

NOTES

Energy Smart Industrial

Utility Focus Group Meeting

July 12, 2022

Facilitator:

Kyle Barton

Energy Smart Industrial Program Mgr
Energy Efficiency
Bonneville Power Administration

Attendees



Name:

Aaron Houseknecht
Alan Fraser
Ashley Stahl
Bill Hough
Brandy Neff
David Harris
Don Newton
Jacob Henry
Jason Bird
Jen Langdon
Kelsey Lewis
Lori Froehlich
Matt Walker
Mike Arend
Rusty Heaslet
Ryan Westman
Salem Schankel
Terry Mapes
Travis Hardy
Zeecha Van Hoose

Company Name:

Seattle City Light
Tacoma Power
City of Centralia
EWEB
PNGC Power
Springfield UB
Flathead Electric
Lewis PUD
City of Idaho Falls
Cowlitz PUD
Snohomish PUD
Clark Public Utilities
Tacoma Power
Columbia River PUD
Benton REA
City of Milton-Freewater
Mason PUD 3
Benton PUD
Northern Wasco PUD
Clark Public Utilities

Name:

Brice Lang
Doug Heredos
Jacob Schroeder
Jennifer Wood
Kyle Barton
Shelley Layton
Todd Amundson
Tony Simon

Company Name:

BPA, Contract Officer's Technical Rep
Cascade, Custom Project Process Mgr
Cascade, Energy Management Manager
BPA, Contracted Program Specialist
BPA, ESI Program Manager
Cascade, Program Specialist
BPA, Industrial Technical Lead & Engineer
Cascade, ESIP/ESIP Lead

Kyle Barton: Welcomed everyone and reviewed the meeting agenda.

Agenda

Welcome and Overview <ul style="list-style-type: none">• Safety Update• ESI Team Updates	Kyle Barton Tony Simon	11:00 – 11:10
ESI Program Updates <ul style="list-style-type: none">• Custom Project Pipeline• Remote SEM Cohort• Energy Project Manager	Tony Simon, Travis Hardy Jacob Schroeder, Don Newton Todd Amundson	11:10-11:30
UFG Open Forum	All	11:30-11:50
Wrap-up and Reminders	Kyle Barton	Remaining time

3

This month's **Safety Moment** is brought to you by Tony Simon, ESIP/ESIP Lead.

Tony Simon: It is important to have a good electrical safety program; although not everyone does electrical work, this month we wanted to talk about electrical safety and how they can help any safety program.

Safety Moment – Electrical Safety



4

Arc flashes and arc blasts are hazardous events that can happen because of a fault or other problem in an electrical panel or cabinet.

T. Simon: Here are some key items the ESI program has in our electrical safety program to help our team be safe and effective while working in the field.

Safety Moment – Electrical Safety Program



Electrical Safety Program Components:

- Training and knowing who is qualified for what task.
- Job Planning Forms and Job Briefs
- Personal Protective Equipment (PPE)
- Positive encouragement to report near misses.
- Have electricians perform work if available and qualified.
- Stop Work Policy

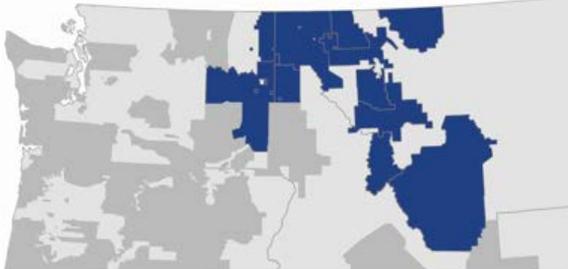
5

The Stop Work Policy allows anyone to say something if something doesn't feel right. The policy allows employees to stop work and discuss the situation to find a better, safer approach to the task at hand.

Now on to **ESI Team Updates**...ESI would like to announce the upcoming retirement of Troy Savage in late August 2022. He's supported the utilities (shown in blue) since March 2018. Besides program implementation and technical support, it is all about the people. With a vast service area, he's done a fantastic job serving his customers and their end users. Troy exemplifies excellence and we will miss him.

ESI Team Updates

Troy Savage's Retirement



Troy Savage



- 16 Utilities
- 341 Site Visits
- 79 Different End-User Customers
- 26 Projects
- 6.9 million kWh/year
- Largest project: 1.4 million kWh/year

6

T. Simon: We would also like to welcome our newest ESIP, Henry Griffith. Henry supports Cowlitz, Clatskanie and Tillamook PUD- this territory includes several mega-sites: including three (3) pulp and paper mills, a large chemical plant, several lumber mills, and Tillamook Creamery. He is known as the "ammonia whisperer."



