

Press Clippings

August 30 – September 5, 2010

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KVAL – Oregon Couple Plan Home Wind Turbines, Need City OK

8/30/10

Kate Ramsayer

BEND, Ore. (AP) — The roof of the super-efficient greenhouse Tom Elliott and Barbara Scott are designing is slated to be covered in solar panels to produce electricity. But the Bend couple is hoping to take onsite energy production on the northwest Bend property one step further.

They're proposing to install two vertical wind turbines to capture gusts that blow across their lot.

City and utility officials say the turbines would be the first such structures within the city limits.

"We're trying to build a home that's net-zero energy," to produce all the power the house would use, Elliott said.

But before the couple starts installing the devices, Elliott and Scott have to get the OK from the city, which doesn't currently have specific wind turbine regulations and will instead require a conditional-use permit for the structures. Elliott said one of the couple's goals is to lay the groundwork that will make it easier for others to install wind turbines within the city.

Before they can apply for the turbines, Elliott and Scott are required to hold a community meeting to address concerns of nearby residents, which Elliott, Scott and their team of consultants did Tuesday. Several of the eight or so residents who attended had questions ranging from the safety of the turbines to their noise and visual impact.

Elliott kicked off the meeting with a description of the wind turbines, called Windspire.

The cylindrical devices are 35 feet tall, including a 15-foot base, and about 4 feet wide. They're not scaled-down versions of the propeller turbines found on wind farms, but instead have vertical airfoils that catch the breezes.

The spinning part rides on magnetic bearings, Elliott said.

"It's almost frictionless, so it's extremely quiet," he said.

But sounds including hisses, hums or white noise were among concerns of future neighbor Brian Garcia, who attended the meeting.

"My big concern I'm going to be across the street is the noise," Garcia said. "That has been top on our list."

The turbines produce noise that is about 6 decibels above the background, less than a whisper, said Mark Patt, CEO of EverGreen Energy, a Bend company that distributes the turbines. Standing under some turbines that had been installed in Ashland, he could have a conversation with the person next to him in a normal voice, he reported.

The visual impact and siting of the turbines, and potential safety issues, concern Scott McCaulou and his wife, Bulletin reporter Lily Raff, who live directly behind the site and will overlook the structures.

"We're the ones that are going to be looking at the two towers," McCaulou said at the meeting. "It does loom over our lot."

He questioned the safety of the turbines, and asked what would happen if gusts exceeded their rated wind-speed capacity of 105 mph and whether they had previously been installed in dense residential areas.

Patt said the turbines have a braking system that slows them down when the winds exceed a certain speed. And if the winds are serious and pose a threat, workers will come out to the site and lower the turbines.

The turbines have been installed at universities, including at the University of Kansas architecture school, along a city street median and at the Adobe corporate headquarters in San Jose, Calif., according to Windspire.

McCaulou also questioned why Elliott and Scott were putting in a redundant power supply.

"They're working when the solar panels aren't," Elliott said, noting that it's often windy during storms and at night, when the solar panels won't be too useful. And things fail, he said, noting that after working on a ranch for 30 years, he likes to have redundancies.

The siting of the wind turbines also was a concern, McCaulou said although they would be set back from the cliff at the front of the property, blocking them from view on Northwest Shasta Place, the turbines will be in front of neighbors to the other side.

"It definitely impacts you guys, and I wish it didn't," said Elliott, who plans to meet with McCaulou and Raff further to discuss possible ways to address their concerns about the turbines' safety and location.

He later added that he understood the concerns about the visual impacts of the wind devices.

"It's a little bit like art the beauty is in the eye of the beholder," Elliott said. "Some people look at these and see art, some people look at these and see a pole."

If everyone had wind turbines in their yard, he would probably have concerns about visual impacts, too, Elliott said and he doesn't like the fact that a wind farm is going in next door to his property in Montana, with a 40-story tower above his house.

But small-scale wind projects like this have potential as a decentralized power source, he said.

"I just think we have to continue to explore many different alternatives with energy," he said. "It's not a one-size-fits-all thing."

One turbine costs about \$17,000 installed, Patt said, and Elliott said he expects each will cost \$7,000 once tax credits and other incentives are included, although that could change.

Typically one turbine can provide 25 percent of the power for an average house, according to Windspire's figures. However, Elliott estimated that with the less-than-optimal wind at the Bend site, as well as the home's energy-efficient design and appliances, he expects the two turbines to produce between 20 and 30 percent of the power needs of the home and outbuildings.

