Energy Smart Industrial

Utility Focus Group Meeting

April 14, 2020

Facilitator:

Michelle Lichtenfels
Commercial & Industrial Sector Lead
Energy Efficiency
Bonneville Power Administration
<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Presenter</th>
<th>Time</th>
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<tr>
<td>Welcome, BPA EE and ESI program updates</td>
<td>Michelle Lichtenfels, Steve Martin</td>
<td>11:00 - 11:30</td>
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<tr>
<td>• BPA COVID-19 update</td>
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<td>• Utility Focus Group open forum</td>
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<td>• Other updates</td>
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<td>Industrial project showcase</td>
<td>Eric Miller, Tony Simon, Dave Wimpy, Jimmy Sauter</td>
<td>11:30 - 11:45</td>
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<tr>
<td>Utility Focus Group survey results</td>
<td>Michelle Lichtenfels</td>
<td>11:45 – 11:50</td>
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<tr>
<td>Potential topics for next UFG</td>
<td>All</td>
<td>Remaining time</td>
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<tr>
<td>Other topics of interest to UFG</td>
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BPA Priorities COVID-19 Response Period

- Health and safety of workforce and the community
- Reliable power and transmission services
- Customer service to utility customers
Status of BPA EE and ESI teams

• All BPA EE and ESI staff are working remotely

• Field work has been cancelled or postponed.

• Remote alternatives have proven effective, but requires awareness of each end user’s circumstance
A range of perspectives

The site whose business is way down, or shutdown

The end user that wants to stay engaged, but needs IT assistance

The industry whose business just spiked up, or got more complicated

The energy champion who’s still working and needs to show value

The site designated as an “Essential Industry”
Core operating strategies

Understand the needs and circumstances of each utility and end user

Minimize the burden to the end user

Advance projects using better conversations and less data logging

Commit to regular communication
Recent successes

- Puget Sound Wastewater Energy Coaching (WEC) transitions to webinar format
- Compressed air project M&V study leverages mill control system
- Data loggers deployed and returned by site staff
- Conversation with EPM identifies large custom project
Discussion & feedback from Utility Focus Group

• What challenges are you facing?
• What are you hearing from your customers regarding energy efficiency?
• How can ESI help during this time?
Other Updates

- 2021 Power Plan
- BPA EE Tracking System (BEETS)
- Next Rate Period Implementation Manual
- Impact Evaluation Update
Project Showcase: Darigold (Benton REA)

Darigold Sunnyside

Energy Savings Projects 2011-2019

Projects implemented

1. 2015 Dry Milk Plant Expansion
   - Installed variable frequency drives (VFDs) for improved process control on pumps, refrigeration, and fans

2. 2016 Refrigeration Panel Upgrade & Lighting
   - Installed compressors with microprocessors on ammonia refrigeration systems for better control and updated lighting

3. 2014 Boiler Fan VFDs
   - Installed VFDs to optimize combustion control on the steam system

4. 2013 Condenser Fan VFDs
   - Installed VFDs for improved refrigeration performance

5. 2011 New Chiller and Lighting
   - Upgraded chiller plant for process quality improvement and energy performance

+9,200,000 kWh Annual Energy savings
$423,000 Annual avoided cost
836 # of Pacific Northwest homes’ energy use

What ideas do you have to save energy?

CONTACT
Eric Miller - Benton REA Energy Services Manager
Tom Bloss - Darigold Technical Manager
Jim VanGuilder - Darigold Project Engineer
Tony Silver - ESD Program Delivery Manager
Project Showcase: Darigold (Benton REA)

• Newsletter
  • [Link to Newsletter]

• Facebook
  • [Link to Facebook Page]
Project Showcase: Tillamook (Tillamook PUD)

Tillamook County Creamery Association

Energy Savings Projects 2019

Projects Implemented

1. Installed Variable Frequency Drives (VFDs) on:
   - Beta Vacuum Pumps
   - Tower Vacuum Pumps
   - Evaporator Fans
   VFDs allow a motor to run at a slower speed. This allows for more precise control of the process. A fan that was drawing 10 hp at 100% speed may now only draw 4 hp at 70% speed.

2. Installed a Logic Control System on the South Refrigeration System
   This Control System optimizes the operation of the refrigeration system by allowing for greater control by plant technicians.

3. Designed and Installed Photo Eyes to reduce compressed air usage in packaging
   Photo Eyes were installed to only blow when there is product on the packaging line. A timer will turn off compressed air once all product has passed. Compressed air is a very expensive utility. Reduction of compressed air usage will greatly save energy.

1,191,905 kWh Annual Energy Savings
$63,000 Annual Avoided Cost
141 Pacific Northwest Homes’ Annual Energy Use

What Ideas do you have to save energy?

CONTACT
Gery Slaughter, Associate Process Engineer

Members of the Tillamook County Creamary Association Energy Team (L-R):
- Joey Christ, Maintenance Supervisor
- Justin Konitz, Corporate Environmental Manager
- Gery Slaughter, Associate Process Engineer
- David Wanner, Energy Resources Manager
- Ray Hark, Maintenance Supervisor
- Ryan刚利, Maintenance Manager
Historically the Utility Focus Group has met quarterly. What is your preferred meeting frequency?

- More frequent (e.g. monthly)
- Quarterly
- Semi-annually
Utility Focus Group survey

Would you be interested in attending a Utility Focus Group breakfast session at the 2020 Efficiency Exchange

- 0% I’m not attending EFX2020
- 10% I’m attending EFX2020, but would not attend a UFG breakfast session.
- 50% I’m attending EFX2020, and would consider attending a UFG breakfast session.
- 40% I’m attending EFX2020, and would be very interested in attending a UFG breakfast session.
Potential topics for July UFG

- Approaches to forecasting EE savings
- Tools to help site staff secure capital budget approval
- Summary of past projects (systems and measure)
- SEM program results
- RTF activities related to industrial measures
- EC motors
- Future of lighting
- Demand response
Thank you!

For more information, contact:

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