

**DRAFT  
NORTHWEST ENERGY EFFICIENCY TASKFORCE REPORT AND  
RECOMMENDATIONS FOR THE EXECUTIVE COMMITTEE'S  
CONSIDERATION**

**December 31, 2008**

**Contents**

- I. Executive Summary**
  - II. Introduction**
  - III. The Case for Energy Efficiency**
  - IV. Planning that Puts Energy Efficiency First**
  - V. The NEET Mission and Work Groups**
  - VI. Work Group Assignments and Summary of Recommendations**
  - VII. NEET Overarching Themes**
  - VIII. Executive Committee Recommendations and Next Steps**
- Appendices (included in separate CD) -- Work Group Reports**

## I. Executive Summary – Under Development

The Executive Summary will focus on the recommendations and will be completed following the January 9, 2009 Executive Committee discussions.

## II. Introduction

The push for energy efficiency in the Pacific Northwest is facing an unprecedented opportunity and a significant challenge. With load growth, increasing fuel costs, the rising expense of siting and building new generating and transmission resources combined with increasing climate change concerns, it is clear that energy efficiency must be the region's top priority to meet the growing demand for energy.

The opportunity of greater energy efficiency would appear to be good news for a region that has dedicated itself to energy efficiency and conservation. After all, the Pacific Northwest has at least 30 years of experience putting efficiency policies and measures to work and collaborating to balance the needs of the environment with the region's economic health.

But ironically, the Pacific Northwest's impressive energy efficiency accomplishments also mean we face an increasing challenge to keep the savings coming. Building an energy efficiency "power plant" is no different than building a typical electric generation resource. It requires ongoing efforts to analyze, design, construct, market, operate and maintain the systems that provide energy efficiency benefits and to continuously improve these systems over time.

That is what the Northwest Energy Efficiency Task Force (NEET) process is all about. For the past 10 months, this partnership of utilities, government agencies, industry leaders, legislators, community action groups, consultants, educators, environmental advocates and others has developed recommendations to expand energy efficiency in the Northwest. Building on its substantial investment and legacy of experience, the region is well-positioned to take on an increased commitment to energy efficiency.

The vision statement for NEET reads:

*Significantly advance the region's energy efficiency achievement through greater regional collaboration, commitment, customer involvement, and pursuit of the most cost-effective strategies.*

Climate change issues, along with an increased need to stimulate the economy and accelerate the creation of more local jobs, have bolstered an already strong case for energy efficiency. Energy efficiency is one of the most economic and environmentally effective options available for meeting the growing demands of the Northwest.

The idea for NEET was born out of the belief that collaboration offers the best opportunity for accelerating the acquisition of energy efficiency in the Northwest. Through NEET, regional leaders explored how various entities can best work together to leverage their individual efforts. The process has resulted in a detailed roadmap for achieving higher levels of efficiency in the future.

The following report is both a summary of the first phase of NEET work and a call to action. It is an appeal to interests in the Pacific Northwest to work together and put efficiency first as we meet our energy needs. The recommendations that follow point the way toward an energy future that nurtures a healthy environment and supports a robust regional economy.

Sidebar: In this report, *energy efficiency* includes both increasing the efficient use of electrons and energy-producing fuels, as well as using less energy overall. The Northwest Power and Conservation Council’s power plan defines conservation as the more efficient use of electricity, but it is sometimes taken to mean using less energy overall. In any case, both the efficient use of electricity and using less to produce the same result are the goals of the NEET effort.

### III. The Case for Energy Efficiency

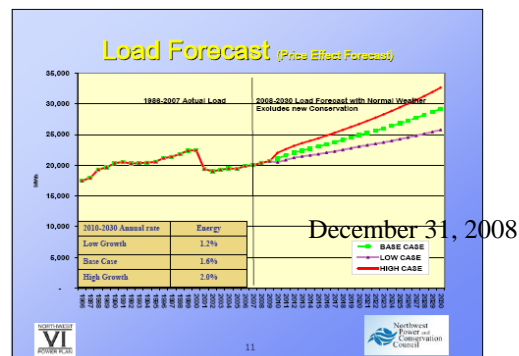
The 1980 Pacific Northwest Electric Power Planning and Conservation Act (Act) catapulted the region into a leadership role with conservation and energy efficiency. The Act created the Northwest Power and Conservation Council (Council) and mandated regional power planning. Among its other major provisions, the Act called on the Pacific Northwest to develop regional programs related to energy conservation.

Congress backed up its words by specifying that the first priority for resource acquisition in the Northwest be given to conservation, followed by renewable resources. Congress ensured conservation would be given preferential treatment by defining cost-effectiveness differently for conservation. The Act requires that when the Bonneville Power Administration (BPA) adds resources, conservation be given an advantage in terms of cost-effectiveness over other choices.

As a result, the Northwest Power Act set in motion an ambitious, on-going effort in the region to use electricity efficiently and wisely. In its implementation, the Act has also nurtured a regional ethic that views the conservation of electricity as a societal good and the responsible thing to do.

#### **Load Growth Signals Need for New Resources**

The need for new resources in the Northwest is driven by load growth. While current conditions suggest a slowdown in economic



activity and energy consumption, loads in the region are still expected to increase at a moderate pace and to pick up steam again in 2010.

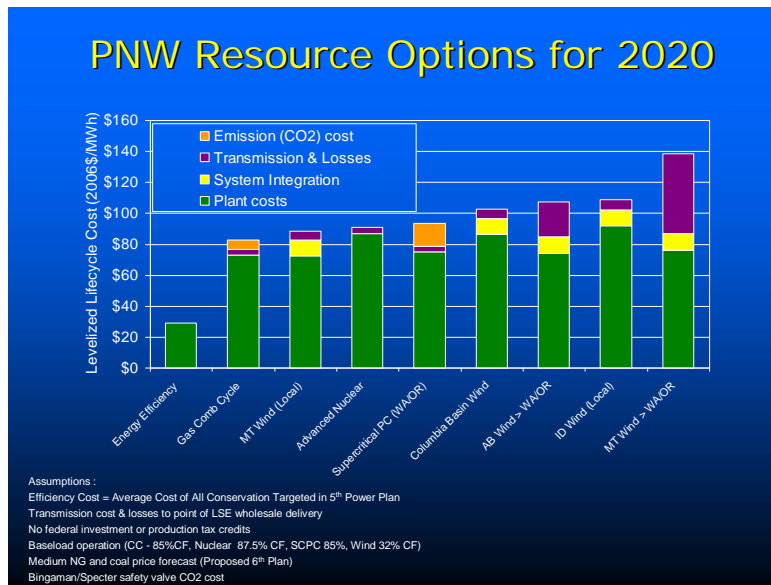
According to preliminary estimates prepared by the Northwest Power and Conservation Council for its Sixth Power Plan (due in 2009), the region’s power supply system could see load growth of between 1.2 percent and 2 percent annually over the next 20 years. This load growth is fueled by a growing population, expanding numbers of electronic devices and the potential for the increasing electrification of the transportation sector.

Demand is expected to grow by about 400 average megawatts per year from 2010 to 2030. This is equal to the output of a new combined-cycle power plant or 1,200 megawatts of wind-farm capacity.

Utilities are looking for ways to meet load, and they are finding no bargains today when it comes to building generation. Recent data from the American Wind Energy Association shows a significant increase from 2004 to 2006 in the per-kilowatt-hour cost of generating resources, including wind, natural gas, coal, hydro and other sources.

[Placeholder for graphic showing costs going up for all resources; possibly use AWEA slide.]

