

AGENDA - REGIONAL EMERGING TECHNOLOGIES ADVISORY COMMITTEE

Date: October 26, 2017

Time: 10:00am – 4:00pm

Location: NEEA Offices (421 SW 6th Ave, 6th Floor, Portland) – Cedar Conference Room

Webinar Link: <http://neea.adobeconnect.com/retacjul2017/>

Meeting Outcomes:

- Update RETAC members on the status of the regional Emerging Technology (ET) portfolio and NEEA's ET activities
- Develop updated working definition of emerging technology
- Identify research gaps in advanced lighting controls
- Review and identify new pipeline metrics for RETAC to use to monitor and manage pipeline health

Agenda	Packet Pg #
10:00 am Welcome and Agenda Review Review meeting tasks and desired outcomes	Jonathan Belais, NEEA Staff
10:15 pm RETAC 2.0 Database Portfolio Update: What's New, What have we learned since the last RETAC meeting? <ul style="list-style-type: none"> • Outcome: RETAC members expand their understanding of research and product progress. 	Dave Kresta, NEEA Staff 4
10:45 pm Product Prioritization Review work towards a process for developing regional product and technology priorities. <ul style="list-style-type: none"> • Outcome: Update committee members and garner feedback 	Mark Rehley, NEEA Staff
11:15 am ET Definition Conclude exercise from Q3 meeting to update the working definition of emerging technology <ul style="list-style-type: none"> • Outcome: Agreement on updated definition 	Nick Leritz, NEEA Staff pg 6
12:15 pm Lunch – Provided	
1:00 pm ET Definition (continued)	Nick Leritz, NEEA Staff pg 6
1:30 pm Advanced Lighting Controls Identify product and market trends in the area of advanced lighting controls. <ul style="list-style-type: none"> • Outcome: Prioritize research areas that the northwest could address in 2018. 	Michael Poplawski, PNNL Chris Wolgamott, NEEA Staff

2:30 pm **Break**

2:45 pm

Pipeline Metrics

Review and prioritize pipeline metrics that RETAC could use to management and verify pipeline health

- Outcome: Prioritized list of metrics that the RETAC work group will develop in 2018

Keshmira
McVey, BPA
Dave Kresta,
NEEA Staff

pg 8

3:45 pm – Meeting Review and Adjournment

4:00 pm Feedback about the meeting and adjourn

Memorandum – *Agenda item (Tier 1)*



October 19, 2017

TO: Regional Emerging Technology Advisory Committee (RETAC)
FROM: Mark Rehley, Senior Manager Product Management & Emerging Technology
SUBJECT: Meeting Packet, Informational Updates, Additional Details

MEETING PACKET APPROACH

This packet continues the “tiered” approach:

- Tier-1 memos for active agenda items;
- Tier-2 memos for informational updates on items not currently requiring agenda time;
- Tier-3 materials provided as additional detail for those interested, accessible via links in the Tier-1 and Tier-2 memos.

This approach helps keep packets concise and digestible. Input appreciated on room for improvement.

INFORMATIONAL UPDATES

- New and improved format for the [Q4 NEEA Emerging Technology Report](#)

ADDITIONAL DETAILS (Tier 3)

Tier-3 materials related to the agenda items and informational updates listed above will be accessible through links in those memos. Additional Tier-3 details are available here:

- July 12, 2017 [RETAC](#) meeting notes

Memorandum – Agenda item (Tier 1)



Oct 26, 2017

TO: Regional Emerging Technology Advisory Committee (RETAC)
FROM: Dave Kresta, Senior Product Manager - NEEA
SUBJECT: Regional ET Database updates

New Items in Database

Since our last RETAC meeting, we have had two new projects added and no new products. Following is a summary of the new projects:

Project name	Description	Primary Contact	Status
Pivot Commissioning Update	Refresh on the relevance and applicability of Pivot Commissioning of original work from 2014. Development of Pivot Commissioning protocol and method, development of skilled practitioners, implementation of water and energy savings and potentially utility programs that can be run through Agricultural Irrigation market actors (Irrigation specialists, distribution houses and pivot suppliers).	Geoff Wickes, NEEA	Wishlist
UHD TV Test Procedure/Clip and ENERGY STAR Specification	Monitoring several new display technologies such as: Micro LEDs (MLED) Organic LEDs (OLED), Quantum Dots.	Nick Leritz, NEEA	Active – started in 2016

ASK: If you have any questions about these projects, please contact the primary contacts prior to the RETAC meeting.

Updates to Database Functionality

Minimal changes have been made to the ET Database since the last RETAC meeting. Several items are in process, including:

- 1) Requiring users to be logged in to Conduit in order to run ET Database reports. This provides a minimal level of “security” on who can see items in the ET Database.
- 2) Adding “Disproven” as an option for Entry Status to enable RETAC to flag products that have been shown to not meet sufficient performance or fitness for use levels. Setting the flag will only be done upon discussion in a RETAC meeting.

ASK: Provide feedback prior to or at the RETAC meeting on these proposed changes, as well as other changes you are interested in seeing.

Discussion on Ensuring Successful Usage/Updating of ET Database

Each RETAC meeting will include a summary of new RETAC Projects and Products. We will also be implementing technology to enable a report on any changes to items (such as updated status, updated readiness levels) since the last RETAC meeting. Look for this for future meetings.

