on Oct. 2 covering guidance on reporting cost data and eligibility of income qualified repair costs will be posted on the BPA Energy Efficiency's Presentation and Webinars homepage soon.

New Guidance Document: Reporting Costs in BEETS

Posted in the
BPA Document Library under
"Residential"



(https://www.bpa.gov/energy-and-services/efficiency/document-library)



BONNEVILLE POWER ADMINISTRATION

Guidance for Reporting Residential Costs in BEETS

Version: 1.0

The BPA Energy Efficiency Implementation Manual 2026-2027 refers to three types of costs in Section 11: Residential Sector. The purpose of this guidance document is to clarify these terms for Residential measures and how to report them in BEETS:

- **Installed Cost**
- **Income Qualified Measure Cost**
- **Income Qualified Repair Cost**

Installed Cost

Effective October 1, 2025, all BPA Residential Sector measures, except Income Qualified measures, require a dollar value be entered in the "Installed Cost" field of the Bonneville Energy Efficiency Tracking System (BEETS) (Column R in the UES Measure Upload Template). Additionally, BPA prefers, but does not require, additional detail in the "Wildcard" BEETS field about what types of cost(s) are included in the reported total cost (Column U in the UES Measure Upload Template). The installed cost data will help BPA better understand current market conditions and improve the design of incentive structures.

Installed Cost may:

- Include the actual or estimated cost of equipment for measure implementation.
- Include the actual or estimated cost of installation for measure implementation.
- *Not* include the cost of repairs completed to support the installation for the measure.

Note for Income Qualified measures: The "Installed Cost" field is not required in BEETS; see next page for more detail on Income Qualified Measure and Repair Costs.

While the Installed Cost field must be completed in BEETS, BPA recognizes it may be harder to get actual or estimated cost data for some measures. See **Table 1** below for which measures users may enter a value of $0 if the actual or estimated installed cost is not available.

TABLE 1: Installed Cost Field Can be Reported as $0

BPA IM Section	Measure	Type	BEETS Wildcard Field *(Optional for All)*
11.7.1 11.7.2	New Northwest Energy Efficient Manufactured Housing (NEEM) Replacement of Pre-1976 Manufactured Home with NEEM Certified Home	All	Equipment only ***or*** Equipment and Installation
11.7.3	Single-Family New Construction Performance Path	All	Equipment only ***or*** Equipment and Installation
11.7.4 11.7.5	BPA Energy Efficient New Multifamily Construction (BPA-Qualified) BPA Zero Energy Ready New Multifamily Construction (BPA-Qualified)	All	Equipment only ***or*** Equipment and Installation
11.9	All Income Qualified Measures	*Installed Cost Field Optional*	

By Request Distribution Channel

- **Removed "By Request" Measure Distribution Channel.**
  - 11.3.1 ENERGY STAR Level 2 Networked Electric Vehicle Chargers.
  - 11.4.1 Thermostatic Shut-Off Valves (TSV).
  - 11.6.3 Advanced Smart Thermostats.
  - 11.8.7 Door Sweeps.

Energy Savings and Incentive Payments

Measure #	Measure Name	Existing Payments	New Payments
11.2.1	Clothes Washers	$25-$100/unit	$36-$125/unit
11.4.2	Unitary Heat Pump Water Heater – 40 gallon (BPA-Qualified)	$700/unit	$1400/unit
11.4.3	Unitary Heat Pump Water Heater – 50 gallon (BPA-Qualified)	$800-$900/unit	$1600-$1800/unit
11.4.4	Split-System Heat Pump Water Heater	$1100/unit	$2200/unit
11.5.1	Ductless and Ducted Mini-Split Heat Pumps	$800/unit	$920/unit
11.5.2	Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Air-Source Heat Pump	$1000/unit	$1250/unit
11.5.3	Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Variable-Speed Air-Source Heat Pump	$1200/unit	$1560/unit
11.5.4	Variable-Speed Air-Source Heat Pump Upgrade	$200/unit	$600/unit
11.8.2	Prime Window and Patio Door Replacement	$6-$16/sf	$8-$20/sf

Energy Savings and Incentive Payments

Measure #	Measure Name	Existing Busbar Savings	New Busbar Savings
11.2.1	Clothes Dryers	191.13 kWh – 517.09 kWh	253.03 kWh - 569.29 kWh
11.4.3	Unitary Heat Pump Water Heater – 50 gallon (BPA-Qualified)	1470.72 kWh – 1856.62 kWh	1528.92 kWh – 2063.51 kWh
11.5.1	Ductless and Ducted Mini-Split Heat Pumps	953.83 kWh – 3251.30 kWh	545.28 kWh - 3248.14 kWh
11.5.2	Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Air-Source Heat Pump	1878.85 kWh - 5087.27 kWh	2453.63kWh – 4145.37 kWh
11.5.3	Air-Source Heat Pump Conversion from Electric Forced-Air Furnace to Variable-Speed Air-Source Heat Pump	526.59 kWh – 5442.44 kWh	489.57 kWh – 3723.28 kWh
11.5.9	Duct Insulation	1.53 kWh – 1.58 kWh	2.46 kWh - 3.53kWh
11.6.2	Communicating Line Voltage Thermostats	80.00 kWh	79.52 kWh - 80.43 kWh
11.8.1	Insulation *(Including Exterior Insulated Doors)*	0.06 kWh – 4.54 kWh	0.06 kWh - 4.07 kWh
11.8.2	Prime Window and Patio Door Replacement	7.72 kWh – 18.16 kWh	8.00 kWh - 23.4 kWh
11.8.3	Low-E Storm Windows	6.94 kWh – 16.29 kWh	8.42 kWh – 21.48 kWh
11.8.5	Air Sealing	0.26 kWh – 0.27 kWh	0.37 kWh

Multifamily New Construction QPL Update

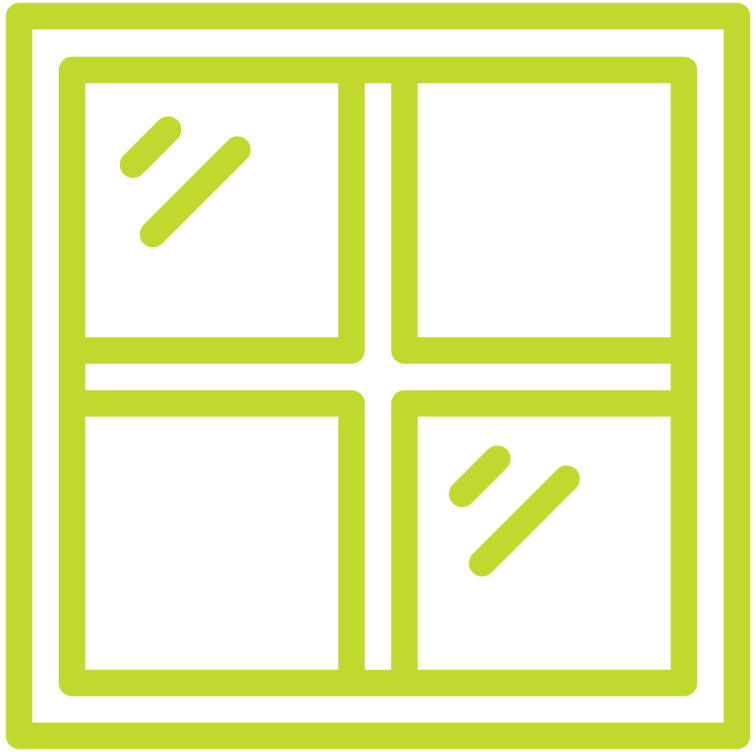
- **Updated Qualified Programs List.**
  - 11.7.4 BPA Energy Efficient New Multifamily Construction (BPA-Qualified).
  - 11.7.5 BPA Zero Energy Ready New Multifamily Construction (BPA-Qualified).
- **Based on updated analysis on state codes and voluntary new construction certification program requirements.**
- **New Approach to "locking-in" qualified program.**
  - Building Construction Permit Date.

Unitary Heat Pump Water Heaters – New Construction

- **HPWH in new construction now <u>allowed</u> in Montana, Wyoming, Idaho, California, Utah, and Nevada.**
  - 11.4.2 Unitary Heat Pump Water Heater – 40 gallon (BPA-Qualified).
  - 11.4.3 Unitary Heat Pump Water Heater – 50 gallon (BPA-Qualified).
- **<u>Not available</u> in Oregon or Washington.**

Prime Window and Patio Door Replacement

- **Removes Double-Pane Pre-condition "metal frame only."**
  - 11.8.2 Prime Window and Patio Door Replacement.



Residential Custom Projects

- **BPA does not develop energy savings estimates** for new multifamily construction custom projects that address multiple end uses or whole building measures.

- **BPA may develop energy savings estimates** for custom projects that address a single targeted end use, (e.g., central heat pump water heaters).

- **For the whole-building analyses**, customers may either leverage the UES measure BPA Energy Efficient New Multifamily Construction or develop and submit a custom project per Section 4 of the Implementation Manual using their own resources.

ComfortReady HOME

Real Comfort. Real Savings. Real Smart.

Program Overview

October 2025

Bonneville POWER ADMINISTRATION

Comfort Ready Home is funded by
Bonneville Power Administration and Northwest Utilities.

ComfortReady HOME

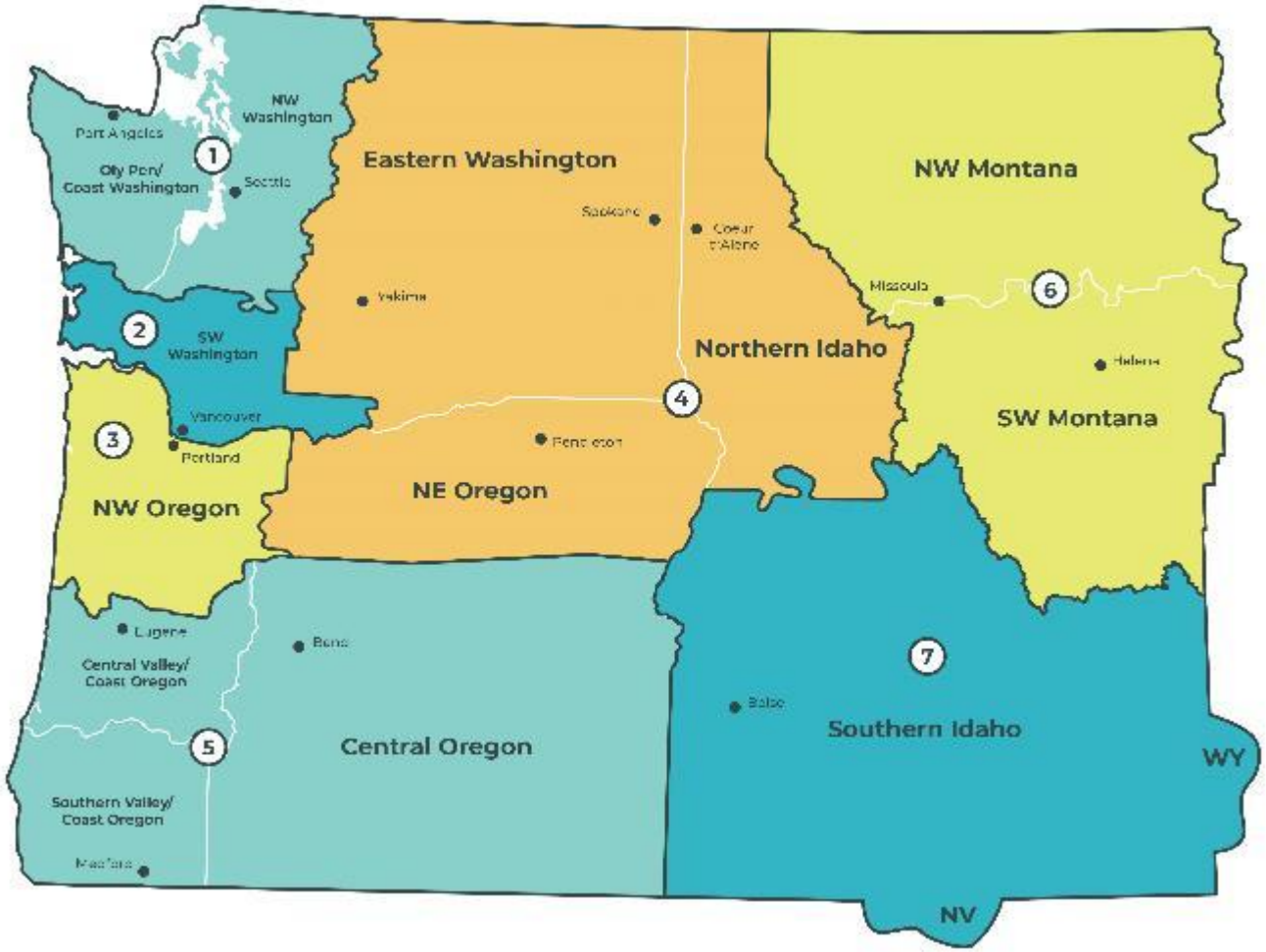
Homeowners

Contractors

Utilities

Comfort Ready Home | Field Team

ComfortReady HOME



1 **Miesha Yagle**
NW Washington
Olympic Peninsula

2 **Nick Phillips**
SW Washington

3 **John DeLance**
NW Oregon

4 **Aaron Lazelle**
NE Washington
Northern Idaho

5 **Mike Stothers**
Central Oregon
Southern Oregon
Northern California

6 **Scott Mayfield**
Montana

7 **Dean Paler**
Southern Idaho
Nevada
Wyoming

John Heflin
Outreach Specialist

Mike Hughes
Field Services Manager

Cyrus Collins
Program Manager

About the Program

Comfort Ready Home is a partnership between Bonneville Power Administration and its customer utilities.
Our goal is to increase the number of residential energy-efficient insulation, windows, HVAC, and water-heating installations in the Northwest.

We aim to achieve this by connecting homeowners, contractors and utilities and providing each with the tools, resources, and support they need to prioritize energy efficiency.

BETWEEN JULY 1, 2024, AND JUNE 30, 2025, WE:

Helped **2,300** end users find nearby qualified contractors

Received **141K** views on Youtube

91 utilities supported

64K website views

Enrolled **519** contractors

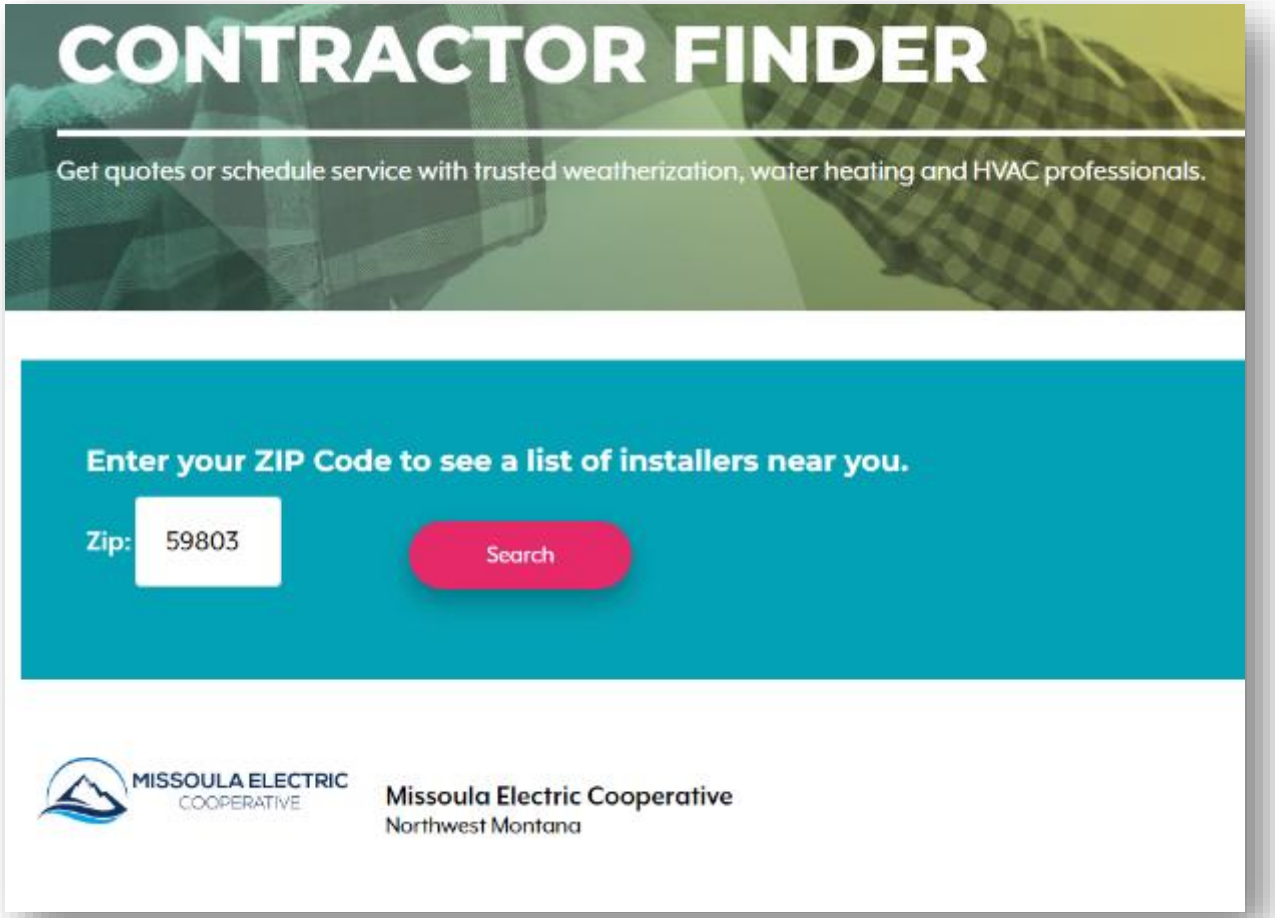
Trained **827** contractors and utility staff in person

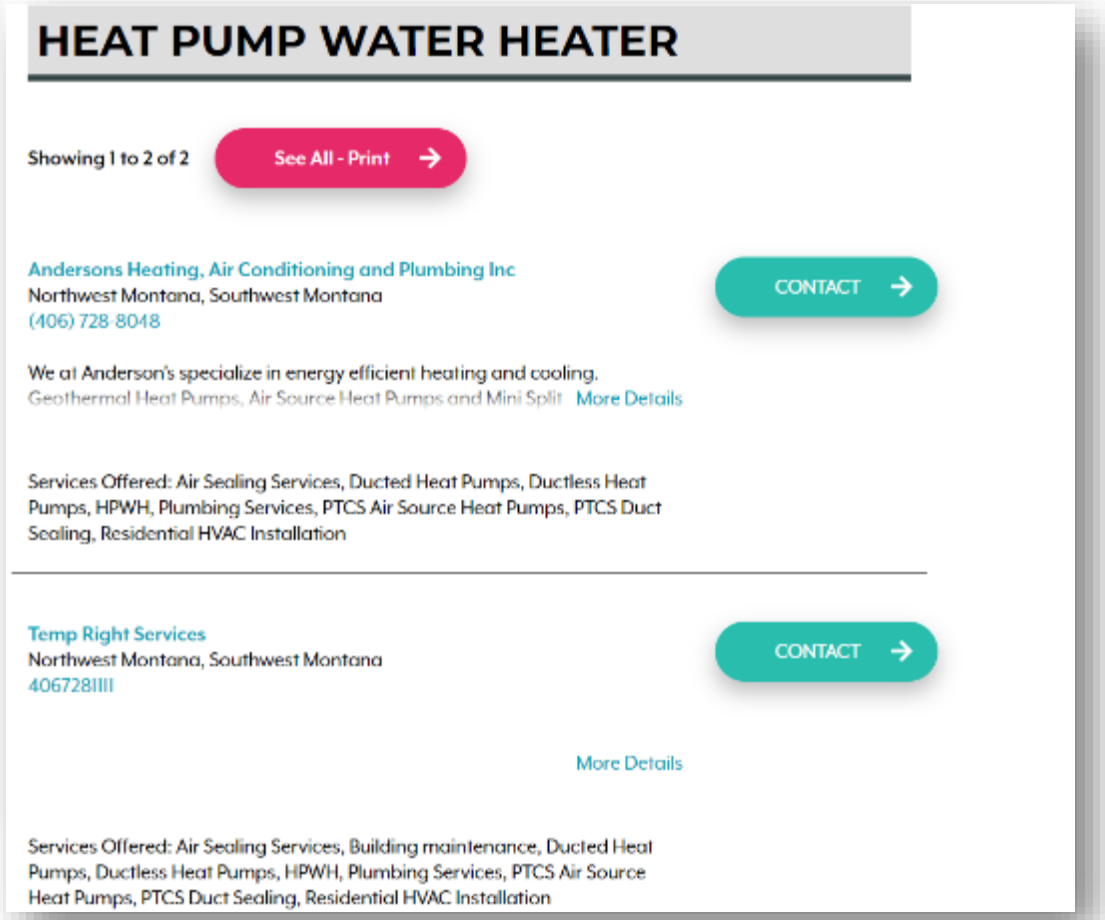
Rewarded **396** heat pump water heater installations

Hosted **13** workshops

Take Advantage of the Contractor Search

ComfortReady HOME





On-Site Workshops

ComfortReady HOME

Small group contractor trainings.

- Heat Pump Water Heaters.
- Home as a System.
- Wall Insulation.
- Heat Pump Best Practices.
- Duct Sealing Best Practices – NEW!

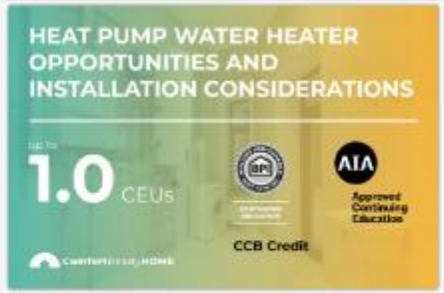
On-Demand Training

ComfortReady HOME

- Insulating Sloped Ceilings
- Attic Insulation
- Floor Insulation

- Cold Climate Heat Pumps
- Manufactured Home Insulation
- Site Built Wall Insulation

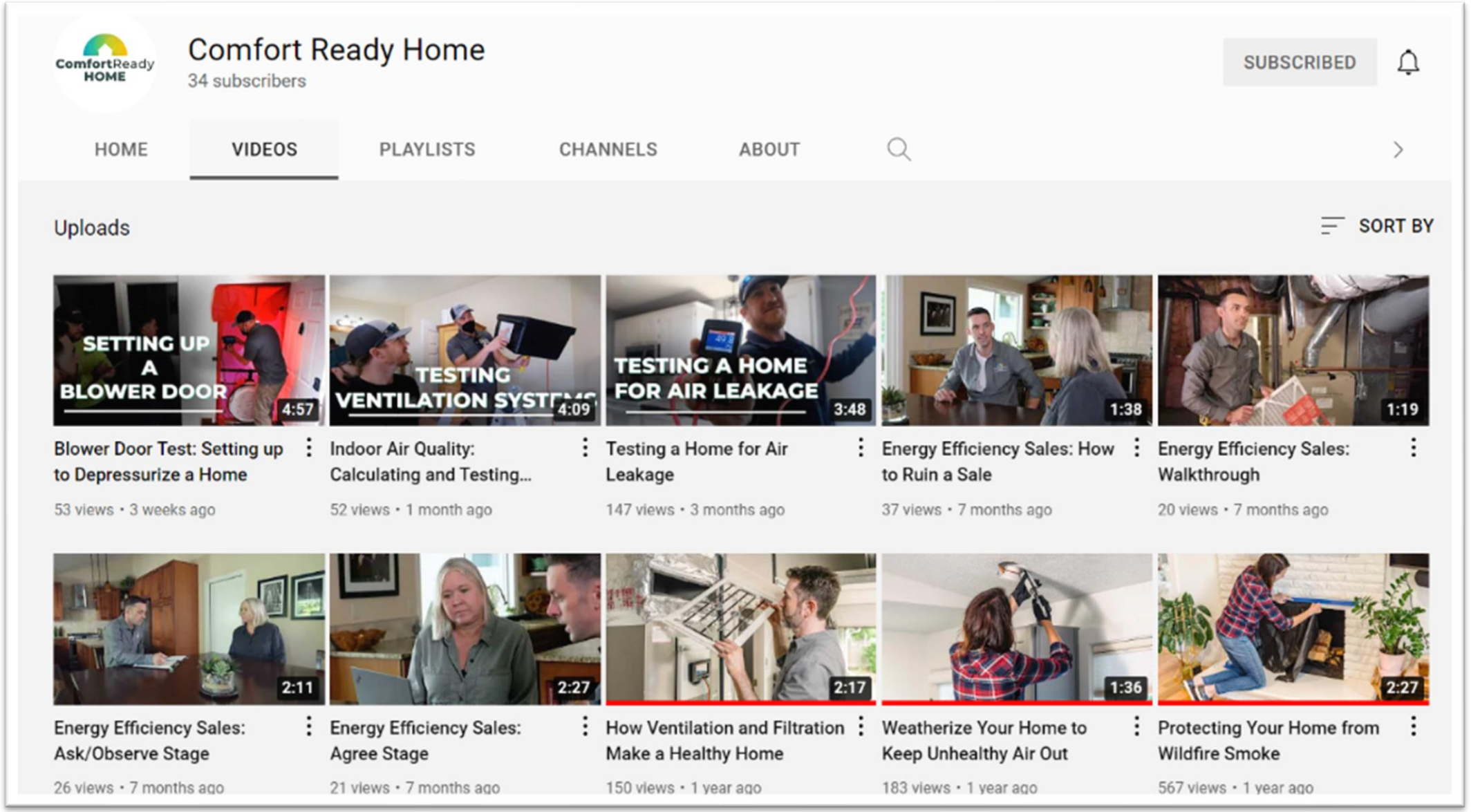
Simple and Effective Floor Insulation



Heat Pump Water Heater Opportunities + Installation Considerations (CRH-EiQ215)

Making the Most of HVAC Opportunities

Training and Educational Videos



Customizable Video – Rebate Roundup

ComfortReady HOME

Module Options

- Introduction
- Heat Pump Water Heaters
- Ductless Heat Pumps
- Air Source Heat Pumps
- Insulation
- Duct Sealing
- Windows
- Multifamily
- Outro

ComfortReady HOME

BUILDING A STRONGER PROGRAM

The 2025 Contractor Survey

- Contractors who engage with Comfort Ready Home are highly satisfied.
- Overall awareness and usage of services is around 50%.
- We need to continue building pathways that make the Program more visible.
- 97% of respondents who used the Program's training and technical resources reported a positive experience.
- 71% of participating plumbers said the Greener Water Heater Promotion helped them sell more heat pump water heaters.
- 8 contractors began offering HPWHs for the first time.
- Contractors want help reaching customers and rebate information.

LOOKING FORWARD

The Comfort Ready Home program is built upon a strong foundation of technical expertise and customer service. This has allowed us to expand and improve the support provided to utilities and contractors through the last year.

Looking ahead, we will continue to focus on providing and improving on our existing offerings, while also expanding to meet the changing needs of utilities and contractors.

Goals for 2025–2026 include:

1. **Engage 95 utilities in the Utility Program Plan process**
2. **Provide 10 trainings throughout the region**
3. **Help utilities, contractors, and end-users navigate a changing incentive landscape**
4. **Reach 150,000 users via the Program website and YouTube channel**
5. **Develop Duct Seal Best Practices small group workshop curriculum**

We’re excited to build on the progress made over the past year and to continue providing valuable resources and expertise to our utility and contractor partners.

Thank You!

Please contact your
Energy Efficiency Representative

or

Cyrus Collins
Program Manager
cyrus.collins@evergreen.energy
(503) 705-7039

ComfortReady HOME

Bonneville POWER ADMINISTRATION

Comfort Ready Home is funded by
Bonneville Power Administration and Northwest Utilities.

Residential Pipeline

- High-Performance High-Capacity Heat Pump Research.
- Room Heat Pumps.
- Cold Climate Heat Pumps.
- Combination (Combi) Systems.
- Central Heat Pump Water Heaters.
- Low Profile (Low Boy) Heat Pump Water Heaters.
- Heat Recovery Ventilation (HRV).
- Behavioral Home Energy Reports (alternative approaches).