Elliott and Scott are trying to meet the strict environmental and energy-efficiency requirements of the Living Building Challenge. Among other things, the challenge requires participants to generate all of their power onsite using renewable energy. Most of the couple's power will be from solar panels, but the plan also calls for wind power.

The wind project found support at Tuesday's meeting as well, including with neighbors Peter Geiser and Maureen Sweeney.

"These guys are doing so much," Sweeney said. "They are mentoring people to think about this."

And future neighbor Garcia, who came to the community meeting with concerns about the noise and aesthetics of the turbines, said afterward that he favored the project, too, once his questions were answered.

"I was a little concerned with the aesthetics," he said. "They look great. It's kind of a structural piece of art."

Heidi Kennedy, senior planner with the city of Bend, said Elliott and Scott won't apply for a permit for the turbines until the Shasta Place community has finished reviewing the proposal, and the couple has tried to address any concerns.

"It's important to address any issues with the neighbors before you come in and apply to the city," she said. "If you have some issues, maybe you can resolve them."

Once the couple applies for a conditional-use permit for the wind turbines, the city will examine the size, location and topography of the project, as well as any impacts like noise, light, glare or odor on neighboring properties before deciding whether to issue the permit.

One of the goals of the project, Elliott said, is to make it easier for other people to do similar wind projects later.

"It's evolving into something that is attractive, and relatively noninvasive," he said, adding that he and Scott are "navigating that path with the city, so people down the road will hopefully have an easier time making it work."

Moscow-Pullman Daily News – Whitman County to Bill Palouse Wind Up to \$100K

8/31/10

Sarah Mason

Whitman County expects to be compensated up to \$100,000 for time compiling and reviewing State Environmental Policy Act documents for a wind farm proposed on Naff Ridge.

First Wind or Palouse Wind, the subsidiary group created for the wind farm, applied for a conditional use permit at the end of July. It hopes to construct between 35 and 50 turbines about eight miles northwest of Oakesdale.

Before construction workers for the Boston-based wind turbine developer break ground on the \$5 million project, the county will have to complete an Environmental Impact Statement. The impact statement includes hundreds of pages outlining the purpose of the project and all possible impacts on the surrounding environment.

Whitman County Planning Director Alan Thomson said putting together the EIS could take around nine months.

"We've never had a project of this magnitude before," Thomson said.

In most situations, the permitting costs cover county staff's labor while putting together and reviewing paperwork. Not only is the wind project larger than any other proposal the county has seen, it also marks the first time the county has issued a determination of environmental significance.

This means the Palouse Wind farm is the first time the county has had to participate in the EIS process, a much more intensive application process than usual.

"When a company pays for a conditional use permit or a SEPA, fees are pretty nominal - \$300 to \$400 for a conditional use application, \$250 for a SEPA," Thomson said.

"Typically, we stay within those numbers. Well, we are going to go way, way beyond that here."

Palouse Wind paid \$650 in permit application fees. Thomson said because the legal requirements for the EIS are so extensive and because wind energy is already a hot-button issue, the county will hire outside help and put in extra hours to deal with the paperwork.

According to an agreement between Palouse Wind and the county, the company will give the county a deposit of \$10,000. Anytime that amount falls below \$10,000 because

of county expenses, the company has 30 days to reinstate it to that amount. Should First Wind/Palouse Wind fail to do so, the county will stop work on the EIS.

County Prosecutor Denis Tracy, who drew up the contract, said the funds from First Wind will not go directly to county employees. Instead, the money likely will go into the county's general fund.

"I want to emphasize the county's not making any money on this deal, they're simply being reimbursed for costs," Tracy said.

Now, the county is receiving comments from the public regarding the potential environmental impact of the turbines. Thomson said all comments must be written, signed and either mailed or hand delivered to the planning department. Anyone can comment on the wind farm, as long as it relates to the environmental impact.

Anyone interested in submitting comments about Palouse Wind may mail a hard copy to Alan Thomson, SEPA Official, P.O. Box 430 Colfax, WA 99111. All comments must be submitted by 5 p.m. Sept. 16. For more information about First Wind's application, visit <http://www.whitmancounty.org/page.aspx?pn=Planning+Division>.

Lewiston Morning Tribune – Whitman County Eyes Loans for Energy-Efficient Upgrades

8/31/10

Kelsey Samuels

Whitman County will likely see energy-efficient upgrades to county buildings in the near future using a loan some officials claim pays for itself.

