

Northwest Energy Efficiency Leadership Forum

October 17, 2016 Annual Meeting

Executive Summary

Built on a foundation of action items created during the 2015 Annual Meeting, the 2016 Meeting of the Northwest Energy Efficiency Leadership Meeting focused on three key questions:

1. **Aligning Policies and Regulation:** How might we realign policies and regulatory structures to reduce friction and increase rewards for achieving more energy efficiency?
2. **Pricing, Behavior, and Customer Satisfaction:** How might we repackage energy efficiency to increase adoption, improve satisfaction, and make enough money to do more?
3. **Pathway to Value:** How might we establish a market structure to enable and optimize the full development of the Regional energy efficiency resource?

To stimulate conversations about these three themes, the meeting included presentations from national experts including Rich Sedano, Director of US Programs for the Regulatory Assistance Project (RAP); Ken Black, Co-Chairman ESource; James Newcomb, Managing Director at Rocky Mountain Institute; and Rhys Roth, Director, Center for Sustainable Infrastructure.

The group split into smaller working groups that considered the following questions in two separate sessions:

Session 1: What new approaches, change in programs or other actions could more effectively engage consumers, yield greater adoption of energy efficiency, and make financial sense for all?

Session 2: What must be different to allow for energy efficiency to trade on spot and long term markets, new enabling technologies to be readily adopted, sensible regulatory oversight?

The outcomes from these sessions led to three prioritized action items including:

1. **Alternative regulation models/ rate structures tests:** The group suggested that a near-term goal would be to get one or more utilities and their respective regulatory bodies (could be public or Investor Owned Utilities) to step forward and test some alternative rate structures / revenue models.
2. **Energy Efficiency Resource Transaction Test:** Bonneville agreed to take a lead role with support from Snohomish PUD to pursue a test of a renewed version of the Conservation Transfer Agreement that was implemented in the late 1980s.
3. **End-use characterization of the Energy Efficiency resource:** The group agreed that it will be increasingly important to characterize the capacity delivered by energy efficiency resources during specified times so that it can support market transactions that fully value its contribution to the power system. As a first step towards this goal, NEEA will work with interested parties who have expressed interest in launching a Regional end-use load research project.

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Meeting Report

Background. The Northwest Energy Efficiency Leadership Forum is an annual gathering of executives from organizations responsible for regional energy efficiency efforts. The purpose of the NEEL Forum is to discover ways we can work together to achieve a more efficient and prosperous Region.

The emphasis of the annual meeting is on strategic discussion and learning from each other, and to:

- Discuss where the region is currently headed in our energy efficiency efforts;
- Identify issues or challenges for the future of energy efficiency;
- Define appropriate actions to be taken at a regional or sub-regional level; and
- Share best practices and innovative ideas.

2016 Meeting of the Northwest Energy Efficiency Leadership Forum.

The 2016 meeting of the Northwest Energy Efficiency Leadership Forum took place on October 17, 2016 in Portland, Oregon. This year's meeting built off of the five major action items developed at the 2015 meeting. Specifically, this year's meeting was focused on addressing the challenges the Region faces as it strives to ensure that we capture the full potential of the energy efficiency resource over the next 20 years. To accomplish this goal, there will likely be some changes required to conventional forms of transactions between customers and utilities. It may also require some re-examination of how the energy efficiency resource can be fully valued for both capacity and energy and transacted in markets as a long-term power resource. The meeting was structured around the following key themes and questions:

1. Aligning Policies and Regulation: How might we realign policies and regulatory structures to reduce friction and increase rewards for achieving more energy efficiency?
2. Pricing, Behavior, and Customer Satisfaction: How might we repackage energy efficiency to increase adoption, improve satisfaction, and make enough money to do more?
3. Pathway to Value: How might we establish a market structure to enable and optimize the full development of the Regional energy efficiency resource?