The graph below tells the story looking toward 2020, when the low-cost generating options are projected to be over \$80 per megawatt, not including the additional expense of a potential carbon tax. The Council’s analyses indicate a carbon tax could significantly add to the cost of electricity by 2015. As the costs of generating resources increase, so do opportunities for cost-effective energy efficiency.



Efficiency is the lowest-cost resource option to meet increasing energy loads. It can also provide additional benefits in terms of greater system reliability, a hedge against risk, peak load reduction, and a decrease in the Northwest's carbon footprint. Ultimately, it saves money for consumers by slowing the need to build costly new generating plants.

**Sidebar:**

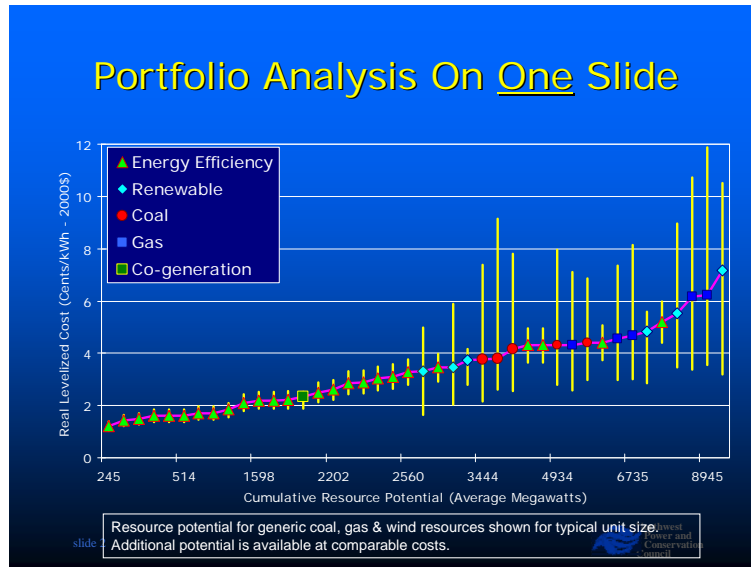
The past few years have introduced new environmental and operational considerations to the complexities of developing generating resources. Among them, power from fossil fuels is subject to growing environmental limits and prohibitions in the West, and there is a significant potential that federal and/or state lawmakers will impose new taxes on carbon emissions.

While wind power is an attractive no-emissions renewable option, it cannot alone provide reliable electric service. Wind is an energy resource that does not add capacity — the ability to meet peak loads — to the generating system. From a system operations standpoint, the natural variability of wind means other resources must be available for backup. The capacity of the hydro system to provide backup is nearly tapped out, which means additional natural-gas fired plants or other flexible resources will be needed for that purpose.

### ***Identifying Available Energy Efficiency Opportunities***

In its Fifth Power Plan, completed in 2004, the Council estimated there were about 2,800 average megawatts of cost-effective (less than 2.4 cents per kilowatt-hour) conservation that could be acquired over the next 20 years. The Council's 2004 Resource Action Plan called on the region to acquire a minimum of 700 megawatts of efficiency from 2005 to 2009, and the Northwest is on the path to reach, if not exceed, that goal.

The Council is currently developing its Sixth Power Plan. According to preliminary estimates, there are between 2,000 and 3,000 average megawatts of cost-effective conservation available, the lion's share of which is available at much lower cost than renewable resources, coal and gas-fired generation. According to the Council's projections, shown on the graph below, nearly 2,500 megawatts could be acquired at less than four cents per kilowatt-hour.



So far, the Council’s Sixth Power Plan seems likely to focus on lighting, distribution system efficiency, changing business practices, residential water heating, appliances and electronics, and commercial refrigerators as the source of most of the savings. The NEET work groups offered a number of recommendations, detailed later in this report, that address how we might accelerate that acquisition.

## IV. Planning that Puts Energy Efficiency First

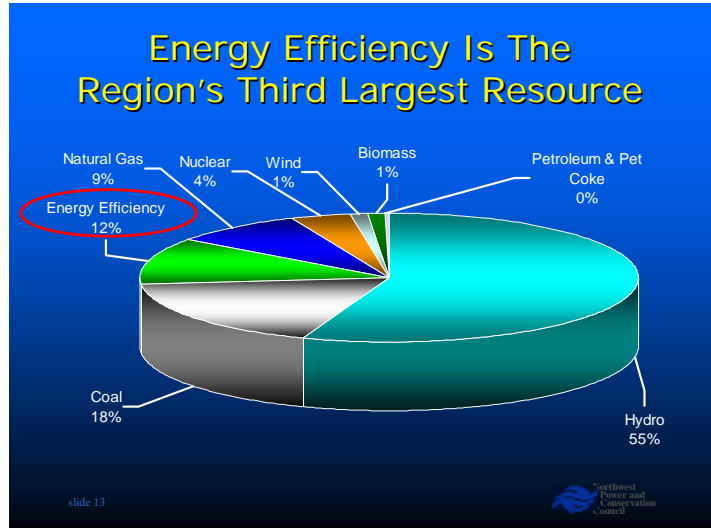
The Council’s first Northwest Power and Conservation Plan in 1983 focused on changing building codes to capture energy savings. The target in the plan was for the region to adopt the Council’s Model Conservation Standards (MCS) within 20 years. By the mid-1990s, the entire region had adopted the MCS, which represented a 40 percent energy savings over the codes in effect at the time. The success of the MCS signaled the readiness with which citizens of the Northwest would embrace energy efficiency.

BPA, utilities, and others throughout the Northwest have offered energy efficiency programs and encouraged customers to take advantage of efficiency initiatives. The emphasis on efficiency during the 1980s and 1990s led to a novel concept for its time: Conservation is equivalent to generation as a means of providing electricity to serve customer needs, and it is a resource that is typically purchased from customers. Efficiency has the added advantage of being a no-fuel, no-emission, and low-cost alternative.

### ***Efficiency Achievements***

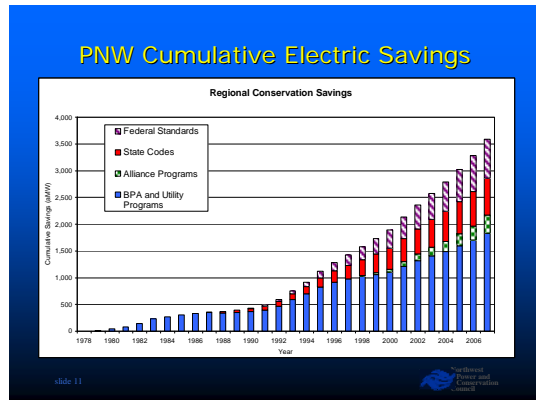
The Northwest has made remarkable achievements in conservation and energy efficiency over the past 30 years. Since the Council’s first power plan in 1983, the region has acquired over 3,500 megawatts of conservation at an average cost of 3 cents per kilowatt-

hour. This is equal to the current electricity consumption of the entire state of Idaho, plus western Montana.

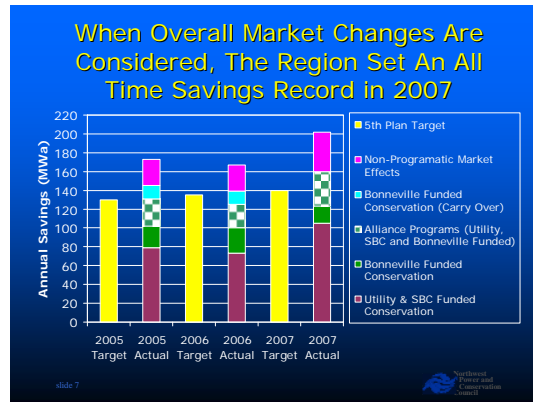


Energy efficiency is now the third largest resource in the region, and, as illustrated on the chart above, it lags only hydro and coal.