The state of Washington's Department of General Administration offers a loan program to pay for capital projects that conserve energy called Energy Savings Performance Contracting. Loans are available to various state agencies as well as cities, counties, hospital districts and library districts.

The loans typically pay for upgrades to lighting, boiler replacement and high-efficiency heating and air conditioning systems, among other projects. Recipients essentially pay back the loans with the money they save on energy costs, and GA will repay loan recipients if the upgrades do not save money.

Commissioners signed an agreement Monday to have GA Energy Systems Engineer Kirsten Wilson, from Olympia, present a list of possible upgrades that would benefit the county.

Loans are based upon how much is saved on energy bills. The loan total is the first year's savings multiplied by 7.5 with 2.9 percent interest. Financing is completed through the Washington treasurer's office. Typically, such loans take about 10 years to repay.

Commissioner Pat O'Neill said projects won't cost taxpayers money even if some of the cost has to come from the county because there is funding set aside in a conservation program in the county budget for these kinds of capital projects.

He said energy rates keep increasing, and much of the county's current equipment is "ancient."

"We're going to pay the utility bill regardless. Every month, it's paid," O'Neill said. "So it takes a smart man to go through and get your money back through energy savings, through technology."

GA spotlights Washington State University as a success story for Energy Savings Performance Contracting, stating it saved \$1.6 million annually on energy costs due to completed projects.

In other Whitman County news, wind energy company First Wind completed its application for a conditional-use permit to build a wind farm near Oakesdale.

The application for the project, Palouse Wind, will be paid for by the company. The total is estimated to not exceed \$100,000, including billing for county staff and legal services pertaining to the application.

The planning department is accepting public comments in writing until Sept. 16. After Sept. 16, comments will be compiled, responded to and made accessible to the public in the form of a draft environmental impact statement.

Energy Prospects West – FERC Rejects PSE Wind-Integration Tariff

8/31/10

Steve Ernst

The Federal Energy Regulatory Commission has rejected Puget Sound Energy's request to charge wind generators in its balancing authority area a capacity-based grid integration charge, but the debate over integration costs is far from over.

The commission's decision was based mostly on Puget's use of a proxy rate that was calculated using a hypothetical capacity cost chosen from a group of five commercially available peaking units in the area. The proposed rate was not a "reasonably accurate representation of the opportunity costs Puget incurs" in providing wind-integration service, the commission said.

Puget used a proxy gas-fired generator to set the incremental costs for balancing services because the company's hydroelectric output is diminishing and is reserved to meet its native load, as a state-mandated least-cost resource, explained Christine Philipps, director of federal regulatory affairs at PSE.

The case was closely watched by utilities and wind developers around the country, and follows two similar FERC cases that dealt with wind-integration costs.

In May, FERC reaffirmed its order denying NorthWestern Energy's request that some wind generators within its balancing authority be responsible for providing their own regulation services.

The utility argued that it doesn't own or operate generating facilities to supply ancillary services, and so must rely on third parties for the capacity and energy needed to meet its balancing authority obligations.

NorthWestern Energy is building the Mill Creek Generating Station, a 200-MW natural gas-fired plant near Anaconda, Mont., primarily to provide balancing services for wind farms in its balancing authority area (BAA).

In March, FERC reaffirmed its support of Westar Energy, a Kansas utility, charging for and providing generation regulation and frequency-response services to wind generators located in its BAA.

While those two cases focused mostly on regulation of a balancing authority, Puget's case centered on the costs of supplying the capacity necessary to follow the variable output from wind, and who should pay for those costs.

Several Northwest utilities filed motions in support of PSE's tariff request, arguing that existing hydroelectric facilities shouldn't be used to subsidize third-party wind generators.

Puget's attempt to justify its use of a proxy rate was based on FERC's acceptance of proxy rates in the assessment of generator imbalance charges under Schedule 9 of the pro forma OATT, according to the FERC order.

The utility tried to "expand the logic beyond the context of imbalance energy charges to the capacity reserves at issue in its Wind Following Service," arguing that because there is no existing liquid market for the flexible capacity in the region, it is appropriate to use the hypothetical capacity costs of a hypothetical generator as a proxy for determining the rate to be charged for this service.

"While Puget has explained how it will determine its opportunity costs (based on the hypothetical Proxy unit), it has not demonstrated that calculating its opportunity costs in this manner will not lead to over-recovery of its costs," the commission wrote in its order, released Aug. 13.

