



PNUCC has come through a challenging year with flying colors. In 2011, our industry confronted new realities on the power system—simultaneous high winds and high water, growing amounts of intermittent resources that test reliability, and innovative demand-side technologies, as well as the smart grid. As these challenges converged on PNUCC's landscape, we rolled up our sleeves to find technical solutions and beefed up our communications with key audiences.

We reached out to our counterparts in the natural gas industry this year because gas is now such an important piece of the wind integration puzzle, and we are finding ways to work more closely together. We've increased our analysis of capacity and new resource characteristics and are looking into new storage technologies that could help us create load when we need it.

As new questions emerge, PNUCC helps our industry put them into context. PNUCC creates the opportunity for the conversation to start, and it's an excellent vehicle for us to bring in others to talk about how problems can be solved. As we enter our board meetings, we "leave our shields and swords at the door" so we can have collaborative discussions, share information, and seek common ground.

I've enjoyed chairing PNUCC's board over the past two years. I want to thank our outstanding and hard-working staff, as well as my colleagues on the board for their engagement and willingness to provide the resources that help us address issues we all find important. I also want to thank those from outside PNUCC who take the time to come to our meetings and offer their opinions and knowledge, which broadens our perspective. I look forward to what 2012 has in store for us all knowing we have a solid foundation on which to build.

Sincerely,

Jim Lobdell
Chairman of the Board

Searchlight, catalyst, forum, and hub. These four carefully chosen words express how we go about accomplishing our mission at PNUCC. We're a searchlight for changes that will affect our industry, a catalyst for examining them, a forum for discussions, and a hub for analyzing data on vital issues.

In some years, one or more of those roles seemed to take precedence over the others. But in 2011, we have been going full steam ahead on all four.

Our communication and education effort, exemplified by the *Plan today. Power tomorrow.* project, has taken on an increasingly prominent place in our work plan. A few years back, we conducted a survey on what the public knows and cares about when it comes to electricity. We used the PNUCC forum to examine the results and have an in-depth discussion. And we brought together an energetic group of utility communicators to analyze the information and develop strategies to respond to it. This year, they have collaborated on a number of valuable products for our members to use.

In every way, our communications work, like our system planning activities, embodies our mission and how we achieve it. It will serve the industry well as we head into a future in which utilities rely more heavily on customers as partners to provide the energy that powers their lives.

Sincerely,

Dick Adams
Executive Director

Electric utilities have traditionally been connected to customers by wires. But there is something brand-new in the way we expect customers to connect in the future. From the Smart Grid to electric vehicles to energy-efficient appliances, there is a growing interdependence between what customers do on their side of the meter and how utilities meet energy needs. Communication and information will help to prepare us all for what's ahead.

PNUCC is applying more resources than ever into communicating with people in the Northwest about the electricity industry. Informed and educated policymakers and savvy customers are vital to bridging the technical aspects of energy supply with the policies and aspirations of the next decade.

In 2011, PNUCC added to the regional and national conversation about our industry in several ways. We aimed to explain in layman's terms how the power system works, and we sought to broaden the audience for the information we provide. In a world of tweets and texts, PNUCC is looking for effective ways to deliver a complex message.

an amplified voice for pnucc

The *Plan today. Power tomorrow.* project is the centerpiece of PNUCC's communications effort. Through this regional energy awareness campaign, we are providing information about the cost and supply of electricity, as well as the challenges of maintaining a reliable system.

This year, we launched an independent *Plan today. Power tomorrow.* website. Originally hosted by PNUCC, the stand-alone site gives the project greater visibility and its own identity. We keep the website stocked with articles, fact sheets, and imagery to help utilities communicate with policymakers, business leaders, and the public about issues that affect our industry. Postings on the site also give utility communicators a way to see what others are doing with newsletters and activities to inform and educate their audiences.



"Through this regional energy awareness campaign, we are providing information about the cost and supply of electricity, as well as the challenges of maintaining a reliable system."

connecting the industry and customers

PNUCC's Communications Committee has targeted our traditional analytical reports and white papers as a means to deliver non-technical information and messages to policymakers and the public. In particular, we added a communications element to our "state of the union" for the region's electric utilities, the *Northwest Regional Forecast*. We crafted an executive summary that connects the dots for the lay reader about how the region's power needs are changing, where we need to concentrate to assure reliability through peak periods, and how new technologies are both adding megawatts and presenting integration challenges.

From the *Forecast*, we developed a new communications tool, the *State of the Northwest Power Supply*. We reached out to a variety of audiences with a colorful slide show that depicts the demand forecast, the power supply available today, and the mix of resources utilities will use to meet growth.

We are telling our story from a planning perspective and enumerating the challenges utilities are up against in meeting demand throughout the year and with integrating new types of resources, particularly wind. The presentation is intertwined with the three messages that have been our mantra since the *Plan today. Power tomorrow.* project was developed:

- needs are changing
- more resources and technologies are the solution
- rising costs are a challenge we'll face together

All of these efforts, including our ever-popular reports on the Northwest Power and Conservation Council's monthly meetings, are strengthening the connection between the industry and its customers.

system planning gets a workout



"The System Planning Committee is PNUCC's 'think tank' where we tackle operation and planning challenges facing the region. We benefit from the cross-pollination of ideas from different utilities, and our interactions help us gain a common understanding of issues."