Questions or Comments?

Income Qualified Offerings

Income Qualified Updates

- Snapshot of increased uptake.
- Name change is official.
- Income qualifying multifamily units.
- Workgroup.
- Income qualified repair cost reference table.
- Updated resources.

Increased Uptake!

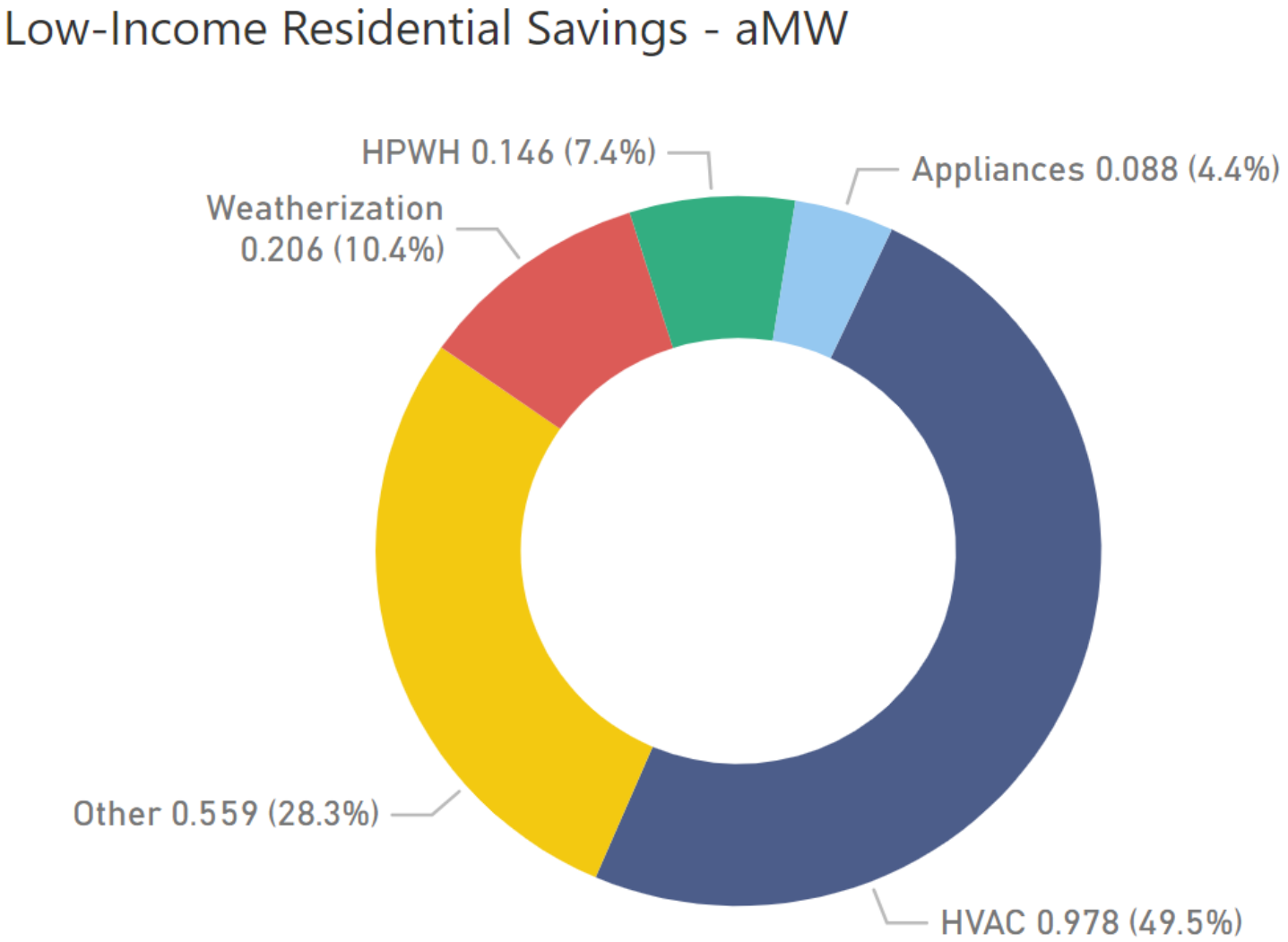
FY 2024 had the highest number of utilities that have claimed Low Income measures within the last three rate periods!

Fiscal Year	# of Utilities
FY 2018	46
FY 2019	42
FY 2020	37
FY 2021	39
FY 2022	37
FY 2023	42
FY 2024	50
On Average:	42

Increased Uptake!

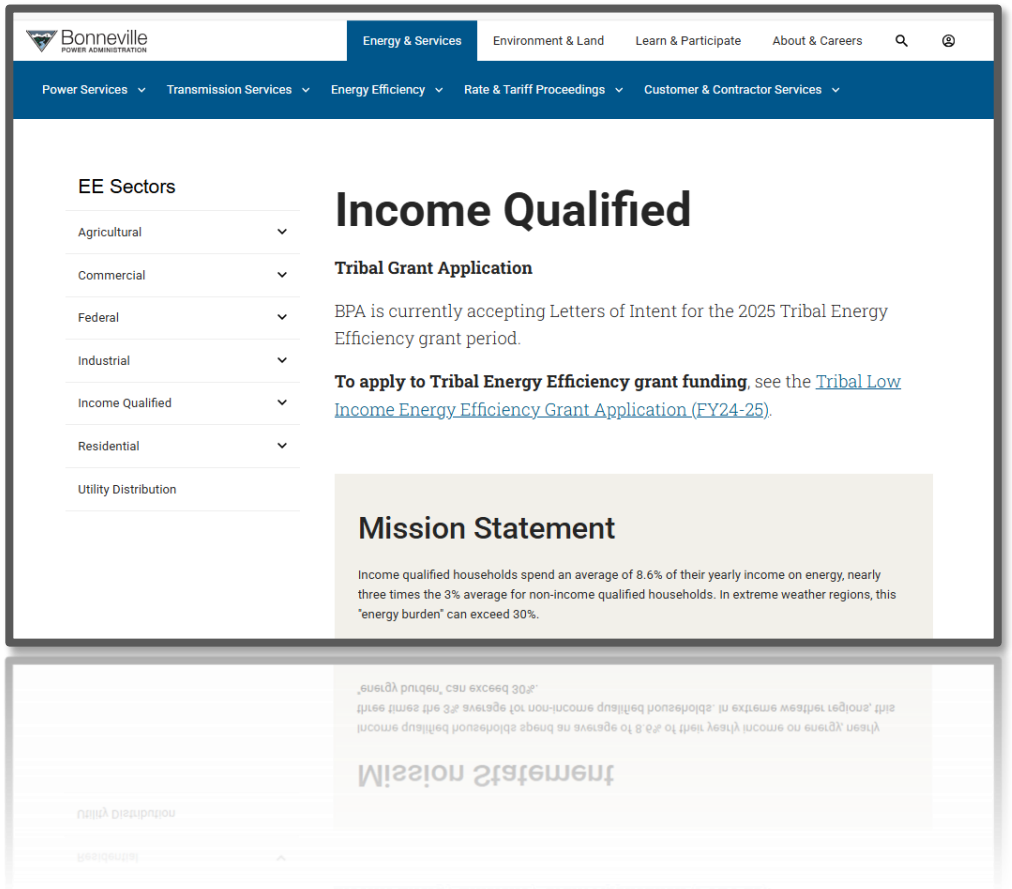
- 230% increase in funding from FY22 to FY24.
- 124% increase in savings from FY22 to FY24.
- Most Popular measures: Heat Pumps, Insulation, and Appliances.
- **So far in FY25:**
  - Over 3,000 washers and dryers installed, more than double than FY24.
  - Over 1.7 million sq feet of insulation installed, which is 26 football fields worth!
  - Over 1,500 ductless heat pumps, nearly 600 ducted heat pumps, and 43 packaged terminal heat pumps installed.

Income Qualified Successes!



Name Change is Implemented!

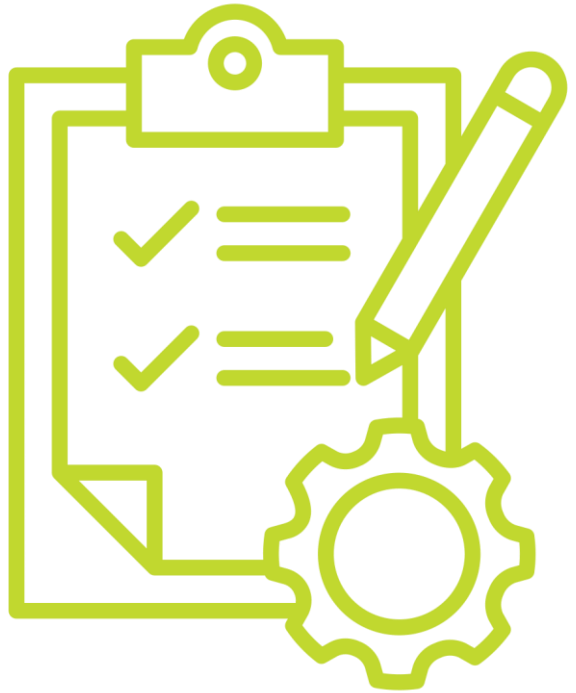
Program name is officially changed from “**Low Income Energy Efficiency**” to “**Energy Efficiency Income Qualified (EEIQ).**” Some website links have changed as a result.



https://www.bpa.gov/energy-and-services/efficiency/ee-sectors/energy-efficiency-income-qualified

Low Income Qualification Clarification

"Household eligibility is based on gross income and is defined in the Federal Weatherization Assistance Program (WAP) as 200 percent of the poverty income levels. Alternatively, approved statewide or tribal eligibility definitions may substitute for federally established income qualified levels, ***if available****."*



Income Qualifying Multifamily

Clarification added in the IM that you can income qualify and serve a single multifamily unit without having to serve and income qualify the entire building.

- Clarifying an existing policy.
- If needing to serve the whole building, utilities can still income qualify at least 50% of the units.

Highlighted Changes Effective Oct. 1

- Requiring two fields when entering projects in BEETS.
- Disallowing cost coverage of full roof replacements.
- Implementing new policy for repair cost coverage.
  - For an income qualified project with a measure cost of $1,000 or higher, related repair costs will be capped at 300% of the reported income qualified measure cost.

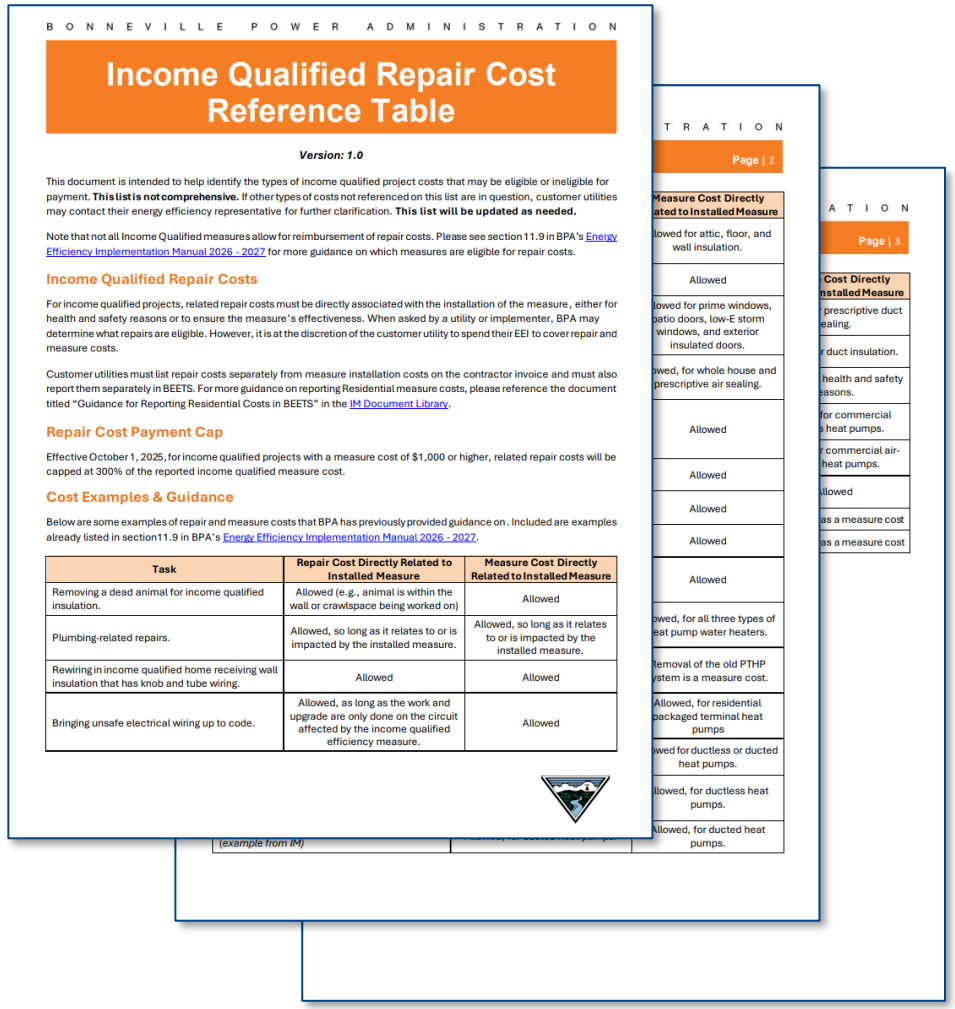
New Reference Document: IQ Repair Costs

Posted in the
BPA Document Library under
"Residential".

Income Qualified

- Tribal Low Income Energy Efficiency Grant Application (FY 2024-2025)
- Low-Income Project Information Form + Income Verification (Optional – Customizable Word Document)
- Low-Income Project Information Form + Income Verification (Optional – Fillable PDF)
- Income Verification Form (Optional)
- Repair Cost Reference Table

(https://www.bpa.gov/energy-and-services/efficiency/document-library)



BONNEVILLE POWER ADMINISTRATION

Income Qualified Repair Cost Reference Table

Version: 1.0

This document is intended to help identify the types of income qualified project costs that may be eligible or ineligible for payment. **This list is not comprehensive.** If other types of costs not referenced on this list are in question, customer utilities may contact their energy efficiency representative for further clarification. **This list will be updated as needed.**

Note that not all Income Qualified measures allow for reimbursement of repair costs. Please see section 11.9 in BPA's Energy Efficiency Implementation Manual 2026 - 2027 for more guidance on which measures are eligible for repair costs.

Income Qualified Repair Costs

For income qualified projects, related repair costs must be directly associated with the installation of the measure, either for health and safety reasons or to ensure the measure's effectiveness. When asked by a utility or implementer, BPA may determine what repairs are eligible. However, it is at the discretion of the customer utility to spend their EEI to cover repair and measure costs.

Customer utilities must list repair costs separately from measure installation costs on the contractor invoice and must also report them separately in BEETS. For more guidance on reporting Residential measure costs, please reference the document titled "Guidance for Reporting Residential Costs in BEETS" in the IM Document Library.

Repair Cost Payment Cap

Effective October 1, 2025, for income qualified projects with a measure cost of $1,000 or higher, related repair costs will be capped at 300% of the reported income qualified measure cost.

Cost Examples & Guidance

Below are some examples of repair and measure costs that BPA has previously provided guidance on. Included are examples already listed in section11.9 in BPA's Energy Efficiency Implementation Manual 2026 - 2027.

Task	Repair Cost Directly Related to Installed Measure	Measure Cost Directly Related to Installed Measure
Removing a dead animal for income qualified insulation.	Allowed (e.g., animal is within the wall or crawlspace being worked on)	Allowed
Plumbing-related repairs.	Allowed, so long as it relates to or is impacted by the installed measure.	Allowed, so long as it relates to or is impacted by the installed measure.
Rewiring in income qualified home receiving wall insulation that has knob and tube wiring.	Allowed	Allowed
Bringing unsafe electrical wiring up to code.	Allowed, as long as the work and upgrade are only done on the circuit affected by the income qualified efficiency measure.	Allowed

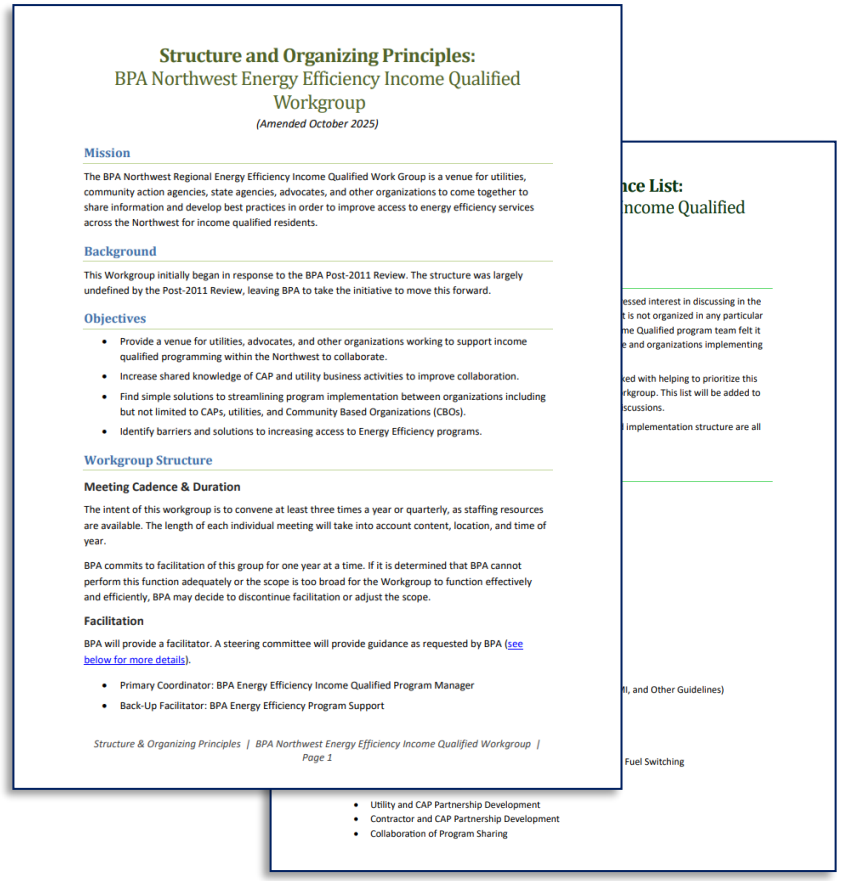
Recorded Webinar: Repair Cost Reference Table

- Hosted webinar on October 2, 2025 covered:
- IQ measure cost vs. install cost.
- Reporting IQ measure and repair costs.
- Repair cost cap policy.
- Eligibility of tasks as repairs vs. install costs.
- Nuances of repair costs.
- Presentation slides and webinar to be posted in the EE Presentations and Webinars.

Energy Efficiency Income Qualified Regional Workgroup

Last meeting held Oct. 6, 2025.

- Winter meeting date to be determined.
- Hosted three times a year.
- Presentations and facilitated discussions.
- Selected Steering Committee.
- Posted on Income Qualified Page.
  - Agendas and Resources from Previous Meetings
  - Workgroup Charter.
  - Discussion Topic Reference List.
  - Resources from previous meetings.



Structure and Organizing Principles:
BPA Northwest Energy Efficiency Income Qualified Workgroup
(Amended October 2025)

Mission

The BPA Northwest Regional Energy Efficiency Income Qualified Work Group is a venue for utilities, community action agencies, state agencies, advocates, and other organizations to come together to share information and develop best practices in order to improve access to energy efficiency services across the Northwest for income qualified residents.

Background

This Workgroup initially began in response to the BPA Post-2011 Review. The structure was largely undefined by the Post-2011 Review, leaving BPA to take the initiative to move this forward.

Objectives

- Provide a venue for utilities, advocates, and other organizations working to support income qualified programming within the Northwest to collaborate.
- Increase shared knowledge of CAP and utility business activities to improve collaboration.
- Find simple solutions to streamlining program implementation between organizations including but not limited to CAPs, utilities, and Community Based Organizations (CBOs).
- Identify barriers and solutions to increasing access to Energy Efficiency programs.

Workgroup Structure

Meeting Cadence & Duration

The intent of this workgroup is to convene at least three times a year or quarterly, as staffing resources are available. The length of each individual meeting will take into account content, location, and time of year.

BPA commits to facilitation of this group for one year at a time. If it is determined that BPA cannot perform this function adequately or the scope is too broad for the Workgroup to function effectively and efficiently, BPA may decide to discontinue facilitation or adjust the scope.

Facilitation

BPA will provide a facilitator. A steering committee will provide guidance as requested by BPA (see below for more details).

- Primary Coordinator: BPA Energy Efficiency Income Qualified Program Manager
- Back-Up Facilitator: BPA Energy Efficiency Program Support

Structure & Organizing Principles | BPA Northwest Energy Efficiency Income Qualified Workgroup | Page 1

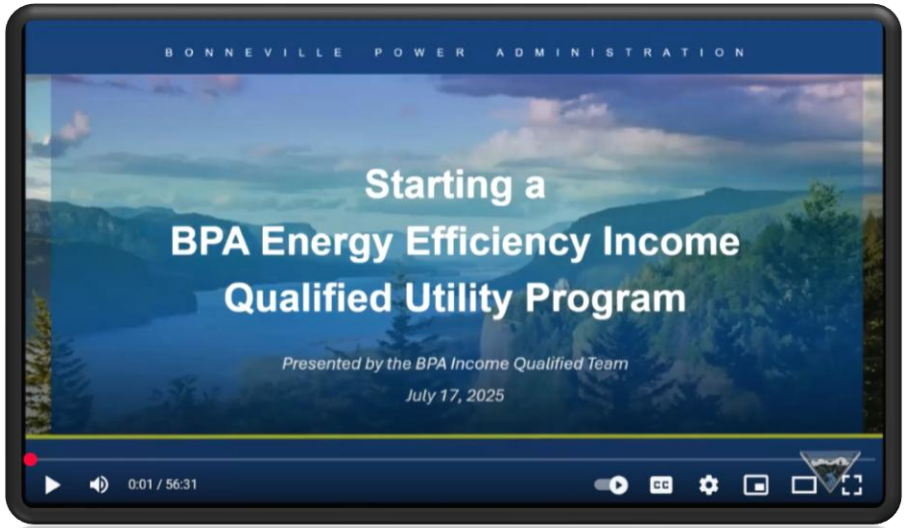
- Utility and CAP Partnership Development
- Contractor and CAP Partnership Development
- Collaboration of Program Sharing

Click on each page to access the documents online.

Recorded Webinar: Starting an EEIQ Program

Recorded webinar from July 17, 2025 covering:

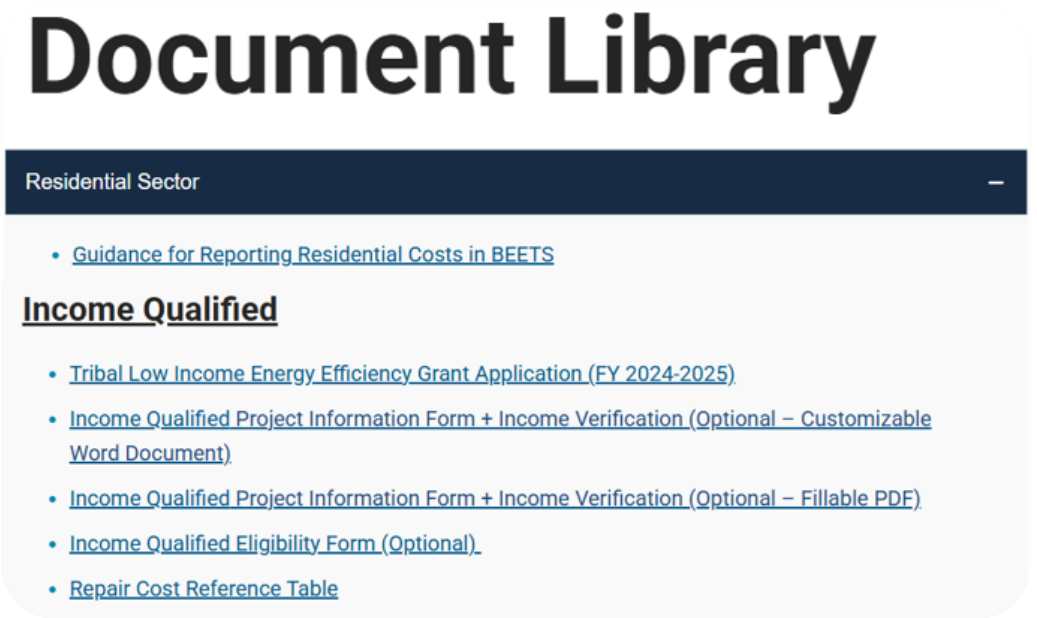
- Basics of starting an EEIQ Program.
- Available measures and documentation.
- Claiming repair costs.
- Outreach and coordination.
- Income qualification.
- Presentations from two utilities.



EE Presentations and Webinars | Presentation Slides | Recorded Webinar

Updated Income Qualified Program Resources

- BPA Energy Efficiency Income Qualified Homepage.
- Income Qualified Optional Form and Income Verification Template *(customizable).*
- Income Qualified Repair Cost Reference Table.
- *Coming Soon:*
  - *Updated Income Qualified Quick Start Guide.*
  - *Tribal Grant Application and Supporting Materials.*



Questions or Comments?

Thank you!