The full Meeting Agenda is included in Attachment 1 and a list of Attendees is included in Attachment 2. Roger Woodworth, former VP of Strategy at Avista Utilities facilitated the meeting. The meeting opened with presentations from Rich Sedano, Director of US Programs for the Regulatory Assistance Project (RAP); Ken Black, Co-Chairman ESource; James Newcomb, Managing Director at Rocky Mountain Institute; and Rhys Roth, Director, Center for Sustainable Infrastructure. The speakers provided material in support of the afternoon discussion where participants developed guiding principles, ideas and action items in answer to questions 1 and 2 above. These materials are available at www.neea.org/neel.

Guiding Principles: The group developed a set of guiding principles that were developed to address two questions:

- 1) What overarching principles that should guide the region in assessing / amending current legislative and regulatory frameworks that govern energy efficiency?
- 2) What overarching principles should guide the region in mainstreaming energy efficiency as a resource that's at least on par with other generating resources?

In response to these questions, the group developed a list of guiding principles:

- 1) **Maintain a long-term perspective.** Capturing the full value of the energy efficiency resource is inherently a long-term enterprise; in many cases it will take 10 or 20 years to fully develop the resource.
- 2) **Strive to create and maintain a level playing field.** Energy efficiency, like many distributed resources is different from traditional generating resources in the distribution of capital and operating expenses over time. There are also differences in “non-traditional” factors such as risk, availability, alignment with loads over time and environmental consequences. To the extent possible, Regional policy should attempt to ensure that all these attributes are placed on an equal footing across resources.
- 3) **Let outcomes drive actions.** For example, if the real outcome that is needed is a lower carbon footprint, set a total carbon performance goal and let many ideas compete to achieve the goal.
- 4) **Capture and Recognize Full Value of Energy Efficiency.** Acknowledge the multiple benefits that energy efficiency brings to all components of society including economic, environmental, as well as traditional utility metrics such as reliability, deferred capital cost, and avoided energy purchase costs.
- 5) **Customer-centric.** In pursuit of energy efficiency, the utility/customer relationship needs to be maintained if not enhanced.
- 6) **Adaptable Regulatory Processes.** Regulatory processes need to adapt and adjust to reflect current realities and future vision.
- 7) **Move from Commodity to Service.** Break with the current commodity-based model of energy service and move towards a value-based revenue model.
- 8) **Success through Collaboration.** Continued regional collaboration throughout NW will provide a firm foundation for success.
- 9) **Be willing to take risks.** Willingness to try/pilot new things
- 10) **Seek to Optimize.** Optimize regional system and existing assets in order to maximize shared benefits to all Regional stakeholders.

After establishing starting principles, the group then held two sessions to identify ideas and insights to address two primary questions linked to the themes/questions for the day.

Session 1: What new approaches, change in programs or other actions could more effectively engage consumers, yield greater adoption of energy efficiency, and make financial sense for all?

The group developed a list of ideas and insights that are fully captured in Attachment 3. These ideas were then grouped into the following themes:

- 1) **Convene Regional regulators, utilities and stakeholders to explore future of regulation including:**
 - Broaden/extend decoupling across all portions of the Region
 - Institute a non-by-passable charge for EE
 - Expand scope to include fuel switching & transportation
 - De-judicialize regulatory process; make it simpler and easier to innovate and collaborate
 - Adopt return on EE
 - New approaches to directly address equity issues

- 2) **Create/Test mechanisms to convert EE to power sales contracts (not just increasing short-term surplus sales)**
 - Explore new contract mechanisms
 - Create instruments that can recognize long and short term value
 - Explore all value streams including T&D deferral, Carbon, flexibility, reliability.
 - Power wheeling requirements

- 3) **Alternative Rate Structures/Business Models:**
 - Explore different models; e.g. Cell-phone all fixed charge; pay as you go, EE as service model
 - Do customer research into what customers really want from their utility in EE services? How would they like to pay for it?

Session 2: What must be different to allow for energy efficiency to trade on spot and long term markets, new enabling technologies to be readily adopted, sensible regulatory oversight?