The graph below presents the region’s considerable year-by-year cumulative conservation savings since 1980.



The pace of conservation acquisition in the Pacific Northwest was 130 to 150 average megawatts per year between 2001 and 2006. In 2007, the region set a one-year record for energy efficiency achievement, with a gain of 200 average megawatts (aMW) or 1,750 million kilowatt-hours (kwh). This record, which is detailed in the graph below, occurred despite the fact the Northwest has already gathered much of the “low-hanging fruit.”



Significant energy efficiency savings have accrued in all of the following areas:

- Manufactured housing
- Weatherization
- Electric water heaters
- Refrigerators and freezers
- Dishwashers, clothes washers and dryers
- Lighting (residential, commercial and industrial)
- Heating and cooling equipment
- Irrigation
- Industrial processes

Starting with the MCS, upgrading codes and providing incentives and tax credits have boosted energy efficiency in the Northwest. From the beginning, building codes were the cornerstone of the region’s energy efficiency efforts. It was more effective and cost efficient to use codes to build energy efficiency into structures rather than have to retrofit them later.

Nationally, the Energy Policy Act of 2005 established new federal efficiency standards and required updating standards for a number of products. In December 2007, Congress passed the National Energy Security and Independence Act, which also established new efficiency standards and updated existing standards for appliances and equipment.

At the state level, Oregon and Washington have adopted equipment efficiency standards in line with federal law. Washington requires large utilities to prepare resource plans that include conservation and to develop all cost-effective conservation, defined in the same way as in the Council’s plan.

Oregon recently implemented a revised residential building code to boost conservation acquisition and improve energy efficiency in new homes. Idaho and Montana are considering updates to state residential and commercial energy codes as part of the normal cycle of revising codes. Many cities and counties in the Northwest have also joined in the pursuit of energy efficiency.



There is no shortage of activity to promote energy efficiency in the Northwest and it appears to be working. Rather than rest on its laurels, the Northwest has decided to do more.

To avoid the risk of a slowdown at a time when energy costs are rising, leaders in the Northwest's electric utility and efficiency communities are determined to expand the region's commitment to efficiency and increase awareness, knowledge and enthusiasm for the next generation of measures and activities. NEET aims to tap into the zeal for environmental stewardship and to champion energy efficiency as the greenest of the 21<sup>st</sup> century "fuels." In other words, the Northwest is looking to maintain its position as the vanguard of energy efficiency across the nation.

## **V. The NEET Mission and Work Groups**

Changes in the Northwest's energy outlook spurred the NEET effort. As described above, climate change, growth, resource costs, state mandates and increased interest among utilities for ramping up effective programs, all played a role in shaping NEET.

In addition, the public expects government agencies and utilities to address environmental issues such as climate change and to press for energy independence for the United States. Energy efficiency can play a leading role in meeting these challenges.

Another important realization was at the heart of NEET. While the region has amassed a solid and impressive record of accomplishments with energy efficiency, there is no room for complacency. The Northwest was an energy efficiency pioneer and led the way with innovative building codes and widespread promotion of technology like the compact fluorescent light bulb (CFL), which is now commonplace in the region's households and businesses.

Since the region has already chalked up considerable achievement, we need new ideas and momentum to accelerate the acquisition of energy efficiency. Simply put, we have got to get more energy efficiency faster.

### **Sidebar:**

Customers of BPA have yet another reason to take a heightened interest in energy efficiency. The 20-year power-sale contracts customers signed in 2008 are based on tiered rates and a presumption BPA will no longer acquire new resources and meld the costs with those of the low-cost federal hydro system. Under the contracts, if a utility purchases power from BPA beyond its original allotment, it will pay full cost.

This new relationship means more BPA customers will likely consider acquiring their own resources to meet load growth. The lowest-cost and most advantageous alternative, in most cases, is energy efficiency. In addition, many utilities in the region are subject to state laws that require renewables and energy efficiency to be a major part of their resource mix and to be the preferred resource when new supply is needed.

The Northwest's energy community has a long history of working collaboratively on issues like energy efficiency, and NEET is modeled on previous efforts. The taskforce brought together a group of high-level leaders to explore opportunities to foster greater regional cooperation in energy efficiency programs, share and learn from current energy efficiency experiences, and raise the general awareness about the benefits of conservation and efficiency.

In April 2008, a number of utility executives sent a letter to western governors, other utilities, and policy makers calling for greater collaboration on energy efficiency. The letter said, to achieve the vision of a clean energy future, "we will need to rethink and retool our energy supply." It summoned others to work "to maximize the benefits of energy efficiency, advanced metering technologies and other demand-side programs."

NEET answers that call to action.

The NEET effort convened an executive committee of 30 senior-level representatives from utilities, state government, electricity customers, industry and energy efficiency specialists. Council member Tom Karier of Washington, PacifiCorp CEO Pat Reiten and BPA Administrator Steve Wright chaired the committee. A list of the executive committee members is attached.

Six work groups open to all interested parties and co-chaired by energy experts were formed to focus on specific topic areas. Time and commitment were essential to the success of NEET, and the executive committee and work group members gave generously of both.

The executive committee first met in June 2008 to discuss and approve a work plan to guide the taskforce activities. In October, there was a second executive committee meeting at which the work group co-chairs offered detailed mid-term reports. In between meetings, the work groups investigated their topics and developed recommendations.

The NEET work groups discussed opportunities to accelerate energy efficiency acquisition and developed short and long-term recommendations. After presenting their recommendations and gathering comments from the executive committee in October, the work groups prioritized and finalized a list of recommended actions for the region. These were delivered December 15.

Add the following text boxes:

When NEET was formed, governors in the Northwest backed its mission and pledged their support. According to Oregon's Governor Ted Kulongoski, " <i>It is imperative that the region collaborate on ways to tap more efficiency, to spur the introduction of new energy-efficient technologies, and to step up the pace of existing efficiency programs.</i> "
---

Washington's Governor Christine Gregoire endorsed NEET by pointing to the need for cost-effective resources. *"Regionally coordinated actions to preserve and enhance the value of our collective power supply have benefited us all. Energy efficiency is the lowest cost and lowest risk resource and we need to continue our efforts to ensure that it remains a regional priority."*

Brian Schweitzer, the governor of Montana, weighed in to support NEET by saying, *"Energy efficiency has proven to be the region's lowest cost and lowest risk resource and should continue to remain the region's highest priority."*

## **NEET Work Groups**

Issues for NEET to consider were gathered over several months of meetings with utilities and energy efficiency professionals. Like other resources, energy efficiency must be "built," and while the tools and materials are obviously different than for a conventional project, there must be information, materials, technology, skilled workers and institutional arrangements that facilitate construction.

The issues identified for the work groups are building blocks for the energy efficiency power plant. They provide answers to such questions as:

- How do we better understand the cost-effective conservation potential?
- How do we fill the pipeline with new technologies such as compact fluorescent light bulbs that have been highly successful?
- Are there opportunities to operate energy efficiency programs on a regional basis to take advantage of synergies and economies of scale?
- Are there regional marketing opportunities that would accelerate adoption of energy efficiency measures?
- What can be done to assure there is an adequate workforce to implement new technologies and a robust program?
- Are there regional policy issues and institutional arrangements that should be addressed to accommodate and support an accelerated energy efficiency effort?

