Alternative energy blowing in the wind

Electric cooperatives need to be ready to deal with distributed generation requests, Basin Electric Power Cooperative Manager of Member Marketing Ron Rebenitsch told a group of Montana co-op trustees and staff February 7. The public must be told the whole story, he added.

Basin is a North Dakota-based power generation cooperative that provides electricity to member cooperatives in parts of eight states, including Montana. Basin has recently become involved in large scale wind power generation projects in North Dakota and South Dakota.

Rebenitsch said that there are several other kinds of distributed energy generation, including solar, fuel cells, diesel generators, methane digesters and small hydroelectric units. He said, however, that except in special situations, large scale wind projects are the only kind that can be expected to be predictably economically sound and then only with the assistance of federal tax credits.

One example of special circumstances which prove beneficial include backup generators in places like hospitals.

"They have to have them anyway," explained Rebenitsch. "They can be contracted to generate electricity that can allow load dropping by a utility," he said. "But they must be able to run when they are needed to make the agreement feasible."

Similarly, businesses like sawmills with steam plants and dairy farms with manure digesters can take advantage of cogeneration opportunities.

Solar units and small wind generating units are still not cost effective, he said, adding that sometimes concerns besides profitability, like the environment, must be taken into consideration.

He said fuel cells may someday have a dramatic effect on the power industry but they have not evolved enough technologically to have much of an impact yet.

Rebenitsch said co-ops are often seen as being anti-alternative energy but that seldom is the case. He said sometimes the member coming to the co-op has been sold "a bill of goods" by a generator vendor without having been told the true costs and benefits involved.

"Perhaps the biggest misunderstanding occurs when people with generators wanting to feed electricity back onto the line don't understand why they can't be paid the same rate they pay for the co-op's delivered power," he said. "They need to understand why they can't get paid the retail rate. They need to know that those electrons account for a relatively small portion of their power bill. Co-ops need to explain to them the costs of constructing and operating the system that brings electricity to them. That system has to be

Continued on page 11

Alternative energy

Continued from page 7

there whether the co-op member is generating or not."

The only value of the distributed generation to the co-op is the aversion of the cost of the wholesale power the off site unit generation will replace, he said. He added that there are other cost factors, including safety and engineering that have to be paid for. "Safety absolutely cannot be compromised," he emphasized.

He said there is nothing "wrong" with distributed generation, in fact he said it is a good thing for environmental and other reasons and it is "here to stay."

"But the people need to know what any project entails and they shouldn't expect fellow co-op members to subsidize their project," Rebenitsch said. Co-ops need to have the numbers ready and be able to explain them so that there will be no misunderstandings or misconceptions, he added.

"Wind has great potential for the region," Rebenitsch said. "But it has to be right for everyone involved. Wind partners well with natural gas powered generating units that can ramp up quickly when the wind dies down." Basin will spend $150 million over the next two years constructing a large wind project in South Dakota. The project will be good for Basin and its members and good for the community in which it is built, he said.

He said he expects more generation facilities of various kinds to be built in the region in the near future but he stressed that along with generation building comes the need for expanded transmission capabilities. "They will need a gateway to the grid," he said. "That has to be addressed early on."