The group developed a list of ideas and insights that are fully captured in Attachment 4. These ideas were then grouped into the following themes:

- 1) **Understand timing, and magnitude of existing energy/capacity commitments “freed” by EE and then understand how to “target” and “group” EE implementation to deliver specific energy and capacity under contract.**
 - Need to better understand long-term marginal resources being dispatched in response to EE
 - Timing and “shape” of EE delivery needs to be characterized for sale
 - Recognize the diversity across the Region; more EE potential in some areas and more demand/need for EE power in others

- 2) **Better understand potential customers for long-term contracted EE power**
 - What/how do customers of EE Power value? Capacity? Flexibility? Carbon? Risk reduction?
 - What would be a minimum/maximum amount per contract

- 3) **Need a fair return for utilities or others developing EE resource**
 - Need comparable rate of return for EE resource development as for capital investment in generating resources.

- 4) **Address Federal and State Barriers and Opportunities**
 - Look at Bonneville federal power sales contract requirements
 - Align state and local policies to support EE transactions around carbon policy, reliability, flexibility

requirements

- Modify least-cost planning/IRP requirements to recognize “inter-Regional” EE power sales as a resource

Specific Action Items. After discussing the ideas and themes from the two sessions, the group prioritized three Items for immediate action along with volunteers to advance them:

- 1) **Alternative regulation models/ rate structures tests:** The group suggested that a near-term goal would be to get one or more utilities and their respective regulatory bodies (could be publics or Investor Owned Utilities) to step forward and test some alternative rate structures / revenue models. These tests would be designed to address the current and forecasted challenges with the current cost-based business models while keeping or increasing high-customer engagement and satisfaction. Northwest energy Coalition volunteered along with NRDC to work with utilities and regulators to create some live tests over the next year.
- 2) **Energy Efficiency Resource Transaction Test:** Bonneville agreed to take a lead role with support from Snohomish PUD to pursue a test of a renewed version of the Conservation Transfer Agreement that was implemented in the late 1980s. The test will focus on the contractual and physical elements need to support an exchange of the power “freed-up” by energy efficiency in one utility service territory and delivered to another. Ralph Cavanaugh from Natural Resources Defense Council also offered to help with the potential to find a California buyer of the carbon free power freed up from energy efficiency development in the Northwest.
- 3) **End-use characterization of the Energy Efficiency resource:** The group agreed that it will be increasingly important to characterize the capacity delivered by energy efficiency resources during specified times so that it can support market transactions that fully value its contribution to the power system. This includes the need to assess both the “fixed” components of capacity as well as “flexible” or “variable” components that can be exercised as system demands change over time. NEEA will take the lead in this effort and is currently working to secure funding to establish an end-use load characterization project that could serve as the starting point for more reliable characterization of the energy efficiency resource.

Attachment 1

2016 Northwest Energy Efficiency Leadership Forum

AGENDA

DATE: October 17, 2016

Location: Hilton Portland; 921 SW 6th Ave., Portland, OR 97204

Skyline Conference Rooms Floor 23

Purpose: Discover ways we can work together to achieve a more energy efficient and prosperous region.

Context

While there is general agreement by both utilities and customers on the value and long-term potential of energy efficiency in concept, in practice there remain significant barriers to the business model that supports utility energy efficiency programs. Capturing the full regional potential of the energy efficiency resource over the next 20 years will likely require some changes to conventional forms of transactions between customers and utilities. It may also require some re-examination of how the energy efficiency resource can be fully valued for both capacity and energy and transacted in markets as a long-term power resource.

Guiding Questions

1. **Aligning Policies and Regulation:** *How might we realign policies and regulatory structures to reduce friction and increase rewards for achieving more energy efficiency?*
2. **Pricing, Behavior, and Customer Satisfaction:** *How might we repackage energy efficiency to increase adoption, improve satisfaction, and make enough money to do more?*
3. **Pathway to Value:** *How might we establish a market structure to enable and optimize the full development of the Regional energy efficiency resource?*

Welcome

8:00 – 9:00 Breakfast Buffet -

9:00 – 9:30 am **Introductions and review of the day** – Co-chairs and Roger Woodworth.