ESI Team...cont'd

Welcome Henry Griffith, Newest ESIP





Energy Efficiency Experience (12+ years):

- Strategic Energy Management (SEM) Tune-Up Tech
- BPA ESI – Technical Service Provider (TSP)
 - Tech Lead/Energy Coach Refrigeration Operator Coaching (ROC) SEM Cohort
- Energy Trust of Oregon (ETO)
 - Streamlined Industrial (SI) Analyst
 - Production Efficiency Program – Senior Account Manager

Strong Technical Foundation:

- Ammonia Technician for a couple of major design firms
- Military Veteran – U.S. Navy

7

He has served regional and national clients in a variety of technical and account management roles.

There are also a couple of ESIP transitions happening. Jimmy Sauter has relocated to North Idaho and will be taking over Troy's territory.

- Hand-off meetings will occur throughout July.

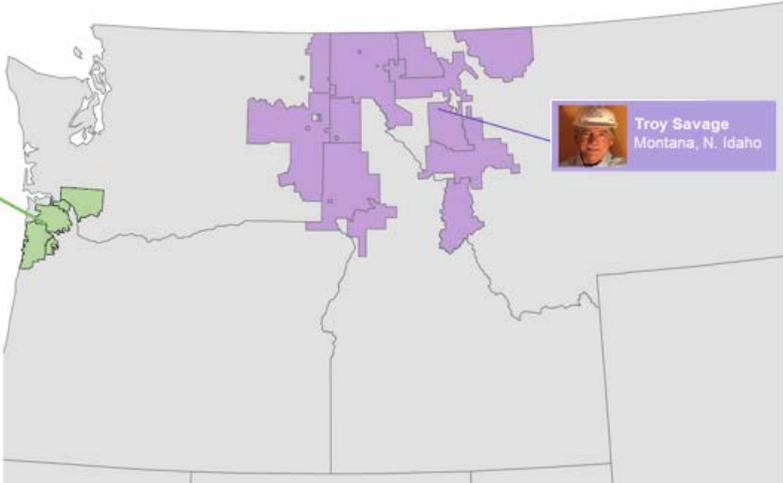
ESI Team...cont'd

Current Assignments (July 2022)





Jimmy Sauter
Cowlitz,
Clatskanie,
Tillamook PUDs



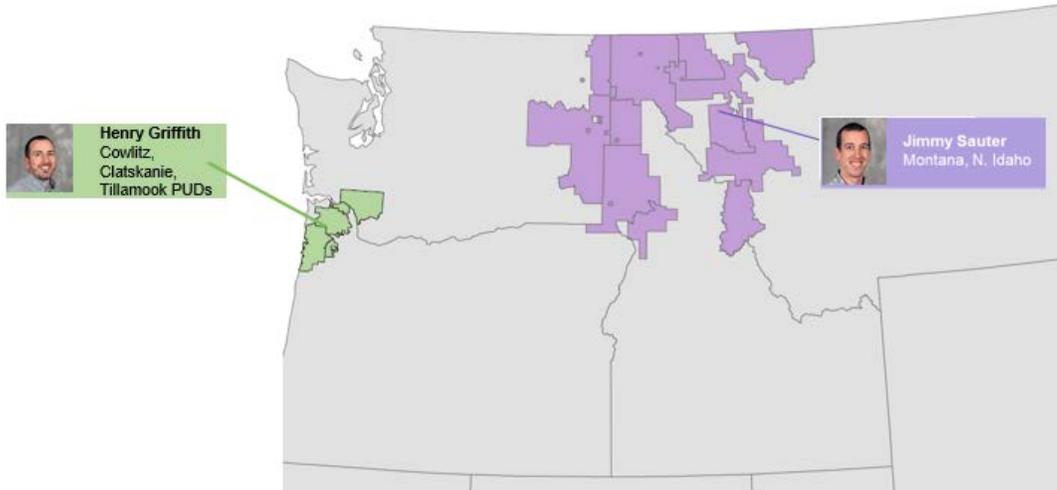


Troy Savage
Montana, N. Idaho

T. Simon: Staffing changes will be gradual, we are mindful of making these transitions smooth while continuing to provide great customer service to both utilities and end-users.

ESI Team...cont'd

New Assignments (August 2022)



We'd like to thank you customers during this transition time.

