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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF)
IDAHO POWER COMPANY FOR)
APPROVAL OF A POWER PURCHASE)
AGREEMENT FOR THE SALE AND)
PURCHASE OF ELECTRIC ENERGY)
BETWEEN IDAHO POWER COMPANY AND)
ARROW ROCK WIND, INC)

CASE NO. IPC-E-05-24

REPLY COMMENTS OF ARROW
ROCK WIND, INC.

COMES NOW, Arrow Rock Wind, Inc. ("Arrow Rock") by and through its President, Ted Sorenson and hereby lodges its reply comments to the comments filed by the Staff of the Idaho Public Utilities Commission ("Staff") in the above captioned matter.

Arrow Rock appreciates and endorses the Staff recommendation that the contract with Idaho Power be approved by the Commission. The purposes of Arrow Rock's reply comments are to clarify the record and correct some factual errors in Staff's comments related to the development, cost and structure of the Arrow Rock project.

**THE COST OF DEVELOPMENT OF
WIND POWER FAR EXCEEDS THE JUDITH GAP "DEAL"**

At page three of its Comments Staff observes, correctly, that Northwestern purchased 135- 150 MW of wind from Judith Gap at the price of \$31.71. In reviewing the various filings in Montana, the price stated does not include all of the property tax cost, which is a direct pass-

through for the project. Albeit, the price associated with JG is much less than that available in the market today. Informal communication with NorthWestern assisted in explaining the price disparity. NorthWestern began its procurement review of wind resource in 2002 and the Judith Gap project was under plan and development since 2001. The ultimate procurement of the Judith Gap resource in 2004 was benefited by substantially lower cost turbine costs. The JG PPA price is far from representative of the cost to develop a wind project today. In fact, the cost to develop a wind project today is in the \$50 to \$60 dollar range, as can be identified by the procurement of the Wolverine project in Idaho by PacifiCorp and a refresh of the wind resource bid in Idaho Power's latest RFP. To further explain the increasing cost of wind resources, attached is an article from the trade publication *Wind Energy Weekly Volume 24, "Colorado Prairie Wind Project Scrapped"* (p 7), which identifies that the production costs and demand-related factors have contributed to an 18% (approximate) increase in wind generation equipment over the last year. Arrow Rock's cost for wind turbines is not related to the procurement of the 135 MW for the benefit of NorthWestern and unfortunately, such cost structure is not available to ARW. Comparison of the Judith Gap prices to current wind resource acquisition is akin to claiming that today's natural gas prices should be benchmarked against the \$3.85 natural gas prices that were available just a couple of short years ago. It should also be noted that the increase in costs must be directly recovered by the off-take energy agreement, since PTC benefits have not increased.

The site, adjacent to the Judith Gap site, was chosen by Arrow Rock because i) the benefit of the wind resource; ii) the mobilization cost of construction; and iii) the deliberate and beneficial studies with the USF&W in the area on avian (bird) impact. The Montana site area demonstrates a wind resource capacity factor of approximately 35% to 37% compared with 28%

to 30% in Idaho and Oregon. The increase in wind energy production assists in lowering the fixed cost of the project. However, this benefit is substantially offset by transmission costs to deliver the energy from Montana to Idaho. The Arrow Rock structure with Idaho Power also incurs an additional cost of integrating, firming and shaping the wind energy into a fixed-rate schedule to Idaho Power. This structure is a value-added component of the Arrow Rock resource, as communicated by Idaho Power in the filing. Arrow Rock must compensate the integration agent, NorthWestern, for such services.