Jonathon Belmont

Residential Sector Lead

jmbelmont@bpa.gov

Amy Burke

Income Qualified Lead

aaburke@bpa.gov

INCOME-QUALIFIED PROGRAMS

WELLS RURAL ELECTRIC COMPANY

AGENDA

PROGRAM REVIEW AND PROGRAMS

DHPS AND INSULATION

WASHER AND DRYER

QUESTIONS

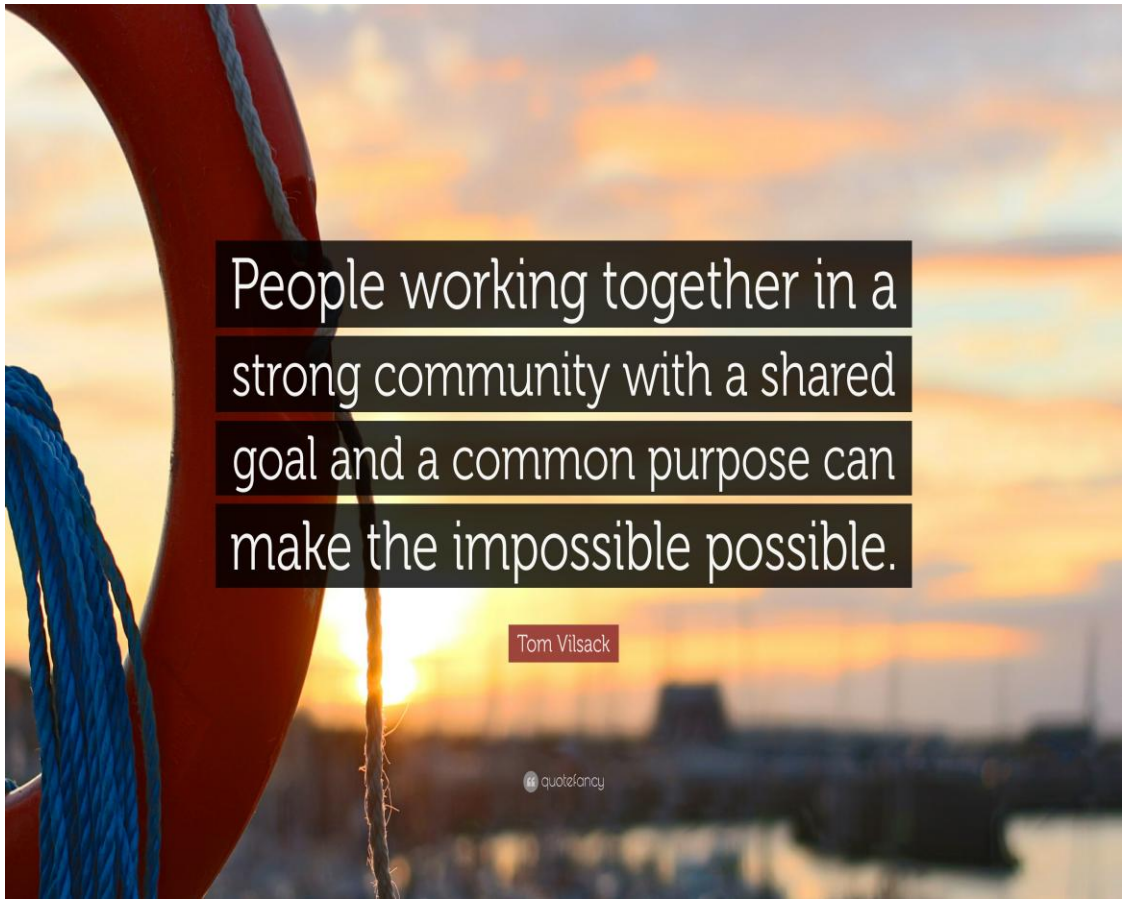
Income-qualified programs

DHPS

INSULATION

WASHER AND DRYER

TOTAL BUDGET UTILIZED
$1,164,400.00



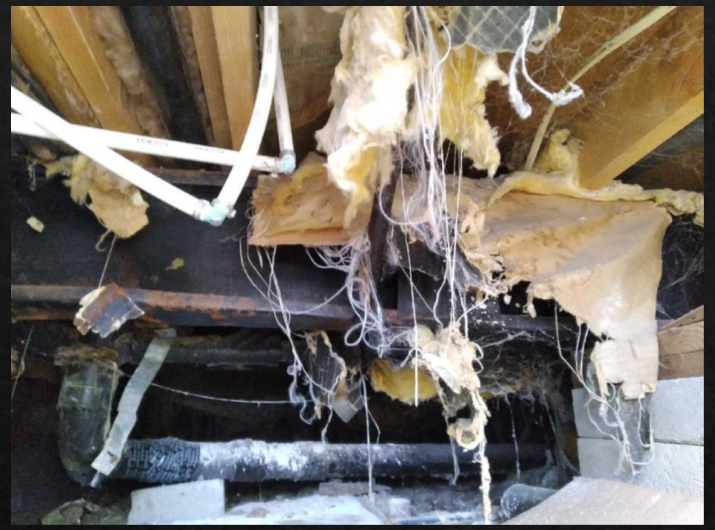
Residential Ductless Heat Pump

# of Households The Units Were Installed

93 HOMES !!!!!!

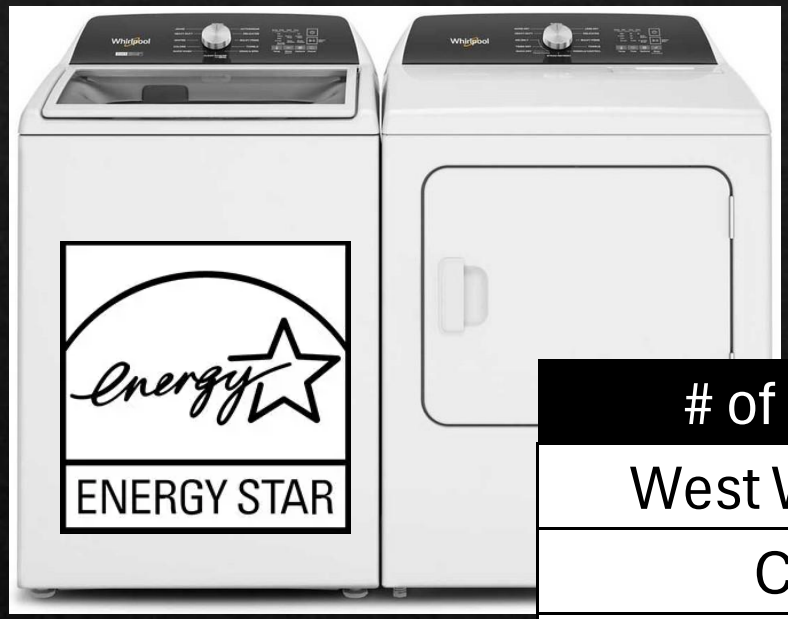
Total Budget – $558,000

Residential Insulation Weatherization



Of Households Weatherized 38 HOMES!!!!!! Total Budget - $304,000

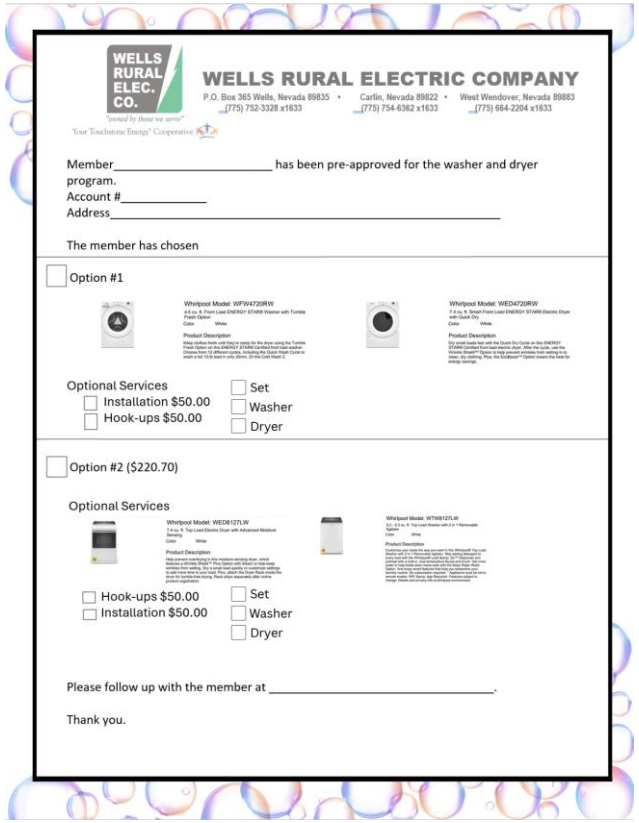
Residential Income Qualified Clothes Washers and Dryers



# of Households by City	
West Wendover	115
Carlin	27
Wells	25
Wendover UT	22
Total	189
Applied bu DN Qualify	21

Total Budget - $302,400

FORMS UTILIZED



WELLS RURAL ELECTRIC COMPANY

P.O. Box 365 Wells, Nevada 89835 • Carlin, Nevada 89822 • West Wendover, Nevada 89883
(775) 752-3328 x1633 (775) 754-6362 x1633 (775) 664-2204 x1633

"owned by those we serve"
Your Touchstone Energy® Cooperative

Member_____ has been pre-approved for the washer and dryer program.
Account #_____
Address_____

The member has chosen

☐ Option #1

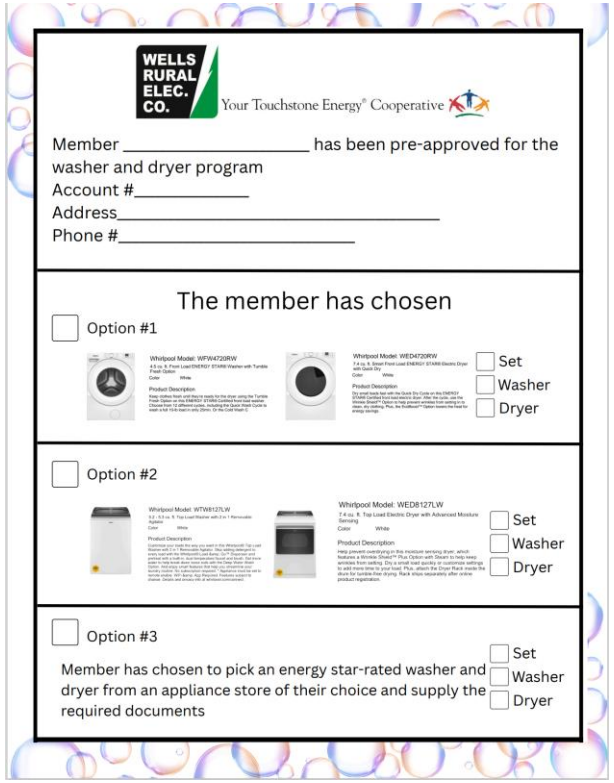
Optional Services
☐ Installation $50.00
☐ Hook-ups $50.00
☐ Set
☐ Washer
☐ Dryer

☐ Option #2 ($220.70)

Optional Services
☐ Hook-ups $50.00
☐ Installation $50.00
☐ Set
☐ Washer
☐ Dryer

Please follow up with the member at _____.

Thank you.



WELLS RURAL ELEC. CO. Your Touchstone Energy® Cooperative

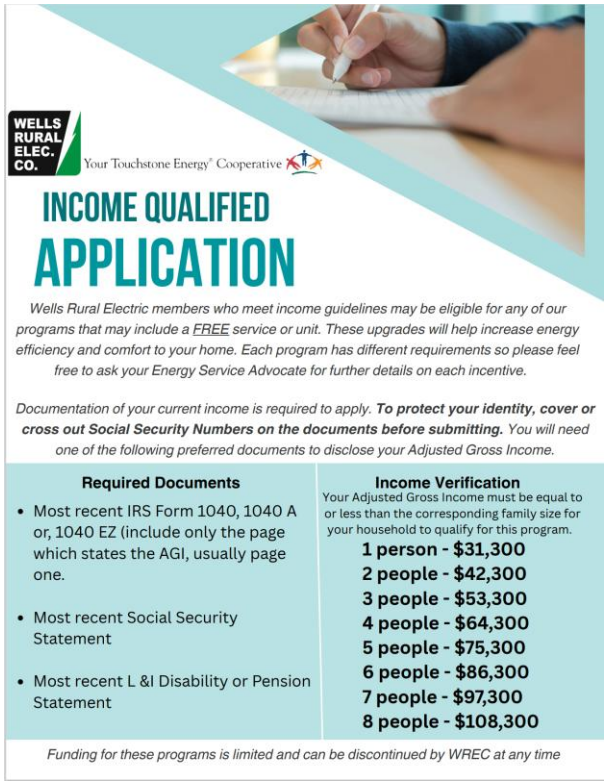
Member _____ has been pre-approved for the washer and dryer program
Account #_____
Address_____
Phone #_____

The member has chosen

☐ Option #1
☐ Set ☐ Washer ☐ Dryer

☐ Option #2
☐ Set ☐ Washer ☐ Dryer

☐ Option #3
Member has chosen to pick an energy star-rated washer and dryer from an appliance store of their choice and supply the required documents
☐ Set ☐ Washer ☐ Dryer



WELLS RURAL ELEC. CO. Your Touchstone Energy® Cooperative

INCOME QUALIFIED APPLICATION

Wells Rural Electric members who meet income guidelines may be eligible for any of our programs that may include a FREE service or unit. These upgrades will help increase energy efficiency and comfort to your home. Each program has different requirements so please feel free to ask your Energy Service Advocate for further details on each incentive.

Documentation of your current income is required to apply. ***To protect your identity, cover or cross out Social Security Numbers on the documents before submitting.*** *You will need one of the following preferred documents to disclose your Adjusted Gross Income.*

Required Documents

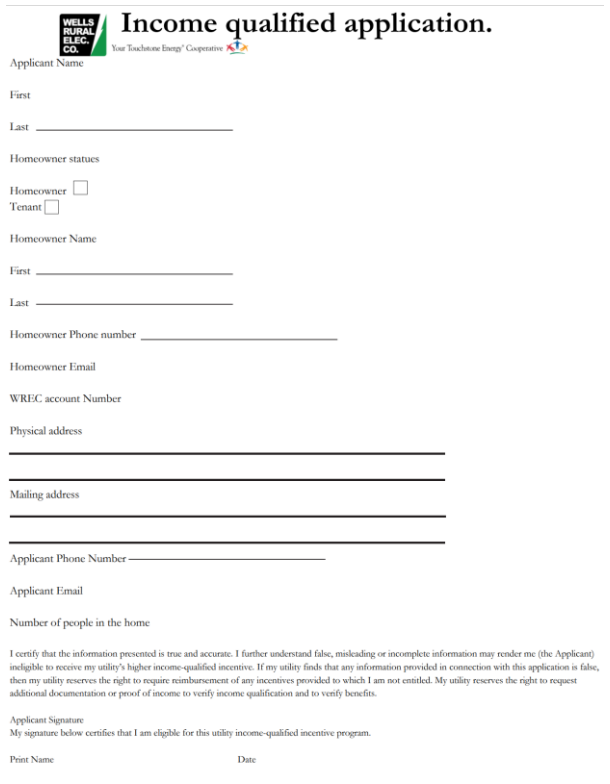
- Most recent IRS Form 1040, 1040 A or, 1040 EZ (include only the page which states the AGI, usually page one.
- Most recent Social Security Statement
- Most recent L &I Disability or Pension Statement

Income Verification

Your Adjusted Gross Income must be equal to or less than the corresponding family size for your household to qualify for this program.

1 person - $31,300
2 people - $42,300
3 people - $53,300
4 people - $64,300
5 people - $75,300
6 people - $86,300
7 people - $97,300
8 people - $108,300

Funding for these programs is limited and can be discontinued by WREC at any time



WELLS RURAL ELEC. CO. Your Touchstone Energy® Cooperative

Income qualified application.

Applicant Name

First

Last _____

Homeowner statues

Homeowner ☐
Tenant ☐

Homeowner Name

First _____

Last _____

Homeowner Phone number _____

Homeowner Email

WREC account Number

Physical address

_____

_____

Mailing address

_____

_____

Applicant Phone Number _____

Applicant Email

Number of people in the home

I certify that the information presented is true and accurate. I further understand false, misleading or incomplete information may render me (the Applicant) ineligible to receive my utility's higher income-qualified incentive. If my utility finds that any information provided in connection with this application is false, then my utility reserves the right to require reimbursement of any incentives provided to which I am not entitled. My utility reserves the right to request additional documentation or proof of income to verify income qualification and to verify benefits.

Applicant Signature
My signature below certifies that I am eligible for this utility income-qualified incentive program.

Print Name Date

PEOPLE WORKING TOGETHER IN A STRONG COMMUNITY WITH A SHARED GOAL AND A COMMON PURPOSE CAN MAKE THE IMPOSSIBLE POSSIBLE.

QUESTIONS

Any further questions, please contact Karley Fitch or Maria Landeros at

kfitch@wrec.coop – 775-548-0207

mlanderos@wrec.coop – 775-548-0245

Time for a break!

Commercial and Industrial Sector

UTILITY ROUNDTABLES 2025

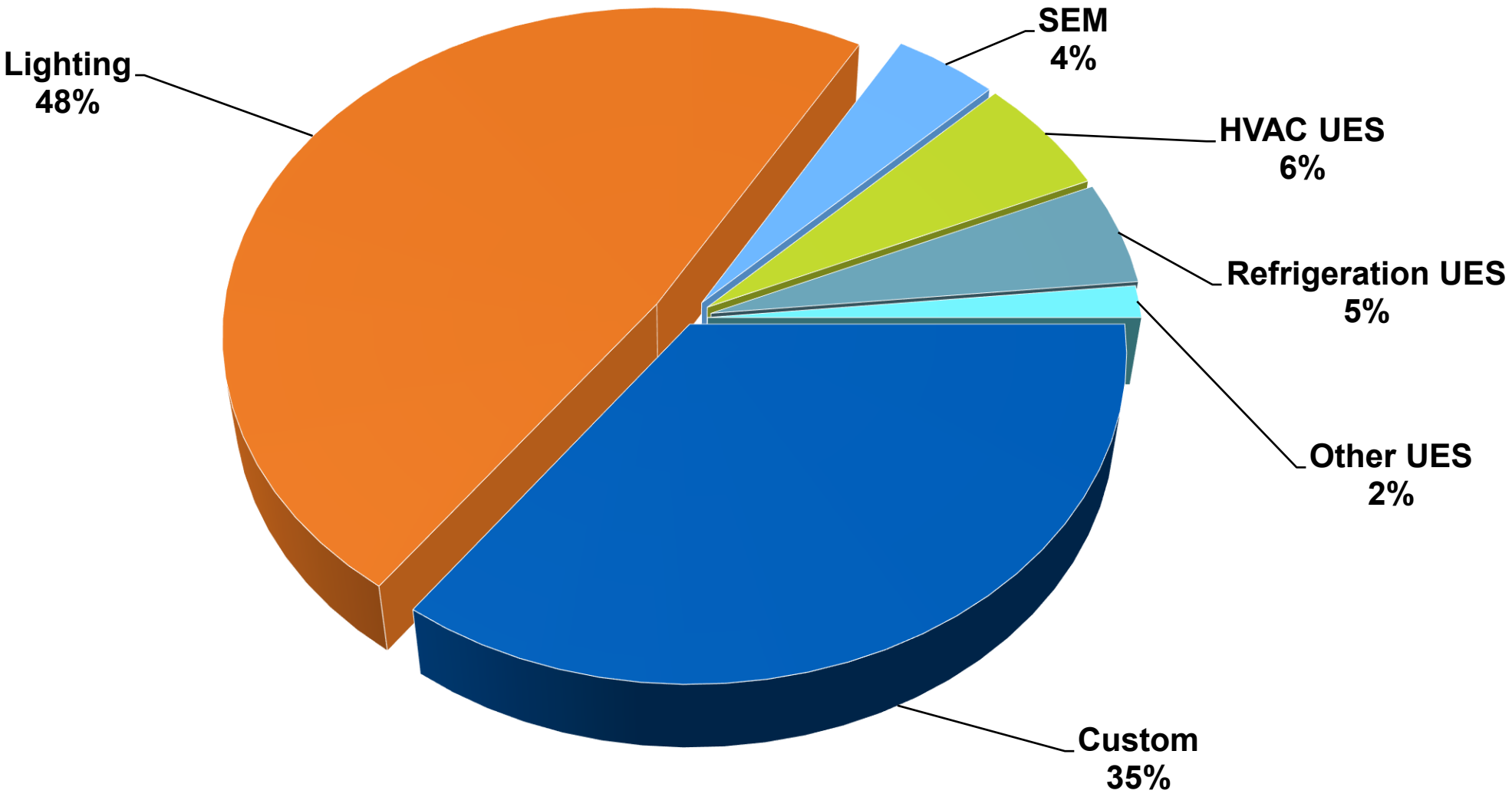
Oct. 8-9, 2025

Agenda

- FY 2024-2025 Rate Period Results.
- Nonresidential Lighting.
- Energy Management.
- UES Portfolio Highlights.

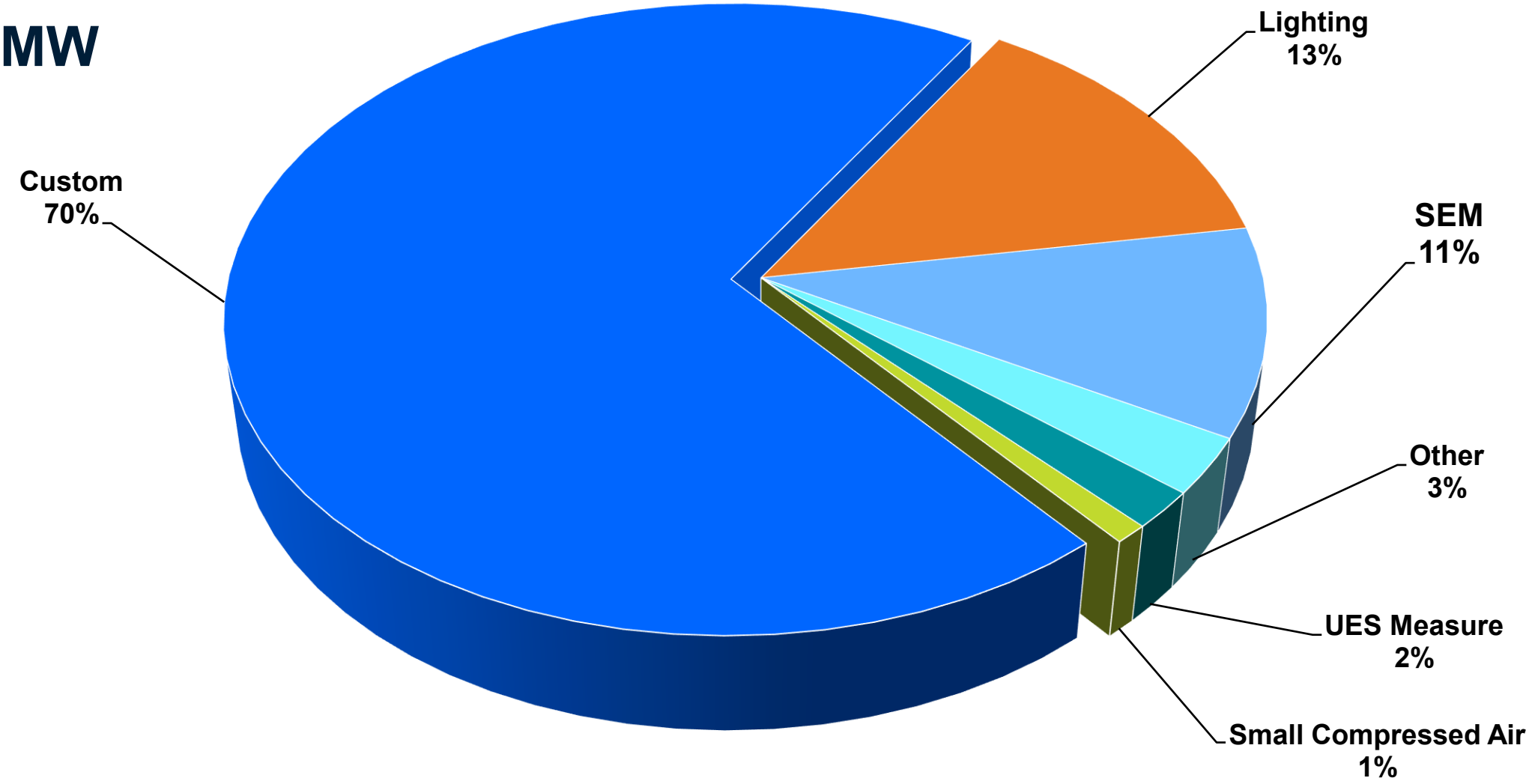
FY 2024-2025 Commercial Savings

19 aMW



FY 2024-2025 Industrial Savings

29 aMW



Nonresidential Lighting

FY 2026-2027 Incentives

Measure Series	Allocation 24-25	Allocation 26-27
Series A: Small Lamp/Fixture	$2-5	$4-10
Series B: LED Tubes (Type A)	$2	$4
Series O: LED Tubes (Type B/C)	$8	$12
Series C: LED General Indoor/Outdoor	$20-$210	$40-$280
Series D: LED High Bay	$80-$620	$160-$800
Series E: LED Exterior	$30-$500	$60-$800
Series F: HID Screw-in Replacement	$20-$150	$40-$300
Series: G: LED Linear	$0.13	$0.25
Series H: LED Exit Signs	$20	$30
Series I: Signage	$0.13	$0.25
Series J: Decommissioning	$0.13	$0.25
Series K: Non-standard Measures	$0.13	$0.25
Series L: Controls	$10-$50	$20-$200
New Construction	$0.13	$0.25

FY 2026-2027 Program Changes

Project Level Requirements

Requirement	Allocation 24-25	Allocation 26-27
Minimum B/C Ratio	0.5 for all projects	0.5 for projects >200,000 kWh
Minimum Wattage Reduction (Retro)	25%	10%
Minimum Wattage Reduction (NC)	20%	10%

Controls

- Removed Networked Lighting Controls option from ‘General Indoor/Outdoor’ and ‘High Bay’ fixture retrofit measures.
- Added Luminaire Level Lighting Control measure- Allows controls to qualify for deemed incentives even when fixture upgrade is non-standard or ineligible.

Online Lighting Calculator

Recent Changes

- New Allocation (RP_FY26_FY27) is now live.
- Admin access removed for all non-BPA users.
  - Contact lighting@bpa.gov for new users and/or utility configs.
- Project Summary Report runs automatically and accessible via Cloud.
- Measure Management area in Cloud is now read-only.
- Ability to transfer projects to trade allies via “Assign to Agency” function.
- Updated OLC User Manual (v2) released.

Online Lighting Calculator

Planned Changes

- Improve formatting of the Project Summary Report.
- Move Client Report to Cloud (like Project Summary Report).
- Re-create Utility Summary Report.
- Add option for multiple default rate schedules for each utility.

Online Lighting Calculator

Available Utility Configurations in OLC

- Contact Information.
- Default Energy and Demand Rates.
- Pass-through Incentive Amounts.
- Project Level Caps (Min B/C Ratio, Max $/kWh, Max % Project Cost).

Reach out to lighting@bpa.gov for support.

Energy Management

Energy Project Manager

- More than 7 aMW worth of savings reported at 25 Energy Project Management (EPM) commercial and industrial sites in FY 2024-2025.
- Eligible for $1.24M in EPM payments on top of standard measure incentives.

An EPM can improve project outcomes, timeline, and return on investment.

Save more energy and money by maximizing energy savings

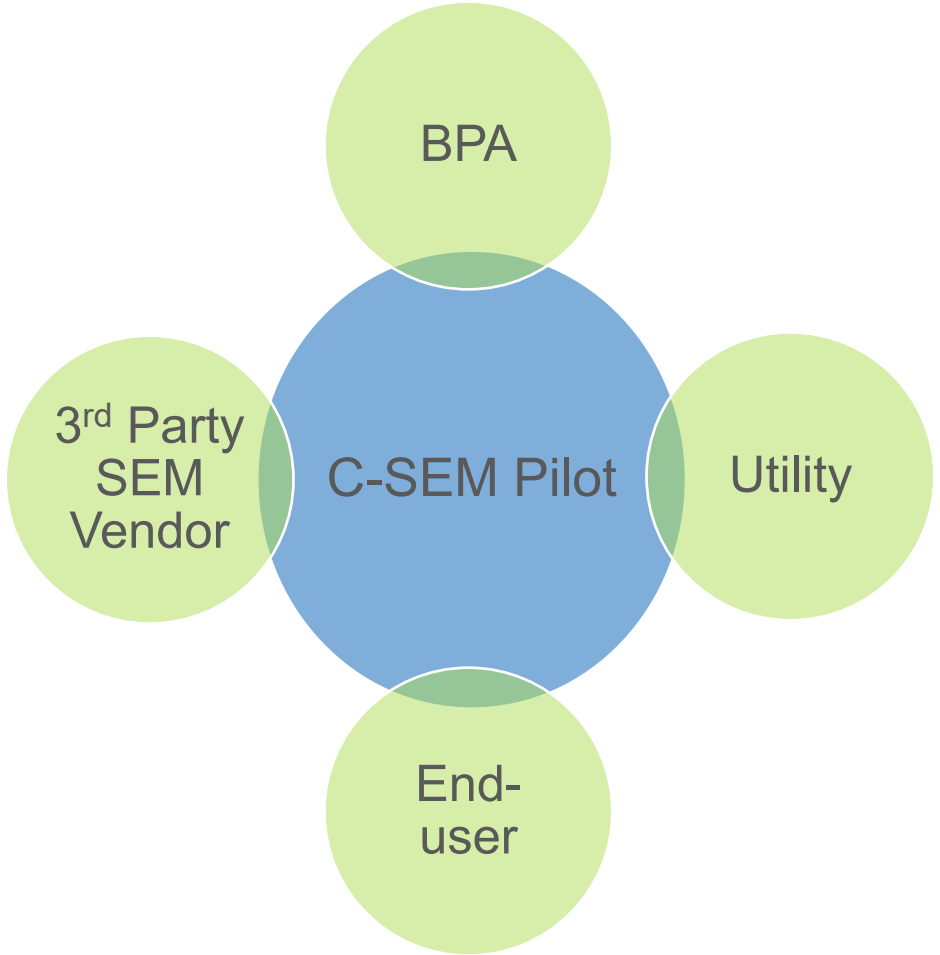
Reduce project implementation lead times

Develop a pipeline of future energy efficiency project opportunities

Earn an EPM payment in addition to energy savings incentives for completed energy efficiency projects.

