Making Power Supply Decisions

Short-term cost, long-term stability weighed as utilities face the prospect of meeting growth

By Pam Blair

The choices facing public power utilities in the years to come are complex and risky:

• Go it alone and build your own generation.

• Join with others to develop new resources.

• Aggregate your allotment and load in a pool arrangement.

• Commit to a set amount of power from the traditional supplier, but at market- rather than cost-based rates—and paying for it, whether you end up needing that much power or not.

The Bonneville Power Administration (BPA) no longer is the only game in town—and it may not even be the preferred option to meet growing electricity needs.

"The issue is not nearly as straightforward as it used to be, when we effectively had one choice—and that was Bonneville," said Rick Crinklaw, general manager of Lane Electric Cooperative, based in Eugene, Oregon. "After 2011, there are going to be multiple choices that all utilities must consider.

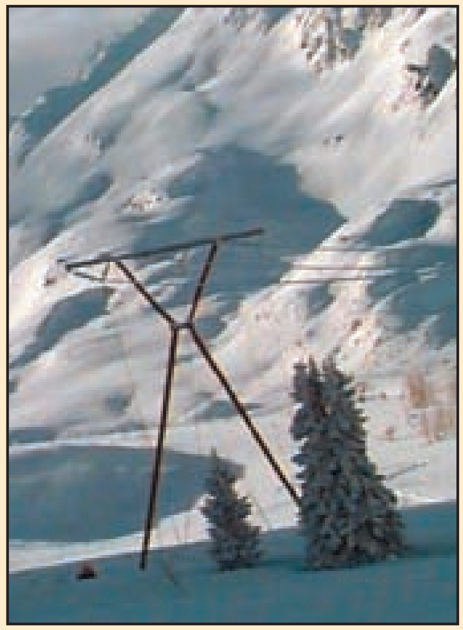
"There will be a heightened degree of risk. There is no risk-free option out there. Whatever decision is ultimately made will have an impact of 20 or more years."

High Fuel Costs Drive Alaskans

Rising fuel costs motivates Robert Wilkinson, chief executive officer of Copper Valley Electric Association (CVEA), to never stop exploring power supply options.

Last November, CVEA completed the Alternative Generation Review. The primary goal of the study was to determine whether high fuel costs associated with diesel plants could be displaced with other generation.

The results did not identify any cost-effective options for decreasing CVEA's reliance on diesel fuel. The complete study can be found on our Web site at www.cvea.org



The Four Dam Pool transmission line, Thompson Pass, Alaska.

Diverse power generation capabilities result in lower costs and increased reliability for our consumers.

CVEA generates energy from three sources: hydro, 60 percent; cogeneration, 25 percent; and diesel, 15 percent. CVEA produces electricity at four power plants subject to seasonal and contractual requirements.

During the summer, the Solomon Gulch Hydro Project carries the entire system. During winter months, as much as 70 percent of system requirements is generated with diesel fuel.

CVEA's mission is to provide exceptional customer service through safe, reliable, cost-effective electric service and programs. With this in mind, we will continue to explore alternatives to high fuel costs. ■

Exhausting the Supply

The BPA has had enough electricity to be the sole power provider for most publicly owned utilities in the Northwest. However, the supply of traditionally lower-priced hydropower is not expected to be sufficient to meet future demand.

As a result, beginning in 2011, the BPA will offer two tiers of service.

Tier 1 will allocate shares of the cost-based power generated at the federal dams and nuclear plant, based on each utility's load in 2010. Shares will be fixed for 20 years.

As a utility's needs exceed Tier 1 allocations, it will have options for meeting load growth, including buying Tier 2 power from the BPA at market rates. The current proposal requires a take-or-pay arrangement, meaning the utility must pay for the contracted amount, whether or not the power turns out to be needed.

Although changes will not take effect until 2012, utilities must anticipate their needs and determine how they will meet load growth when signing federal contracts in 2008.

"October 1, 2011, is going to be a brave new world for public power in the Northwest," said John Prescott, president and chief executive officer of PNGC Power. "It's a change, but with the change comes an opportunity. Our organization already has an infrastructure in place."

Staff and board members of Lane Electric Cooperative are dwarfed by a hydroelectric turbine blade during a tour at Bonneville Dam. Photo courtesy Dave D'Avanzo.

Laying the Foundation

Lane Electric's goal is to "acquire as much of the Bonneville resource as we can and stretch that as much as we can for as long as we can," said Crinklaw.

Since Tier 1 is unlikely to meet all of the utility's needs for the 20-year contract term, the co-op will have to secure other resources.

"2011 is not very far away when it comes to electricity resource planning and acquisition," Crinklaw said. "We need to know how much Bonneville resource is going to be available to us."

West Oregon Electric Cooperative, based in Vernonia, has limited load growth now, but with suburban areas stretching westward, "it doesn't mean it will always be that way," said General Manager Marc Farmer.

"The easy way out is to go with the BPA's Tier 2 rate, but is that really the best thing for members?" asked Farmer. "In my mind, we don't want to go it alone."

West Oregon Electric and Lane Electric are among 15 members of PNGC Power, which provides the Northwest co-ops with power supply and related management needs.

Helping members cost-effectively meet their power needs is the focus of PNGC. On behalf of its members, PNGC commissioned development of an integrated resource plan, which forecasted how much power would be needed during the next 20 years, and identified alternatives for meeting those needs.

"Our members are entitled to their share of the Bonneville resource, but going forward, we have the option to chart our own course," Prescott said.

"It's a matter of managing risk. Pooling shares the risks. Staying with Bonneville as a full-requirements customer is not a free ride. It's not the Bonneville of the past when it comes to serving load growth."

Looking Beyond Bonneville

Utility boards and staff are exploring a number of options for meeting load growth. Several—including Northern Wasco County PUD, based in The Dalles, Oregon, and United Electric Cooperative, based in Heyburn, Idaho—have looked at a coal project being developed in Delta, Utah.

PUD customers will vote May 15 on participating in the 900-megawatt plant, which has an estimated price tag of $2.6 billion and a life expectancy of at least 30 years.

United opted last month not to invest in the plant after a revised projection came in .3 cents per kilowatt-hour higher than the BPA's Tier 2 projection. The coal plant figures seem inflated and a BPA official conceded its number was too low, said General Manager Ralph Williams.

"A take-or-pay contract that commits us for 30 years is a scary scenario for a board that has had a full-requirements contract," Williams said. "You have to make a decision based on information and your gut. Only time will tell us if we have made a good decision."

The co-op will keep looking for an opportunity to diversify its power supply and own some generation.

"I think it will be a mistake in the future to have all our eggs in one basket," Williams said. ■

For a more indepth story, see www.ruralite.org/news/story.php?ID=98.