**ARROW ROCK IS NOT INTENDING TO SELL
ANY ELECTRICAL ENERGY
TO NORTHWESTERN ENERGY**

On page 3 of its comments the Staff observes that in March, April and May Arrow Rock will sell its output to Northwestern under a separate agreement. To clarify, the energy produced from the ARW resource during those months will be integrated and stored by NorthWestern for later delivery to Idaho Power. The integration service contemplated with NorthWestern is similar to the services provided by the Bonneville Power Administration and is intended to be an energy-neutral service at market-based rates. (Please see the attached brochure, "BPA Wind Integration Services", which explains their various services including the "Storage and Shaping Services" on page 2). Thus, the provisions of the integration agreement do not contemplate substantial energy sales to NorthWestern. Rather, almost all of the energy produced by the ARW resource will be delivered to Idaho Power, pursuant to the Firm Energy Sales Agreement. Northwestern's role is limited to that of general integration services and transmission provider pursuant to its Open Access Transmission Tariff and the protocols adopted by the Western Energy Coordinating Council (WECC) and the North American Reliability Council (NERC). As

identified by the BPA brochure, NorthWestern is simply providing an integration service and OATT transmission that is offered by other utilities.

**ARROW ROCK IS NOT PROVIDING
A 10 MW FLAT PRODUCT TO IDAHO POWER**

Staff states the Arrow Rock resource will deliver a flat 10 MW product to Idaho Power. While it is true that Arrow Rock will deliver a flat product to Idaho Power the actual energy quantity each month is stated below. Therefore, the ARW Project is designed to provide the integrated annual energy requirements under the Firm Energy Sales Agreement with Idaho Power, without any significant excess energy.

Base-load, Firm Energy Deliveries to Idaho Power:

January 9 MW	September 9 MW
February 9 MW	October 9 MW
June 7 MW	November 9 MW
July 7 MW	December 9 MW
August 7 MW	

It should be underscored that Arrow Rock's deliveries are flat and are firm in that Idaho Power may rely on the schedule that is supported by the integration services provided by Northwestern (at ARW's sole expense). The value to Idaho Power of such a product far exceeds the value for other wind projects that are located in its load control area.

SUMMARY

It is hoped the above information, along with a copy of the executed LOI for the purchase of wind turbines (previously submitted) is useful to the Commission as it makes its deliberations as to the reasonableness of the agreement between Idaho Power and Arrow Rock. We appreciate this opportunity and remain available at the Commission's convenience to respond to any questions it may have.

Respectfully submitted this 19 day of September, 2005.

Arrow Rock Wind, Inc.

By 
Ted Sorenson 9/19/2005
President

Wind Energy Weekly

Vol. 24, #1158
9 September 2005

IN THIS ISSUE

Michigan utility boosts green power offering with new supply

Consumers Energy has reached supply purchase agreements for renewable energy with five independent developers proposing seven separate projects, two of which are wind projects.

Community Energy partners with investors to finance new wind farms

Community Energy, Inc., a wind energy marketer and developer, has closed a \$50 million investor financing package on two new wind energy generation facilities under construction in Pennsylvania and New Jersey.

Northern Power Systems names new President

Distributed Energy Systems Corp. has announced that it has promoted Darren Jamison to President of its Waitsfield, Vt.-based Northern Power Systems subsidiary.

ComEd cancels wind energy solicitation

Commonwealth Edison has announced that it intends to delay opening its wind energy request for offers solicitation.

Renewables lab offers to work with private partner to build dynamometer

The Department of Energy's National Renewable Energy Laboratory is seeking a partner to collaborate in developing a dynamometer spin test capability for testing large scale wind turbines.

Prairie Wind project unable to find wind turbines

Xcel Energy has announced that the 69-MW Prairie Wind facility will not be built this year.

DOE grants money for wind resource research, other energy-saving technology

The U.S. Department of Energy has announced that it will provide over \$16.5 million for 178 energy efficiency and renewable energy projects in 42 states.

California RPS undermined by new amendments

AWEA signed on to a letter developed by the Independent Energy Producers Association in California that raises concerns regarding implementation of the California renewables portfolio standard.

Wind plant developer re-proposes Vermont project

Endless Energy Corp. has resubmitted plans for a new wind farm on Equinox Mountain in Vermont.

Fall Symposium offers panel on optimizing project operations

What happens to wind power production when a weather front moves through the area?