- Co-chair opening remarks
- Participant introductions

- Goals and structure for the day

Part I: Setting the stage – Information for Ideas and Discussion

9:30 – 10:10 am **Less Friction, More Reward: How others are realigning governing and regulatory policies to achieve greater adoption of energy efficiency.** Presentation by Rich Sedano, Principal and US Programs Director of the Regulatory Assistance Project.

- Beyond decoupling, what can we do to treat energy efficiency more as an equivalent to generating resources including impacts on revenues and margins? What can we learn from other regions' experience with similar problems?
- What incentive structures show the greatest promise to move beyond minimum compliance and foster acquisition of more efficiency?

10:10 – 10:20 am **Break**

10:20 – 11:00 am **Outcomes by design: Understanding what drives consumers.** Presentation by Kenneth Black, Co-Chairman, E-Source.

- Engaging Consumers: How might we repackage the way we offer energy efficiency to increase adoption and improve customer satisfaction?
- Increasing revenue: How might we restructure the way we price energy efficiency to make money to do more?

11:00 – 11:10 am **Break**

11:10 – 11:50 am **Pathway to Full Value: First steps toward establishing a market structure to monetize energy efficiency.** Presented by James Newcomb, Managing Director, Rocky Mountain Institute.

- What would it take to enable efficiency to trade as a long-term energy resource comparable to generating resources?
- What are the financial, legal and technical components that would support transactions between inter-regional buyers and sellers that would encourage full development of the energy efficiency resource?

11:50 am – 12:00 pm **Morning Summary – Capturing observations and Ideas**

12:00 – 12:30 pm **Lunch and networking**

12:30 – 1:00 pm **Better Outcomes at Lesser Cost: Leveraging energy efficiency to improve productivity and lower costs across public services.** Presented by Rhys Roth, Director, The Center for Sustainable Infrastructure.

1:00-1:15 pm **Break**

Part II: Doing the Work - Creating, Prioritizing and Signing up for Solutions

1:15 – 2:15 pm **Aligning Policies and Practices for Less Friction, More Reward**

- What overarching principles should guide the region in assessing / amending current legislative and regulatory frameworks that govern energy efficiency?
- What new approaches, change in programs or other actions could more effectively engage consumers, yield greater adoption of energy efficiency, and make financial sense for all?
- To advance these ideas, we'll want to know _____, need to decide _____, and have to assure _____."

2:15 -- 2:20 pm **Stretch Break**

2:20 -- 3:20 pm **Designing a Market that Leverages and Optimizes Regional Diversity in Efficiency**

- What overarching principles should guide the region in mainstreaming energy efficiency as a resource that's at least on par with other generating resources?
- What must be different to allow for energy efficiency to trade on spot and long term markets, new enabling technologies to be readily adopted, sensible regulatory oversight?
- To advance these ideas, we'll want to know _____, need to decide _____, and have to assure _____."

3:20 -- 3:25 pm **Stretch Break**

3:25 - 4:00 pm **Shared Priorities for Energy Efficiency: Action Ideas Summary**

- What are the priority items that we're going to work on and why? What is the first most important step to take?
- Who will be accountable for progress? What resources will be required? Who will pay?