ESI Program Updates: Custom Project Pipeline



We have noticed supply chain disruptions this year– the average custom project timeline has increased from 14 months to 18 months from start to completion; as a result we need a larger pipeline to achieve sector targets.

As a result, the ESI team kicked off the “ESI Pipeline Olympics” – putting emphasis on building a strong pipeline.

T. Simon: In early 2022, we met together virtually to identify things to build the pipeline.

Pipeline Olympics – Team Brainstorm



Brainstorm resulted in Pipeline Olympic Event Categories!

- Shovel-ready Custom Projects¹
- Vendor and Distributor Outreach²
- Project Assessment Studies³
- SEM Recruitment

¹Quicker projects to complete (less than 18 months)

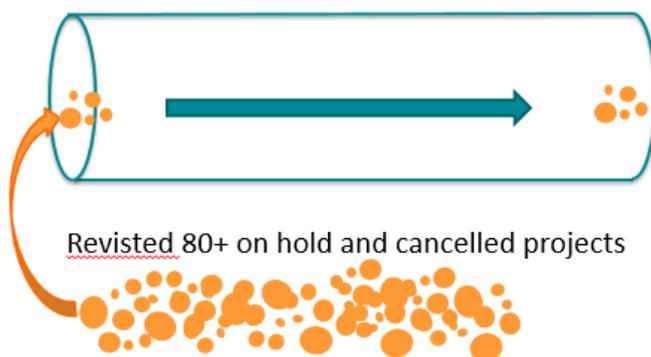
²Connected and clarified program point of contacts, incentives, requirements, etc.

³Or project scoping; the more technical eyes means more opportunities.

Jacob will expand on the SEM Recruitment, later in the presentation.

One category idea was to mine the canceled/on-hold projects; they can be a gold mine.

Pipeline Olympics – Mining On-Hold Projects



On-Hold Projects Still Have Value

- Savings and costs already vetted
- Might be easier to sell
- Higher probability of implementation
- Brings back value by increasing our pipeline forecasting

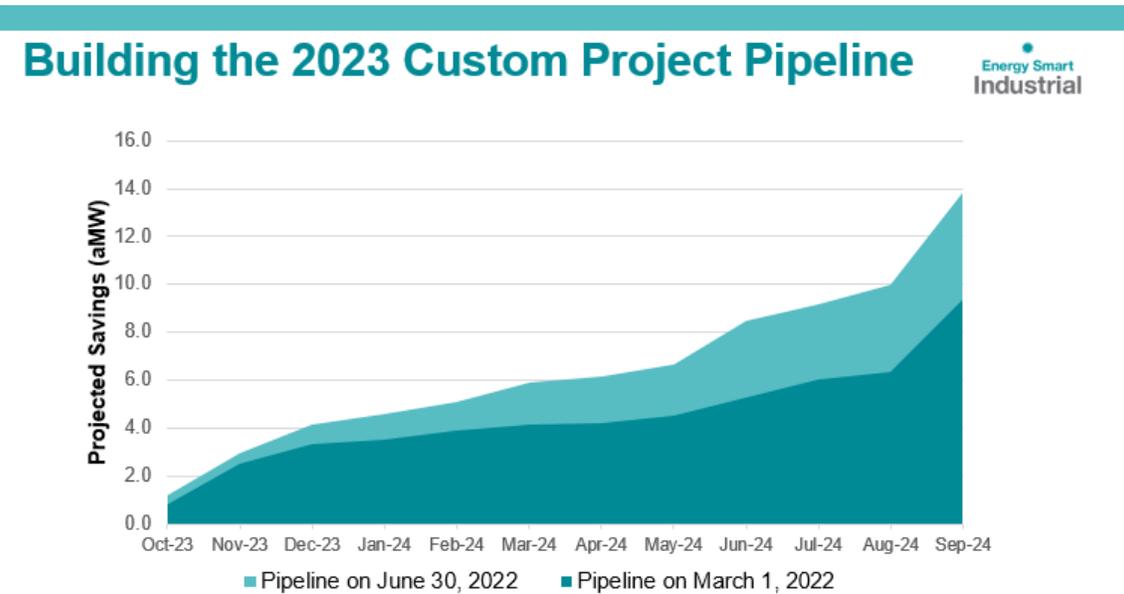
If we could bring back 2% of these projects it can bring big savings (possibly 1.0 aMW). We'll consider past barriers and how they can be overcome.