"Accordingly, even under the standard for using proxy rates in assessing generator imbalance charges, Puget has not met its burden," FERC said. "Moreover, Puget has not explained its proposal for self-scheduling this service, including the types and locations of resources that may be used."

On June 14, PSE asked FERC to approve the charge, effective Aug. 16, for its Within-Hour Generation Following Service -- also termed Following Capacity Service -- as Schedule 12 of its Open Access Transmission Tariff [ER10-1436].

Puget argued that the charge was needed to recover the cost of supplying the capacity required to balance wind generator variability. Puget had 393.4 MW of total installed wind capacity in its BAA during 2009, according to the FERC order.

Wind generators in the region opposed the tariff request. Estimated as \$2.70/KW per month, it would have applied toward a wind generator's nameplate capacity and could be sizeable, amounting to more than \$3.2 million per year for a 100-MW wind farm, according to the American Wind Energy Association, which intervened in the case.

"No other generators have these charges assessed, and with this order, we expect utilities will give up their interest in assessing these charges to renewable sources," AWEA said in response to FERC's order.

However, the debate may not be over. The utility is reviewing the FERC order and plans to respond this fall.

Energy Prospects West – Northwest States Can Quit Coal Most Easily, Report Says

8/31/10

Penelope Kern

The Northwest is best positioned among all regions of the U.S. to transition from coal to clean energy sources, says a new report released by a non-partisan, non-profit think tank.

The report suggests it is technically and economically feasible to retire all coal generation in the region, which the study defines as Washington, Oregon, Idaho, Montana, Wyoming, Utah and Nevada.

Aggressive demand-side management coupled with development of the region's ample wind, geothermal and biomass resources would assure the region "would fare the best of all the major sections of the U.S. under a transition to a clean-energy electricity future," according to the report, written by Cambridge, Mass.-based research firm Synapse Energy Economics for the Civil Society Institute.

Because the Northwest has a relatively small amount of coal and nuclear capacity and an extensive renewable resource base, the transition will be much easier here than in many other regions, the report says.

"In fact, over time the Northwest exports more electricity [than under the status quo], with net exports rising from 31 TWh in 2010 to 53 TWh in 2050. This resource development path would bring energy jobs to the region and could make the Northwest a leader in clean energy technology development," the report concludes.

Under the report's "transition scenario" for the region, all coal (11,800 MW) and nuclear (1,100 MW) capacity is retired, and gas-fired generation falls by 33 TWh (74 percent) relative to 2010 levels. Meanwhile, the region adds 12,000 MW of wind capacity -- increasing wind capacity by 63 TWh to become 27 percent of all energy generation. Hydro generation increases modestly, "due to upgrades at existing dams," and 1,800 MW of geothermal capacity is added, so that the resource provides 6 percent of the region's energy by 2050. Biomass and gas-fired CHP plants generate 7 TWh (2 percent of the region's energy) in 2050. Waste gases also produce another 7 TWh in 2050.

The path outlined in the report would also mean a 94-percent drop in the region's electricity-sector CO₂ emissions, contrasted to "status quo trends" that will yield a 30-percent increase.

Mercury emissions would also fall 100 percent, compared to no change under the status quo; and water consumption by power plants would fall "considerably," under the report's transition scenario.

By 2020, the report's transition scenario would cost the region about \$10 billion more per year than the business-as-usual scenario, but the region would save \$5 billion per year by 2040 under the transition scenario.

North American Wind Power – Cascade Community Wind Receives Grant

8/31/10

NAW Staff

Cascade Community Wind Co. (CCWC) has been awarded a \$1 million grant and loan from the Washington State Energy Program. This award will be used to help CCWC install up to eight community wind turbines before December 2011.

The funds were awarded due in large part to CCWC's efforts to remove barriers to distributed community renewable energy projects, according to the company.

CCWC plans to install two smaller wind turbines this summer near Thorp, Wash., and another six turbines around the state next year.

Local News 8 – Ridgeline Energy Appeals Project Denial

9/1/10

Hailey Higgins

BONNEVILLE COUNTY, Idaho — Ridgeline Energy is appealing a decision made by the Bonneville County Planning and Zoning Commission after their proposal was shot down last week.

The appeal was submitted Wednesday afternoon at the Bonneville County Courthouse.

Ridgeline Energy Project Manager Randy Gardner said the merit of the application stands strong and they are taking it to the commissioners to have a second look.