4:00 – 4:15 pm **Re-cap of Action Ideas and Accountabilities;**

4:15 – 4:30 pm **Closing Remarks by Co-chairs and Adjourn**

Attachment 2

2016 NEEL Meeting Attendees

Name	Title	Organization
Dennis Vermillion	President	Avista Utilities
Elliot Mainzer	Administrator	Bonneville Power Administration
Richard Genece	Vice President of Energy Efficiency	Bonneville Power Administration
Darby Collins	EE Marketing Manager	Bonneville Power Administration
Margie Harris	Executive Director, Former	Energy Trust of Oregon
Michael Colgrove	Executive Director	Energy Trust of Oregon
Darrel Anderson	President and CEO	Idaho Power Company
Theresa Drake	Senior Manager	Idaho Power Company
Ralph Cavanagh	Senior Attorney	Natural Resources Defense Council
Susan Stratton	Executive Director	Northwest Energy Efficiency Alliance
Jeff Harris	Chief Transformation Officer	Northwest Energy Efficiency Alliance
Tom Karier	Council Member	Northwest Power and Conservation Council
Charlie Grist	Manager, Conservation Resources	Northwest Power and Conservation Council
Roger Gray	CEO	Northwest Requirements Utilities
Deb Young	Program Consultant	Northwestern Energy
Robert Rowe	President and CEO	Northwestern Energy
Nancy Hirsh	Executive Director	NW Energy Coalition
Beth Looney	President and CEO	Pacific Northwest Generating Cooperative
Shauna McReynolds	Executive Director	Pacific Northwest Utilities Conference Committee
Stefan Bird	President and CEO	Pacific Power
Joe Barra		Portland General Electric
Bob Stolarski	Director Customer Energy Management	Puget Sound Energy
Larry Weis	General Manager and CEO	Seattle City Light
Jim West	Assistant General Manager	Snohomish County PU
Pohndorf, George	Senior Manager, Energy Services	Snohomish County PUD
Clay Norris	Manager, Power Section	Tacoma Power
Joe Lukas	Executive Director	Western Montana Electric G&T Cooperative

Attachment 3

Session 1: Aligning Policies, and Practices: Inventory of Ideas and Insights

1. Don't forget the long view
2. Economics regulation that provides confidence
3. Level the playing field
4. Expand the effects to include carbon
5. Expand the governing board flexibility including other sectors
6. Address the equity issue
7. Better educate customers on value of EE
8. Identify what our consumers want
9. Rate structure similar to cellular service
10. Adding customer services to value from utilities
11. Need an overall carbon target
12. De-judicialize the regulatory process
13. Principal: Put the customer at the center
14. Put EE on Par with other resources
15. Consistency of regulatory process
16. Linking energy efficiency to carbon reduction
17. Need a return on Energy Efficiency
18. Identify barriers to progress (stakeholder process)
19. Convene region's regulators to address today's issues
20. Broaden revenue decoupling throughout the region
21. Need a non-bypassable charge for distribution services
22. Add flexibility component to EE power transactions and end use load research
23. Aggressive pursuit of Pilot EE Power Transactions
24. Better understand the value difference between long term and marginal markets
25. Assess the legal contract mechanisms
26. Target EE in hours and location
27. Identify type of support needed from regulators

Attachment 4

Session 2: Designing Markets: Inventory of Ideas and Insights

1. Principals – EE is on the same level with other resources – defining what the products are, what the market is
2. Defendable and dependable
3. Awareness of what is being freed up with EE measure
4. Utility maintains relationship with customer
5. Address institutional barriers (ie states have similar rules)
6. Bonneville contracts may need some adjustment
7. State mandates need some changes
8. Responding to market opportunity
9. Need right incentives to participate in market (equitable and fair)
10. Come up with a model maybe using other models in the nation (ie NY)
11. Pilot and take some risks within a state to attempt this market (free of penalties)
12. Analyze what the benefits are in a traded market (low carbon, reducing transmission costs, delivering capacity needs)
13. Know who the customer was that would buy this EE, and decide how to price that, and assure a fair return
14. Develop a pilot and standard that could be replicated on a regional basis
15. Principals – Reassess how EE is deemed to be a least cost resource (cost-effectiveness)
16. Minimize total carbon footprint for the region to generate an offset that could be translated into a commodity
17. More targeted energy efficiency – ability to differentiate different types of EE using time and location variables
18. Establish a level playing field between capital investments and EE investments allowing a comparable rate of return
19. Try to develop regulatory support to broaden IRP's to be a more regional solicitation generated by multiple regional utilities

20. Give 1st mover advantage by anticipating the types of transactions that will need to occur to generate an EE market in the west.
21. Anticipate objections that may arise
22. Limited/no barriers – the current infrastructure will suffice for this type of action
23. Targets that are more subregional
24. Regional collaboration to ensure those goals can be met
25. Customer expectation is for EE – potentially set a minimum
26. States require evaluation of efficiency - capacity, risk reduction, and non-energy benefits