Strategic Energy Management

- Strategic Energy Management (SEM) generated nearly 4 aMW in across 85 commercial and industrial sites in FY 2024/2025.
- First Quarter (Q1) FY 2026: BPA will be engaging USB and any interested utilities in providing feedback on a commercial SEM program pilot design.

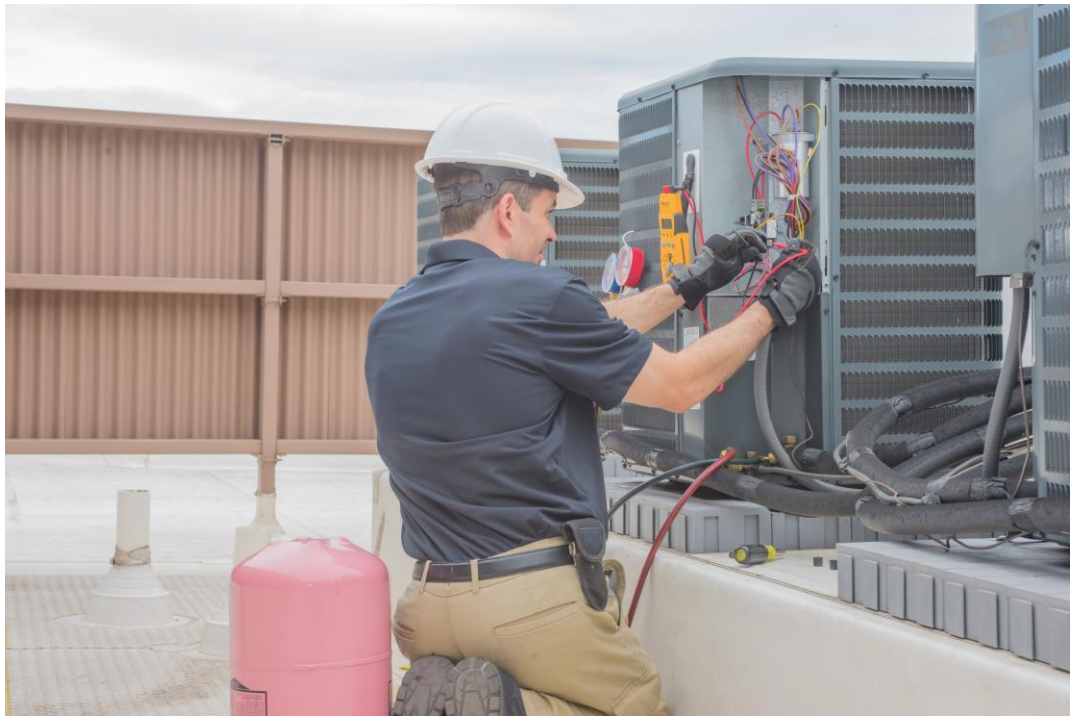


UES Portfolio Highlights

Energy Efficiency
Implementation Manual
2026-2027

Commercial HVAC

1. Air-Source Heat Pumps.
2. Ductless Heat Pump (DHP).
3. Supply Air Fan Control.
   a. Variable Frequency Drive (VFD) on Air-Handler Unit.
   b. Advanced Rooftop Unit Control.
4. Heat Recovery Ventilators (HRV).
5. Package Terminal Heat Pumps (PTHP).
6. Connected Thermostats.
7. Variable Refrigerant Flow (VRF).
8. Demand Control Kitchen Ventilation.



- Equipment Measure
- Controls Measure

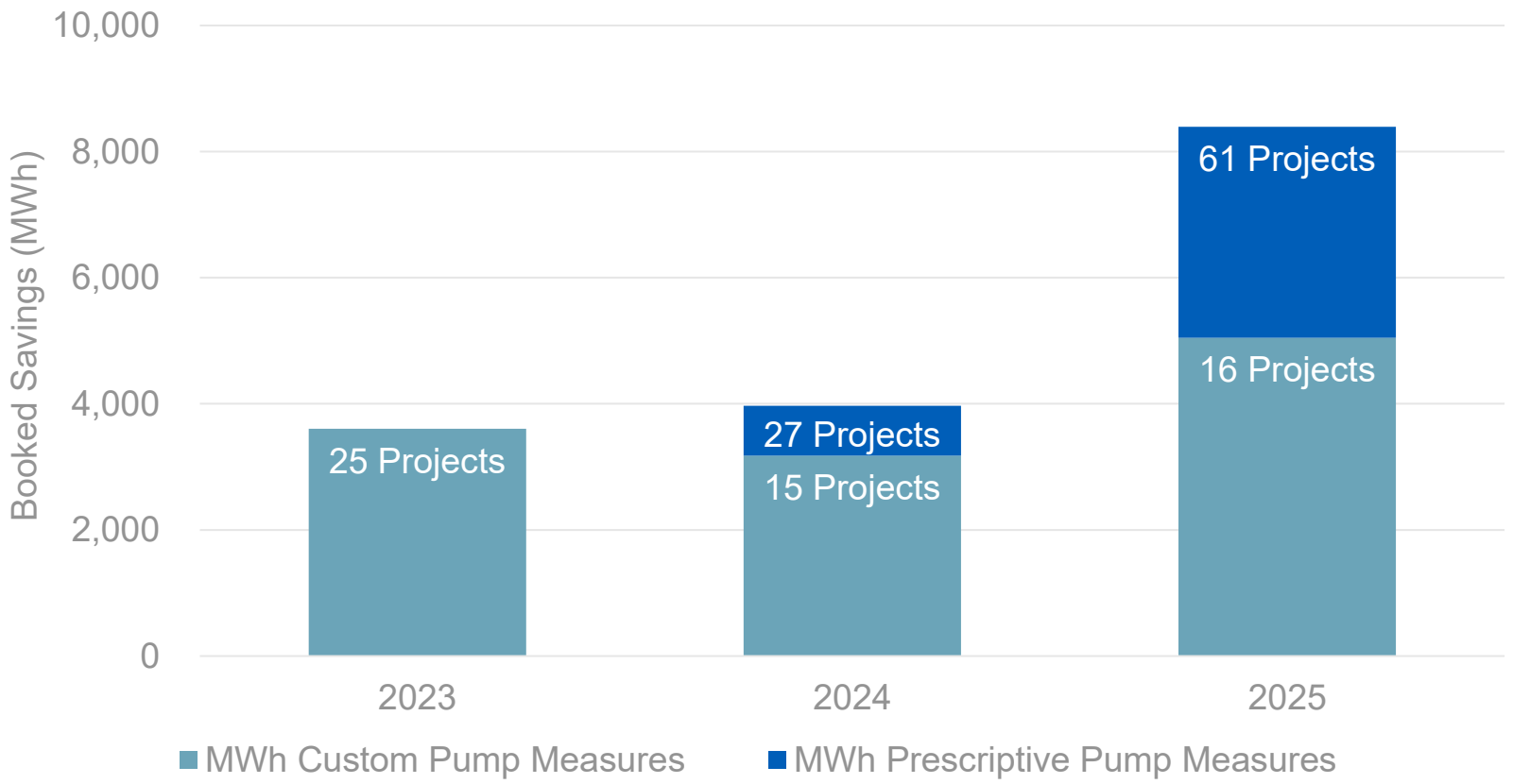
Commercial Refrigeration

1. Case Door Retrofit.
2. Floating Refrigeration Controls.
3. ECM Evaporator Fans.
4. Evaporator Fan Controls (NEW).

- Equipment Measure
- Controls Measure

Clean Water Pumps

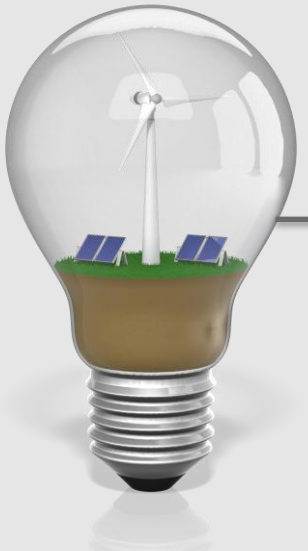
1. VFD on Pumps.
2. Efficient Pumps.



- Equipment Measure
- Controls Measure

Questions or Comments?

Energy Efficiency Programs and IFP Products and Services Update



IDAHO FALLS POWER

Savings by Sector 2025

- Commercial
  - Projects: 120
  - Incentives: $782,388
  - kWh Saved: 3,338,504
- Industrial
  - Projects:
  - Incentives:
  - kWh Saved:
- Residential
  - Projects: 108
  - Incentives: $253,694
  - kWh Saved: 572,246.16
- Total kWh saved
  - 3,910,750
  - Last two-year rate period 4,429,047

IDAHO FALLS POWER

Commercial Incentives

- Rebates for up to 70% of project cost
- Deemed Measures
  - Set reimbursement amount
    - (ex. $35/fluorescent fixture)
- Custom Projects
  - Rebates based on Cents per kWh saved
    - (ex. 200,000 kwh x $0.33 = $66,000)
- Loans (for qualifying customers) up to $50,000

IDAHO FALLS POWER

Commercial Project Savings

- City of Idaho Falls
  - Park Restrooms and Shelters LED Lighting – 15,300
  - Sage Lakes Golf Course LED Lighting - 14,909
  - Zoo Admin Building LED Lighting - 19,867
  - Pinecrest Golf Course – LED Lighting - 14,063
  - Sand Creek Golf Course LED Lighting - 13,148
  - City Hall LED Lighting - 39,952
  - Fielding Memorial Park Cemetary LED Lighting - 1,732
  - Parks and Rec Admin Building LED Lighting – 3,499
- Total: 122,470 kWh's

IDAHO FALLS POWER

Commercial Project Savings

- City of Idaho Falls - In Process
  - COIF WWTP Screw Press / Vaugh Pumps - 620,000 (estimated)
  - COIF Well # 13 VFD Project

IDAHO FALLS POWER

Commercial Project Savings

- Grand Teton Mall Parking Lot
  - Lighting – 316,707
- Timberline Auto (old Nissan Building)
  - Lighting – 277,175
- Eagle Rock Health
  - Lighting – 165,723
- Timberline Auto (Woodruff)
  - Exterior Lighting – 89,114
- INL – Willowcreek Building
  - Roof Insulation – 220,898
  - Chiller Replacement – 986,800

IDAHO FALLS POWER

Security Lighting

- 170 Participants
- 373 security Light fixtures
- 145 of these are now LEDs

IDAHO FALLS POWER

Commercial / Industrial

- Primarily HVAC, motors, processing equipment, air compressors
- Any electric energy saving measure
  - Custom Project Proposals (CPP)
- No job too big
  - Provide needed expertise

IDAHO FALLS POWER

Future Programs

- Support cutting edge technologies
- Anything that benefits the customer and the utility
  - Pre-pay meters
  - Kiosk payment option
- Integrated services
  - Smart Thermostats
  - EV Chargers
  - Net Meters
- Rate Incentives
  - Orchard Park
- Battery storage
- Demand Response

IDAHO FALLS POWER

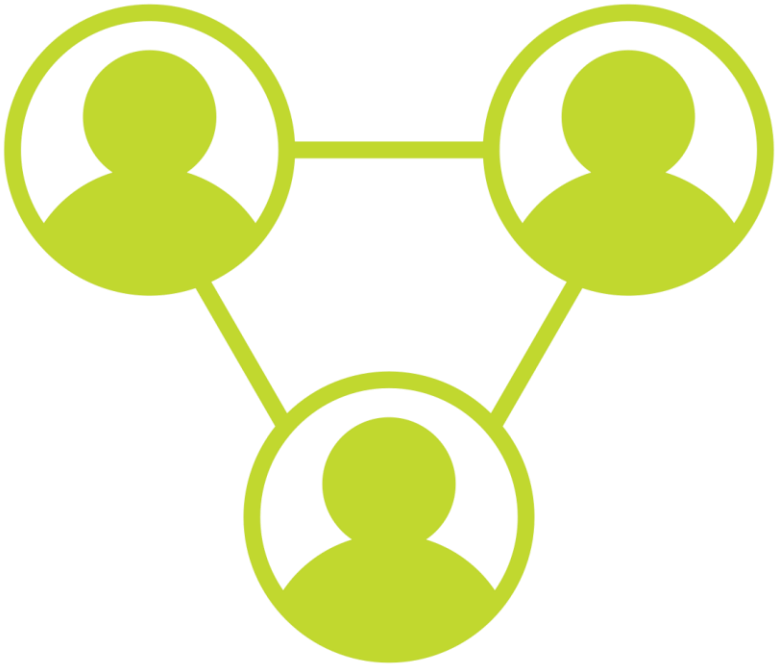
BONNEVILLE POWER ADMINISTRATION

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

Utility Share Outs

- **What's on your mind? Please share or ask <u>anything</u> you like!**
  - Recent successes?
  - Concerns/challenges now or in the future?
  - Future opportunities or areas to improve?
  - What are you excited about?



Thank you!

Thank you and please join us for a dinner and networking at:

EdgeWater Dining and Spirits
530 Hampton Drive
Burley ID 83318

Adjourn!

Good Morning!

Southern Idaho/Nevada/Wyoming

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

Energy Efficiency Marketing Team

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

Meet the Marketing Team

Mike Gross
Marketing Lead

Rachael Ettelman
Marketing Specialist

Maggie Bagan
Marketing Specialist

Ming Kust
Marketing Specialist

Robin Moodie
Marketing Specialist

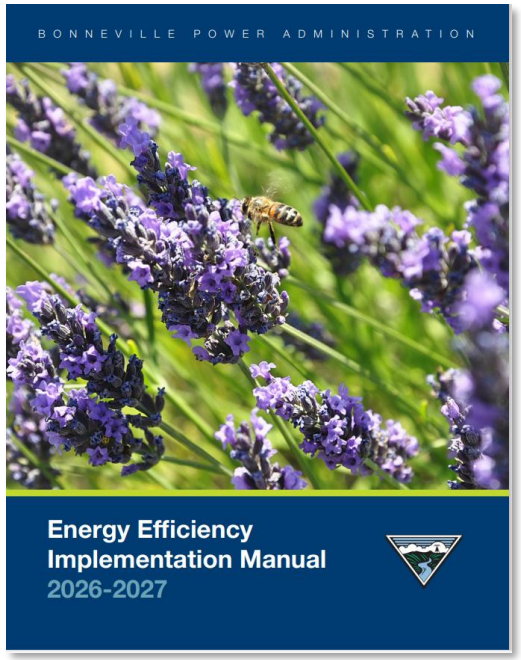
Skillset and Services

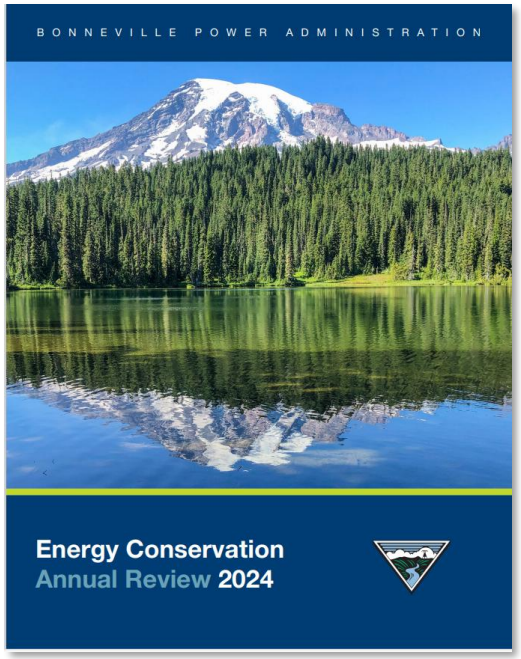
Collective Skills

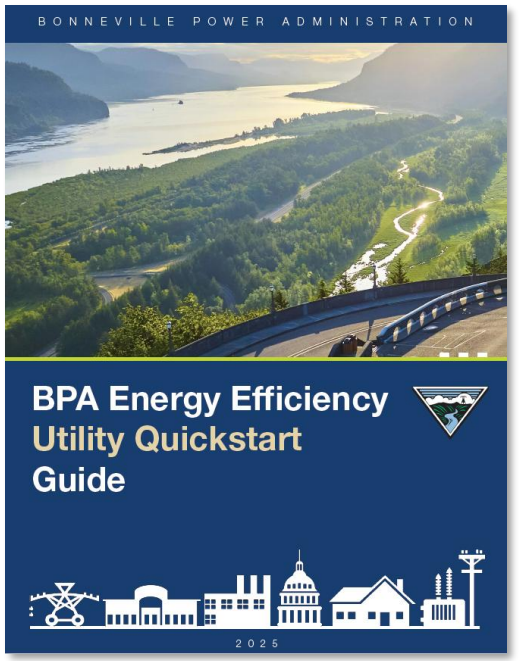
- Graphic Design
- Production Design
- Technical, Public Relations, Copywriting, and Editing
- Presentations
- Instructional and Social Media Videos
- Web Design
- Marketing Strategy and Planning

Marketing Team Publications

- Energy Efficiency Implementation Manual.
- Energy Conservation Annual Review.
- Energy Efficiency Action Plan.
- Energy Efficiency Utility Quickstart Guide.







Services

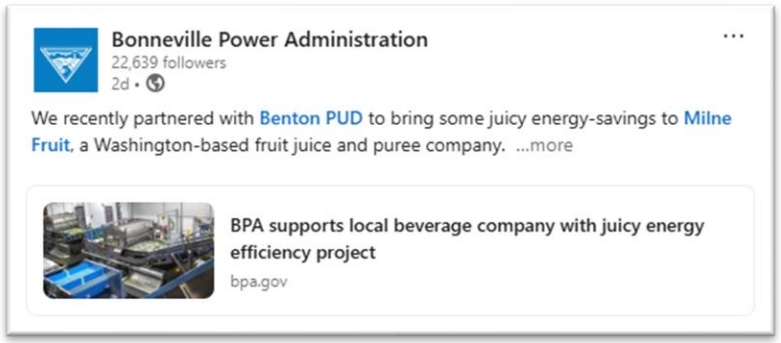
Marketing and Design

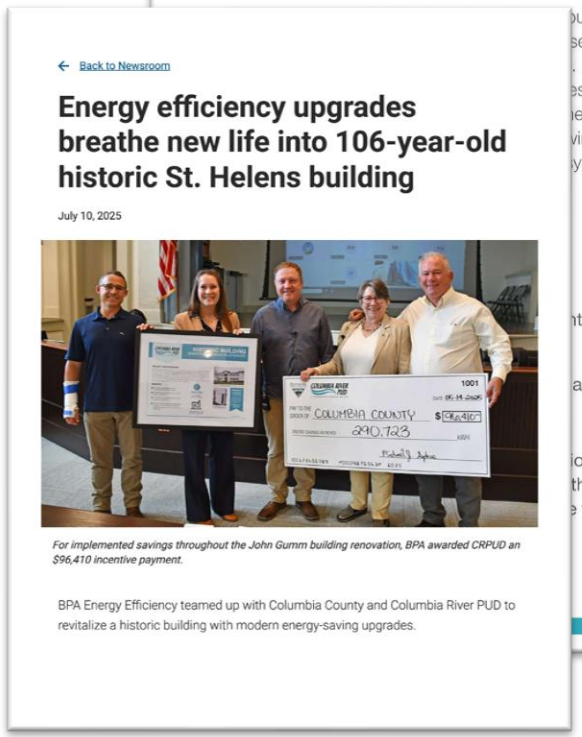
- Photos and graphic design production for images, logos, and icons.
- Marketing materials customization:
  - Custom fillable forms,
  - Social media content,
  - Flyers, or
  - Bill stuffers/post cards.
- Recommendations and support for marketing projects and campaigns.

Services

Press Kits:

- Press releases,
- Articles,
- Case studies,
- Project success posters, and
- Social media posts.

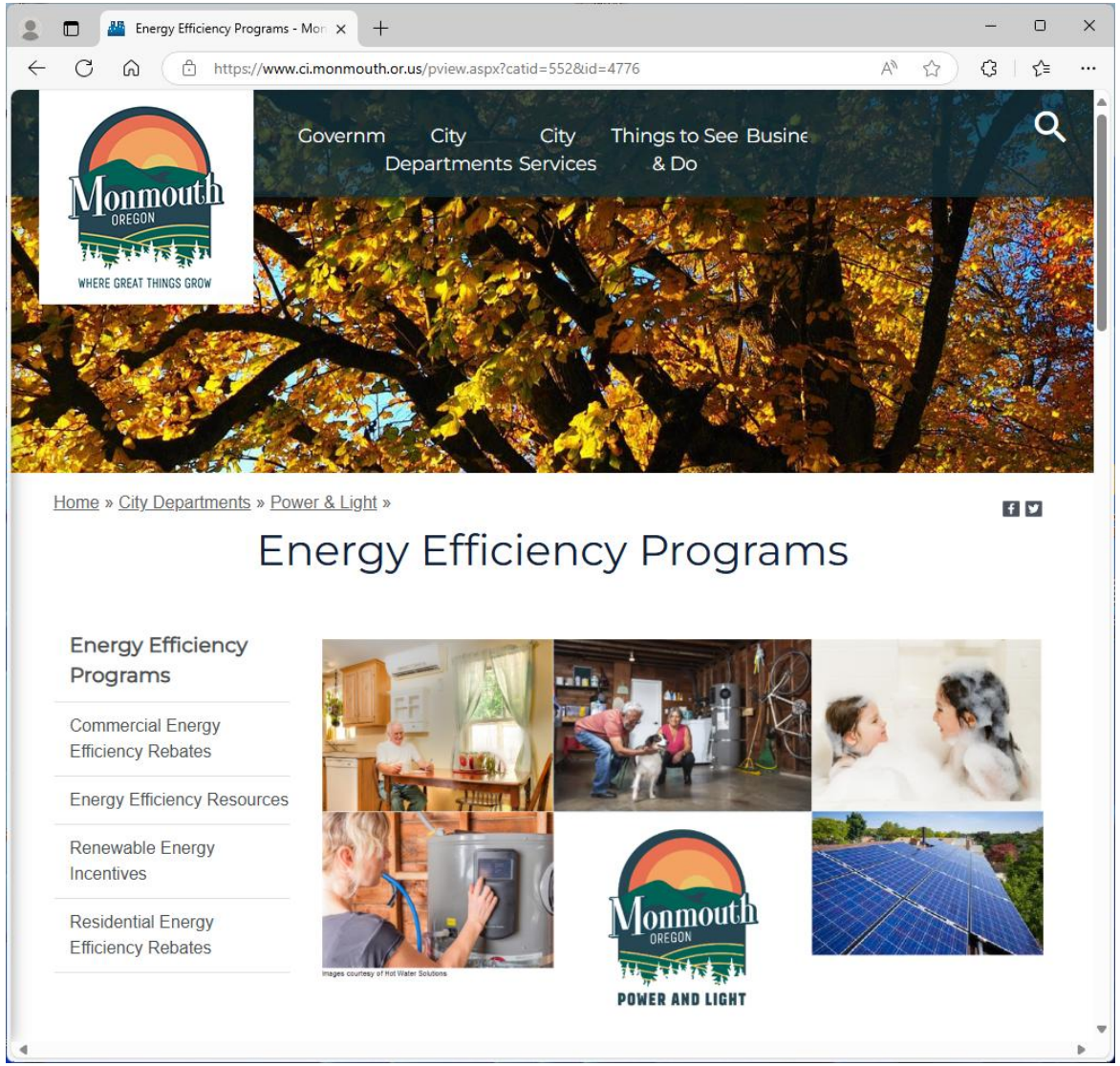




New Services

Website Recommendations

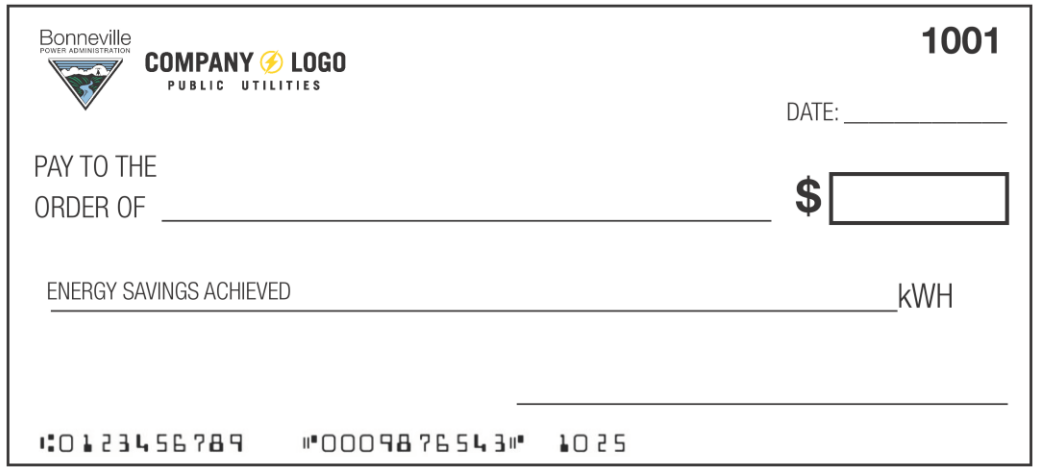
- Review existing website and make recommendations.
- Graphics production.
- Search engine optimization.
- Improve user experience.
- Increase program visibility.



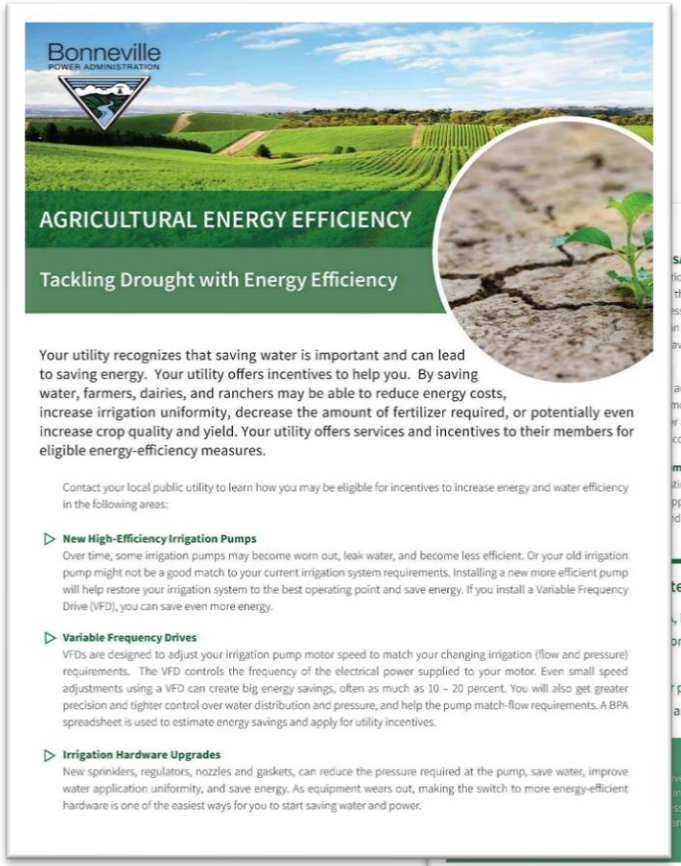
New Services

Big Check

- Laminated.
- Customized with logo.
- Re-usable with dry erase markers.
- Great for photo ops for case studies, articles, etc.