News summaries from the rest of the wind world

A summary of other recent news in the wind industry.

Announcements/Advertisements:

- Sponsorship opportunities available for financial workshop in October
- EMS seeks Construction Manager
- TradeWind Energy seeks Project Development Manager

Will you be attending the HUSUMwind Trade Fair taking place September 20-24 in Husum, Germany? If so, come visit AWEA in Hall 4, Stand # 4A01!

National Wind Energy Association

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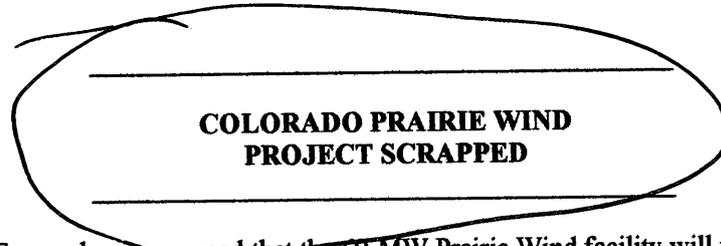
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4. Access to the facility by other wind industry members to be offered by the partner (20%).

Proposal submissions should be sent to:

Neil Wikstrom
National Renewable Energy Laboratory
National Wind Technology Center
1617 Cole Blvd.
Golden, Colorado 80401-3393



Xcel Energy has announced that the 69-MW Prairie Wind facility will not be built this year. The project was to have been an array of about 46 turbines built by a collaborative of five landowners in southeastern Colorado.

Prairie Wind said that it could not obtain wind turbines at the cost that would allow it to meet the contracted terms. "There are so few turbines out there right now that they demand a premium. We've been unable to secure equipment at a price that would make it work economically," said Chris Rundell, a spokesman for the project. Rundell said that the price of a 1.5-MW-sized wind turbine has gone from about \$1.4 million last fall to about \$1.65 million today because of higher steel prices and scarcity of wind turbines.

Rundell said the group would continue to seek ways to build the project. Prairie Wind has submitted another bid under Xcel Energy's larger "least-cost resource" request for proposals. Xcel said that it has received bids for about 4,570 megawatts of wind power under that solicitation.

Xcel spokesman Mark Stutz said the company could add another 750 MW of wind power through 2010 to comply with the Colorado state law that requires Colorado's top utilities to provide a percentage of their retail electricity sales from renewable resources beginning with 3% by 2007, increasing to 10% by 2015.

In the fall of 2004, the Colorado Public Utilities Commission granted Xcel Energy's request to acquire up to 500 MW of wind power by 2006. Xcel Energy announced in March that it had signed a contract with the Prairie Wind Energy facility, along with a 60-MW project being developed by Invenergy near Peetz, Colo. (see *Wind Energy Weekly* #1134, March 18). The Peetz facility is now under construction and expected to be complete by the end of the year.

BPA Wind Integration Services

Over the past two years, BPA has undertaken an extensive research and development effort to evaluate the costs and opportunities associated with integrating wind energy into the Federal Columbia River Hydroelectric System (FCRPS). This evaluation phase is now complete and we are pleased to announce two new services that will utilize the flexibility of the hydro system to integrate wind energy into our control area on behalf of electrical utilities in the Pacific Northwest. BPA has established a goal of providing up to 450 MW (nameplate) of wind integration services over the 2004-2011 time period. At least 200 MW of these services will be earmarked for public power customers.