In the end, the executive committee grouped the issues into six topics, each of which was assigned to a NEET work group. While there was some overlap in the topics, an attempt was made to avoid redundancy and give each of the following work groups a discrete assignment.

- Work Group 1: Measuring What Matters
- Work Group 2: Emerging Solutions and Technologies
- Work Group 3: High Impact Energy Efficiency Initiatives
- Work Group 4: Marketing and Public Awareness
- Work Group 5: Building the Energy Efficiency Workforce
- Work Group 6: Governance and Energy Efficiency Policies

The work groups were open to broad participation and each had anywhere from 45 to 70 people signed up as members.

## **VI. Work Group Assignments and Summary of Recommendations**

The work groups' first task was to research the issue area, determine whether the information available was sufficient for further discussion and developing actions and, if not, to lay out steps and timelines to acquire the needed information. From this groundwork, the groups moved on to the heavy lifting: developing strategies and shaping recommendations.

The work group assignments and recommendations are summarized below. The full text of each work group report is contained in the Appendices, along with a list of all members of each group.

### ***Work Group 1: Measuring What Matters***

#### **Co-Chairs**

Massoud Jourabchi, Northwest Power and Conservation Council  
John Kaufmann, Oregon Department of Energy  
Mary Smith, Snohomish County Public Utility District

#### **Assignments**

Data collection and analysis is the foundation for successful energy efficiency programs. Without accurate data, the region could miss opportunities and market trends that drive new load growth, make expenditures where they are no longer needed, and fail to reach the full potential of energy efficiency as the region's resource of choice.

Work Group 1 answered the fundamental question: Looking ahead, what data must we have to succeed? In its first task, the work group tackled a list of questions to determine whether existing data is current, sufficient and useful in the areas of customer characteristics, energy consumption, end-use load shape, market characteristics, energy efficiency technology and behavior change savings and cost.

The work group considered whether a regional approach to acquiring data is appropriate, and if so, what the approach should be. They discussed the role of the Regional Technical Forum (RTF)<sup>1</sup> and its current level of support; provided background on the different state programs that promote energy efficiency; and identified opportunities for synergies in developing a coordinated state approach to building codes, code enforcement and product standards.

---

<sup>1</sup> The RTF is a standing advisory committee to the Northwest Power and Conservation Council, convened in 1999 to develop standardized protocols for verifying and evaluating conservation savings. It provides BPA and the region's utilities with a wide range of technical and analytical support.

## **Summary of Work Group 1 Recommendations**

Energy efficiency is built upon, driven by, and evaluated through data. Without accurate data, utilities, states and policy makers cannot gauge the impact of energy efficiency measures or make the strategic decisions needed to determine how best to deliver reliable energy savings to customers and avoid new expensive generation facilities.

Today, regional utilities spend an estimated \$5 million a year collecting and evaluating data. This is a significant reduction from the region's investment in data collection and coordination in the 1980s and 1990s. By taking a coordinated approach to gathering real-time feedback on areas such as energy use, technical performance, customer needs and behaviors, the region would be better able to leverage those resources to meet anticipated ramped-up energy efficiency demand and maximize the delivery of cost-effective energy efficiency efforts for the region. States could also use this information for developing building codes and product standards and for monitoring progress towards climate-change targets.

Work Group 1 recommends creating and funding a regional long-term, coordinated and fuel-neutral data initiative to develop common survey and evaluation tools, as well as provide dedicated staff to track and manage the region's energy efficiency data for national, regional and local uses.

The work group also recommends the creation of a web-based data clearinghouse where all parties can engage and simplify the sharing of information. This effort would be initiated by conducting an independent evaluation of current data collection efforts by the Regional Technical Forum and the Northwest Energy Efficiency Alliance (NEEA) to determine program effectiveness, find synergies and develop an implementation plan with dedicated long-term funding and staffing recommendations.

The effort would also include developing a business plan for the creation of the data clearinghouse. A second phase of the project would focus on implementation of the coordinated function and clearinghouse for 2010 and beyond to advance success in the region's energy efficiency acquisition.

## ***Work Group 2: Emerging Solutions and Technologies***

### **Co-Chairs**

Bob Balzar, Seattle City Light  
Susan Hermetet, NEEA

### **Assignments**

Work Group 2 explored a question essential to delivering ongoing efficiency programs in the region: How can we keep the pipeline full of energy efficiency innovations for use in the Pacific Northwest? A key to the assignment was discerning what research, development and demonstration (RD&D) on new energy efficiency technologies is available to the region and if/how the RD&D is used.

Early on, workgroup members realized the need to get down to basics, including a common definition of RD&D. They established a subgroup to provide a definition that would help scope a regional funding effort and organized their inquiry into three sections: premises, RD&D stages and RD&D scope.

The work group conducted a survey to assess current RD&D within and outside the region that could be beneficial for efficiency, as well as to explore potential future topics for RD&D and types of infrastructure to coordinate and implement RD&D efforts. A subgroup developed selection criteria for identifying emerging technologies and exploring market and development issues.

## **Summary of Work Group 2 Recommendations**

The Northwest needs to develop a continuous pipeline of commercially available new technologies, practices and solutions to continue to advance energy efficiency efforts in the region. Significant investments in this area have not been made for the last 15 years, and the region has instead focused on the near term, with measures such as compact fluorescent light bulbs and energy efficient clothes washers and windows. While it has been successful, this approach is no longer able to meet the increased demand for more cost-effective energy efficiency measures and delivery.

Work Group 2 recommends that the region adopt a “pooling” approach to fund efforts for the development of longer-term emerging energy efficiency technologies and solutions. This would provide a way for more technologies and solutions to become commercially viable faster and have increased impact. By pooling research and development funds, the region could better coordinate, focus, diversify and leverage funds.

A survey conducted by the work group, found research and development budgets in the region ranged from \$5,000 to \$40 million dollars a year for utilities and other regional entities. Many people expect RD&D funding to increase in their organizations. The work group recommends designating a currently existing regional entity to become the central coordinator to leverage RD&D efforts within the region and beyond. Governed by a regional board, this entity would administer the funds and facilitate the development of a diversified and balanced emerging energy efficiency technology portfolio.

The work group envisions that a standard screening criteria would be used to select the top fuel-neutral RD&D priorities and projects for the region. The criteria would screen for technical promise, regional implications and market promise. The work group stressed that it is critical for the region to adopt a long-term view and commitment to this effort in lieu of today’s measurement paradigm, which is based purely on cost effectiveness and cost-benefit tests.

The work group evaluated the entities that might handle the RD&D administration effort and determined that the NEEA and the BPA were the two primary contenders. If the executive committee supports the “pooling” recommendation and decides to centralize this effort with one of these entities, the next step would be to develop a business plan

outlining implementation needs for five years and expected return on investment for funders.

#### **Additional Note:**

Following the release of the work group's December 15 report, BPA announced that it is undertaking a revision of its technology road maps for each item in the agency's energy efficiency RD&D portfolio. BPA is looking to pursue several advanced technologies and will screen and analyze them through its technology road-mapping process to find the most promising ones for implementation.

BPA seeks to make the revisions collaboratively and to use the process to complement the NEET proposals. Because this effort will be on a fast track, BPA will issue an invitation to all interested entities to participate in the process. The invitation is attached to the Work Group 2 information in the appendix.