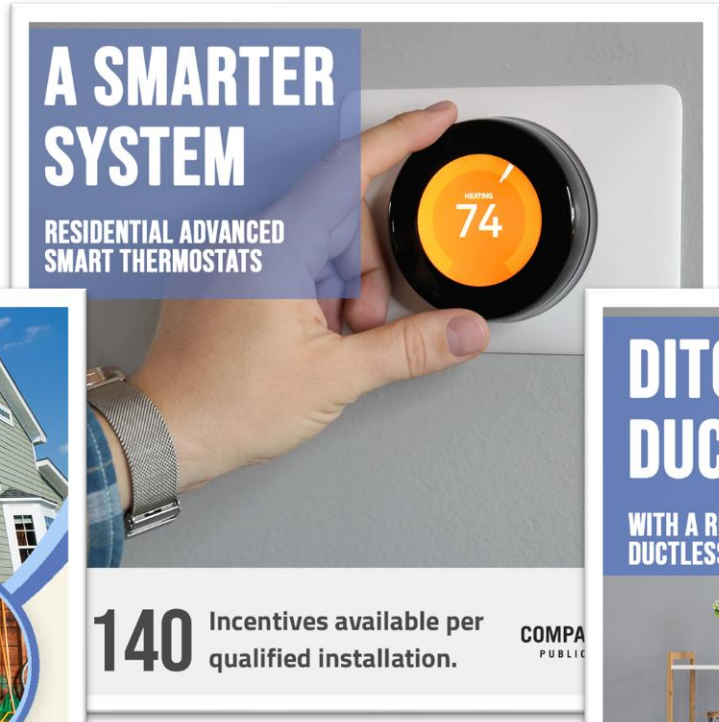


Updated Templates: Flyers



Updated Templates: Postcards, Bill Stuffers

Updated Templates: Social Media Posts



UTILITY ROUNDTABLES 2025

Utility Distribution Sector

Oct. 8-9, 2025

Utility Distribution Strategic Priorities

Utility Distribution

Increase communication with utility management to promote the value of Utility Distribution measures.

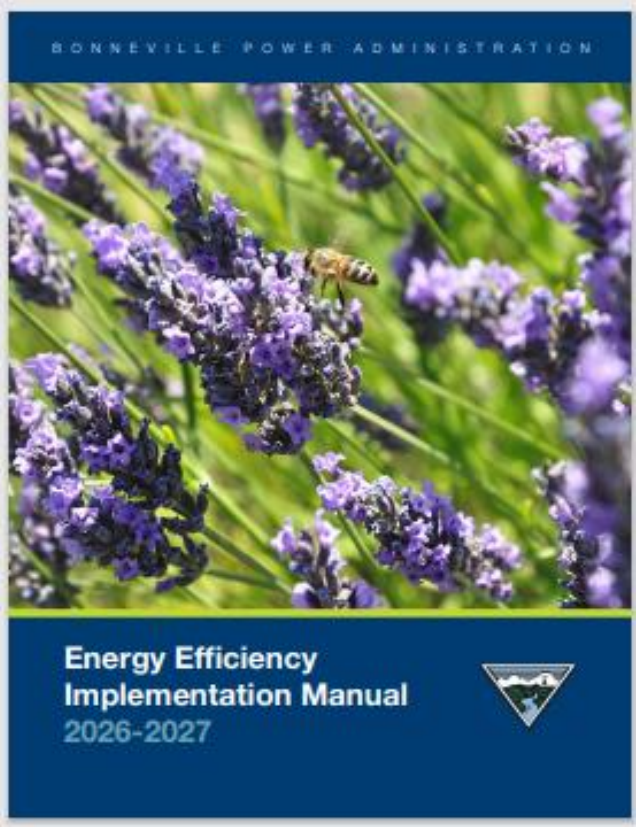
2026-2027 Priorities

- Continue to encourage Re-conductor and Transformer Measures.
- Renew Marketing for Conservation.

Implementation Manual – Section 12
What Measures are in this Sector?

Two main groups: FY 2026+

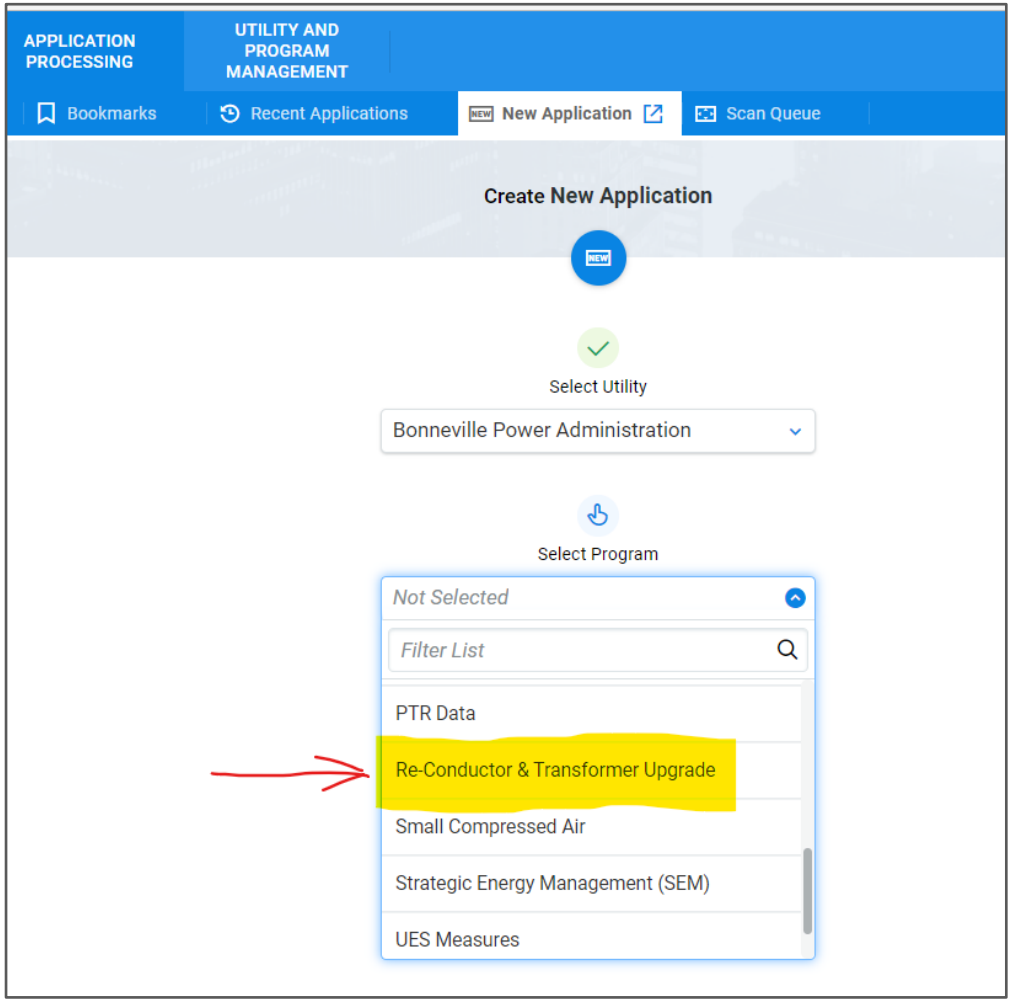
1. Re-conductor and Transformers (35-year measure): **$0.38/kWh.**
    - Several other measures: voltage increase, power factor correction, etc., but they are infrequently submitted/reported.
2. Conservation Voltage Reduction (CVR) / Voltage Optimization (VO) (10-year measure life): **$0.33/kWh** incentive.



Reconductor-Transformer (RT) Calculator: Program in BEETS

What is it?

- New streamlined process for these two measures, an alternative to custom project submittal.
- Project support document files can be attached to the calculator (all in one file).
- More automated data entry fields.
- Can handle up to six transformer and six reconductor measures in one file.



Reconductor Measures Can Also Be Custom Projects

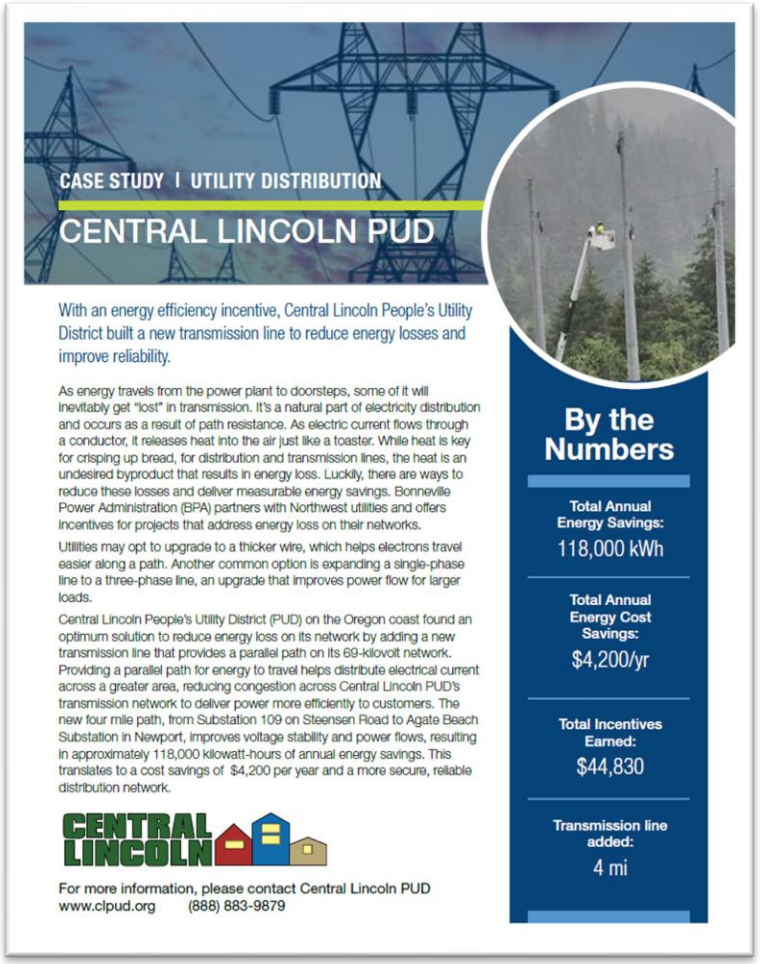
- When a reconductor project gets complicated.
- It can-not be addressed via RT-file.
- We leverage Load-Flow models executed by utility engineers or consultants.
- Outputs from the model (Peak kW Loss) are used to calculate Energy Savings.
- Tony Koch prepares the Custom Project details and enters into BEETS.

Utility Project Submittals in FY 2025

Utility	Program / Savings Type	Busbar Energy Savings (kWh/year)
Inland	Re-Conductor & Transformer	401,882
Idaho County	Re-Conductor & Transformer	117,835
Flathead	Re-Conductor & Transformer	268,061
Vigilante	Re-Conductor & Transformer	185,224
Coos-Curry	Re-Conductor & Transformer	390,686
DOE-RL	Re-Conductor & Transformer (Transformers)	29,867
Oregon Trail	Re-Conductor & Transformer	32,014
Cowlitz	Re-Conductor & Transformer	92,583
Vigilante	Custom Projects Option 1 - Reconductor	122,012
Fall River	Re-Conductor & Transformer	5,924
Kittitas	Re-Conductor & Transformer	371,794
Snohomish	Custom Projects Option 2 - Reconductor	29,691
Benton PUD	Custom Projects Option 1 - CVR	887,019
Vigilante	Custom Projects Option 1 - Reconductor	74,068
Lakeview	Re-Conductor & Transformer (Transformer)	89,530
Central Lincoln	Custom Projects Option 1 - Transmission Line	117,974
	FY25 Total (kWh/year)	**3,216,164**
	aMW	**0.37**

A Special Project to Highlight

Central Lincoln PUD Case Study



CASE STUDY | UTILITY DISTRIBUTION

CENTRAL LINCOLN PUD

With an energy efficiency incentive, Central Lincoln People's Utility District built a new transmission line to reduce energy losses and improve reliability.

As energy travels from the power plant to doorsteps, some of it will inevitably get "lost" in transmission. It's a natural part of electricity distribution and occurs as a result of path resistance. As electric current flows through a conductor, it releases heat into the air just like a toaster. While heat is key for crisping up bread, for distribution and transmission lines, the heat is an undesired byproduct that results in energy loss. Luckily, there are ways to reduce these losses and deliver measurable energy savings. Bonneville Power Administration (BPA) partners with Northwest utilities and offers incentives for projects that address energy loss on their networks.

Utilities may opt to upgrade to a thicker wire, which helps electrons travel easier along a path. Another common option is expanding a single-phase line to a three-phase line, an upgrade that improves power flow for larger loads.

Central Lincoln People's Utility District (PUD) on the Oregon coast found an optimum solution to reduce energy loss on its network by adding a new transmission line that provides a parallel path on its 69-kilovolt network. Providing a parallel path for energy to travel helps distribute electrical current across a greater area, reducing congestion across Central Lincoln PUD's transmission network to deliver power more efficiently to customers. The new four mile path, from Substation 109 on Steensen Road to Agate Beach Substation in Newport, improves voltage stability and power flows, resulting in approximately 118,000 kilowatt-hours of annual energy savings. This translates to a cost savings of $4,200 per year and a more secure, reliable distribution network.

CENTRAL LINCOLN

For more information, please contact Central Lincoln PUD
www.clpud.org (888) 883-9879

By the Numbers

Total Annual Energy Savings:
118,000 kWh

Total Annual Energy Cost Savings:
$4,200/yr

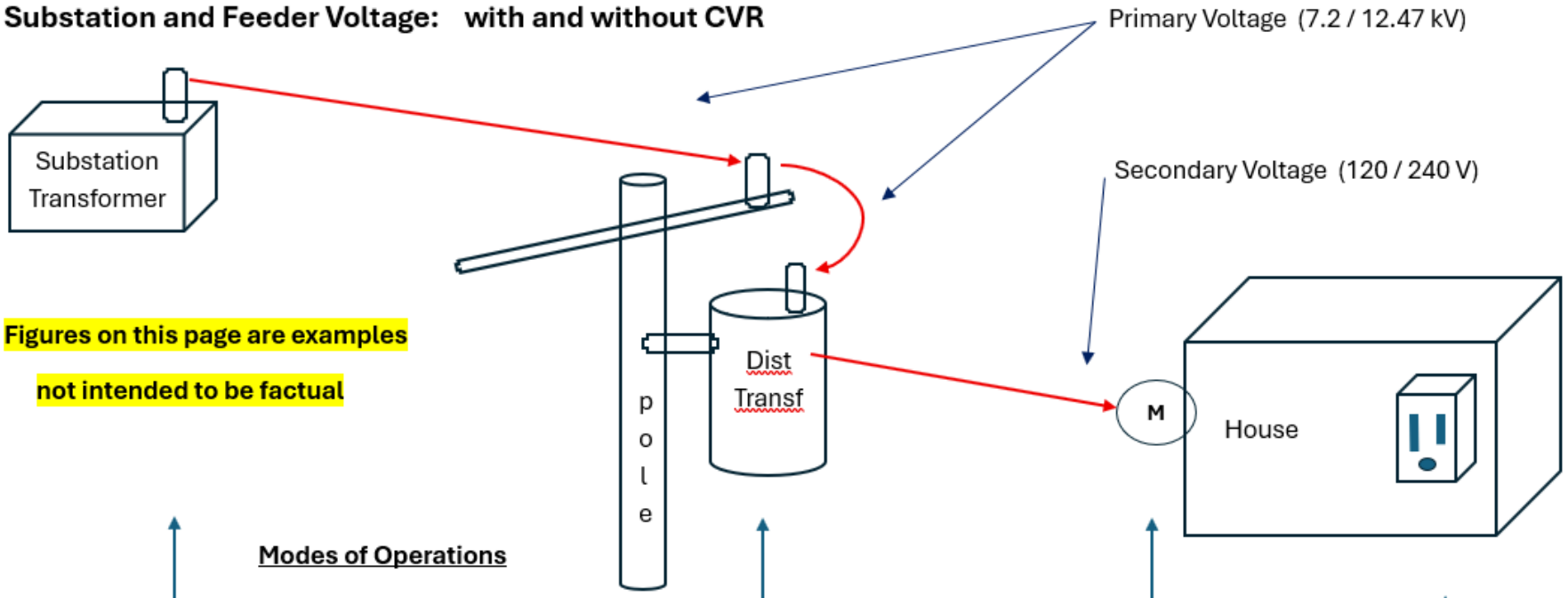
Total Incentives Earned:
$44,830

Transmission line added:
4 mi

Clallam PUD: Deploying CVR projects with AMI Data

- Clallam has traditionally implemented CVR using Primary end of line voltage.
- The PUD is currently in CVR-factor data gathering for two substations.
- CVR-factor calculation relies on turning the CVR voltage setting On and Off on a daily-basis. A CVR-factor is calculated, usually using ~6 months of daily On / Off data, for a specific substation, and reflects the native load of the substation.
- The following page illustrates some different CVR operating modes.

Substation and Feeder Voltage: with and without CVR



Modes of Operations

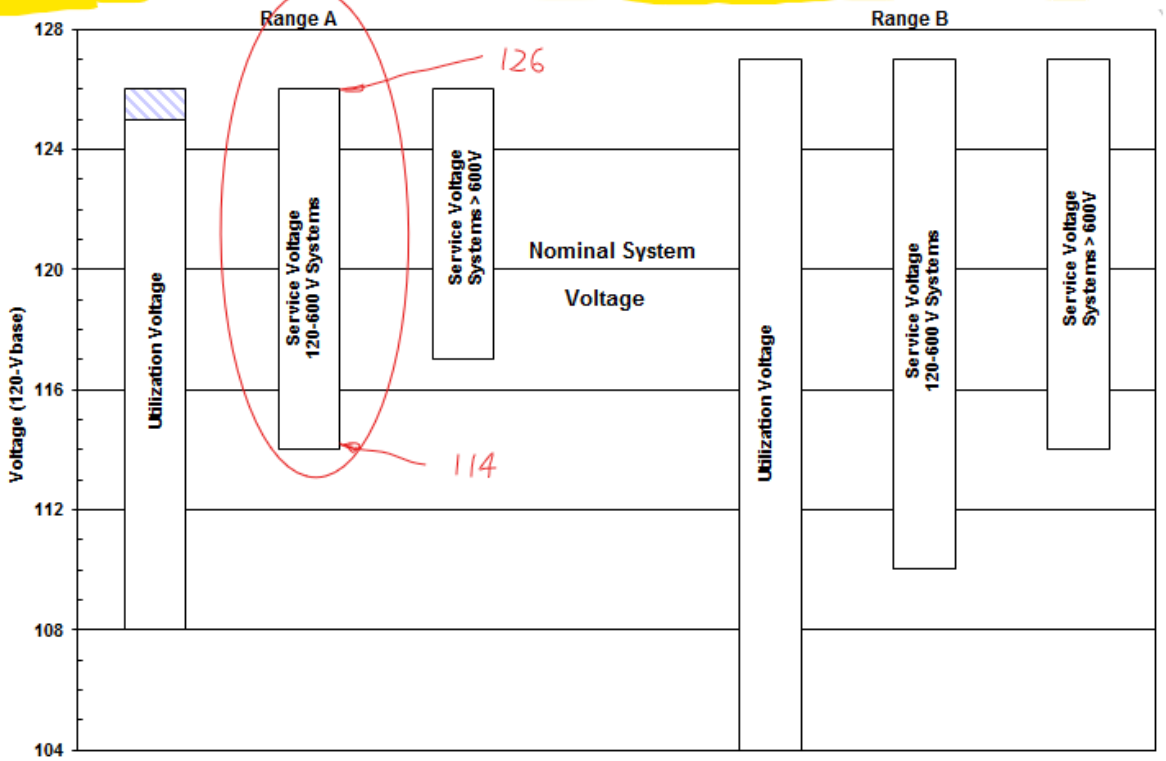
Max: 126 V	**ANSI C.84.1 Max & Min**	**Min: 114 V**	**Min: 110 V**
122 – 124 V	**Typical non-CVR operation**	**121 – 122 V**	**120 – 122 V**
123 Avg		**121 Avg**	**120 Avg**
120 Avg	**2-3V Reduction CVR target: 118 EOL**	**117 Avg**	**116 Avg**
	Uses radios to communicate EOL voltage to sub		
118 Avg	**4-5V Reduction CVR with AMI voltage feedback**	**115 Avg**	**114 Avg**
	Eliminates the need for EOL radios		

Annex B

Illustration of Voltage Ranges of Table 1

Figure B1 shows the basis of Range A and Range B limits of table 1. The limits in table 1 were determined by multiplying the limits shown in this chart by the ratio of each nominal system voltage to the 120V base. [For exceptions, see note (c) to Figure B1.]

A technique commonly called Conservation Voltage Reduction (CVR) is sometimes used for energy and or demand reduction. Determination of the value of CVR is beyond the scope of this Standard. However, it is recommended that the application of CVR should be limited to voltages in Range A for normal operation. Range B should be reserved for emergency, infrequent operation. CVR systems should not be designed to operate below Range B for any condition.



(informative)

Figure B1

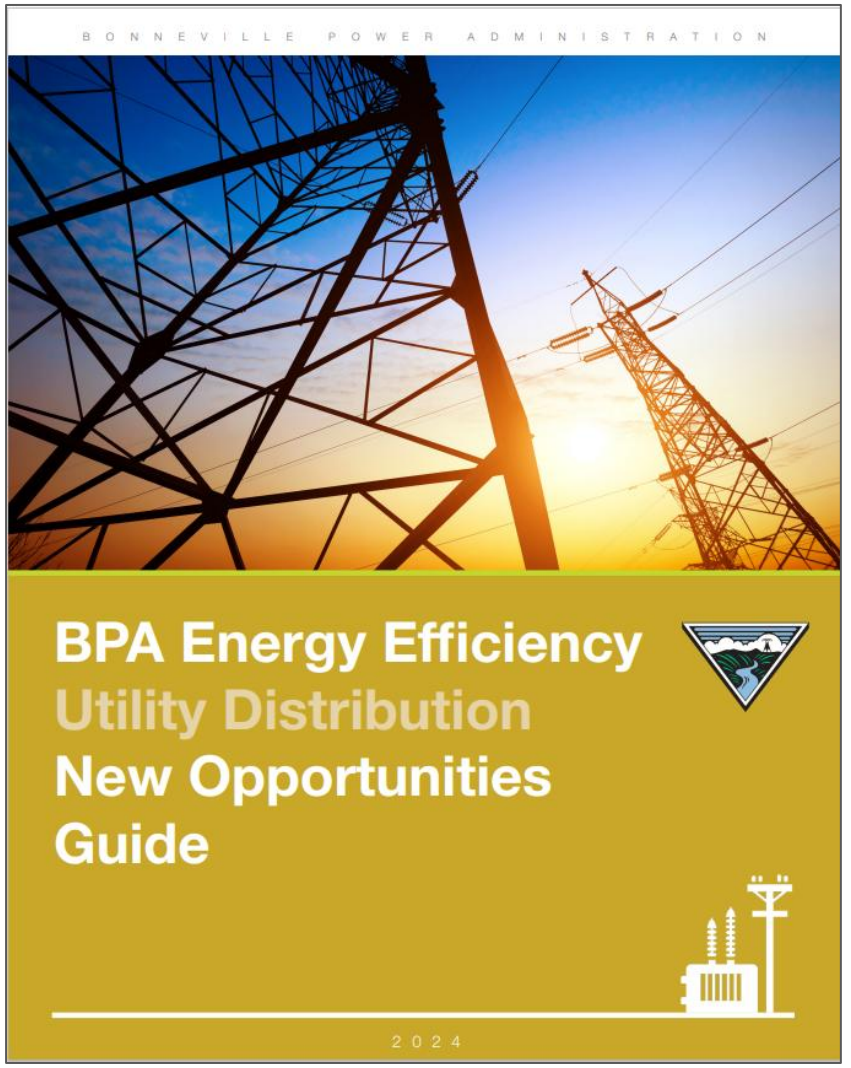
Re-Introduction of Daily DVR Energy Savings Pilot Program

- BPA has been working for the past year+ to enhance the Daily Demand Voltage Reduction (DVR) offering.
- BPA will host a **customer webinar on Nov. 13** to discuss Daily DVR in more detail.
  - ***Invite your Distribution Engineering staff to the webinar.***
- BPA developed economic analysis tools that specifically quantify the overall benefit to utilities.
- BPA will address the possibility for hybrid CVR and Daily DVR in the webinar.

Utility Distribution: New Opportunities Guide

A marketing document to share with other staff…

https://www.bpa.gov/-/media/Aep/energy-efficiency/utility-toolkit/uds-nog.pdf



Contact Info for Technical Customer Service Support

Tony Koch, PE, CEM

Mechanical Engineer

jakoch@bpa.gov

(206) 220-6777

Time for a break!

Custom Projects

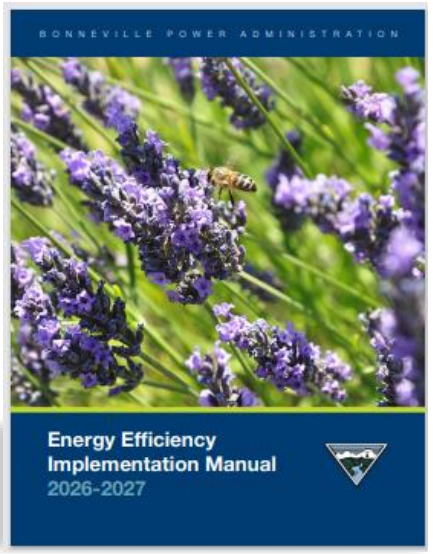
UTILITY ROUNDTABLES 2025

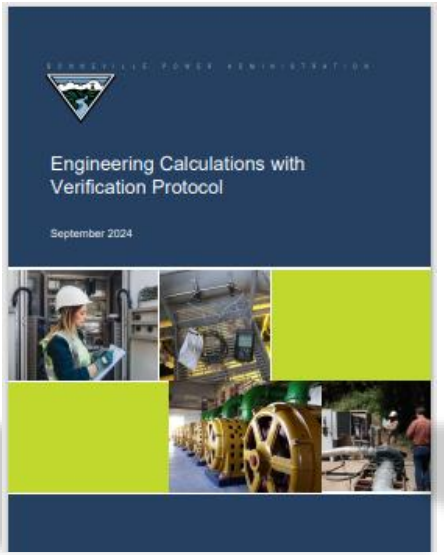
Oct. 8-9, 2025

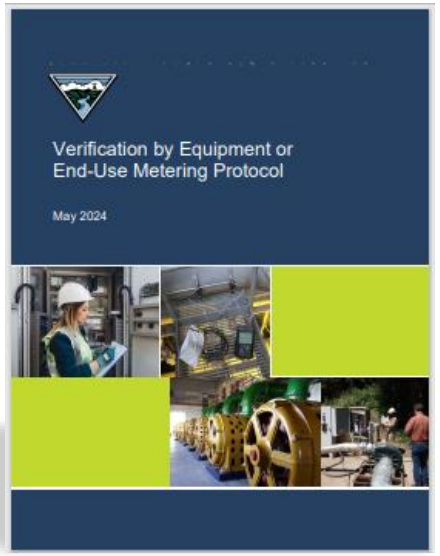
Overview

- Unit Energy Savings (UES) vs Custom.
- Commercial/Ag Custom versus Industrial.
- Custom Projects' General Requirements.
- Custom Projects' Process.
- Custom Project's Success Story.
- Energy Smart Industrial (ESI).

UES versus Custom



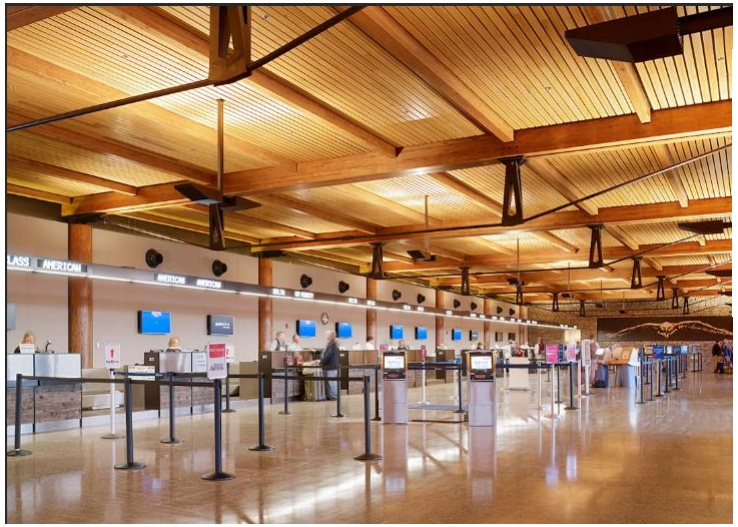




- Standalone measures – savings pre-determine and estimated on a per-unit basis.
- Incentives are based on a per-unit basis.
  - Can be viewed as a minimum guaranteed amount.
- Relatively quick and easy.
- BEETS bulk upload.