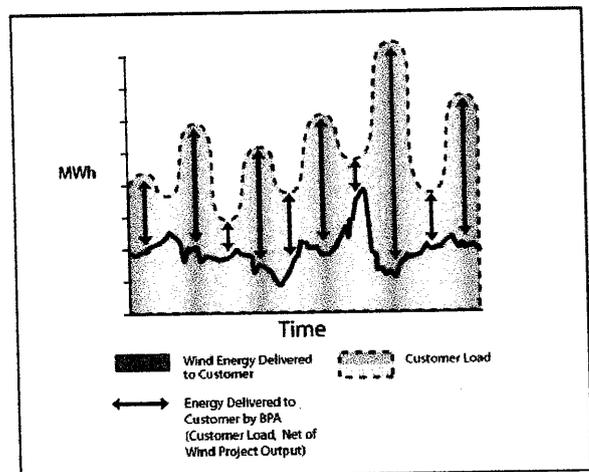
Network Wind Integration Service

Network Wind Integration Service has been designed to serve the needs of public power customers with loads embedded in the BPA control area who elect to purchase all or a portion of their power from a new wind resource. Once the customer has (a) signed a bilateral power purchase agreement with a new wind resource, (b) procured firm transmission and (c) determined a scheduling agent for the power, the BPA Power Business Line will use its hydro system to integrate the scheduled output of the resource with the customer's load. The scheduled energy from the wind resource will offset an equal amount of HLH and LLH PF energy that BPA otherwise would have provided. BPA will continue to meet and follow the customer's load at all times, including during those periods when there is no output from the wind resource. The customer's PF demand billing determinant will not be reduced for the amount of wind generation scheduled to its load on the hour of the generation system peak. BPA PBL

cannot count on the generation being there and thus must hold sufficient generating capacity available to fully back up the resource. The PF Load Variance charge will continue to be based on the customer's Total Retail Load, so will not be reduced by the amount of wind generation.

The customer will be charged a fee of \$4.50/MWh for all scheduled energy that BPA integrates into its system. This fee may be subject to annual escalation depending on the length of the requested contract. For contracts that extend beyond the current rate period, the fee will be escalated at the rate associated with the Gross Domestic Product Implicit Price Deflator, which is the same index used to escalate the Federal Production Tax Credit for wind.

Network Wind Integration Service



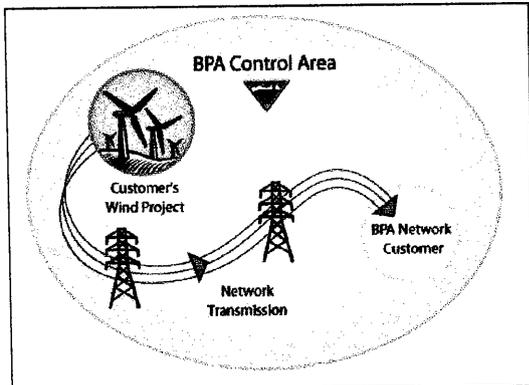
Transmission

With respect to transmission, customers will be able to import power from new resources using their NT transmission rights. BPA will work with public power customers and wind project developers to identify regions of the BPA grid best suited for wind development with respect to the availability



of firm transmission. BPA plans to take an active role in developing a diversified portfolio of regional wind resources. This diversification will be a key factor in increasing the amount of wind energy selling into the BPA grid.

Network Wind Integration Service Transmission



One Transmission Wheel Using Customer's
Network Transmission Rights

Scheduling and Generation Imbalance

The customer (or its scheduling agent) will be responsible for transmission arrangements and for scheduling the wind output from the point where the generation is integrated into the BPA transmission system to a point of delivery where the customer's system interconnects with the BPA transmission system. Generally, the customer will need to request a new Point of Receipt under its NT transmission contract and there is no guarantee that firm transmission capacity will be available.

The wind project operator or its scheduling agent will provide the Transmission Business Line with a Day-Ahead Generation Estimate followed by revisions up to 30 minutes before the start of the hour if changes are required. The project operator will be responsible for paying the BPA TBL Generation Imbalance charges for deviations between wind project actual generation and the Generation Estimate.

Whether the project operator directly assigns these generation imbalance costs to project participants or not will depend on the specific contractual agreements between those entities. Accurate wind forecasting will minimize these charges. If changes are made to the Generation Imbalance tariff in the future, these changes will be amended to the Network Wind Integration Service Contract.