### ***Work Group 3: High Impact Energy Efficiency Initiatives***

#### **Co-Chairs**

Stan Price, Northwest Energy Efficiency Council

John Savage, Commissioner, Oregon Public Utility Commission

#### **Assignments**

The task for Work Group 3 was to identify the components that make up a successful energy efficiency program. The work group's primary question was: What elements underpin high-impact energy efficiency initiatives for business, homeowners and vulnerable customers? This work group also took on the issue of how the region should address energy efficiency across multiple fuels, i.e., electricity, natural gas and offer efficiency programs that are fuel neutral.

The work group examined current best practices and benchmarking criteria that are relevant for Northwest energy efficiency programs and explored innovations that could be used to deliver services and make energy efficiency programs more consistent and simple. The work group also reviewed program policies, many of which were developed 20 years ago, when the region had much less experience with energy efficiency.

Work Group 3 organized itself into three subgroups and each explored the issues in the context of one customer sector: residential, commercial, and industrial loads. Each subgroup evaluated information from experts about how to accelerate conservation, identified opportunities for significant savings in each sector and barriers to achieving them and prioritized new initiatives.

### **Summary of Work Group 3 Recommendations**

Work Group 3 identified two primary paths to significantly accelerate energy efficiency acquisition in the region. First, find ways to improve the design and delivery of existing programs by focusing primarily on building long-term relationships in key customer

markets. Second, target new energy-saving opportunities or implement regionally coordinated programs.

To make this happen, the work group recommends establishing a regional energy efficiency forum that would bring together staff from utilities, energy efficiency organizations, state and local governments, BPA and interested stakeholders to develop regional initiatives, coordinate implementation and delivery approaches, and foster best practices. Interaction among these entities currently takes place, but in a fragmented and informal manner. A forum chartered for this purpose could formalize interaction among entities with the goal of enhancing regional collaboration. The work group recommends establishing a leadership-level group to help advance best practices in the region, as well as to make dedicated funding and forum staffing a reality.

The work group also recommends several initiatives for specific customer groups. For residential and commercial customers, one work group recommendation is to develop a regional program to manage “plug-load” for home and office electronic equipment with advanced standards, improved labeling and intelligent load control. Among the proposals for commercial and industrial customers, the work group recommends expanding programs for building performance to include developing best practices for high-performing building operations, and teaming up with business partners outside the utility industry and with trade groups.

## ***Work Group 4: Marketing and Public Awareness***

### **Co-Chairs**

Erin Holland, Edelman  
Teri Duncan, PEI

### **Assignments**

Work Group 4 tackled the question: What is the role of marketing in fostering an energy efficient economy? The work group considered whether a coordinated effort would enhance the success of the region’s energy efficiency programs, whether there would be advantages to unified energy efficiency messages across the region, and whether coordinating efforts could leverage resources, be more effective and reduce costs.

The tasks for Work Group 4 included surveying utilities’ market and customer research, determining who funds public awareness and education efforts to promote energy efficiency, and reviewing existing marketing efforts and gauging their effectiveness.

Work Group 4 focused on two areas: 1) integrating and leveraging existing research and identifying gaps where new research is needed and 2) developing a strategic approach to a regional marketing effort.

### **Summary of Work Group 4 Recommendations**

To build a regional communications effort, work group members agreed that consistent messages and marketing among energy efficiency providers across the region would



significantly contribute to increasing the delivery of energy efficiency. Establishing a formal mechanism to better coordinate existing marketing efforts, as well as develop new channels of information, would benefit the region and local utility efforts.

The work group focused on strategies to change behavior and bolster local energy efficiency programs. The strategies the work group developed are aimed at capitalizing on what has already been learned about customer behavior, conducting new research to improve insights, and developing a means to add a regional outreach effort to individual messaging efforts. The ultimate goal is to find ways to make energy efficiency as normal an everyday activity as recycling and disposing of litter.

The work group recommends creating a coordinating council of utilities, businesses, state and governmental organizations, and others to oversee the development of a regional communication and public awareness framework. The first phase of this effort would be to evaluate current research, followed by conducting new research to better identify what motivates consumers to be more efficient. The research would be used to create a regional outreach effort to promote increased energy efficiency behavior in the Northwest and reduce energy use.

The work group came to the conclusion that “none of us can do it as effectively or as cost-efficiently alone as we can do it regionally.” The synergies from coordinated efforts would help reduce consumer confusion, extend the reach of communications and messages and help activate social channels that are currently not being used to promote energy efficiency. The work group recommendations reflect a desire to find ways to better manage costs, as well as provide consumers with a clear call to action to contact their local utility/energy organization for help in addressing energy efficiency needs.

## ***Work Group 5: Building the Energy Efficiency Workforce of the Future***

### **Co-Chairs**

Pat Egan, Pacific Power

Phil Jones, Commissioner, Washington Utilities and Transportation Commission

Cal Shirley, Puget Sound Energy

### **Assignments**

Work Group 5 took on the issue of keeping another kind of energy efficiency resource in the pipeline for the future: the human resource. The Work Group 5 question was: Facing today’s demographics, how do we create systems that build and sustain energy efficiency talent to meet needs today and in the future? In other words, with retirements in the energy industry estimated to be 50 percent over the next five years, how do we develop and maintain an energy efficiency workforce?

The work group delved into the types of skills needed for energy efficiency jobs and whether there are post high-school programs to educate them. They looked beyond traditional educational formats and considered training and demonstration centers that

can pass along needed education. The work group focused its effort on a literature review, which provided considerable information and led to the following recommendations.

### **Summary of Work Group 5 Recommendations**

To advance the development of an energy efficiency workforce, Work Group 5 recommends the region conduct a professional assessment to define and segment energy efficiency from other green economy jobs, establish skill standards and identify job classifications that can be used region wide. In addition, the work group recommends that a clearinghouse be created to make available to a broad audience study data, best practices in recruitment and retention, and job openings across the region. This would help employers, education experts, and training organizations and potential job candidates understand and address the workforce issue with a common viewpoint and language.

The work group also determined the region needs a strategic coordinating body to partner with other entities and advise on training opportunities and curriculum to assure quality programs are developed and industries' needs are met. Work Group 5 recommends that the Center of Excellence for Energy Technology at Centralia College (Washington), which has already demonstrated expertise in the electrical energy sector, be expanded to apply its expertise and consult on a regional basis for program development and coordination. Because the need is so immediate for workforce coordination, Work Group 5 recommends these preliminary steps be undertaken within four months.

### ***Work Group 6: Rethinking Governance and Energy Efficiency Policies***

#### **Co-Chairs**

Michael Early, Industrial Customers of Northwest Utilities  
Sara Patton, Northwest Energy Coalition

#### **Assignments**

Regulation and institutional arrangements can either enhance or act as a barrier to carrying out public policies aimed at energy efficiency. The task for Work Group 6 was to consider how the current systems of governance and regulation could be reshaped to promote an energy efficient future. In particular, the question was: How do we optimize the alignment of regulatory practice with public policy goals?

The work group divided its tasks into four major areas of focus: direct application renewables; load management/smart grid; cost effectiveness and decoupling and efficiency-related earnings opportunities for investor-owned utilities. For direct application renewables, such as residential solar panels and other distributed generation, the work group looked at how to translate the current widespread public interest in these technologies into policies that encourage widespread deployment.

The work group investigated the link between valuing capacity and the cost effectiveness of load management/smart grid technologies. With cost effectiveness as a key element in governance and regulation of most energy efficiency programs offered by utilities, Work Group 6 considered new ways to look at that topic. The “decoupling” inquiry explored whether current statutory and regulatory structures strike the right balance between shareholder and customer interest in acquiring conservation.