- Site specific savings.
- Work with BPA Customer Service Engineer (CSE) or Energy Smart Industrial Partner (ESIP).
- May require an energy audit and/or billing analysis.
- Entered into BEETS by CSE or ESIP.

Commercial/Agricultural Versus Industrial



Lower Valley Energy: Jackson Hole Airport Terminal Expansion. 855,489 kWh.

Energy Smart Industrial
BPA ENERGY EFFICIENCY

City of Burley: Suntado. 6,408,232 kWh.

Contact your EER!

- Commercial business.
- Institutional buildings (i.e., government, schools, hospitals).
- Irrigated crop, on-farm production, greenhouse operations.*

CONTACT YOUR CSE!

- Manufacturing plants.
- Municipal utility services.
  - City/municipal water supply* and wastewater pumps.

CONTACT YOUR ESIP!

Custom Projects' General Requirements

- No fuel switching.
- Limited to one sector per project.
- Cost-effectiveness.
  - Not performed if ≤ 200,000 kWh (≤ 800,000 kWh for Utility Distribution).
  - B/C ratio must be ≥ 0.50 if > 200,000 kWh (> 800,000 kWh for Utility Distribution).
- Include incremental or total cost documentation.

Raft River Rural Electric Cooperative: Webb Basin Dairy. 214,546 kWh.

Custom Projects' Process

1. Identify Project.
2. Contact your Customer Service Engineer (CSE).
    - May conduct an energy audit or metering.
3. Determine project value.
4. End-user determines if they will move forward.
5. Implement project.
6. Post-project steps.
    - May include metering, billing analysis, modeling of savings.
7. CSE enters into BEETS.
8. BEETS workflow.
    - Utility and BPA review.
9. Invoicing!

City of Weiser: Ridley's Family Market. 717,345 kWh.

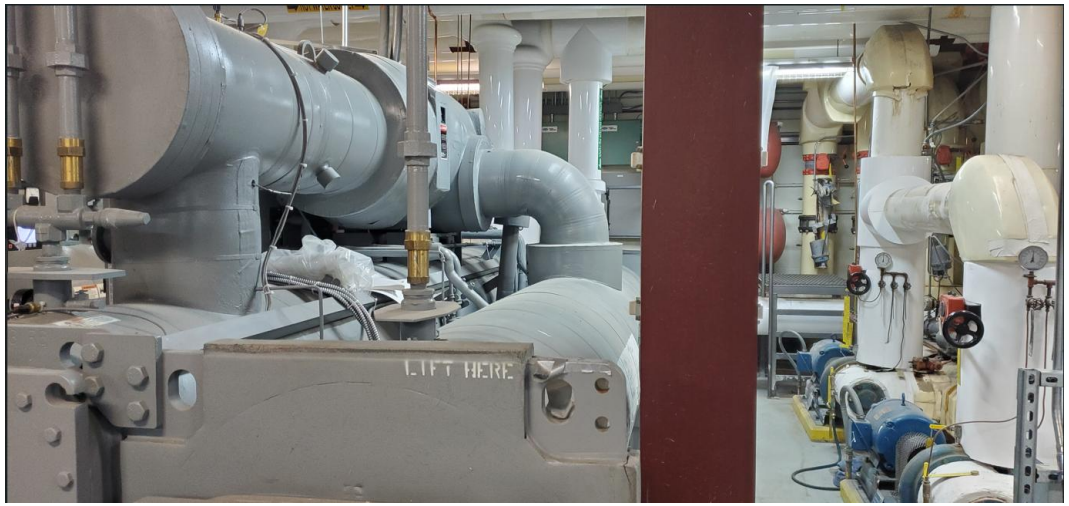
Success Story:
Idaho National Laboratory Willow Creek Building

- UES vs. Custom.
- Commercial/Ag Custom versus Industrial.
- Custom Projects' General Requirements.
- Custom Projects' Process.
- Custom Project's Success Story.

Idaho Falls Power: Idaho National Lab Willow Creek Building. 1,317,067 kWh.

Success Story:
Idaho National Laboratory Willow Creek Building

- No central heating system.
- Building heated with lights.
- Replaced one of the Old Chillers with a Reverse Cycle Chiller.



Success Story:
Big Lost River Valley Pipeline

Water Conservation in The Big Lost River Valley

Bonneville POWER ADMINISTRATION

Project Background

The Big Lost River Valley holds approximately 76,000 acres of farmland in the mountains of south-central Idaho. Water is the lifeblood of farmers in this mountainous region. For years, farmers relied on open canals to deliver their water, which presented challenges with losses through evaporation or leakage.

A system of pipelines was proposed to distribute water across the valley. The Big Lost River Irrigation District—within its broader scope of fairly and efficiently delivering irrigation water to the basin—assisted in the effort with Lost River Electric Co-op, Inc., Natural Resources Conservation Service, and participant irrigators to make it a reality. The pipeline project received funding through energy conservation grants from Bonneville Power Administration (BPA). As of early 2025, 11 systems have been or will be improved upon across the Big Lost River Valley. Once complete, more than 45 miles of liner and/or pipe will serve a significant portion of the farmground in the valley.

Results

- **Improved water conservation:** In addition to the pipelines and liners, farmers received technical and financial assistance to help install low-elevation spray application (LESA) sprinkler package on pivot irrigation systems to conserve water.
- **Energy Savings:** The Inskeep Pipeline project resulted in 169,187 kWh of energy saved annually, while the Aikele Pipeline project delivered 83,678 kWh of energy savings annually.
- **Increased Water Availability:** Reduced losses in the delivery system are expected to provide additional water to the southern portion of the valley.

252,865 kWh
Annual Energy Savings

Inskeep pipeline farmer tie-in.

The pipeline project underway at Burnett Ditch.

What ideas do you have to save energy?

"Our cooperative mission is to provide safe and reliable electricity, sustainable energy solutions and quality member service, all at a fair and reasonable price."

Lost River Electric Cooperative, Inc.
(208) 588-3311
www.lostriverelectriccoopinc.com

LOST RIVER Electric Co-op, Inc.

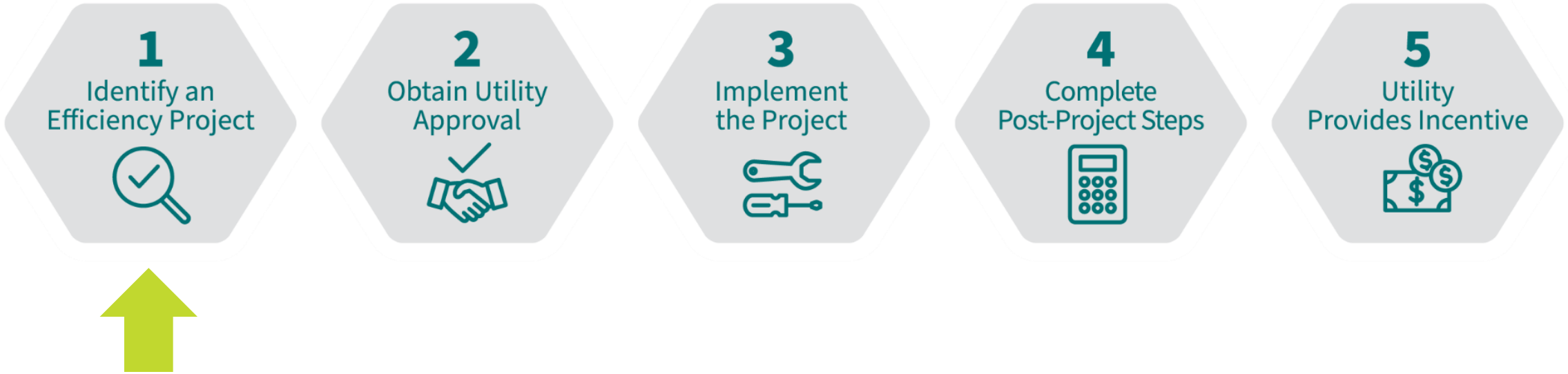
Questions or Comments?

Energy Smart Industrial Custom Project Overview

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

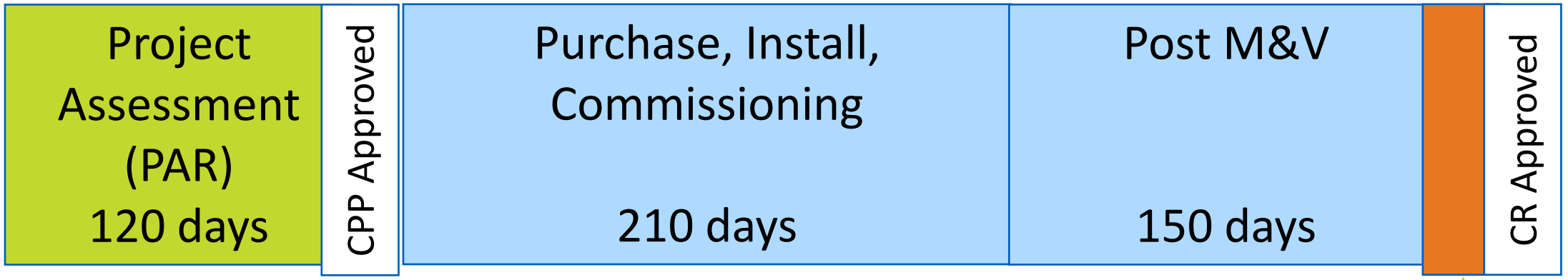
ESI Custom Project Process



#1 – Call us when you hear about an opportunity.
#2 – Share Customer List with ESIP.

Custom Project Lead Time

Average time between CPP and CR approval:
360 days.



Includes data collection, analysis, and Completion Report.

BEETS
BPA Energy Efficiency Tracking System

Utility review and submittal.

Project Spotlight – New Construction

Nosh Makujina – Energy Smart Industrial Partner (ESIP).

New Construction

Suntado

Projected Timeline

Summer ‘23
Project identified and TSP Project Assessment Report (PAR) ordered.

Fall ‘23
TSP PAR study completed – Estimated savings of 4.8 M kWh.

Milestone #1
Nov. ‘23
Suntado site construction completed.

Milestone #2
‘23 – ‘24
Certification and 1st Sellable Product.

Fall ‘24
TSP M&V study site visit and data collection.

Milestone #3
Fall/Winter ‘24 – ‘25
Production ramping to design capacity.

Spring ‘25
TSP M&V and equipment commissioning for savings.

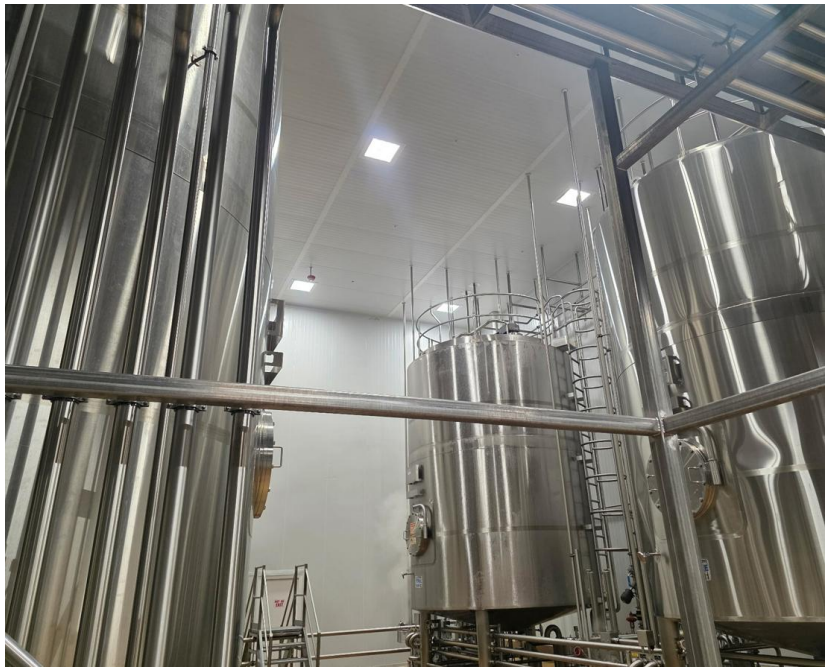
June/ July ‘25
BPA approval.

Suntado

Engagement Takeaways and Future Work

Suntado experienced a six-month delay, ESI delivered VALUE.

- ✓ New Construction Lighting.
- ✓ UES Efficient Pump and UES Pump VFD measures.



Engagement Takeaways and Future Work

UES Projects (completed)

- Lighting: **853,945 kWh.**
- UES Pump VFD: **1.4 M kWh.**
  - 45 pumps (1,533-horsepower total).

Custom Project (June 2025).

- Verified savings: **4.16 M kWh.**
- BPA Direct Funding Demonstration (DFD Funding).
- Sub-system focus.
  - Refrigeration.
  - HVAC.
  - Compressed Air.
  - Process Agitators.

Questions or Comments?

Agriculture Sector

UTILITY ROUNDTABLES 2025

Oct. 8-9, 2025

Overview

- Sector Updates – Payments Effective October 1, 2025.
- Other Offering: Agricultural Transformer De-Energization.
- Utility Spotlight: Wells Rural Electric Company.
- Agricultural VFD Calculator Walkthrough.
- Utility Spotlight: Raft River Rural Electric Cooperative.

Payments Effective October 1, 2025

Measure #	Measure Name	Existing Payments	New Payments
7.5.1	Irrigation System Conversion: LESA/LEPA/MDI (Low Elevation Spray Application/Low Energy Precision Application/Mobile Drip Irrigation)	$18 per drop	↑ $23 per drop
7.5.2	High-Pressure Sprinkler Package Replacement	$16 per package	↑ $18 per package
7.5.2	MESA (Mid-Level Elevation Spray Application) Sprinkler Package Replacement	$15 per package	↑ $21 per package
7.5.2	LESA/LEPA/MDI (Low Elevation Spray Application/Low Energy Precision Application/Mobile Drip Irrigation) Sprinkler Package Replacement	$7 per package	↑ $10 per package
7.5.3	Irrigation System Low-Pressure Conversion: High-Pressure to Low-Pressure, Wheel-line or Hand-line	$16 per package	↑ $23 per head
7.5.3	Irrigation System Low-Pressure Conversion: High-Pressure to Low-Pressure, Center-pivot or Lateral-move	$18 per drop	↑ $26 per drop
7.6.2	Variable Frequency Drive for Agricultural Centrifugal Pumps (BPA-Qualified)	$70 per horsepower	↑ $95 per horsepower
7.6.3	Variable Frequency Drive for Agricultural Turbine Pumps (BPA-Qualified)	$100 per horsepower	↑ $135 per horsepower
7.6.4	Variable Frequency Drive for Agricultural Centrifugal Pumps (BPA-Qualified)	$70 per horsepower	↑ $95 per horsepower
7.6.4	Variable Frequency Drive for Agricultural Turbine Pumps (BPA-Qualified)	$100 per horsepower	↑ $135 per horsepower
7.6.5	New Agriculture Pump Efficiency Upgrade (BPA-Qualified)	$70 per horsepower	↑ $95 per horsepower

Other Offering: Agricultural Transformer De-Energization

https://www.bpa.gov/energy-and-services/efficiency/document-library

- Transformer De-energization Energy Savings and Incentive Calculator

Agriculture Utility Distribution System Transformer De-Energization Report April 15, 2024

For xxxxxxx Electric Cooperative Winter Season 2023-2024

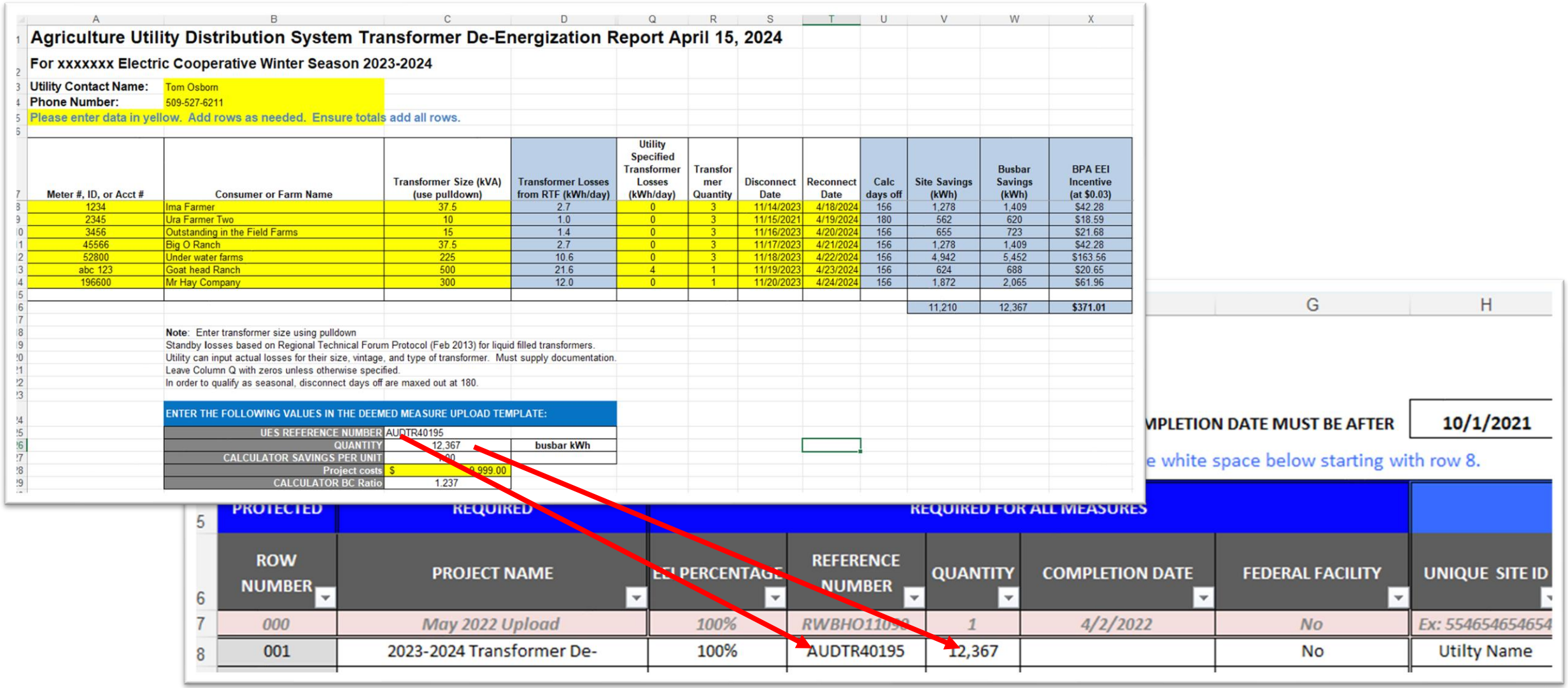
Utility Contact Name: Tom Osborn
Phone Number: 509-527-6211
Please enter data in yellow. Add rows as needed. Ensure totals add all rows.

Meter #, ID, or Acct #	Consumer or Farm Name	Transformer Size (kVA) (use pulldown)	Transformer Losses from RTF (kWh/day)	Utility Specified Transformer Losses (kWh/day)	Transformer Quantity	Disconnect Date	Reconnect Date	Calc days off	Site Savings (kWh)	Busbar Savings (kWh)	BPA EEI Incentive (at $0.03)
1234	Ima Farmer	37.5	2.7	0	3	11/14/2023	4/18/2024	156	1,278	1,409	$42.28
2345	Ura Farmer Two	10	1.0	0	3	11/15/2021	4/19/2024	180	562	620	$18.59
3456	Outstanding in the Field Farms	15	1.4	0	3	11/16/2023	4/20/2024	156	655	723	$21.68
45566	Big O Ranch	37.5	2.7	0	3	11/17/2023	4/21/2024	156	1,278	1,409	$42.28
52800	Under water farms	225	10.6	0	3	11/18/2023	4/22/2024	156	4,942	5,452	$163.56
abc 123	Goat head Ranch	500	21.6	4	1	11/19/2023	4/23/2024	156	624	688	$20.65
196600	Mr Hay Company	300	12.0	0	1	11/20/2023	4/24/2024	156	1,872	2,065	$61.96
									11,210	12,367	**$371.01**

Note: Enter transformer size using pulldown
Standby losses based on Regional Technical Forum Protocol (Feb 2013) for liquid filled transformers.
Utility can input actual losses for their size, vintage, and type of transformer. Must supply documentation.
Leave Column Q with zeros unless otherwise specified.
In order to qualify as seasonal, disconnect days off are maxed out at 180.

ENTER THE FOLLOWING VALUES IN THE DEEMED MEASURE UPLOAD TEMPLATE:		
UES REFERENCE NUMBER	AUDTR40195	
QUANTITY	12,367	busbar kWh
CALCULATOR SAVINGS PER UNIT	1.00	
Project costs	$ 9,999.00	
CALCULATOR BC Ratio	1.237	

Other Offering: Agricultural Transformer De-Energization



Agriculture Utility Distribution System Transformer De-Energization Report April 15, 2024

For xxxxxxx Electric Cooperative Winter Season 2023-2024

Utility Contact Name: Tom Osborn
Phone Number: 509-527-6211
Please enter data in yellow. Add rows as needed. Ensure totals add all rows.

Meter #, ID, or Acct #	Consumer or Farm Name	Transformer Size (kVA) (use pulldown)	Transformer Losses from RTF (kWh/day)	Utility Specified Transformer Losses (kWh/day)	Transformer Quantity	Disconnect Date	Reconnect Date	Calc days off	Site Savings (kWh)	Busbar Savings (kWh)	BPA EEI Incentive (at $0.03)
1234	Ima Farmer	37.5	2.7	0	3	11/14/2023	4/18/2024	156	1,278	1,409	$42.28
2345	Ura Farmer Two	10	1.0	0	3	11/15/2021	4/19/2024	180	562	620	$18.59
3456	Outstanding in the Field Farms	15	1.4	0	3	11/16/2023	4/20/2024	156	655	723	$21.68
45566	Big O Ranch	37.5	2.7	0	3	11/17/2023	4/21/2024	156	1,278	1,409	$42.28
52800	Under water farms	225	10.6	0	3	11/18/2023	4/22/2024	156	4,942	5,452	$163.56
abc 123	Goat head Ranch	500	21.6	4	1	11/19/2023	4/23/2024	156	624	688	$20.65
196600	Mr Hay Company	300	12.0	0	1	11/20/2023	4/24/2024	156	1,872	2,065	$61.96
									11,210	12,367	**$371.01**

Note: Enter transformer size using pulldown
Standby losses based on Regional Technical Forum Protocol (Feb 2013) for liquid filled transformers.
Utility can input actual losses for their size, vintage, and type of transformer. Must supply documentation.
Leave Column Q with zeros unless otherwise specified.
In order to qualify as seasonal, disconnect days off are maxed out at 180.

ENTER THE FOLLOWING VALUES IN THE DEEMED MEASURE UPLOAD TEMPLATE:		
UES REFERENCE NUMBER	AUDTR40195	
QUANTITY	12,367	busbar kWh
CALCULATOR SAVINGS PER UNIT	[illegible]	
Project costs	$ [illegible] 999.00	
CALCULATOR BC Ratio	1.237	

MPLETION DATE MUST BE AFTER 10/1/2021

e white space below starting with row 8.

PROTECTED	REQUIRED		REQUIRED FOR ALL MEASURES				
ROW NUMBER	PROJECT NAME	EEI PERCENTAGE	REFERENCE NUMBER	QUANTITY	COMPLETION DATE	FEDERAL FACILITY	UNIQUE SITE ID
000	*May 2022 Upload*	*100%*	*RWBHO11058*	*1*	*4/2/2022*	*No*	*Ex: 554654654654*
001	2023-2024 Transformer De-	100%	AUDTR40195	12,367		No	Utilty Name

IRRIGATION

WELLS RURAL ELECTRIC COMPANY

WELLS RURAL ELEC. CO.

Your Touchstone Energy® Cooperative

Agriculture Sector
Irrigation

WELLS RURAL ELEC. CO.

Your Touchstone Energy® Cooperative

This Rate Period October 1, 2023 through September 30, 2025

Sector Allocations	Estimated Budget Amount	Estimated Pay for Performance	Percentage of Budget	Notes
Agricultural	$ 73,244.00	$ 19,850.91	5%	VFD only, Pump & VFD Project, 6 Piviot Package Conversions sprinkler package upgrade

Next Rate Period October 1, 2025 through September 30, 2028

Sector Allocations	Estimated Budget Amount	Percentage of Budget	Notes
Agricultural	$ 75,000.00	3%	Karley & I have began generating profiles for each irrigator and Identified several projects

Agriculture Irrigation
(Future)

Account Profile			
	Data		
Name			
Account #			
Transformer #		Transformer Size	75
Transformer #		Transformer Size	75
Transformer #		Transformer Size	75
Meter #			
Service Address			
Confirmed Address	Correct above		
Pole #			
Base Fiscal Year	2022		
Nameplate Horsepower	200		
Has this pump been rewound/updated?	n/a		
If, yes new horse power nameplate?	n/a		

WELLS RURAL ELEC. CO.

Your Touchstone Energy® Cooperative

Agriculture Irrigation (Future)

Account Profile				
		Data		
Name				
Account #				
Transformer #			Transformer Size	25
Transformer #			Transformer Size	25
Transformer #			Transformer Size	25
Meter #				
Service Address		75 HP Irrigation	Confirmed Address	yes
Pole #				
Telephone #				
Email Address				
Base Fiscal Year		2022		
Nameplate Horsepower		75		
Has this pump been rewound/updated?		Yes! It has just to refurbed to try and keep air from getting into the pump, and after further investigation, we found out that the well is actually running out of water.		
If, yes new horse power nameplate?		75		

WELLS RURAL ELEC. CO.

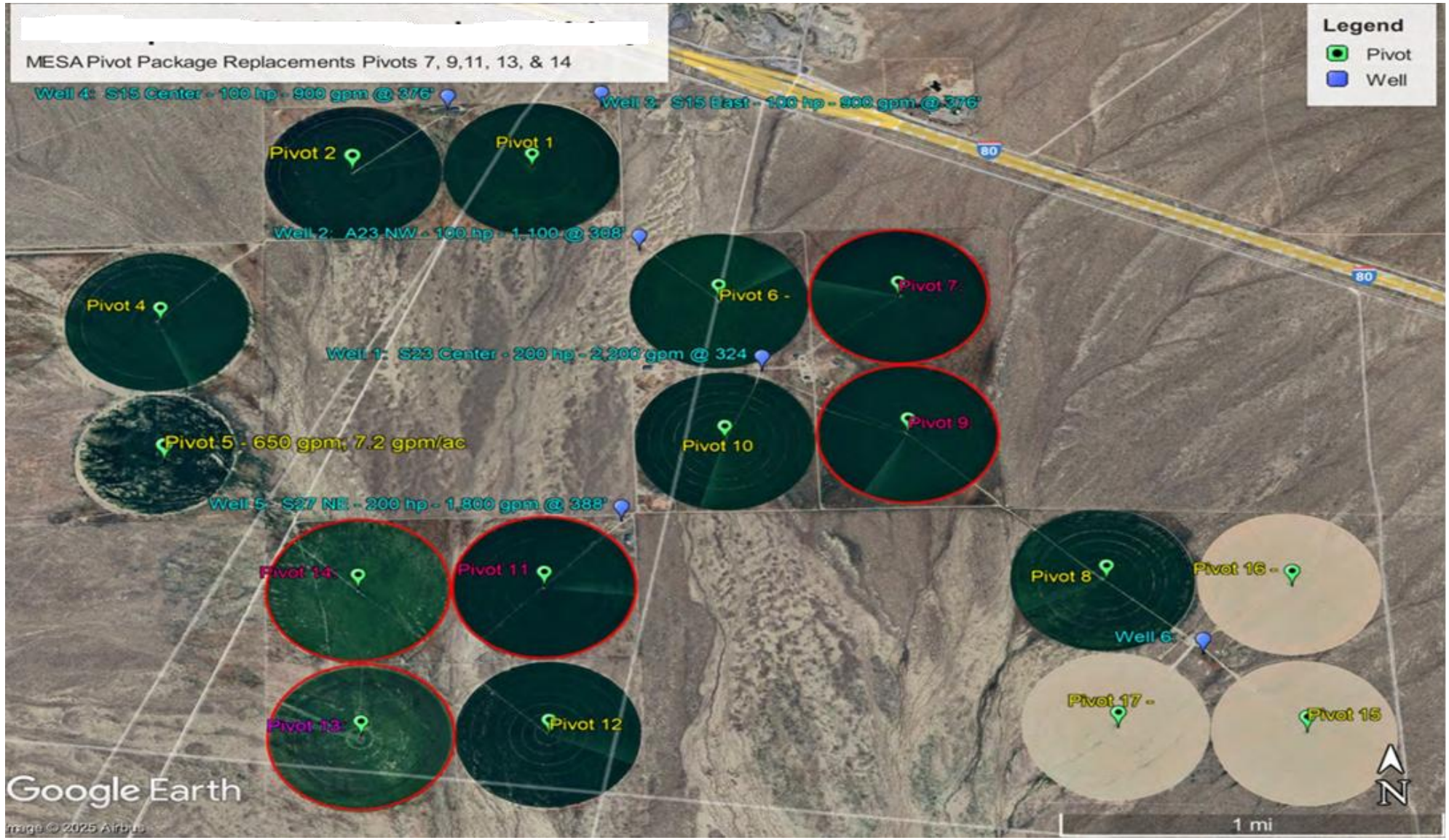
Your Touchstone Energy® Cooperative

Agriculture Irrigation (Future)

# of electric pivots connected to same meter	3 at any time
Are electric pivots a separate service?	no
If yes, meter number.	n/a
If yes transformer #	n/a
Transformer Size	n/a
Do this service have an end gun?	no
If yes, is it running continuously or intermittently?	n/a
Does the end gun require a booster pump?	n/a
Does this service have installed capacitors?	yes
If yes, what size are the capacitiors?	
Does this service have a reduced voltage start?	no
Does this service have a VFD?	no
If VFD installed include harmonic controls as defined by IEEE-519?	n/a

WELLS RURAL ELEC. CO.