“As we reviewed what happened at the Planning and Zoning meeting, we feel confident they were more concerned about the ordinance than they were about our application,” said Gardner during a phone interview.

The energy company wants to build 75 wind turbines on the area of Meadow Creek, which is on the north end of the Bonneville County foothills near Ririe.

Daily Record – Op-Ed: Loss of Local Control Hits Home

9/1/10

Mathew Manweller

If you have driven west to Seattle in the past few months and were disgusted by how a new crop of wind farms have destroyed the most scenic view in our valley, you may want to consider joining the Republican Party.

What is the connection between the new wind farms and the Republican Party? Simple. The concept of local control. For decades Republicans have been calling on Washington, D.C. to respect state's rights and at the same time calling on Olympia to respect the rights of cities and counties. For many voters, the call for local control was just an abstract political slogan. Now that abstract concept is hitting home. All you have to do is look west and see the eyesore that replaced a once beautiful view of the Stuarts to see how loss of local control can mean the loss of things we all treasure.

How did all this happen? A brief review is helpful.

A few years ago, it became clear that Kittitas County was going to be a fertile place for wind farms. In response, we came together as a community and discussed the issue. Our locally elected officials held hearings. Local citizens came to testify. We debated and discussed with our neighbors and in our local paper. We ended up with an excellent decision. As a community we decided that it was entirely appropriate for wind farms to be located on the east side of our valley in the sagebrush between us and Vantage. It was decided that wind farms were not appropriate along state Route 10 where so many people lived and so many others enjoyed the majesty of our mountainous region.

If only our local control had been respected. Instead a foreign corporation that doesn't give a damn about the people in this community appealed our decision to the Energy Facility Site Evaluation Council (EFSEC). This board is comprised of people who do not live here, will never live here and report to people who don't live here. The council is made up of primarily West Side bureaucrats who get appointed by liberal governors who have to appeal to Seattle environmentalist who want green energy, but in someone else's backyard.

EFSEC dismissed all the local input, ignored all the decisions by our locally elected officials, and overruled all the decisions we made in this community. Its decision was then passed along to Gov. Christine Gregoire, another politician who does not live in our community, has never lived in our community, and will never live in our community. Because we neither have the votes or the campaign contributions to be of any significance to her, she enforced the EFSEC decision that swept away all the local decisions. We don't have instruments to measure that level of arrogance. This one woman has decided that she knows better than the hundreds if not thousands of local citizens who came together to manage the way we live in our valley.

Now, the people who do live here and did participate in the civic process are left with the mess that others have wrought. What options are left to us? We can't remove the unelected bureaucrats who sit on EFSEC. We cannot appeal to our county commissioners. They no longer have any power to protect their own citizens. What we can do is pay attention the next time a Republican candidate starts speaking about the importance of local control. We can make sure we elect senators who will respect local control when they move to D.C. We can elect governors who will remember that county and city governments are those closest to the people.

We can remember the abstract political concept of today may be the awful reality of tomorrow if we chose the wrong people to represent us.

Kitsap Sun – PUD 3 Takes on Cutting-Edge Smart-Grid Project

9/1/10

Rodika Tollefson

BELFAIR — Fred Barrett and Debbie Jacobs bought a summer home in Allyn after falling in love with the area. When Mason County Public Utility District 3 built a fiberoptic network in North Mason, they saw the opportunity to move there from West Seattle and bring their Bellevue-based company along.

Allyn Technology Group (also known as Allyn Analytics) is a virtual company that does business all over the world, providing Internet application design and hosting services, product design, and a host of other high-tech and enterprise solutions.

“Allyn Technology Group could not be Allyn Technology Group had PUD not invested in fiberoptics,” Barrett said. “The PUD was ahead of the game.”

Some would say things are coming full circle for the company. PUD 3 is embarking on a smart-grid pilot project in partnership with Bonneville Power Administration — a project made possible by one of Allyn Tech’s products, a device called DCM-937.

The utility district will install 50 of these devices in the homes of customers interested in participating in the project. The DCM (which stands for demand control management) unit will be attached to the water heater and will give the utility the ability to turn the appliance off, remotely, during peak hours, shifting the use of energy for the water heater to a time of lower consumption and leveling out demand.

While that sort of capability is not necessarily unique, the project goes one step further — it will tie the appliances into renewable energy generation. With the help of an algorithm developed by a Seattle company, the device would be able to turn the heaters back on when the wind blows. And there’s more: A small part of the project entails the use of a battery-based device (made by a Spokane company) that can store excess energy generated by wind turbines for later use.

