Energy Smart Industrial

Utility Focus Group Meeting

July 13, 2021

Facilitator:

Eric Mullendore
Industrial Program Manager
Energy Efficiency
Bonneville Power Administration
S. Martin: Welcomed all in attendance and reviewed the agenda

<table>
<thead>
<tr>
<th>Attendees:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td><strong>Company:</strong></td>
</tr>
<tr>
<td>Alan Fraser</td>
<td>Tacoma Power</td>
</tr>
<tr>
<td>Alex Ruiz</td>
<td>Unimalla Electric</td>
</tr>
<tr>
<td>Amy Walton</td>
<td>Lower Valley Energy</td>
</tr>
<tr>
<td>Ashley Stahl</td>
<td>City of Centralia</td>
</tr>
<tr>
<td>Bill Hough</td>
<td>Benton PUD</td>
</tr>
<tr>
<td>Dan Kimman</td>
<td>Grays Harbor PUD</td>
</tr>
<tr>
<td>David Harris</td>
<td>Springfield Utility Board</td>
</tr>
<tr>
<td>Eli Velez</td>
<td>Eugene Water and Electric Board</td>
</tr>
<tr>
<td>Eric Miller</td>
<td>Benton REA</td>
</tr>
<tr>
<td>Jacob Henry</td>
<td>Lewis PUD</td>
</tr>
<tr>
<td>Jason Bird</td>
<td>Idaho Falls Power</td>
</tr>
<tr>
<td>Julie Anderson</td>
<td>Franklin PUD</td>
</tr>
<tr>
<td>Kelly Haugh</td>
<td>Big Bend Electric</td>
</tr>
<tr>
<td>Matt Walker</td>
<td>Tacoma Power</td>
</tr>
<tr>
<td>Maurilio Lopez</td>
<td>Franklin PUD</td>
</tr>
<tr>
<td>Natasha Houkdon</td>
<td>Tacoma Power</td>
</tr>
<tr>
<td>Tara Maynard</td>
<td>Grays Harbor PUD</td>
</tr>
<tr>
<td>Tom Lansers</td>
<td>Columbia River PUD</td>
</tr>
<tr>
<td>Wade Carey</td>
<td>Central Lincoln PUD</td>
</tr>
<tr>
<td>Zeche Van Hoose</td>
<td>Clark Public Utilities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name:</th>
<th><strong>Company:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eric Lang</td>
<td>EPA COTR Liaison</td>
</tr>
<tr>
<td>Eric Mullendore</td>
<td>EPA, Ciel Sector Lead</td>
</tr>
<tr>
<td>Jess Kincaid</td>
<td>EPA, Acting ESI Programs Mgr</td>
</tr>
<tr>
<td>Mark Relton</td>
<td>EPA, EER</td>
</tr>
<tr>
<td>Nathan Kelly</td>
<td>EPA, Engineer</td>
</tr>
<tr>
<td>Neel Makujina</td>
<td>Cascade Energy, ESIP</td>
</tr>
<tr>
<td>Ray Hardiman</td>
<td>Cascade Energy, ESIP</td>
</tr>
<tr>
<td>Shelley Layton</td>
<td>Cascade Energy, ESI Program Specialist</td>
</tr>
<tr>
<td>Steve Martin</td>
<td>Cascade Energy, ESI Operations Mgr</td>
</tr>
<tr>
<td>Todd Amundson</td>
<td>EPA, Engineer and Industrial Tech Lead</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agenda</th>
<th></th>
</tr>
</thead>
</table>
| **BPA EE and ESI program updates** | Steve Martin  
Eric Mullendore  
Todd Amundson  
11:00 - 11:30 |
| **Utility updates and project spotlight** | Wade Carey and Ray Hardiman  
Amy Walton and Nosh Makujina  
11:30-11:45 |
| **UFG Open Forum** | All  
Remaining time |
Steve M. cont’d: Reminded everyone that 16 months has passed since the ESI Program has stopped field work.

Thanks for supporting the ESI team as we’ve navigated this challenging time.

- We’ve learned a ton about communicating in new and creative ways, leveraging technology (e.g., remote data loggers, Realwear body cameras, etc.) to carry out studies.
- We’ve also realized that ‘boots on the ground’ is not going away.

The ESI team has carried out 61 site visits in June (matching the pre-COVID average).

- All performed safely in compliance with local and state laws and regulations, as well as coordinating with you and site personnel to ensure our work is carried out with full knowledge and awareness of utility and in accordance to the ESI program COVID Response decision tree.
- This ramp-up comes at a pivotal time.
Steve M. cont’d: Here’s what we’ve heard and seen in the field…

- National Electronics Manufacturer Association (NEMA) publishes market data that gives a pulse on the direction of capital spending.
- Electro-industry business index is a monthly survey of senior managers of NEMA member companies.
- It’s not a ‘perfect representation’ of industrial EE projects; but it is a ‘relative gauge’ of business confidence for manufacturers and distributors of key components such as motor starters, programmable logic controllers, etc.

- The current conditions and future conditions indices are near record highs after a record low one year ago
- This is a good sign that industries have money to spend, and the idea that the low hanging fruit has been picked may be overstated a bit.

https://www.nema.org/analytics/industrial-control-business-indices
Steve M. cont’d: Here is a “Year Ahead Pipeline” view of the past three years (from the beginning of the month of July)

This is very encouraging that we’ve been able to increase the # of projects for the year-ahead

We are also seeing a higher percentage of the ‘Projects in Development’ category; this is an area of ESIP focus.