T. Simon: The efforts are paying off – with some quick wins. This head-to-head competition has brought several categories, as shown below by the trophies. We expect a surge of new projects and even more projects from the new SEM Cohort, in late summer.



- In Q3 2022 we broke ESI’s quarterly record for new Custom Projects entered the ESI HUB (90 new projects)

The efforts from the Pipeline Olympics have yielded new projects across four fiscal years (FY22-25); the majority has contributed to FY23.



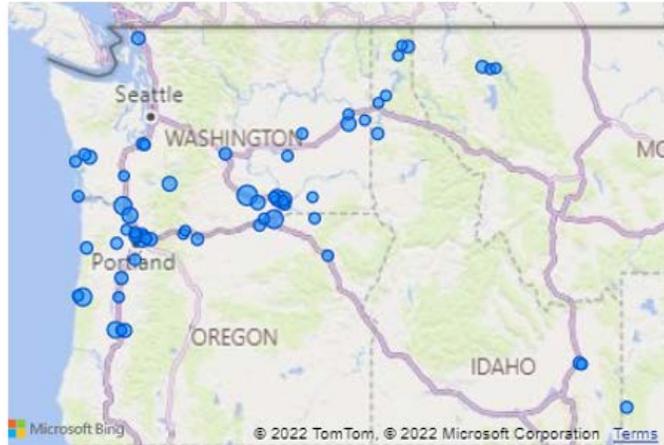
T. Simon: The ESI team is laser-focused to closeout projects this year. The map below there are several projects throughout BPA's region. Industries are experiencing staffing and supply chain issues while still implementing projects and persisting.

FY2022 Option 1 Custom Projects – Still to Close



154
Custom
Projects

4.5+
aMW



15

Slide 16 is a Project Success Poster where Pacific Coast Producers (formerly Oregon Cherry Growers) collaborated with Northern Wasco PUD. Travis Hardy, Energy Management Program Manager at Northern Wasco will talk about this project.

Travis Hardy: This was an amazing project that was completed a few months ago. It was the largest rebate paid out and the largest project completed in our territory. There were some hiccups; but we managed to get them all resolved. I appreciate the support our ESIP, Christian Miner, provided and look forward to doing more work in the future.

Pacific Coast Producers Refrigeration Upgrade 2022



The largest customer in Northern Wasco County PUD's territory, Oregon Cherry Grower's (OCG) Refrigeration Upgrade is also the utilities' biggest energy efficiency project to date.

The following refrigeration upgrade strategies were installed by the OCG project team:

Control System Upgrade
A control system saves energy by allowing intelligent compressor sequencing, decreased defrost cycling and enabling floating wet bulb (WB) approach control.

Condenser Fan VFDs
Installed variable frequency drives (VFDs) improve the part load efficiency.

Evaporator Fan VFDs
Installed VFDs reduce speeds when target room temperature is achieved.

Ammonia Compressor VFD
VFD speed control reduces compressor power during part load operation.

\$40,000+
Annual Cost Savings

840,000+
kWh Annual Energy Savings

85 EQUAL TO
Pacific Northwest Homes' Annual Energy Use



Team Members: (L to R) Oliver Smith, Erick Watkins, Danny Garcia, Ryan Higuera, Randy Davis and Jerome Smith