“This project shows that for a small utility, PUD is really ahead of the game,” Barrett said. “They’re early adopters of smart technology and have an eye toward tomorrow.”

Power Supply Manager Jay Himlie said the devices are in production, and PUD will solicit customers soon. Two battery storage units will be tested, one of which will be at the Pacific Northwest Salmon Center in Belfair, where the public will be able to see it.

The definition of smart technology is fairly complex, but in a nutshell it can be described as a concept that delivers power to end-users through two-way digital technology that allows for suppliers to control appliances remotely to save energy and reduce costs. It also gives consumers choices and the ultimate control on how they consume energy.

“A smart grid truly involves people in their homes — and appliances interacting with the power generators — to decide what price they want to pay,” said Katie Pruder-Scruggs, a Bonneville spokesperson. “The goal is to give people more educated choices and control over how to use electricity.”

It was a lunch meeting with PUD’s Himlie a few years ago that got the idea of the DCM device rolling, Barrett said. Interested in smart-grid technology, he asked Himlie what is it that the concept is missing, and Himlie said one challenge was that most smart-grid projects need multimillion-dollar investments — not an affordable move for a rural entity such as the PUD.

So Allyn Tech came up with a solution — the ability to control appliances via text messaging frequency instead.

“Fred developed the technology for the PUD and it’s unique in the industry,” said Himlie, who is a veteran in the industry with more than 30 years of experience.

The PUD commissioned five devices a couple of years ago, and last year they were tested locally, including at the North Mason Chamber of Commerce. The DCM-937 (Barrett notes 937 is simply a number inspired by Washington’s clean-energy initiative, I-937) would allow the utility, in theory, to turn off water heaters in a neighborhood during a heat spell, for example, to avoid a blackout. Or it could turn off the water heater during peak hours (such as 8 a.m.).

The reason a water heater is a good choice is because even if it’s turned off, it still has 50 or 60 gallons of hot water available while turned off, Himlie said. And the homeowner still has control — there’s an override button that can be used if the home runs out of hot water due to heavy use at that particular time.

Barrett said once the pilot proved the device worked, the next question was, “So what?” “Washington state is unique because we have hydroelectric power, we’re spoiled,” he said. “We sat back and thought, what is this demand control going to do for us? What would incentivize a PUD to keep looking at the problem?”

One problem is that renewable energy, such as wind generation, has a limit — if the power is not consumed when the wind blows, it’s as good as wasted unless it can be stored. But what if the wind power can be predicted a few hours ahead, shifting energy production accordingly? And what if extra power can be banked?

Enter GridMobility LLC of Seattle and Demand Energy of Liberty Lake (near Spokane). GridMobility has come up with an algorithm that can calculate when renewable energy (including wind, solar or thermal) is on the grid and then manage the devices to use the energy during those times (in effect helping devices get turned back on). The Demand Energy battery can save that renewable electricity for use later, when energy is either more expensive or less green.

PUD submitted a proposal to Bonneville Power Administration with those components, and was one of four utilities selected for “demand response” projects. “This one is unique and special because it’s a true representation of smart-grid technology, where the appliances and the wind generation technology are talking to each other,” BPA’s Pruder-Scruggs said.

She said smart-grid technology is always evolving — similar to how today’s smart phones are far from the original Alexander Bell telephone. That means even if this particular idea doesn’t work, “it’s a great project because of the lessons learned,” she said. “We’re testing these technologies and over time, we’ll hopefully have a better smart grid that will save people money.”

For PUD 3, just being able to shift demand would bring in savings. The utility’s winter wholesale bill is \$3 million, and about 25 percent of that is for peak-demand energy. With BPA’s plan to substantially increase fees for the general capacity energy and for wind integration, PUD is looking at the potential of up to 40 percent increase in its power costs next year. The DCM would only generate an estimated half a kilowatt of savings per device, but a systemwide deployment could add to substantial reduction.

For Barrett, that’s the exciting part. He believes people are interested in renewable energy, so it’s a matter of combining the right pieces — including the hardware his company created that would allow PUD to use the technology in a rural area via cell phones.

“You have to look at energy as the ultimate ‘just in time’ project — if I can’t save it and I don’t use it, it’s all gone,” he said. “If we can use renewable energy (when it’s produced), we’re optimizing this thing our society is telling us it’s important ... I think it’s a really cool opportunity.”