Your Touchstone Energy® Cooperative



WELLS RURAL ELEC. CO.

Your Touchstone Energy® Cooperative

Questions, please reach out

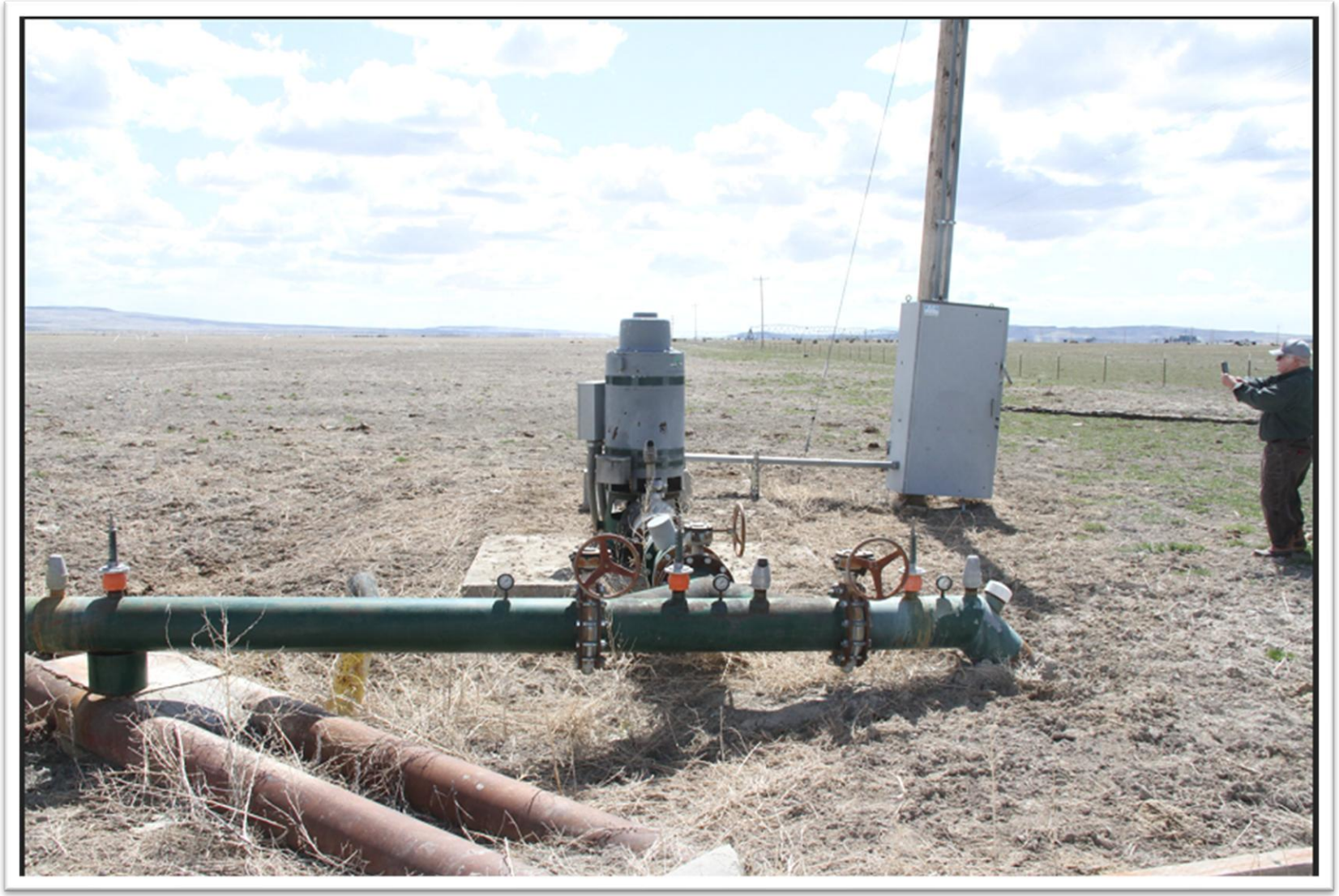
kfitch@wrec.coop | (775) 548-0207

Jcromie@wrec.coop | (775) 275-0324

Rebates for VFDs on Ag Pumps - Overview

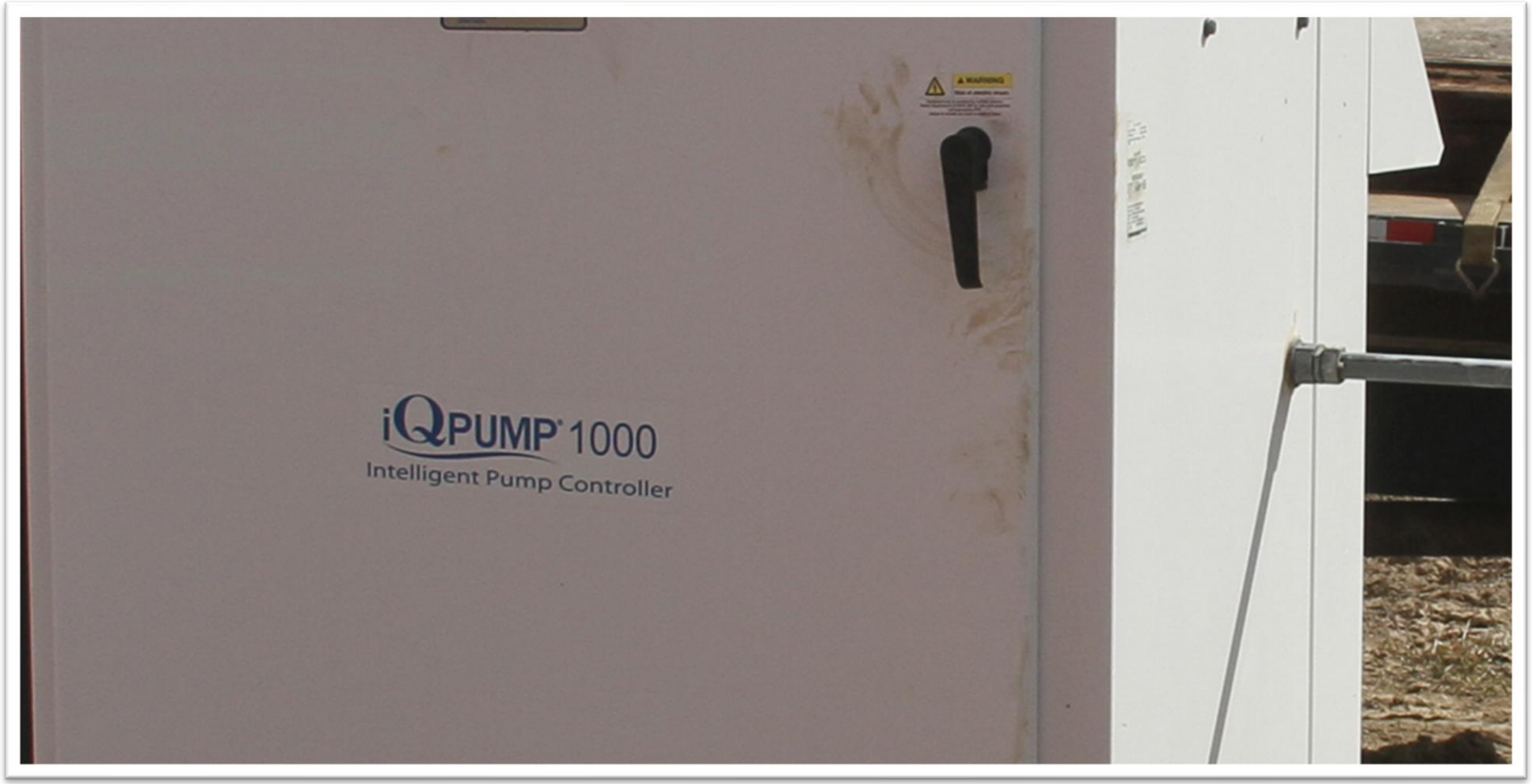
- New Pump – Turbine or Centrifugal.
- Existing Pump –Turbine or Centrifugal.
- Rebated on the **VFD** horsepower (not the pump or motor hp).
- Eligibility also based on the variation of head pressure/flow rate.
- BPA engineers will complete the form for you!

Vertical turbine pump, all we can see is the motor



VFD (white) & Transformer (gray)

VFD Brand and Model



End suction centrifugal pump

Motor Nameplate (hp) – For Pump Rebate

Pump Nameplates

Contain Phone Number & Serial Number
(to call vendor for well info for calculator)

Pump Nameplate
found on the discharge head under the motor

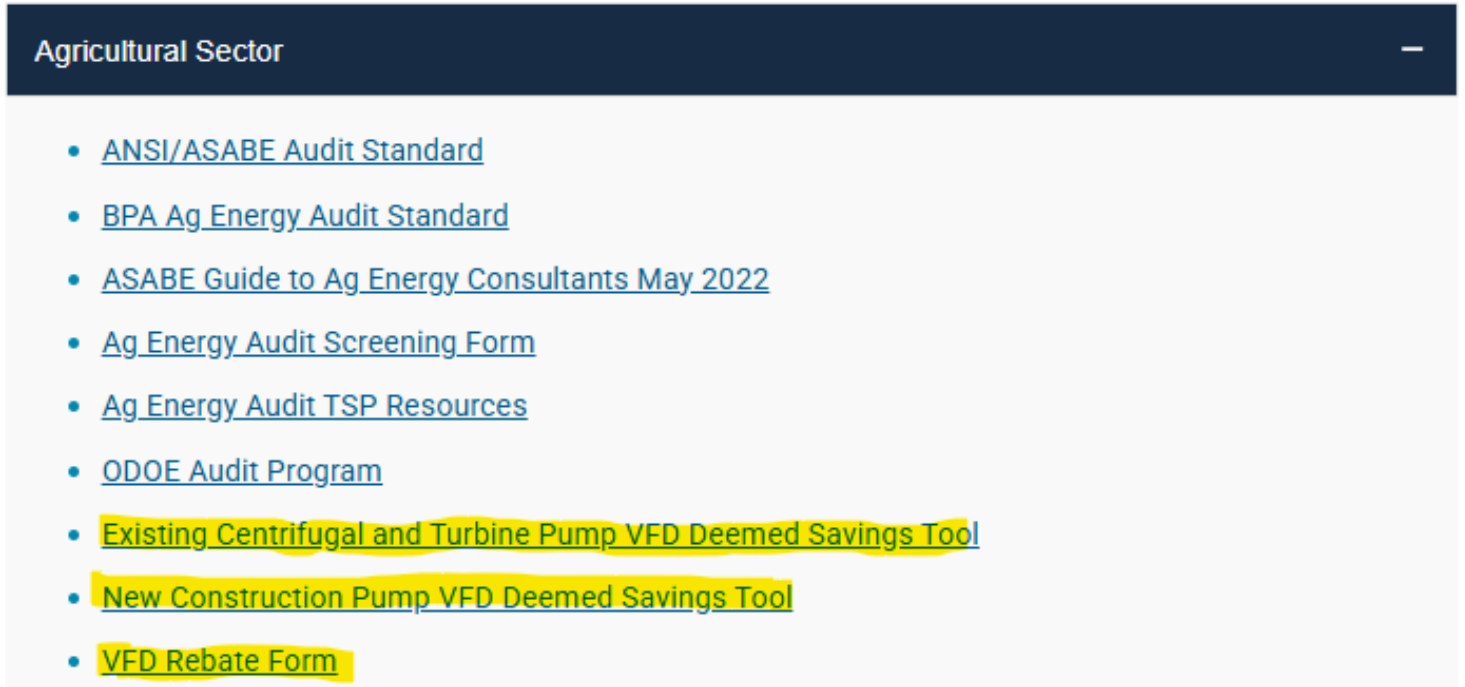
VFD Checklist

- ✓ Calculators (New/Existing Pump).
- ✓ Easy VFD Application Form (for your member).
- ✓ Three Years of Pre-VFD Billing Data (for existing pumps).
- ✓ One Year of Post-VFD Billing Data.
- ✓ Operating Conditions.
- ✓ Pump Curves (if available).

BPA Engineers will work with you and the vendor to complete the calculator!

Document Library

https://www.bpa.gov/energy-and-services/efficiency/document-library



New Construction VFD Calculator

1	**AGRICULTURE NEW CONSTRUCTION - TURBINE AND CENTRIFUGAL PUMP VFD CALCULATOR**				
2				Version Date: 3/1/2025	
3	***Please fill in all of the green highlighted fields. Add any explanatory notes where needed.***				
4	Use this tool to determine eligibility and energy savings related to VFDs installed on new pumping plant installations in Ag applications.				
5					
6	**A. IRRIGATOR INFORMATION**				
7	Estimated Date of VFD Installation:	January 2, 2025			
8	Irrigator Member Name:	Jack N. Beanstalk			
9	Address:	Cornstalk Lane			
10	City,State,ZIP:	Idaho Falls, ID			
11	Serving Electric Utility:	Rural Coop	phone#		
12	Account Number or	123456			
13	Meter Number	54123			
14	Estimated Annual Energy Usage	306,414	kWh per year		
15	Melded Average Cost per kWh:	0.065	$/kWh		
16					
17	**B. MOTOR DATA**				
18	Irrigation Pump Rated HP for VFD:	200	HP		
19	Total Rated HP on meter: (from below)	273	HP		
20					
21	**C. PUMP DATA**				
22	Pump Type (Centrifugal or Turbine):	Turbine	use pull down		
23	Pump Manufacturer:	USA Pumps			
24	Pump Model:	123-abc			
25	Rated Head (or TDH) (nameplate or curve):	550	feet	WHP check = 167	
26	Rated Flow (from nameplate or curve):	1,200	gpm	EHP check = 231	
27	Pump Depth (feet):	400	feet	use zero for centrifugal	
28	Estimated Operational Lift (feet):	360	feet		
29	Maximum Expected Lift (or inlet pressure in feet):	370	feet	(note 2.31 feet per PSI)	
30	Lowest Expected Lift:	350	feet		
31	Discharge pressure Maximum Lift (psi):	90	psi gauge at pump		
32	Discharge pressure Minimum lift (psi):	105	psi gauge at pump		
33	Expected lowest discharge pressure with VFD (psi):	85	psi gauge at pump		
34	Highest Expected Flow (gpm):	1,200	gpm	two pivots	
35	Lowest Expected Flow (gpm):	900	gpm	one pivot	
36	Highest Total Dynamic Head calcuted (ft):	583	feet		
37	Lowest Total Dynamic Head calculated (ft):	551	feet		
38	Variation in Flow requirements during season (calc):	25%	Variation in flow must be at least 20% percent for Turbines, or		
39	Variation in Head during season (calc):	6%	variation in head requirements of at least 10% percent for turbines and 20% for Centrifugal		

New Construction VFD Calculator

41	**D. METER USAGE ESTIMATES**						
42							
43	Equipment Description	Rated Load	Units (kW or HP)	Equipment load as percentage of metered load	Motor Load Factor	Estimated hours of Operation (for pivots assume 33% run time)	Estimated Annual Energy Consumption (kWh)
44	Main Pump (where VFD to be installed)	200	HP	73.3%	0.9	1,800	241,704
45	Centrifugal Booster Pump (if any)	50	HP	18.3%	0.8	1,800	53,712
46	Pivot 1 (6 towers at 1 HP each)	6	HP	2.2%	1	594	2,659
47	Pivot 2 (10 towers at 1.5 HP each)	15	HP	5.5%	1	594	6,647
48	End gun booster pump (pivot 2)	2	HP	0.7%	0.9	1,260	1,692
49				0.0%			0
50				0.0%			0
51				0.0%			0
52	**TOTALS =**	**273**				Estimated Usage Total =	**306,414**
53							
54							
55	**E. CROP AND IRRIGATION SYSTEM TYPE DATA**						
56							
57		**Year**	**Metered kWh**	**Crops grown**	**Acres**	**Irrigation System type**	
58							
59	1 year post installation of VFD	2025	?	wheat, alfalfa	120,120	pivot with drops	
60							

New Construction VFD Calculator

63	**F. DEEMED ENERGY SAVINGS AND INCENTIVE**			
64	Deemed Site Savings per unit (kWh/HP)		**440**	**kWh/HP**
65	New Construction Pump VFD Incentive Rate ($/HP)		**$100**	
66	**Site** Annual Energy Savings (kWh/HP*HP)		**88,000**	**kWh/year**
67	**Busbar** Annual Energy Savings (site savings * 1.11183))		**97,841**	**kWh/year**
68	New Construction Pump VFD Incentive		**$20,000**	
69				
70	Incremental Cost of VFD =		**$50,000**	
71	Simple Payback with incentive =		**5.2**	**years**
72				
73	If any questions, please call			
74				
75	**ENTER THE FOLLOWING VALUES IN THE DEEMED MEASURE UPLOAD:**			
76	**UES REFERENCE NUMBER =**	AMDMC40240	**Ref No**	
77	**QUANTITY =**	200	**HP is Unit**	
78	**CALCULATOR SAVINGS PER UNIT =**	440.00	**kWh/HP**	
79	**CALCULATOR BC Ratio =**	1.96		

DEEMED

Existing VFD Calculator

1	**AGRICULTURE RETROFIT - TURBINE AND CENTRIFUGAL PUMP VFD CALCULATOR TOOL**				
2			Version Date: 3/1/2025		
3	***Please fill in all of the green highlighted fields. Add explanatory notes where needed***				
4	Use this tool to determine eligibility and calculate the BPA deemed energy savings related to VFDs installed on EXISTING pumping plant installations in Ag applications.				
5					
6	**A. IRRIGATOR INFORMATION**				
7	Estimated Date of VFD Installation:	January 2, 2025			
8	Irrigator Member Name:	Jane the Farmer			
9	Address:	Alfalfa Road	Contact #		
10	City,State,ZIP:	Idaho Falls, ID			
11	Serving Electric Utility:	Rural Coop			
12	Account Number or	123456			
13	Meter Number	54123			
14	Average Annual Energy Usage	686,367	kWh per year		
15	Melded Average Cost per kWh:	0.065	$/kWh		
16					
17	**B. PUMP MOTOR DATA**				
18	Irrigation Pump Rated HP for VFD:	400	HP (eligible from 7.5-1,000 HP)		
19	Total Rated HP on meter (value from below):	473	HP		
20					
21	**C. PUMP DATA**				
22	Pump Type (select Centrifugal or Turbine):	Turbine	Use pull down		
23	Pump Manufacturer:	Good ID Pumps			
24	Pump Model:	123-abc			
25	Rated Head (or TDH) (nameplate or curve):	550	feet	WHP check =	306
26	Rated Flow (from nameplate or curve):	2,200	gpm	EHP check =	424
27	Pump Depth (feet):	400	feet	use zero for centrifugal	
28	Estimated Average Lift (feet):	360	feet		
29	Maximum Estimated Lift (or inlet pressure in feet):	360	feet		
30	Lowest Estimated Lift:	300	feet		
31	Discharge pressure Maximum Lift (psi):	90	psi gauge at pump		
32	Discharge pressure Minimum lift (psi):	105	psi gauge at pump		
33	Expected lowest discharge pressure with VFD (psi):	85	psi gauge at pump		
34	Highest Flow expected (gpm):	1,900	gpm		
35	Lowest Flow expected (gpm):	1,000	gpm		
36	Highest Total Dynamic Head (ft) (calc):	568	feet		
37	Lowest Total Dynamic Head (ft) (calc):	496	feet		
38	Variation in Flow requirements during season calc:	41%	Variation in flow must be at least 20% percent for Turbines, or		
39	Variation in Head during season calc:	13%	Variation in head requirements of at least 10% percent for turbines, and 20% for Centrifugal		
40	Does system pressure get too high (Y/N)	yes			
41	If yes, how is it controlled (PRV, throttling, dumping)	PRV			

Existing VFD Calculator

43	**D. METERED LOAD USAGE ESTIMATES**						
44	Equipment Description on same meter	Rated Load	Units (kW or HP)	Equipment load as percentage of metered load	Motor Load Factor	Estimated hours of Operation (for pivots assume 33% run time)	Estimated Annual Energy Consumption (kWh)
45	Main Pump (where VFD to be installed)	400	HP	84.6%	0.9	2,250	604,260
46	Centrifugal Booster Pump (if any)	50	HP	10.6%	0.8	2,250	67,140
47	Pivot 1 (6 towers at 1 HP each)	6	HP	1.3%	1	743	3,323
48	Pivot 2 (10 towers at 1.5 HP each)	15	HP	3.2%	1	743	8,309
49	End gun booster pump (pivot 2)	2	HP	0.4%	0.9	1,200	1,611
50				0.0%			0
51				0.0%			0
52				0.0%			0
53	TOTALS =	473				Estimated Total =	**684,643**
54						kWh actual =	686,367
55	Adjust hours of operation in Column F (45-52) to obtain an overall deviation of less than 5%				Deviation ((kWh actual - calc)/ kwh actual)=		0.3%
56							
57	**E. CROP AND IRRIGATION SYSTEM TYPE DATA** (incentive can be submitted at any time, post installation data is for evaluation at a later date)						
58		**Year**	**Metered kWh**	**Crops grown**	**Acres**	**Irrigation System type**	
59	3 years prior to VFD installation	2022	723,000	alfalfa, wheat	240, 360	5 pivot with drops	
60							
61	2 years prior to VFD installation	2023	641,100	wheat, alfalfa	360, 240	5 pivot with drops	
62							
63	1 year prior to VFD installation	2024	695,000	wheat, alfalfa, hay	120, 240, 360	5 pivot with drops	
64							
65	1 year post installation of VFD	2025	?	potatoes, wheat, alfalfa	120, 240, 240	5 pivot with drops	
66							

Existing VFD Calculator

68	**F. PREVIOUS ENERGY SAVINGS MEASURES**				
69	Name of Measure	**Install Date**	**Energy Savings claimed (kWh/yr)**	**First year of impact on billing history**	**Adjustment to Energy consumption Required?**
70	Pivot sprinkler package	Oct-22	600	2023	no, in baseline
71	Custom Project for mainline improvement	Dec-23	25000	2024	yes, post
72					
73					
74					
75					
76	**G. DEEMED ENERGY SAVINGS AND INCENTIVE**				
77	**Site** Annual Energy Savings (based on calculated pump usage)		**120,852**	**kWh/year**	(site savings)
78	**Busbar** Annual Energy Savings (site savings * 1.11183))		**134,367**	**kWh/year**	(busbar savings)
79	Pump VFD Incentive Rate ($/HP) (reimb per unit)		**$100**		
80	Total Pump VFD Incentive ($)		**$40,000**		
81	Calculated Site Savings per HP =		**302.13**	**kWh/HP**	
82	Project Cost of VFD & harmonic mitigation =		**$75,000**		
83	Simple Payback with incentive =		**4.5**	**years**	
84					
85	If any questions, please call				
86					
87	**ENTER THE FOLLOWING VALUES IN THE DEEMED MEASURE UPLOAD:**				
88	**UES REFERENCE NUMBER =**	AMDMC40238	**REFNO**		
89	**QUANTITY =**	400	**HP is Unit**		
90	**CALCULATOR SAVINGS PER UNIT =**	302.13	**kWh/HP**		
91	**B/C Ratio =**	1.79			
92					

Existing VFD Calculator

AGRICULTURE PUMP VFD DEEMED SAVINGS TOOL
Bonneville Power Administration
Version Date: 4/1/2023

The rebate can be submitted anytime after installation. This post installation usage data should be collected on this page for BPAs future use.