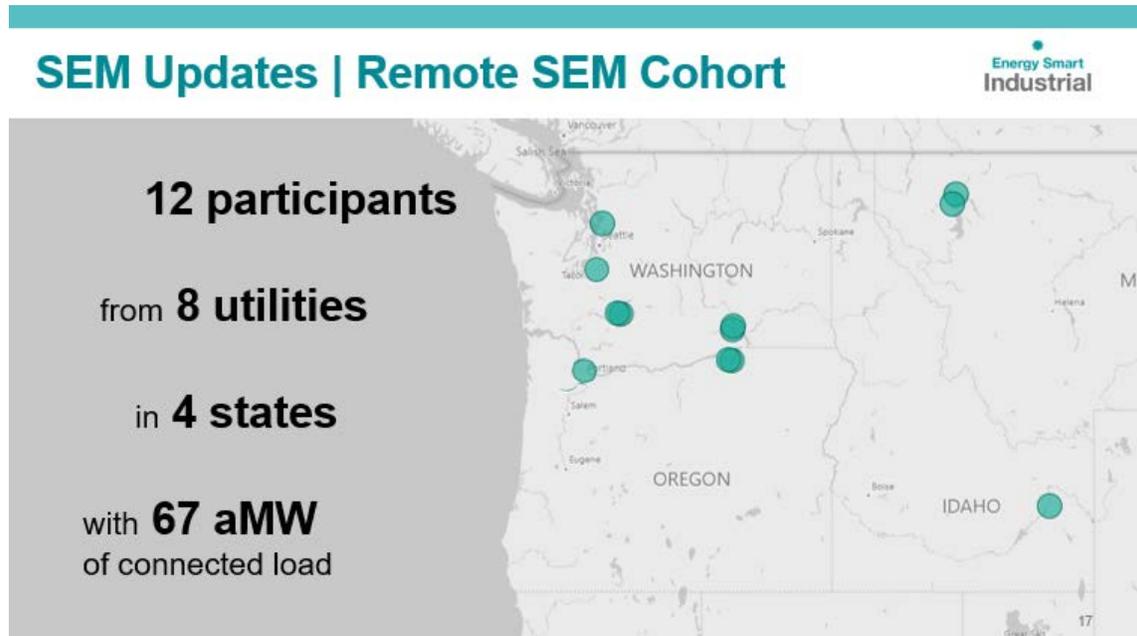
What ideas do you have to save energy?

CONTACT US
Travis Hardy
Energy Management Program Manager
travis.hardy@nwasco.pud.org
(541) 298-3371

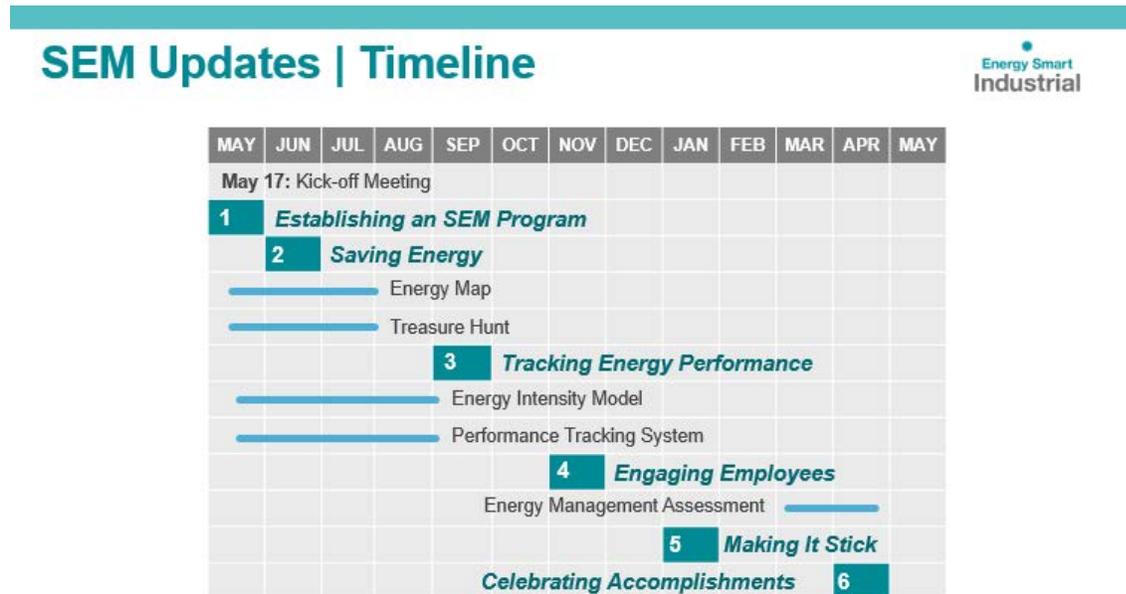


T. Simon: Next up, Jacob Schroeder will be provided the **Strategic Energy Management Updates**.

Jacob Schroeder: We wanted to share some numbers regarding the newest Remote SEM Cohort. This is one of the most ambitious cohorts to date; with projected annual savings of 1.7 aMW or more than 15 million kWh!



As this timeline shows, we're 1.5 months into this new cohort with two workshops completed. We see a lot of momentum building. During the second workshop we talked about seven quick wins, and the technical training focused on blowers, fans and HVAC systems. The third workshop's technical training will focus on compressed air systems.



J. Schroeder: Participants are busy with Energy Scans underway. A lot is going on...here is a picture from the recent Weyerhaeuser Energy Scan. Inviting Don Newton, Energy Services Supervisor and Key Accounts Representative at Flathead Electric, to share his observations, from attending.