Forbes Blog – The Mountain West Can Lead the Way on Energy Innovation

9/1/10

Devon Sweezy

The United States Mountain West has long been a hotbed of experimentation and innovation, due in no small part to a decades-long partnership between government, universities and private enterprise. Throughout the 20th century, the federal government invested in dams, transportation infrastructure and military installations that facilitated economic expansion and the emergence of new private industries.

And according to a new report released today by the Brookings Institution Metropolitan Policy Program, the Mountain West has a pivotal role to play in securing our nation's clean energy future.

In the report, "Centers of Invention: Leveraging the Mountain West Innovation Complex for Energy System Transformation," Brookings' Mark Muro and Sarah Rahman detail the unique role that the Mountain West region (Arizona, Colorado, Idaho, Nevada, New Mexico and Utah) can play in driving innovation to make clean energy cheap and ubiquitous. Building off of their 2009 proposal for energy discovery innovation institutes (E-DIIs), the new report also proposes the creation of four to six new "federally funded, commercialization-oriented, and broadly collaborative energy research and innovation centers," intended to align existing regional assets to accelerate technology commercialization.

This latest Brookings publication adds to a clear and growing consensus among leading policy organizations that new research and commercialization paradigms are needed to overcome the disjointed and overly stove-piped nature of today's national energy innovation system. Last year, the Breakthrough Institute and Third Way proposed the creation of a National Institutes of Energy—an institution with similar goals.

There are numerous bottlenecks that slow or prevent the successful commercialization of advanced, next-generation technologies, according to the report. These challenges include the price gap between new clean energy technologies and incumbent, low-cost competitors; limited private-sector capital; spillover risks from research that cause firms to focus on short-term, low-risk research and product development; and a general disconnect between publicly funded research and technology commercialization in the private marketplace.

Combine that with the federal government's anemic support for energy research and development (R&D)—about \$3 billion annually and an order of magnitude less than what the government invests in health and defense-related research—and you have a recipe for a stagnant energy sector ill-equipped to meet the nation's climate and clean energy goals.

Fortunately, notes the report, the Mountain West region already offers many existing assets that can help advance the nation's clean energy priorities. These assets include world-leading federal energy research facilities, such as the National Renewable Energy Laboratory (NREL) in Colorado and the Los Alamos National Laboratory (LANL) in New Mexico; leading universities conducting path-breaking research on biomass and biofuels (University of Idaho), nuclear (UNLV), and solar (University of Arizona), among others; and abundant supplies of sustainable energy resources.

For example, every Mountain West state ranks within the top ten nationally for solar power potential and all have high-temperature geothermal resources. Three states—Colorado, New Mexico, and Idaho—rank among the top 15 nationally in wind power potential.

To leverage these regional strengths, Brookings recommends creating a network of energy innovation centers, funded at levels similar to the national labs today, intended to facilitate partnerships among leading universities, labs, and industry to conduct translational R&D capable of both addressing national energy priorities and stimulating regional and national economic growth. The centers would leverage existing regional advantages by pursuing research and commercialization activities organized around themes that are largely determined by the private market.

For example, southern Nevada and Arizona, already national leaders in solar energy innovation and production, could coordinate with universities and leading private solar developers to host a solar energy innovation center to conduct research on the entire solar energy supply chain.

The new report clearly indicates the innovation potential of the country's regional assets. Last June, Brookings released a similar report highlighting the strong energy innovation resources of the United States' Great Lakes region. Together, these findings show, unequivocally, that nascent clusters of clean energy innovation and production are forming throughout the country, and that with the right type of integrated public-private partnership, these clusters can transform America's energy system and its economy.

In the wake of the United States failed cap and trade experiment, it is time for Congress to get behind this bold new research effort and finally make progress on our climate and energy challenges.

Devon Swezey is Project Director at the Breakthrough Institute. He is co-author of "Rising Tigers, Sleeping Giant: Asian Nations Set to Dominate the Clean Energy Race by Out-Investing the United States."

Idaho Mountain Express – Idaho Power Plan Gets Nod from PUC

9/1/10

Trevor Milliard

Idaho Power's plan for keeping up with customers' electricity needs over the next 20 years has received formal approval. And demand is expected to greatly swell as a 40 percent increase in customers is predicted, jumping from 486,000 now to 680,000 by 2029.

The company isn't proposing that coal plants be built to accommodate growth in southern Idaho, but plans to add 3,000 megawatts of generation through wind, geothermal plants and natural gas-fired plants.