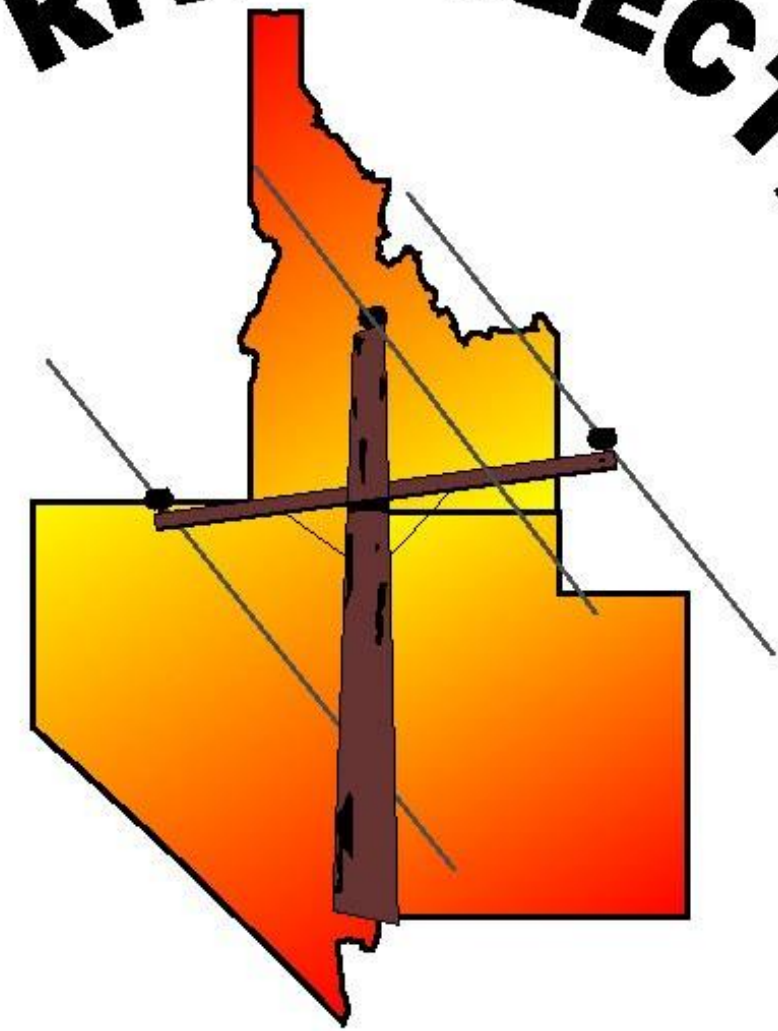
A. IRRIGATOR INFORMATION

Date of VFD Installation:	January 2, 2025
Grower Contact Name:	Jane the Farmer
Address:	Alfalfa Road
City,State,ZIP:	Idaho Falls, ID
Serving Electric Utility:	Rural Coop
Account Number	123456

Average Annual KWH usage (Use the last 3 years, unless the usage is atypical in one or two years, then use the best representative usage)
Add up monthly metered usage if multiple pump stations are impacted by the VFD operation

	kWh 2022	kWh 2023	kWh 2024	3 Year Average
Jan	0	0	0	0
Feb	0	0	0	0
Mar	0	0	0	0
Apr	55,000	100	0	18,367
May	100,000	90,000	100,000	96,667
Jun	140,000	166,000	120,000	142,000
Jul	175,000	190,000	200,000	188,333
Aug	150,000	150,000	150,000	150,000
Sep	75,000	33,000	95,000	67,667
Oct	28,000	12,000	30,000	23,333
Nov	0	0	0	0
Dec	0	0	0	0
	723,000	641,100	695,000	686,367

RAFT RIVER ELECTRIC



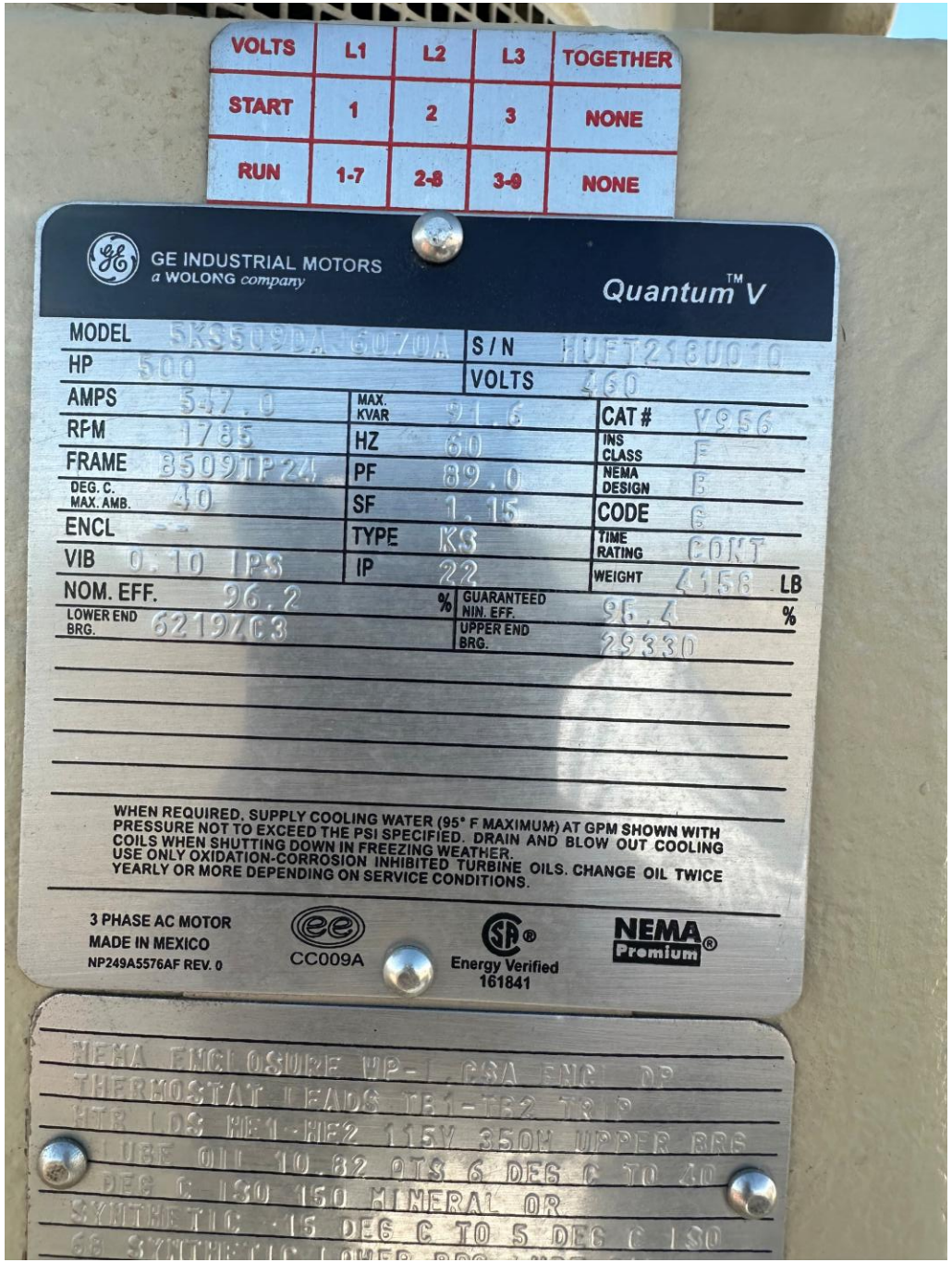
Background

- AVERAGE ANYWHERE FROM 15 TO 20 VFD'S PER RATE PERIOD
- MARKETING IS MAINLY BY WORD OF MOUTH
- RAFT RIVER ELECTRIC PAYS 90% OF THE INCENTIVE TO THE CONSUMER, HOWEVER, OUR BOARD WILL POSSIBLEY CHANGE THAT PERCENTAGE DUE TO THE LARGER INCENTIVE AMOUNTS STARTING IN OCTOBER.

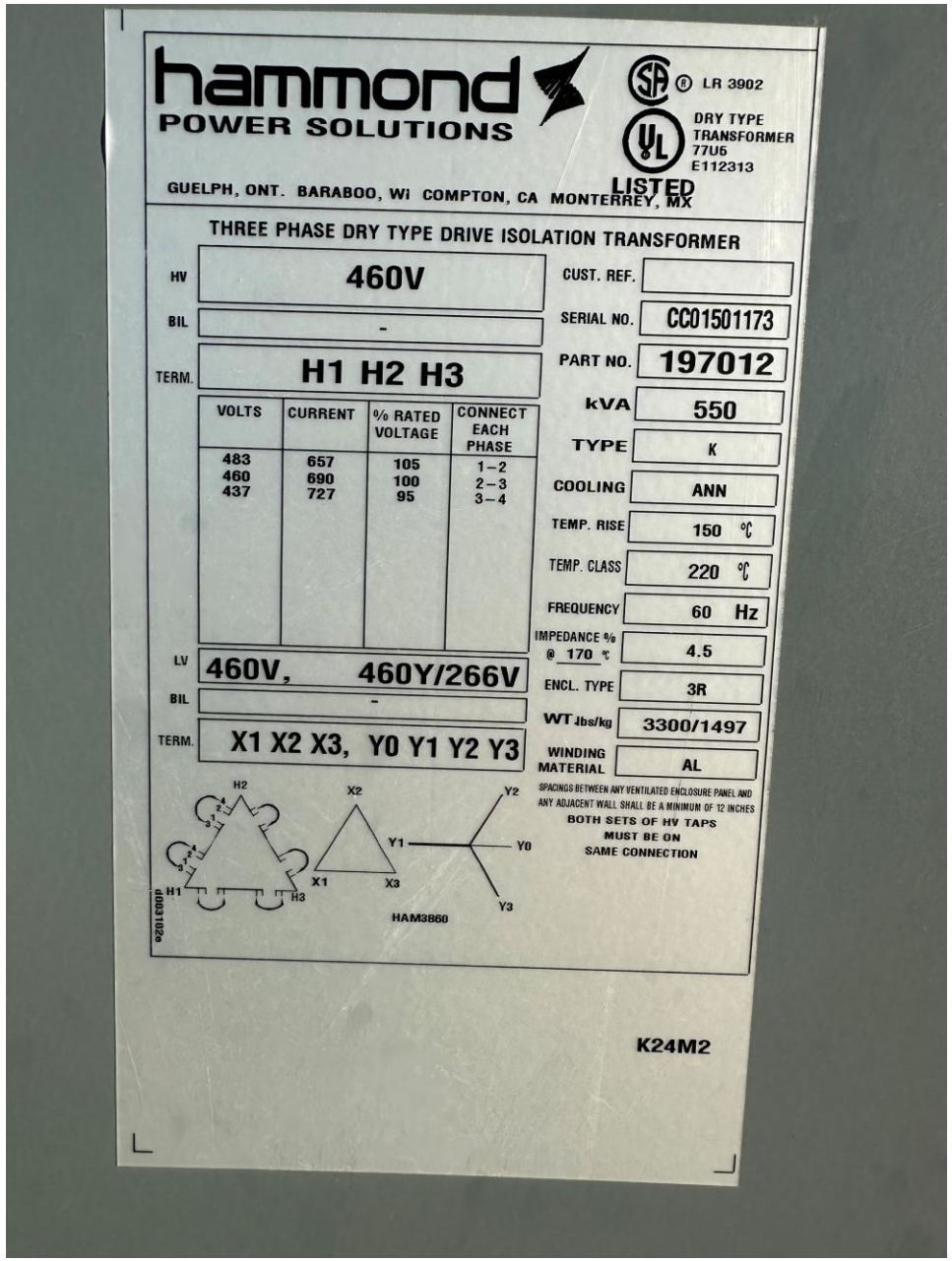
RAFT RIVER ELECTRIC

RAFT RIVER ELECTRIC

RAFT RIVER ELECTRIC



RAFT RIVER ELECTRIC



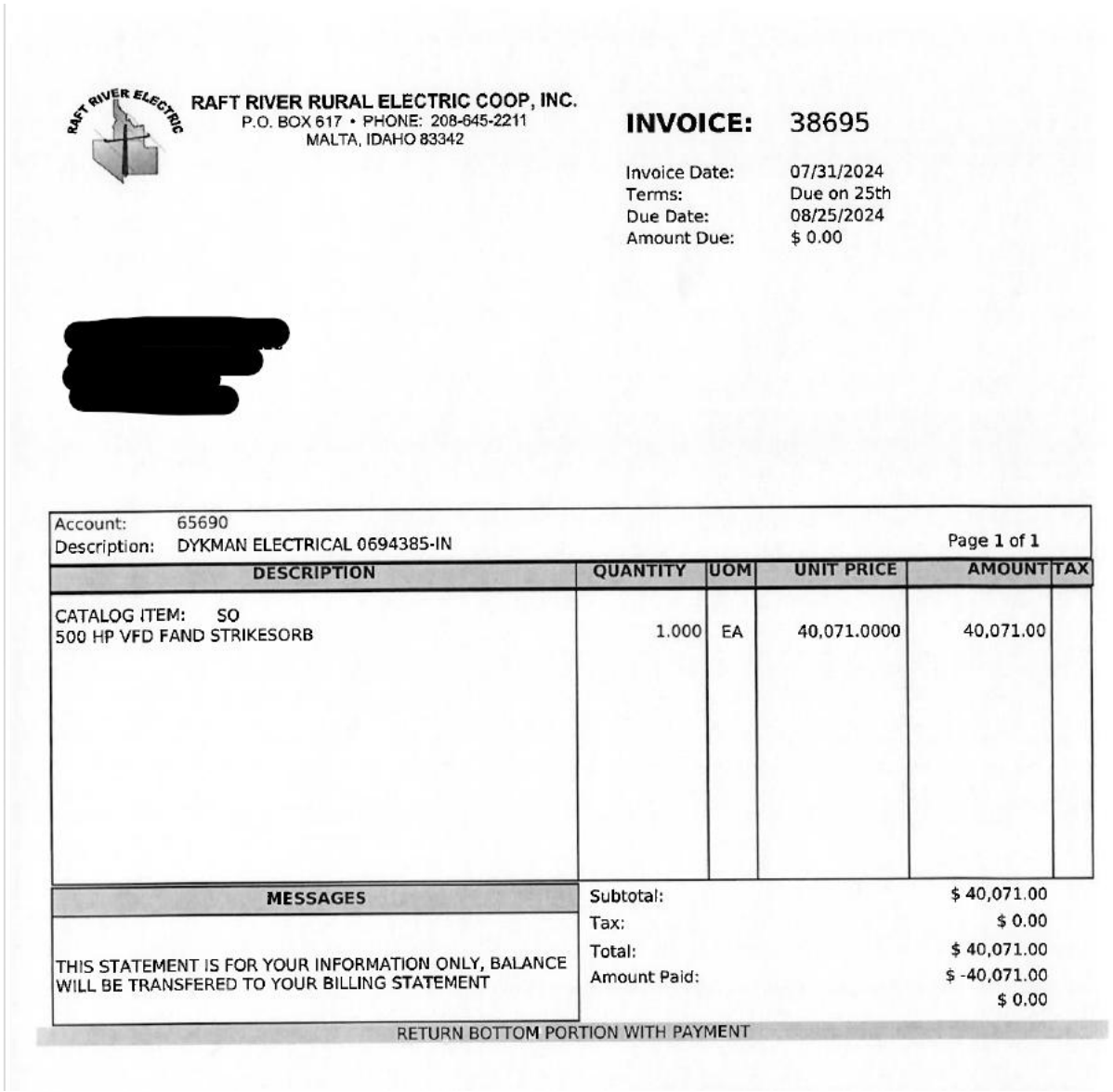
RAFT RIVER ELECTRIC

Checklist: Three Years of Usage

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	[redacted]																
2	SVC 9019																
3	Billing Period	Account	Reading KW	Meter #	Usage	Use Revenue	Demand Rdg	Demand Revenue	Reporting Revenue	Pres Rdg Dt	Days Use	Pres Rdg	Reading Usage	Billing Dmd Mult	Billed KW	KW History	Service Use Type
4	Aug-25	[redacted]	427.76	[redacted]	293,040	12,089.64	5.347	3,208.20	15,297.84	9/1/2025	31	16532	293040	80	427.76	427.76	8 - 401 to 500 HP
5	Jul-25		429.04		267,200	11,030.20	5.363	3,217.80	14,248.00	8/1/2025	31	12869	267200	80	429.04	429.04	8 - 401 to 500 HP
6	Jun-25		429.36		257,520	10,633.32	5.367	3,220.20	13,853.52	7/1/2025	30	9529	257520	80	429.36	429.36	8 - 401 to 500 HP
7	May-25		5.34		171,760	7,117.16	5.336	40.05	7,157.21	6/1/2025	31	6310	171760	1	5.34	5.34	8 - 401 to 500 HP
8	Apr-25		0.57		25,280	1,111.48	0.573	4.28	1,115.76	5/1/2025	30	4163	25280	1	0.57	0.57	8 - 401 to 500 HP
9	Mar-25		0.56		25,520	991.48	0.559	3.64	995.12	4/1/2025	31	3847	25520	1	0.56	0.56	8 - 401 to 500 HP
10	Feb-25		0.55		20,400	804.6	0.554	3.58	808.18	3/1/2025	28	3528	20400	1	0.55	0.55	8 - 401 to 500 HP
11	Jan-25		0.2		7,120	319.88	0.203	1.3	321.18	2/1/2025	31	3273	7120	1	0.2	0.2	8 - 401 to 500 HP
12	Dec-24		0.61		27,280	1,055.72	0.607	3.97	1,059.69	1/1/2025	31	3184	27280	1	0.61	0.61	8 - 401 to 500 HP
13	Nov-24		0.61		23,280	909.72	0.611	3.97	913.69	12/1/2024	30	2843	23280	1	0.61	0.61	8 - 401 to 500 HP
14	Oct-24		0.62		30,320	1,166.68	0.62	4.03	1,170.71	11/1/2024	31	2552	30320	1	0.62	0.62	8 - 401 to 500 HP
15	Sep-24		5.29		64,400	2,406.60	5.293	34.39	2,440.99	10/1/2024	28	2173	64400	1	5.29	5.29	8 - 401 to 500 HP
16	Sep-24		5.18		19,520	716.48	5.177	33.67	750.15	9/3/2024	2	1368	19520	1	5.18	5.18	4 - 151 to 200 HP
17	Aug-24		0		89,920	3,713.60	0	250.11	3,963.71	9/1/2024	18	1124	89920	1	0	0	4 - 151 to 200 HP
18	Aug-24		47.64		12,360	0	1.191	0	0	8/14/2024	13	311	12360	40	47.64	47.64	4 - 151 to 200 HP
19	Jul-24		48.2		80	865.28	1.205	253.05	1,118.33	8/1/2024	1	2	80	40	48.2	48.2	4 - 151 to 200 HP
20	Jul-24		0		26,960	0	0	0	0	7/31/2024	30	61003	26960	40	0	0	4 - 151 to 200 HP
21	Jun-24		48.32		26,520	848.64	1.208	253.68	1,102.32	7/1/2024	30	60329	26520	40	48.32	48.32	4 - 151 to 200 HP
22	May-24		48.44		28,080	898.56	1.211	254.31	1,152.87	6/1/2024	31	59666	28080	40	48.44	48.44	4 - 151 to 200 HP
23	Apr-24		48.44		27,560	3,536.92	1.211	254.31	3,791.23	5/1/2024	30	58964	27560	40	48.44	48.44	4 - 151 to 200 HP
24	Mar-24		44.76		13,120	478.88	1.119	290.94	769.82	4/1/2024	31	58275	13120	40	44.76	44.76	4 - 151 to 200 HP
25	Feb-24		47		25,600	934.4	1.175	305.5	1,239.90	3/1/2024	29	57947	25600	40	47	47	4 - 151 to 200 HP
26	Jan-24		47.32		30,000	1,095.00	1.183	307.58	1,402.58	2/1/2024	31	57307	30000	40	47.32	47.32	4 - 151 to 200 HP
27	Dec-23		47.96		25,560	932.94	1.199	311.74	1,244.68	1/1/2024	28	56557	25560	40	47.96	47.96	4 - 151 to 200 HP
28	Nov-23		48.88		18,200	664.3	1.222	317.72	982.02	12/4/2023	33	55918	18200	40	48.88	48.88	4 - 151 to 200 HP
29	Oct-23		49.84		30,400	972.8	1.246	261.66	1,234.46	11/1/2023	31	55463	30400	40	49.84	49.84	4 - 151 to 200 HP
30	Sep-23		176.36		90,280	2,888.96	4.409	925.89	3,814.85	10/1/2023	30	54703	90280	40	176.36	176.36	4 - 151 to 200 HP
31	Aug-23		176		122,320	3,914.24	4.4	924	4,838.24	9/1/2023	31	52446	122320	40	176	176	4 - 151 to 200 HP
32	Jul-23		177.2		119,040	3,809.28	4.43	930.3	4,739.58	8/1/2023	31	49388	119040	40	177.2	177.2	4 - 151 to 200 HP
33	Jun-23		177.6		43,520	1,392.64	4.44	932.4	2,325.04	7/1/2023	30	46412	43520	40	177.6	177.6	4 - 151 to 200 HP
34	May-23		46.4		20,640	660.48	1.16	243.6	904.08	6/1/2023	31	45324	20640	40	46.4	46.4	4 - 151 to 200 HP

RAFT RIVER ELECTRIC

Checklist: Copy of Invoice



RAFT RIVER RURAL ELECTRIC COOP, INC.
P.O. BOX 617 • PHONE: 208-645-2211
MALTA, IDAHO 83342

INVOICE: 38695

Invoice Date: 07/31/2024
Terms: Due on 25th
Due Date: 08/25/2024
Amount Due: $ 0.00

[redacted]

Account: 65690
Description: DYKMAN ELECTRICAL 0694385-IN

Page 1 of 1

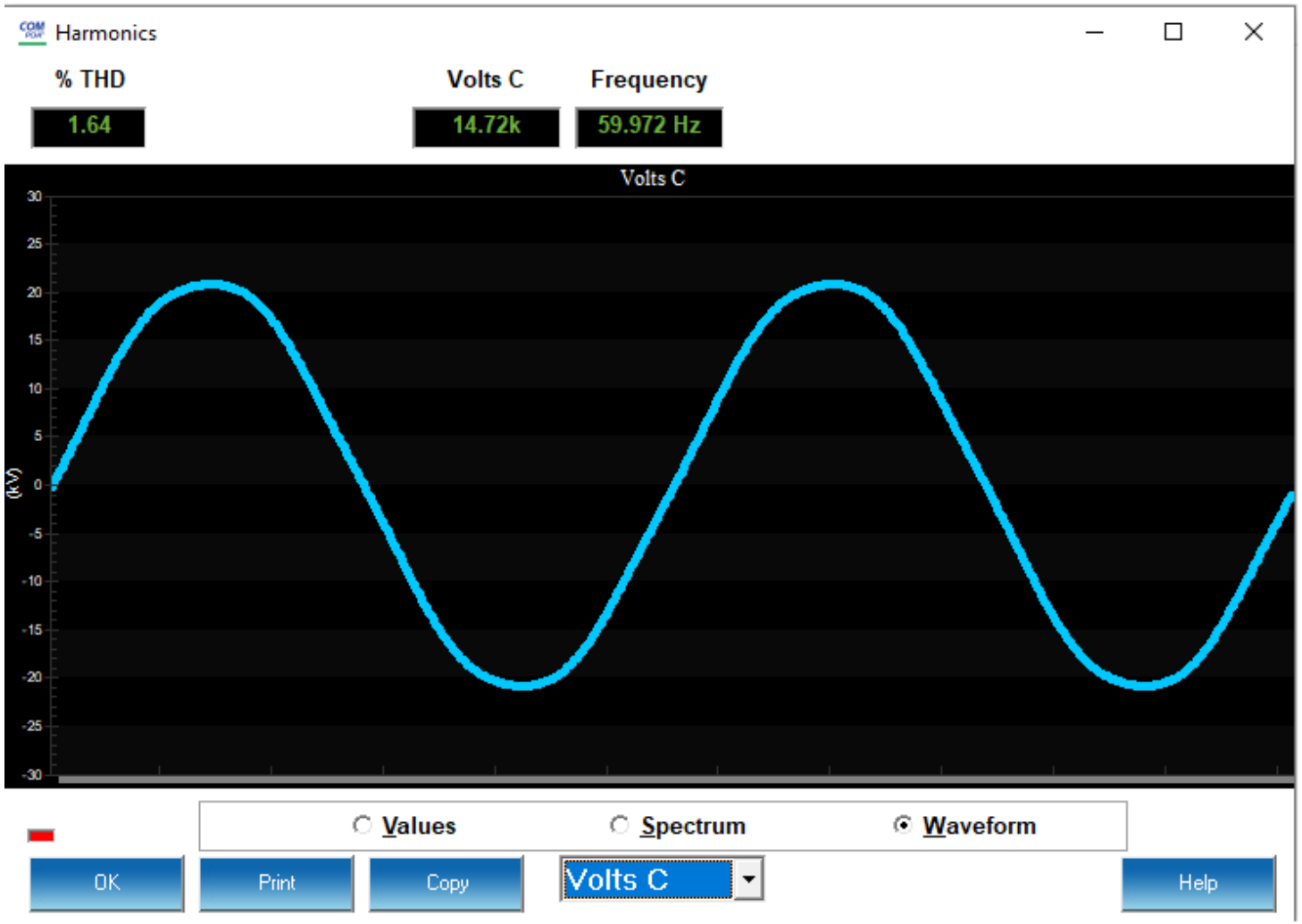
DESCRIPTION	QUANTITY	UOM	UNIT PRICE	AMOUNT	TAX
CATALOG ITEM: SO 500 HP VFD FAND STRIKESORB	1.000	EA	40,071.0000	40,071.00	

MESSAGES		
THIS STATEMENT IS FOR YOUR INFORMATION ONLY, BALANCE WILL BE TRANSFERED TO YOUR BILLING STATEMENT	Subtotal:	$ 40,071.00
	Tax:	$ 0.00
	Total:	$ 40,071.00
	Amount Paid:	$ -40,071.00
		$ 0.00

RETURN BOTTOM PORTION WITH PAYMENT

Harmonics

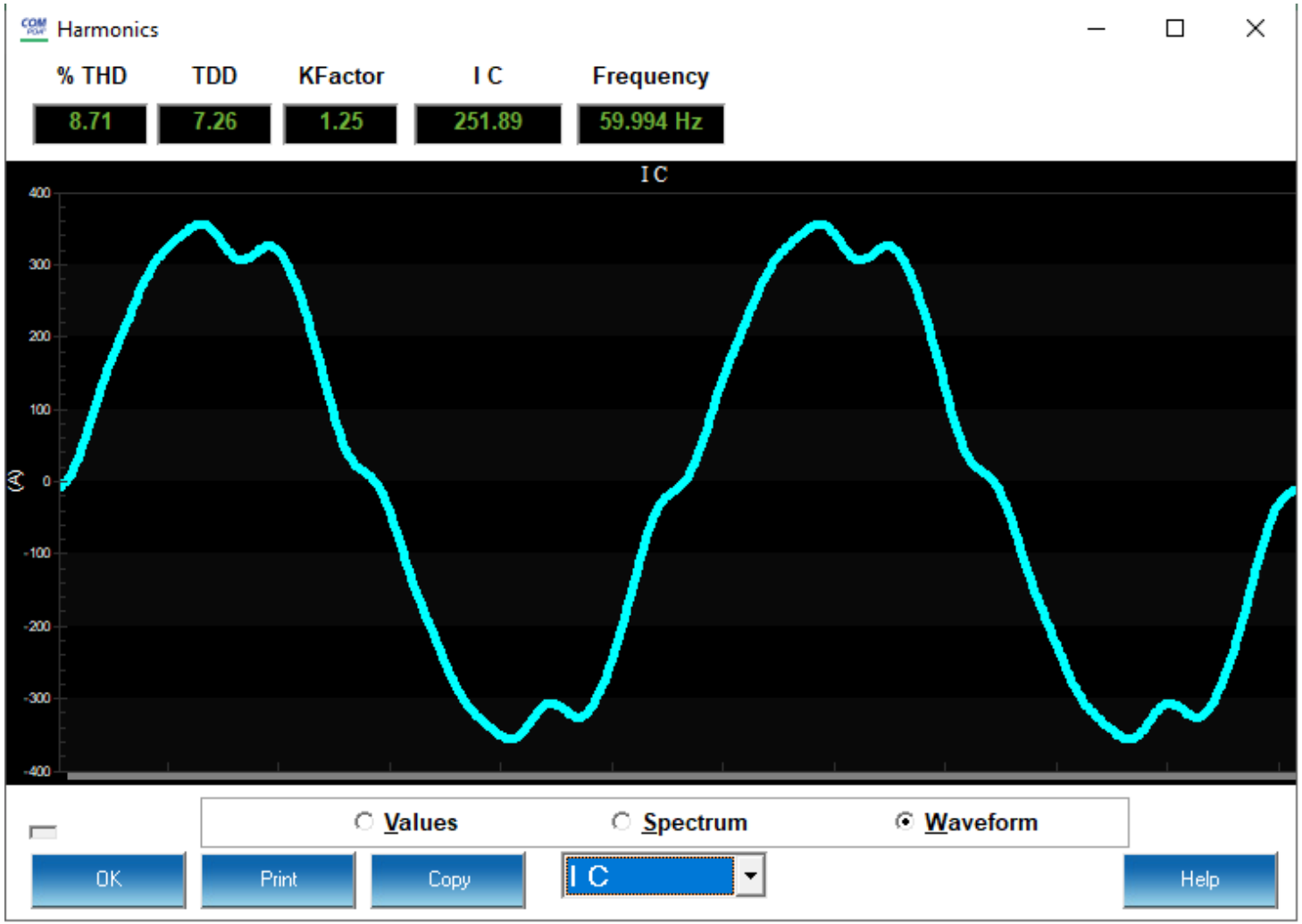
- THIS IS WHAT A GOOD HARMONICS REPORT IS WITH LESS THAN 2% THD



RAFT RIVER ELECTRIC

Harmonics

- THIS IS WITH MANY VFD'S RUNNING WITH INAPPROPIATE FILTERS ON THEM
  - THE THD% SHOULD BE LESS THAN 2%
  - THD IS OVER 8%



Harmonics - Why

- TEMPS ABOVE THE RED LINE ARE TAKING THE LIFE OUR OF YOUR TRANSFORMER DUE TO OVERHEATING.

Questions or Comments?

For additional support always contact your EER first!

Questions?

Efficiency Exchange Conference Raffle

Closing Remarks
Thank you, Surveys & Safe Travels!

Adjourn!