SEM Updates | Energy Scans



Don Newton: The presentation sets the stage for a successful treasure hunt and helps everyone be in the right mindset. Easy wins – the number of ideas on the board by the end of the day. I would encourage you to contact your ESIP if you'd like to participate in one of the upcoming Energy Scans.

Jacob Schroeder: Next Todd Amundson will share **Energy Project Manager Updates.**

Todd Amundson: Energy Project Managers or EPMs are individuals designated to identify and oversee the implementation, focusing on energy efficiency projects at the site. The slide below recaps some of the new guidelines, as of April 1st ~ currently we've re-enrolled 4 EPMs and added 1 new EPM. The energy savings goal or threshold has been reduced (previously the one million kWh savings goal was a barrier to participation – The 200,000 kWh limit applies to the time of enrollment – so the savings goal may dip below, beyond the initial roll-out.

Energy Project Manager, Measure Updates

Energy Smart
Industrial

Effective April 1, 2022

- Savings threshold lowered from 1 million kWh to 200,000 kWh
- EPM co-funding based on verified savings
- No salary documentation required
- BPA WTP capped at \$150K per biennium
- Enrollment process streamlined



[Implementation Manual - Bonneville Power Administration \(bpa.gov\)](https://www.bpa.gov)

20

We did away with EPM progress payments – replacing them with incentives based on verified energy savings, thus streamlining the admin tasks and eliminating the requirement for salary documentation. Utilities still retain the option to cap incentives below BPA's willingness-to-pay of \$150K per biennium. We simplified the enrollment process – putting an emphasis on identifying projects.

During the previous ESI Quarterly Utility Focus Group Zeecha Van Hoose from Clark Public Utilities shared their perspective on EPMs and the benefits experienced within their service territory. Slide 21 shows how EPMs can provide value to both the site and utility - with three (3) key components that help ensure success.

1. Assigning an individual with the responsibility and accountability for EE projects.
2. Having a project list that includes potential savings, costs, and specific milestones.
3. Clear savings goal – keeps focus and brings clarity.

The results, sites with EPMs achieve higher savings and more structured pipelines.



The EPM co-funding, can be viewed as a cost adder of \$0.025 per kWh; however, when looking at the previous rate period and utility's capping payments, the actual cost was nearly \$0.01 with the overall project incentives being an additional \$0.09 per kWh. If you want to know more about capping, several utilities on today's call have applied caps – reach out to if you have questions or would like to connect to discuss their approach.

When comparing sites with EPMs to last year's overall Industrial portfolio, we've seen EPM projects tend to be larger with better implementation results; even seeing better savings persistence!

Next up, Kyle will lead today's **UFG Open Forum**.

Kyle Barton: Does anyone have anything they'd like to share?

Utility Focus Group Open Forum

Discussion with Utility Focus Group members

- Project Successes
- Feedback
- Other topics

23

Todd indicated two "flavors" of EPM...but was there a third "flavor"...

Todd Amundson: Where one national corporation that had two EPMs that actively worked at sites within three different utility service territories. BPA directly contracted with the Corporation (with utility approvals, of course) – this could be done again without having to directly contract with BPA.

K. Barton: That is a huge opportunity with Key Account engagement. Any questions? If no one has anything they'd like to discuss, then let's move on to **Wrap-up and Reminders** ...

K. Barton:

Wrap-up and Reminders



- Option 1 Impact Evaluation¹
- ASD Market Model for Pump & Fan Applications²
- ACEEE Industrial Heat Pump lunch & learn³
- Next Utility Focus Group meeting – Tuesday, October 11th

24

¹Option 1 (Industrial Custom Projects) Impact Evaluation – initial finding 85% realization rate – recommendation to expand ESIP calculations. Next steps, BPA will make it public, and will address in a Memo how BPA will address the recommendations.

²Adjustable Speed Drive (ASD) Market Model for Pump and Fans Applications – can inform future program focus. August lunch and learn planning.

³American Council for an Energy-Efficient Economy (ACEEE) Industrial Heat Pump lunch & learn – Area of emerging tech. Lots of questions yet to be answered. Keep a close eye on how to do things the most energy-efficient way. ACEEE will be providing some technical training – in late August.

We want to thank Troy Savage for his many years of dedicated support to the ESI Program and his utilities. Also thank to Tony, Shelley, Jacob, Travis, Don, and Todd for your role in today's presentation.

Meeting adjourned at 11:40 am