Steve M. cont’d: Two industry segments we watch very closely – food processing and pulp and paper.

Historically, these two have comprised approximately 50% of our savings – as a team we’ve developed deep expertise. We saw a significant shift last year that we expect to continue through the next biennium.
Steve M. cont’d: Some emerging segments – water/wastewater, chemical manufacturing and high tech.

What these three have in common are aging plant infrastructure and relatively healthy balance sheets

- High tech – semiconductor to circuit boards – experiencing the best business cycle since the late nineties
- Chemical manufacturing – experiencing the benefit of higher commodity prices – difficult environment for electrical EE but we seem to be making inroads.
- Water/Wastewater
  - Much of this is the natural outcome of SEM – almost all the largest plants have been through WEC.
  - American Rescue Plan Act (ARPA) funding

Collectively, savings from these segments has trended up the past three years and now represents 30% of program savings (more than 2x three years ago).
Steve M. cont’d: Obviously, the ESI program has targets we’d like to hit; and we’re also very excited to help each of you achieve whatever goals you might have for this biennium’s close-out. How can we do this?

- By proactively engaging end-users in **managing** the Custom Project pipeline.
- Providing regular **updates** to utilities on project completion status and incentive forecasts.
- Minimizing the **end-of-biennium** project submittal rush.

Here is what the Option 1 Custom Project pipeline looks like (today) for the remainder of the year, based on estimated M&V dates:

**Option 1 Custom Projects: 118 projects, 7.1 aMW**
Steve M. cont’d: And here is what the SEM Projects pipeline looks like (today) for the remainder of the year, based on estimated project completion dates.

There are 17 Custom Projects or roughly 0.8 aMW of energy savings that have not been invoiced/reported to BPA.
Steve M. cont’d: The ESI team would like to thank you and your customers that helped us launch two cohorts during COVID (Wastewater Energy coaching and refrigeration energy coaching in Mid-Columbia) and for all the support keeping existing cohort participants on track.

COVID delayed launch of a planned winter 2021 **clean water cohort** – we are now planning to launch workshop 1 in September.

We have five participants enrolled and are looking to recruit a few more.

We’ll be applying our distance learnings to launch a (likely remote) cohort of mixed industrial customers in February next year.

**We encourage you to discuss potential participants with your ESIP.**

---

**SEM – Recruiting for FY2022**

- **Clean Water Cohort**
  - Sept. 2021
- **Mixed Industrial**
  - Feb. 2022
- **Sole Delivery**
  - Continuous

Customer interested in SEM now? Let your ESIP know – Sole delivery SEM starts on their schedule!

---

Here are some reminders of Custom Project Completion Report Submission Timelines

**End of Rate Period Timelines**

- **9/1** – Submit CR for guaranteed review
- **9/15** – Last day to submit CR
- **9/23** – Last day to submit invoice

Next, Todd Amundson is going to share an update on BPA’s Evaluation...
T. Amundson: Utilities will be receiving official word from your Energy Efficiency Representative

E. Mullendore: BPA created a new webpage that includes the draft Rate Period Implementation Manual language for the new Energy Project Manager, Strategic Energy Management and Performance Tracking System. A set of frequently asked questions is available for the EPM and SEM offerings.
Eric M. cont’d: Now I would like to introduce Wade Carey from Central Lincoln PUD and his ESIP, Ray Hardiman...

Wade Carey (Energy Services Manager - CLPUD) and Ray Hardiman (ESIP)

Wade talked about the utility’s perspective of the proposed next Rate Period’s changes to Energy Project Manager offering and how they are preparing for the transition.

Energy Project Managers

- Utility perspective on proposed updates
- Recent opportunity at CLPUD customer
- A contract that bridges the transition
- Final thoughts
E. Mullendore: Now let’s give our attention to Amy Walton from Lower Valley Energy and her ESIP, Nosh Makujina.

Amy Walton (Lower Valley Energy – Conservation Specialist) and Nosh Makujina (ESIP)

Amy W: Although High Country Linen is one of our small customers that has been around for quite some time. Nosh will share the specifics about the project…

High Country Linen Service

- Established in 1931, High Country Linen serves restaurants and hotels in the Jackson Wyoming, Star Valley Wyoming, and surrounding area.

- Existing washers used about 170 hp and upgraded Vega Smartline Tunnel washer reduced the load to 65 hp

- Significant non-energy benefits included water, natural gas, and labor
Nosh M. cont’d: Shared the project summary with savings and incentive.

There was an 11% improvement – plus the merits of this project’s M&V strategy was it being cost-effective and unintrusive to the facility and staff.
Key Takeaways

- Regular communication through commissioning challenges and business downturn provided reassurance and demonstrates commitment
- The completion of a Custom Project is a relationship building opportunity
- Small projects have a big impact

E. Mullendore: Thank you Wade, Ray, Amy and Nosh

Utility Focus Group Open Forum

Discussion & feedback from Utility Focus Group

- Other project success stories?
- What concerns and opportunities do you foresee as we approach the end of the rate period, and how can ESI help?
Wrap-up and Reminders

- End of rate period deadlines
- Utility Account Plan updates
- Q1 Utility Focus Group meeting – October?

Thank you!

For more information, contact:

**Eric Mullendore**
Industrial Program Manager, Energy Efficiency
Bonneville Power Administration
ejmullendore@bpa.gov
503-230-5546