Work Group 6 divided itself into four subgroups:

- Program Policies (dealing with cost effectiveness and cost recovery policies)
- Load Management and Smart Grid
- Direct Application Renewables
- Decoupling

### **Summary of Work Group 6 Recommendations**

The Work Group 6 participants agreed that changes in policies on a broad variety of issues is necessary to drive forward a new generation of energy efficiency efforts and lay the foundation for green jobs, a healthy economy and addressing climate concerns.

For program policies, the work group’s primary recommendation calls for changes in rules and regulations on how energy efficiency is determined to be cost effective. The work group proposes that energy efficiency measures be bundled together at the project level (home, building, facility) as opposed to the level of an individual measure. Under such a scenario, a utility would determine the cost effectiveness for a bundle of energy efficiency options. The work group believes this would result in greater consumer participation in energy efficiency and help increase low-income weatherization efforts.

The subgroup on direct application renewables recommends that direct applications such as solar be considered in the bundling proposal. The subgroup also recommends that the region create a “cost effectiveness handbook for dummies” written for non-technical policymakers, trade allies, program participants and utility managers to promote consistency among tests of cost effectiveness.

Other proposed policy recommendations address changes in building code standards for commercial building HVAC retrofits to encourage the use of more efficient equipment; energy efficiency incentives and how they are determined; regulations that address marketing; and research efforts relative to energy efficiency measures.

A subgroup gathered information on national and regional efforts relating to load management and smart grid technology. The members determined that greater analysis and research is needed on this subject and recommend the region coordinate and create a forum to share information, experience and coordinate analysis on technologies and applications.

The decoupling subgroup evaluated the pros and cons of decoupling and recommends a pilot program be initiated with a publicly owned utility to test mechanisms and determine the potential for savings.

## **VII. NEET Overarching Themes**

While the work groups were successful in identifying a number of specific actions supportive of greater energy efficiency, they also served another critical role. The intense work group activity served to identify certain themes that were both important to individual work group topics as well as more universally applicable to several or all of the others. Several common themes surfaced in many of the work groups, and it became apparent they were likely key elements in the region's ability to unleash greater long-term energy efficiency achievement. These "overarching themes" are discussed below.

### ***1. Using Regional Collaboration to Strengthen Energy Efficiency Achievement***

The taskforce began with the stated purpose of identifying energy efficiency activities and policies that are best accomplished through a regional collaborative effort. NEET assumed there were elements of energy efficiency that could be accomplished at the local utility level, but that would be more effective (both from an achievement and cost perspective) with a coordinated regional approach. Utilities and others could take advantage of the regionally developed work product and apply it at the local level. In the course of the work group activities these assumptions were tested and were strongly confirmed.

This theme is certainly not novel to the Northwest. The Northwest has a long history of using collaborative efforts to address discrete issues. Examples include the market transformation efforts of NEEA, the wind issues addressed by the Northwest Wind Integration Action Plan, the Regional Dialogue conducted by BPA, and the regional planning function of the Northwest Power and Conservation Council.

Experienced as we are at regional collaboration, the NEET work groups reminded us of the important role that working together can play in improving most elements of the region's ongoing energy efficiency efforts.

### ***2. Creating a Structured Regional Forum to Ensure Regional Collaboration is Realized***

Regional collaboration won't happen in a vacuum. All of the work groups voiced a strong desire to have a structured approach that would facilitate ongoing collaboration and information sharing.

Historically, energy efficiency practitioners in the Northwest have been a relatively small, tight-knit group, which naturally facilitated collaboration and information sharing. In the 1990s, however, low electricity prices led to a reduction in the overall energy efficiency effort. At the same time, increased competition caused utilities to communicate less about their efforts.

While this has begun to change in the last few years, the work group recommendations clearly reflect a strong desire for more formalized ongoing regional collaboration. This is hardly surprising as the region strives to significantly ramp up its energy efficiency achievements. With the Northwest's increased focus and reliance on energy efficiency, more people, resources, ideas and information are working in these efforts and even more will become involved in the future.

One of the many reasons for the work groups' success in formulating recommendations is the enthusiasm many members have for the chance to share information and ideas with others. This is the foundation of regional collaboration: individual interaction with others in pursuit of a common goal. The opportunity for a structured, albeit informal, process to capture and focus this collaborative spirit will be a vital building block for an increasingly robust energy efficiency effort in the region.

### ***3. Promoting Greater Understanding and Use of the Behavioral Aspects of Energy Efficiency***

Energy efficiency is simple. Getting people to recognize and act on it is complex. As a resource, energy efficiency is very different than other utility generating resources. One of the key differences is the role of the consumer. By nature, energy efficiency is bought from a multitude of individual consumers. For 30 years, the Northwest's energy efficiency efforts have focused on encouraging these consumers to purchase or install more energy efficient products. We have labeled these products as measures, and the encouragement has come in the forms of financial incentives provided by the utilities and/or the government (e.g. tax credits).

This "measures and incentive" approach has worked well, evidenced by the 3,500 aMW of energy efficiency achieved in this region since 1981. While this basic approach will continue to be the foundation for future programs, a number of work groups identified the key role that individual and group behaviors will likely play in spurring greater energy efficiency in the future.

There are two compelling reasons to promote the behavioral aspects of energy efficiency. The first is to enhance what is already being done in existing programs. It is a necessary complement, in many ways, to the approach being taken in the Northwest. For example, since we pay for the cost of a measure, shouldn't we also have mechanisms in place to ensure the measure is installed and operated in a way that best maintains the energy efficiency that was purchased? Designing and implementing an operations and maintenance program at a large industrial facility or commercial building is one of many

examples of ways to align behavior with gaining energy efficiency. Such programs are beginning to be offered in the Northwest and more will be considered in the future.

The second is to use behavioral elements to nudge consumers in the direction of energy efficiency so they identify themselves as people who are committed to energy efficiency and are therefore more willing to participate in energy efficiency programs. Using public awareness and social marketing efforts to emphasize easily accomplished behavioral change (i.e., turning out lights when they aren't needed), gives consumers a way to take immediate action and reap the rewards, both financial and psychological. Encouraging these behavior changes can also align utilities with their customers' interest in actively and immediately addressing climate change.

Embedding the behavioral aspects of energy efficiency at the program level brings with it several challenges. How will it be measured? Is it persistent? How will it be counted? Is it energy efficiency or is it conservation, in the sense of using less? These and similar questions are all valid and worthy of more exploration.

#### ***4. Counting and Crediting Energy Efficiency***

The pursuit of energy efficiency in the Northwest has moved through several phases in the past 30 years. While it was identified as a preferred resource in the Northwest Power Act, many questioned whether a number of small, discrete measures would actually operate as a resource.

Initially, energy efficiency was also seen as a flexible resource that could be ramped up and down, depending on the energy situation in the region. It was slowed when the region found itself in an energy surplus and a period of sustained low prices, and it picked back up in response to escalating energy prices and periods of power shortages. But this "roller coaster" approach has impaired the ability of the energy efficiency infrastructure to perform at a consistently high level.

The region is now in a period when energy efficiency counts, and it is therefore counted. The concept of counting energy efficiency involves three different metrics: goals, measurement and verification and crediting.

The Northwest does not lack energy efficiency goals. Washington's I-937 initiative establishes goals for large investor-owned and consumer-owned utilities in that state. There are energy efficiency goals in the Energy Trust of Oregon's contract with the Oregon Public Utility Commission, and BPA has committed to achieving the goals established in the Council's Power Plan. The newly signed long-term power sales contracts between BPA and its consumer-owned utility customers also incorporate energy efficiency goals. Other utilities, such as Puget Sound Energy, include penalty and incentive provisions as part of their rate structures.