Storage and Shaping Service

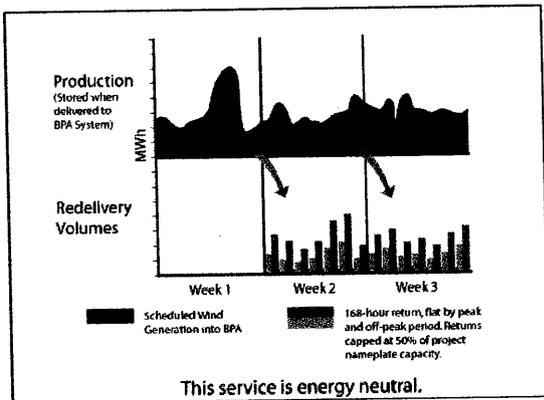
Storage and Shaping Service has been designed to serve the needs of utilities and other entities outside of the BPA Control Area who have chosen to purchase the output of a new wind resource but do not want to manage the hour-to-hour variability associated with the wind output. To facilitate such an arrangement, BPA's Power Business Line will take the hourly output of new wind projects physically located and/or scheduling directly into the BPA Control Area, integrate and store the energy in the Federal hydro system, and redeliver it a week later in flat peak and off-peak blocks to the power purchasing customer. In order to help reduce transmission costs, returns will be capped at 50 percent of the participant's share of project capacity. The base charge for storage and shaping service is \$6.00/MWh, escalated annually at the GDP Implicit Price Deflator.

Transmission

Storage and Shaping Service is for energy delivered *to* and *from* the BPA system. Thus, two transmission wheels are required to receive the service. Generators will be responsible for Generation Imbalance charges for generation scheduled into the BPA system. BPA expects that the transmission arrangements will vary from project to project, depending on (a) the

locations of the project and the end-use buyer, and (b) the availability of firm transmission along both transmission paths.

**Storage & Shaping Service
Power Redelivery**



BPA is committed to working with potential customers to minimize the transmission costs associated with Storage and Shaping Service. So far, we have been able to limit the cost of the wheel out of our system by agreeing to cap returns at 50% of the nameplate rating of the participating project. During periods when generation exceeds the 50% threshold (i.e. greater than 50 MW on a 100 MW project), BPA will bank this excess energy in a storage account. When generation falls below the 50% threshold, BPA will draw from the Excess

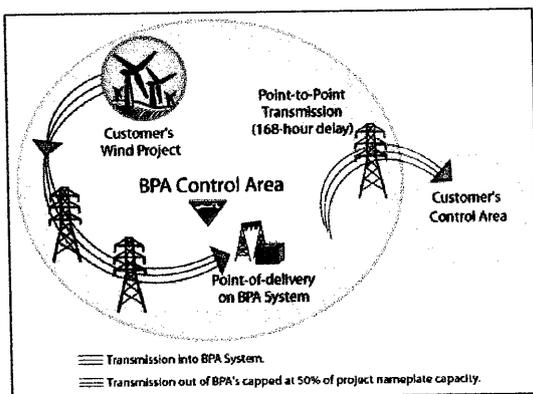
Energy account and redeliver additional quantities above and beyond the current redelivery obligation. This will reduce the amount of transmission required to move the stored energy out of the BPA system. We are also examining a number of potential cost-saving approaches to the transmission wheel into our system.

BPA plans to work closely with project developers, Investor Owned Utilizes and other entities with well-developed and active purchasing plans to help determine which projects can be most efficiently integrated into the BPA system. Siting projects in areas of the grid with minimal congestion and in a way that takes advantage of regional diversity in wind patterns is essential to the growth of cost-effective wind energy in the Pacific Northwest.

For More Information

To learn more about Network Wind Integration Service or Storage and Shaping Service, please contact your PBL or TBL Customer Account Executive or the BPA PBL Renewable Power Group at (503) 230-3530. We look forward to working with you on these exciting new services.

**Storage & Shaping Service
Transmission**



Customer purchases point-to-point transmission out of BPA's Control Area into their own area.