Steve Kern, Chair
System Planning Committee

Our System Planning Committee had its most active year yet, as it worked through a myriad of complex issues and produced documents that clarify new challenges and choices facing our industry. Through the efforts of this committee, we've rekindled the spirit of regional planning cooperation that characterized and energized our industry in years past. We're working harder and learning from each other as we go.

This spring, the committee completed a report titled *Capabilities of Electric Power Resources* that explains how planning

for new generation in the Northwest has changed now that the region's resource mix includes large quantities of wind power. The paper points out that utility planners today evaluate resources for energy, capacity, and flexibility. It helps define the operating characteristics of different resources, and underscores the need for a new perspective on planning to assure reliability.

In May, the System Planning Committee issued another report, *Sorting Out Regional Demand-Side Management*, to provide nuts-and-bolts information to utilities about the conservation resource and the implications of its deployment. The paper is a must-read for anyone who wants a basic understanding of what demand-side management is and is not, how it can be accounted for, and how energy-efficiency efforts affect the need for power and long-term utility planning.



“This work, which PNUCC launched in 2010, has taken on more importance now that wind is the most rapidly growing source of generation in the region.”

The experts on our System Planning Committee also provided a timely new analysis of hydropower peaking capability for this year's *Northwest Regional Forecast*. The *Forecast* documented the region's need for resources to meet peak electricity loads, especially in the winter. The committee is now working on a new assessment of regional peak capacity and flexibility needs.

wind energy still in the limelight

Our System Planning Committee is also working to shed light on how wind power is changing the Northwest power system and the implications for system operations. There is a lot to learn about how to successfully integrate nearly 6,000 megawatts of wind generation into the power grid. Changes in the operation of existing power plants and in the use of the transmission system are being made to meet electricity customers expectations for reliable power.

PNUCC is keeping tabs on how much more wind generation could be built in the region based on the evolving policies at the state and federal level. New policies and procedures are being examined and developed at the same time. In addition, the System Planning Committee is considering how much more wind power the existing system can accommodate, and it is coordinating its work with studies being done by the Northwest Power and Conservation Council and the Northwest Wind Integration Forum.

elementary, my dear system watch

The System Planning Committee is using its System Watch lens to scrutinize unusual situations that stress the power system. Each month, our planners put on their “Sherlock Holmes” gear and sleuth out what happened and why.

This work, which PNUCC launched in 2010, has taken on more importance now that wind is the most rapidly growing source of generation in the region. We hope that through System Watch, we can get the word out on lessons learned and infrastructure changes that may be needed to help utilities avoid problems in the future.

building links with the natural gas community



“PNUCC has stepped up on behalf of its members with content, ideas, and encouragement on the communications front. Research shows a direct connection between good communication and customers’ overall satisfaction with their utility.”

Kathi VanderZanden, Chair
Communications Committee

In May, PNUCC and the Northwest Gas Association co-hosted the Natural Gas and Electric Power Industries Workshop to explore issues arising from the growing interdependence of the two fuels. The well-attended conference brought together planners and operators and covered such topics as natural gas supply and storage, pipeline capacity, reliability and transmission concerns, and the need for more natural gas generation to replace coal and firm up the wind supply in the region.

PNUCC held a follow-up meeting in July to explore operational issues associated with gas and power scheduling. The industry representatives agreed that more work should be done not only to quantify the demand that could be placed on the natural gas system for power production, but also to communicate better with the public about the key role gas plays in electric generation these days.

keeping the treaty review on our radar

Our *2011 Member Agenda* called for us to track the discussions going on in the region about the future of the U.S.-Canada Columbia River Treaty and keep our members up-to-date on issues and progress. We arranged for BPA and others to update our board regularly about the Treaty studies and review process aimed at producing a recommendation from the federal agencies to the U.S. Secretary of State in 2013.

PNUCC is also participating in the Columbia River Treaty Power Group, which is scoping out possible impacts to utilities and other river users from different Treaty scenarios. Our goal is to make sure that when a recommendation about the Treaty is made, all of our advance work will enable our members to support it.

talking transmission and utility plans

Managing our transmission system, already stretched thin, is becoming more complex. We make it a point to schedule regular briefings on pending federal and state transmission policy issues, as well as on projects being planned and built.

Another valued feature of the PNUCC forum is the opportunity to showcase Northwest utilities' integrated resource plans. Integrated resource plans are forward-thinking documents, put together in response to different state mandates, demographics, and public review. When we talk over the IRPs at PNUCC meetings, it gives us a chance to see how other utilities view the world and what paths they have mapped out to meet their needs, and we often come up with new insights as a result.

on tap for 2012

We expect to be busier than ever next year, and we are planning to boost our budget to take PNUCC's communications initiative up to a higher level. Our members are committed to making sure key messages about our industry, present and future, will go out to policymakers, the media, and the public.