Energy efficiency is typically counted using well-established measurement and verification methodologies. In some cases, relatively common and uniform measures are

“deemed” to provide a certain amount of savings. In other instances, counting is accomplished by determining energy usage before and after an energy efficiency measure installation. Both of these methods serve to ensure that energy efficiency is actually gained, and they help confirm that efficiency is in fact a resource.

Counting has several potential ramifications. First, the adoption of promising new approaches to energy efficiency could be slowed if there are any questions as to whether the resulting savings will count towards a specific goal. There simply may be less margin for experimentation and risk. Second, as the region’s energy efficiency efforts evolved from being primarily measure-focused to incorporating the softer science of behavior change, special efforts to determine how to measure and verify behaviorally induced energy efficiency will take on increased importance.

The “who” in crediting energy efficiency is also a factor in the counting challenge, especially as it relates to regional collaborative activities. Utilities may be unwilling to pool their energy efficiency resources to support joint actions unless they can be assured that they get to claim a proportionate share of any energy efficiency that results.

Measurement, verification and counting of energy efficiency play a critical role in ensuring a reliable and credible energy efficiency resource. As energy efficiency efforts evolve, the region will need to guard against letting the desire for precise measurement towards mandated goals stand in the way of pursuing results that may be both abundant and low cost.

## ***5. Recovering Energy Efficiency Costs***

At least four work groups raised the issue of cost recovery for energy efficiency-related expenditures. Historically, regulatory commissions have been cautious in their approach to cost recovery for energy efficiency, and recovery has typically focused on shorter-term efforts and results.

The NEET work groups identified a range of activities that are likely to be needed to support high levels of energy efficiency, both in the short term and long term. This may be especially true for collaborative efforts in the region. Examples of these activities include long-term regional RD&D for new technologies; supporting development of the energy efficiency workforce; education, marketing and public awareness; and innovative program development. Utilities may be hesitant to devote resources to these efforts unless they are reasonably assured of recovering the costs.

## ***6. Realigning Institutional Roles While Maintaining Customer Relationships***

NEET is focused on regional collaboration to secure greater amounts of energy efficiency. The Northwest is favored with a number of institutions that have strong energy efficiency credentials. These include institutions that have a regional footprint (e.g., Council, BPA and NEEA); those that have a unique energy efficiency role and

structure (Energy Trust of Oregon); and those that act throughout the region (e.g., Washington State University Energy Extension Program, U.S. Department of Energy and national energy laboratories). In addition, individual utilities have a deep interest in gaining the benefits of regional collaboration and energy efficiency, while also seeking to maintain and build relationships with their customers in order to serve them better.

Throughout the work group process, two themes surfaced regarding institutions. The first is the need to differentiate between regional collaboration in the development of new programs and supportive activities (data, RD&D and marketing) on one hand, and the delivery of programs to customers at the local level on the other. As mentioned earlier, the work groups identified many areas in which regional collaboration would be a benefit while actually enhancing the working relationships between a local utility and its customers. In fact, there is an assumption that new collaborative activities will enhance the ability of utilities to provide a broader range of services to local customers.

The second institutional theme relates to which of three regional entities are best suited to spearhead the collaboration and carry out the various efforts outlined in this report. Some of the work group reports identify the pros and cons of one entity or another. Given the number and types of tasks identified in the NEET recommendations, all of the regional entities have important roles to fill. As the collaborative projects evolve and mature, the region will have future opportunities to assure the institutional roles are appropriately structured.

## **VIII. Executive Committee Recommendations and Next Steps**

The NEET Executive Committee built on the work groups' analytical and deliberative efforts, consolidating them with overarching themes and incorporating recent developments to create a set of high-level recommendations for the region. These recommendations highlight the many opportunities available in the region to collaboratively to bolster and enhance all phases of the energy efficiency effort.

The executive committee recommends that a management structure and resources be committed to ensure the recommendations are fully developed and ultimately implemented. The executive committee wants to avoid having the recommendations stall from the lack of appropriate and committed follow through.

Therefore, as outlined below, the executive committee recommends that NEEA, BPA and the Council "host" specific subject matter efforts that will result in the creation of business/implementation plans for specific recommendations. These business/implementation plans will provide detailed estimates of costs, specific benefits, order of priority and the appropriate institutional structure to make these recommendations a reality. With the detailed background work already conducted by the work groups, combined with the resources outlined below, it is expected that the



business/implementation plans can be developed and finalized in six months from inception.

## ***Northwest Energy Efficiency Alliance (NEEA)***

NEEA would host collaborative work efforts on:

1. Data needs
2. New technology research and development
3. Marketing and public awareness
4. Work force development
5. Creation of a long term regional energy efficiency forum
6. Other discrete issues (e.g. RTF) which could be developed through this mechanism.

### **Structure**

1. NEEA would either designate or contract for 1 or 2 FTEs to manage specific contracts in these topic areas.
2. The existing work groups would operate in an advisory role to the NEEA staff as they prepare a statement of work, then an RFP and ultimately the selection of contractors to develop the business/implementation plan for each topic area. A common report format will be developed to ensure a consistent approach across all plans.
3. The purpose of this work would be to refine the resources and activities needed to implement the high-level recommendations. In essence, this would provide the level of detail needed for management to make informed resource and action decisions on the highest priority recommendations.

### **Work Product**

Detailed reports will be completed for each subject matter area. These reports will recommend the logical order in which to accomplish the high priority activities in each area. This would also include a budget estimate (plus or minus 10 percent) to accomplish these activities. In essence the report would be a specific business plan that would be compelling and detailed enough to motivate widespread regional support and willingness to implement.

### **Funding**

This is subject to discussion, but NEEA's services would be in the \$100,000 to \$150,000 range, and the specific issues contracts would be in the \$75,000 to \$125,000 range. Funding for this effort would be sought from regional utilities and other appropriate entities (states, U.S. Department of Energy, trade allies, etc.) to supplement NEEA's existing budget.

### **Time Frame**

Not to exceed six months from inception.

## **Specific Topics/Actions to be Addressed by Work Group Area**

It is recommended that the following topics form the basis for the development of business/implementation plans:

1. Data
  - a. Create a coordinating and implementation plan for 2010 – 2015.
  - b. Develop data gathering cycles for each sector/measure.
  - c. Develop sampling criteria so regional surveys can be used at the local level.
  - d. Develop common survey and data-gathering instrument.
  - e. Explore synergies with Northwest states on data and the development of building codes, product standards and other incentives.
  - f. Create and award an RFP to evaluate the current structure, roles, funding and governance of the RTF.
  - g. Develop data clearinghouse requirements and implementation plan for creating a web-based clearinghouse vehicle.
  
2. Innovative Technologies
  - a. Update and revise existing regional energy efficiency technology roadmaps
  - b. Create a common definition for research, development and delivery (RD&D) for the Northwest and test it with key regional entities for acceptance.
  - c. Create a business/implementation plan for the development of an RD&D coordinating council to create combined activity for the Northwest, including recommendations for a voluntary and staged pooling of funds and activities. Business plan should include recommended staff size and budget, along with scope and tasks. It should outline the development of separate funding efforts for electricity and gas activities, as well as demand management and smart grid activity.
  - d. Engage with entities outside the Northwest utility environment (such as DOE, the California PIER project, EPRI, and the private sector) to gain a broader sense of what is currently in the RD&D pipeline and the stage of those activities. Seek synergies for Northwest activities and co-funding opportunities, where appropriate.
  - e. Develop a standard screening criteria and process to select high-priority innovative technologies (fuel neutral) for the Northwest.
  - f. Develop recommendations for a volunteer technical oversight board to provide advice on project selection, marketing and coordination. Include recommendations for budget support for technical consulting experts.
  - g. Develop a business/implementation plan for a web-based information and communication platform on innovative technologies and RD&D.
  