How can we ensure that new projects or products are being added to the database? For example, we have previously discussed capturing utility custom projects in our database.

ASK: Please come to the meeting prepared to discuss ideas for efficient but thorough processes to make sure that new products and projects that your organization is working on make it into the database.

To discuss any of the content of this memo prior to the meeting, feel free to reach out to Dave Kresta, dkresta@neea.org.

Memorandum – Agenda item (Tier 1)



October 10, 2017

TO: Regional Emerging Technology Advisory Committee (RETAC)

FROM: Nick Leritz, Senior Product Manager NEEA

SUBJECT: Emerging Technology Definition Exercise

At the October 26, 2017 RETAC meeting, we will conclude our exercise to develop an updated definition of emerging technology that supports the broader role RETAC is adopting to fill the regional pipeline of new measures. Following the July 12th RETAC meeting NEEA’s Product Council distilled all the input collected and clustered it into the below labeled collections of elements of emerging technology. On October 26th, we will collect additional elements, review the complete labeled collections of emerging technology and work toward consensus of the updated definition.

Our Ask of You:

Review the notes from the July 12th meeting and the collections of elements below and come prepared with any additional elements of emerging technology that should be considered in the definition.

Spectrum of readiness from concept to field proven	Lack of supply and demand infrastructure	Preparing technology for full program support
Tech readiness	Market Readiness	Bridge
Tech you know does not work, so others don't waste time on it.	Not market ready	A bridge between proof of concept and field demos, pilots, or design strategies
Anything from concept to prototype	Discrete tech - not commercially available	A bridge between R&D and programs
Proof of concept exists	Requires investment and effort to advance in the market	Tech that can gradually transition to programs (the long handoff)
Lab proven but not field proven	Hasn't moved to mass production	Tech that programs or execs can't use to meet or set goals
Questions still exist that may change how or what we do with it	Not U.L approved, but not just a concept	Not program ready (is there a clear definition of program ready?)
		Linked to programs
		Anything not in a program
		A process: both pilots/assessments and programs carry it for a bit

Savings Uncertainty	Add or preserve the value of new and existing technology	No clear pathway to broad market adoption
Savings	Continual Improvement/New Value	Low adoption
Savings potential is not well understood	Product, service, practice is still evolving	Adoption is less than it should be
Tech that does not have credible savings	Tech is always improving like a helix (without boundary) - continuous evolution	Linked to market adoption path
It cannot be an RTF proven measure	The application is still evolving or changing	Tech with low adoption
No longer E.T. when a program books savings from it	Potential to bring new value	Has potential but is not cost effective
	Tech with potential	Products, services, practices
	Tech that will disrupt business	Physical product
	Requires investment and effort to apply to a new application	Best practice
	Tech that will enhance business	Service/practic/offering

Memorandum – *Agenda item (Tier 1)*



Oct 26, 2017

TO: Regional Emerging Technology Advisory Committee (RETAC)
FROM: Dave Kresta
SUBJECT: Draft Proposal for Regional ET Pipeline Metrics

Background

The Northwest Power and Conservation Council has identified approximately 50% of 7th Power Plan savings from “new measures” (i.e., measures not in the 6th Power Plan). This provides a challenge and opportunity for improved regional collaboration on emerging technologies, a challenge that the RETAC has taken on. The “RETAC 2.0” emerging technology database provided a first step in the direction of improved collaboration. A common set of regional-level ET metrics is another important element to enable improved regional-level tracking and decision making.

Overview

We will provide an overview of a draft set of metrics at the upcoming RETAC meeting. Please familiarize yourself with this brief overview. We will be seeking your guidance on

- 1) do the metrics make sense?
- 2) are these the right things to be tracking?
- 3) Will they help RETAC make better decisions?

There are three types of metrics in the proposal:

- 1) **Governance of “new measures”:** what group is responsible for oversight of a given product/technology? Currently RETAC is assumed to be responsible for all emerging technology. However, given our newly established readiness criteria matrix, some products/technologies may be ready for RPAC to provide oversight. We will propose a “hand off threshold”, based on the readiness criteria matrix, to define which products/technologies should be managed by RETAC, and which ones should be managed by RPAC.
- 2) **Speed of flow through pipeline:** Are items moving through the readiness levels in a timely manner? This metric will monitor the average amount of time items are spending at various readiness levels, providing an overall view into pipeline flow, as well as identifying specific products/technologies that may be “stuck”.
- 3) **Amount of savings in pipeline:** What is the aMW technical potential of items in the pipeline, by readiness levels?

To discuss prior to the meeting, feel free to reach out to Dave Kresta, dkresta@neea.org.

Memorandum – Informational (Tier 2)



October 10, 2017

TO: Regional Emerging Technology Advisory Committee (RETAC)
FROM: Mark Rehley, Senior Manager Product Management & Emerging Technology
SUBJECT: Summary of Emerging Technology Projects for NEEA – Q4 2017

Our Ask of You:

- Please give us feedback on our new format for the quarterly emerging technology report. This is a work in process. This quarter we added a table showing the list of technologies and our assessment of readiness levels. The rest of the report provides high-level information on each project. Future reports will add more information about the regional pipeline. Stay tuned!

Click [here](#) for a copy of the full Q4 2017 Emerging Technology Report posted on NEEA.org (all sectors).