“We expect to be busier than ever next year, and we are planning to boost our budget to take PNUCC’s communications initiative up to a higher level.”

We'll continue to assess whether changes in policies, standards, or planning criteria are needed in today's brave new world, and if so, what would work best. The capacity issue will be front and center, along with perennial favorites, like adequacy, reliability, and needs assessment. And PNUCC will continue to follow the bouncing ball of California energy politics so our region doesn't get any surprises.

Eager to communicate, not afraid to do the technical heavy-lifting, and enthusiastic about learning from our colleagues—that sums up the PNUCC forum. In 2012, we plan to keep bringing together the power of good ideas so the Pacific Northwest's magnificent electrical system stays strong and dependable.

PNUCC has played a pivotal role in the region's electric utility industry for more than 60 years. As a voluntary, non-profit organization, PNUCC is a forum for bringing the power of good ideas to bear on a range of issues that affect electricity providers and large industrial users in the Northwest. Through PNUCC, members have the opportunity to listen and learn from each other and help shape evolving regional policies.

our mission

Bringing the power of good ideas together to assist PNUCC members in fulfilling their company missions in this ever changing electric industry.

PNUCC's mission is accomplished by providing:

- The searchlight for changes that will have a significant impact on how our industry does business in the future
- A catalyst for examining issues that impact a significant portion of our membership
- A forum for dialogue on policy issues of regional importance
- The hub for technical analysis and data on vital Northwest power industry issues

staff and office information

| | | | |
|-------------------|--------------------|--------------------|--------------|
| Dick Adams | Executive Director | dick@pnucc.org | 503.294.1268 |
| Shauna McReynolds | Deputy Director | shauna@pnucc.org | 503.294.1264 |
| Jennifer Miller | Senior Analyst | jennifer@pnucc.org | 503.294.1259 |

101 S.W. Main, Suite 1605, Portland, Oregon 97204-3224
www.pnucc.org

2011 board of directors

| | | |
|-----------------|---------------------------------|-------------------|
| Jim Lobdell | Portland General Electric | Chairman |
| Jack Speer | Alcoa Inc. | 1st Vice Chairman |
| John Prescott | PNGC Power | 2nd Vice Chairman |
| Lisa Grow | Idaho Power | Treasurer |
| Ed Brost | Franklin PUD | |
| John Bushnell | NorthWestern Energy | |
| Tim Culbertson | Grant County PUD | |
| Pat Egan | Pacific Power | |
| Steve Eldrige | Umatilla Electric Cooperative | |
| Bill Gaines | Tacoma Public Utilities | |
| Roger Gray | Eugene Water and Electric Board | |
| Kimberly Harris | Puget Sound Energy | |
| Bob Huber | Alcoa Inc. | |
| John Hines | NorthWestern Energy | |
| Steve Kern | Seattle City Light | |
| Steve Klein | Snohomish County PUD | |
| Larry La Bolle | Avista Corp. | |
| David Mills | Puget Sound Energy | |
| Kelly Norwood | Avista Corp. | |
| Phil Obenchain | Pacific Power | |
| Terri Peschka | Portland General Electric | |
| Jim Sanders | Benton PUD | |
| Ken Sugden | Flathead Electric Cooperative | |

System Planning Committee Chair: Steve Kern, Seattle City Light

Communications Committee Chair: Kathi VanderZanden, PNGC Power

2011 budget

| | |
|-------------------|-----------|
| Staff Expenses | 445,000 |
| Overhead Expenses | 157,300 |
| Consultants | 88,000 |
| Total Budget | \$690,000 |

members

Alcoa Inc.
City of Ashland
Avista Corp.
Benton PUD
Blachly-Lane Electric Cooperative
Central Electric Cooperative
Chelan County PUD
City of Cheney
Clark Public Utilities
Clatskanie PUD
Clearwater Power Company
Consumers Power Inc.
Coos-Curry Electric Cooperative
Douglas Electric Cooperative
Emerald People's Utility District
Eugene Water & Electric Board
Fall River Rural Electric Cooperative
Flathead Electric Cooperative
Forest Grove Light & Power
Franklin PUD
Grant County PUD
Idaho Falls Power
Idaho Power
Kittitas County PUD
Lane Electric Cooperative
Lewis County PUD
Lincoln Electric Cooperative
Lost River Electric Cooperative
McMinnville Water & Light
Northern Lights Inc.
NorthWestern Energy
Okanogan Co. Elec. Cooperative
Pacific Power
Pend Oreille County PUD
PNGC Power
Portland General Electric
Puget Sound Energy
Raft River Rural Electric Cooperative
Salmon River Electric Cooperative
Seattle City Light
Snohomish County PUD
City of Sumas
Tacoma Public Utilities
Tillamook PUD
Umatilla Electric Cooperative
United Electric Cooperative
Vera Water & Power
Wells Rural Electric Co.
West Oregon Electric Cooperative
Whatcom County PUD



101 SW Main, Suite 1605
Portland, OR 97204-3224
www.pnucc.org