3. Creation of a Long-Term Energy Efficiency Forum
  - a. Establish a leadership group (the Forum) charged with advancing best practices in the region, with the goal of enhancing individual utility, consumer, trade ally and regional collaborative efforts.

- b. Create work groups focused on residential, commercial, industrial and other markets to examine strategies and opportunities. Develop work plans with clear work products, resource requirements, timeframes and accountabilities.
  - c. Create a business/implementation plan to launch the Forum including responsibilities, administrative needs, logistical plans, budgetary needs and timelines.
  - d. Outline specific strategies for the development of high-profile demonstration projects for high-priority best practice opportunities, including but not limited to: a regional plug-load project, a commercial/industrial building operation and maintenance project, and an expansion of efforts similar to that being undertaken by the NW Food Processors Association.
  - e. Develop a regional approach to evaluating the energy benefit of setting building codes based on current avoided costs and at a specified percentage above the national code level.
  - f. Create a subgroup which would develop a forum for state/local officials to discuss how to best enforce/implement building codes and incentives.
  - g. Working with other West Coast entities, establish regional standards for electrical products that are more stringent than MEPS and Energy Star.
4. Marketing and Education
- a. Establish a coordinating council of interested utilities, businesses, state and governmental organizations to oversee the development of a regional communication and public awareness framework.
  - b. Evaluate current research on what consumers believe are energy efficiency behaviors and what motivates them to be more energy efficient and recommend what additional research is needed to develop a regional outreach campaign with specific goals and outcomes, seeking commonality among participants. Target residential customers, initially, with the desired outcome of “contacting your local utility/energy organization.” Prepare an RFP for any additional recommended research.
  - c. Create a business/implementation plan for a coordinated outreach effort including: channel strategies for utilities and local organizations; actions for consumers to take; actions for regional utilities to seek commonalities and recommendations for the creation of a toolkit with consistent messaging, graphics and style for use by all channels.
  - d. Implementation activities should include: research; creative work (messaging, strategy, creative/campaign development, and social media); collateral development (toolkit and consumer website); packaging and distribution of materials (including internal website); exploration of the need for public relations and social media implementation.
5. Work Force Development
- a. Create a business/implementation plan to establish: a clearinghouse for skill standards assessment; best practices in recruitment and retention; job opening postings; and an index of training programs and providers and other related activities.

- b. Conduct a regional workforce assessment on energy efficiency, detailing: skill standards, job classifications, employment levels, employment demands and pay scales.
- c. Track and integrate results of the Sustainable Oregon Workforce Initiative, Washington State Green Workforce Labor Market Survey and the Lawrence Berkeley National Lab study of commercial/industrial workforce needs.
- d. Develop the strategic coordination of a workforce pipeline by creating/leveraging an education and training model for the region, built off the efforts of the Washington Center of Excellence for Energy Technology.

## ***Northwest Power and Conservation Council***

The Council would host collaborative work efforts relating to energy efficiency cost effectiveness and building code advancement and enforcement.

### **Structure**

It is recommended that the Council utilize one of its existing Scientific and Statistical Advisory Committees or create another committee to host a regional discussion regarding the cost effectiveness issues raised by NEET.

As representatives of the four states, the Council is uniquely positioned to address energy efficiency cost effectiveness and to integrate state utility regulators into that discussion.

As representatives of the governors, the Council members should also be able to facilitate a dialogue between the states and the energy interests on the building code and building code enforcement issue.

### **Work Product**

Develop specifics on how to obtain regional policy clarity on cost effectiveness criteria as it is applied to energy efficiency. Develop a means to achieve better understanding within state governments of the key role that building codes/code enforcement and standards play in providing energy efficiency and carbon reduction, especially with the advent of much higher avoided resource costs.

### **Specific Topics/Actions to be Addressed**

1. Cost Effectiveness
  - a. Create and issue an RFP to create a handbook that explains cost effectiveness for non-technical policy makers, trade allies, program participants and utility managers to increase regional consistency and understanding on how cost effectiveness rules and regulations are currently applied.
  - b. Create a taskforce with representation from the Council, BPA, RTF, publicly owned utilities, state public utility commissions, and stakeholders to examine cost-effectiveness rules, regulations, orders, specifications and other guidelines to determine whether to allow bundling at the project level and the needed changes and repercussions to any proposed changes.

- c. Survey public utility commissions, publicly owned utilities and BPA to determine situations where a change in the total resource cost test would spur additional energy efficiency savings and propose specific new rules to achieve those savings.
- d. Consider the creation of model legislation/regulation that would provide for the recovery of reasonable costs incurred to support energy efficiency (e.g. data acquisition, energy technology research and development, marketing and public awareness and work force development)

## **Budget**

To be determined by the Council.

## **Time Frame**

Not to exceed six months from inception.

## ***Northwest Utility Organizations (including BPA and the Energy Trust of Oregon)***

The utility interests would host collaborative work efforts involving conservation voltage reduction (CVR)/distribution system efficiency, load management and smart grid.

## **Structure**

The utility interests would either designate staff or retain a contractor to facilitate hosting a collaborative regional effort to: 1) collect and share information on these topics; 2) define the potential output of pilot programs or demonstration projects; and 3) to determine how to best utilize these subjects to achieve more energy efficiency. Whether one group (with three subgroups) or three groups are empowered to address these subjects is to be determined.

## **Work Products**

A report which outlines specific steps leading to pilot programs/demonstration projects or the initiation of such programs or projects.

## **Specific Topics/Actions to be Addressed**

1. CVR/distribution system efficiency
  - a. Create a joint energy efficiency/distribution/transmission work group to evaluate current CVR projects for their impact on energy efficiency and system reliability.
  - b. Develop an implementation plan for pilot/demonstration programs to test any concepts resulting from work group activity. The plan should include recommendations for technical expertise, data collection, monitoring and evaluation, and a report back to the region on the project upon completion.
  - c. Create a CVR implementation outreach strategy to educate utility organizations throughout the Northwest on this technology.

2. Load Management and Smart Grid
  - a. Decide whether this issue should be addressed by a combined or separate load management/smart grid working group and outline an appropriate structure.
  - b. Create a smart grid road map identifying the likely progression of smart grid technologies
  - c. Lead regional efforts on the analysis of the value of capacity, reliability and energy efficiency associated with load management and smart grid technology.
  - d. Identify those smart grid elements that have the greatest potential to provide meaningful energy efficiency benefits.
  
3. Decoupling
  - a. Seek a Northwest public power utility to undertake a voluntary pilot to test one or more decoupling mechanisms to determine whether savings can be achieved.

### **Budget**

Dependent on how the utility interests prefer to staff and operate this effort.

### **Time Frame**

Not to exceed six months from inception.

### ***Northwest Energy Efficiency Taskforce***

It is recommended that the NEET Executive Committee continue to monitor the business/implementation plan development process and accept the reports and recommendations from all of the hosting entities (NEEA, Council, Northwest Utility Organizations). The executive committee will then issue a final report providing an integrated set of recommendations. It will also play a key role in seeking commitments to ensure the final recommendations move into the implementation phase.

To be Added:

Glossary

Appendices

Workgroup 1 Report

Workgroup 2 Report

Workgroup 3 Report

Workgroup 4 Report

Workgroup 5 Report

Workgroup 6 Report

Bibliography