The 2009 plan, finished in December, doesn't guarantee that all projects proposed over the next 20 years will go through. The Idaho Public Utilities Commission requires the plan—known as the 20-year Integrated Resource Plan—to be updated every two years.

Mark Stokes, manager of power-supply planning, was part of the group that put together the plan. He said it's split into 10-year halves because technology advancements—such as carbon sequestration and electric cars—could drastically change what's implemented during the second 10 years.

The plan also shows three options for coal-fired production during the plan's time: maintain current coal-fired production levels, partially curtail it or cut out coal altogether. Increased coal burning isn't an option.

Mike Youngblood, manager of rate design, pricing and regulatory services, said coal plants currently supply about 45 percent of Idaho Power's electricity every year. He said the company would be shying away from coal in anticipation of legislation limiting greenhouse gas emissions.

But many eco-friendly forms of energy production will be started from the get-go.

A 300-MW natural gas plant now under construction near New Plymouth will come online in 2012, as will a geothermal plant contracted by Idaho Power to supply 20 MW over 20 years. Another geothermal plant contracted by the utility to supply 20 MW over 20 years is scheduled to come online in 2016. An upgrade to the Shoshone Falls hydroelectric facility will make another 20 MW available by 2015.

However, the plan's 150 MW of wind generation to be purchased by 2012 fell through on Aug. 13 when an agreement couldn't be met after issuing a request for proposals.

"In the end, the RFP no longer provided a competitive resource," said Lisa Grow, Idaho Power's senior vice president of power supply.

She added that a cheaper way of acquiring wind power has arisen. In March, the Idaho PUC changed regulations to allow Idaho Power to buy wind-generated electricity at lower cost from other utilities.

"Even though we're not getting the RFP, wind-powered generation today exceeds that identified in the 2009 resource plan," Idaho Power spokeswoman Stephanie McCurdy said.

She said Idaho Power has 200 MW of wind energy on its system and 250 MW more under contract, exceeding the 2009 Integrated Resource Plan's 150 MW. She said Idaho Power anticipates filing additional contracts for wind-generated power and hopes to have about 800 MW of wind on its system in a few years.

Idaho Power also recently requested state approval to enter its first agreement with another utility to buy solar-generated power.

But there is a drawback to these innovative forms of electricity production—they're much more expensive than hydroelectric power and coal, which currently supply about 75 percent of Idaho Power's electricity.

Idaho Power owns and operates 17 hydroelectric projects, two natural gas plants and one diesel-powered generator. It shares ownership of three coal-fired facilities.

While hydroelectric costs \$13 per MW hour and coal \$33, geothermal and natural gas would each cost \$107 per MW hour. And wind would cost \$80 per MW hour.

Relying more on these expensive resources means customers' rates will increase. Stokes said that would likely influence customers to reduce their electricity use.

"Use per customer would decrease despite more customers," he predicted.

And Idaho Power is already encouraging its customers to lower their electricity use through incentives.

"This is about the only industry where we encourage customers to use less of our product," Youngblood said.

Less electricity used means Idaho Power can wait longer before constructing more plants, something Youngblood said the company wants to stave off.

The 20-year plan can be seen at idahopower.com by clicking on the "About Us" tab on the left side of the screen and scrolling down to "Our Plan." Then, click on 2009 Integrated Resource Plan.

The next plan

The 2009 plan was just approved and Idaho Power is already beginning on the 2011 Integrated Resource Plan. The first meeting of the Integrated Resource Plan Advisory Committee was last Wednesday at the company's corporate headquarters. The committee consists of members of the environmental community, major industrial customers, irrigation representatives, state legislators, Public Utility Commission representatives and other interested parties. The 2011 plan will be filed next year.

Oregon Statesman-Journal – Union County Citizens Can Offer Wind Farm Opinion

9/3/10

Associated Press

LA GRANDE — Union County citizens will have a chance to express their opinion of a \$600 million wind farm planned near Union.

The board of commissioners voted Wednesday to place a nonbinding advisory issue on the November ballot.

The Le Grande Observer reports Horizon Wind Energy has applied to the Oregon Energy Department for a certificate to build the Antelope Ridge Wind Farm in the Craig Mountain area. It would generate three times as much electricity as the Elkhorn Valley Wind Farm that opened three years ago near Telocaset.

Opponents say the new wind farm would hurt scenery, property values, wildlife and tourism.