Basin Electric project still seeking CO2 customers

DALE WETZEL - Associated Press Writer - Associated Press

Basin Electric Power Cooperative is searching for customers to buy the carbon dioxide it plans to retain in an experiment to reduce emissions of the gas from its Antelope Valley power plant, a company official said Wednesday.

Curtis Jabs, a senior lobbyist for the Bismarck-based electric power producer, said engineering work to determine the design and cost of the project should be completed late next month. Basin's board of directors will probably decide before year's end whether to go ahead with the project, Jabs told a North Dakota legislative committee that oversees energy development.

One crucial element is whether Basin can find customers for the carbon dioxide that would be captured from one of Antelope Valley's two 450-megawatt generating units, he said. A potential buyer is the oil industry, which uses carbon dioxide to increase production in some geologic formations.

"I think without enhanced oil recovery, it's going to be very difficult financially," Jabs said.

Designers hope the project will be able to capture up to 1 million tons of the gas annually.

The legislative committee's chairman, Sen. Rich Wardner, R-Dickinson, said he believed a surge in carbon dioxide demand was in the offing for western North Dakota's oil industry.

"All of a sudden, they'll find the technique, and you better be ready," Wardner said.

The U.S. Agriculture Department has committed a $300 million loan for construction of the Antelope Valley project, and the federal Energy Department has offered a $100 million grant. A coal research fund controlled by North Dakota's Industrial Commission provided $2.7 million for the engineering work, which will cost about $6.7 million.

Basin Electric Power Cooperative provides wholesale electric power to rural electric cooperatives in nine states. One of its subsidiaries, Dakota Gasification Co., operates the Great Plains Synfuels Plant near Beulah, in west-central North Dakota.

Great Plains processes lignite coal to make synthetic natural gas and retains much of the carbon dioxide in the process. It ships the gas by pipeline to southern Saskatchewan, where oil producers pump it underground to increase oil production. The plant retains about 3 million metric tons of carbon dioxide annually.

Jabs said the pipeline has additional capacity to ship carbon dioxide from the

Antelope Valley project, and additions could be built to supply the gas to western North Dakota oil producers.

The carbon dioxide retention process to be used at Antelope Valley is being developed by HTC Purenergy Inc. of Regina, Saskatchewan and Doosan Babcock Energy, an English company that has its U.S. headquarters in Atlanta.

Carbon dioxide that cannot be sold could be pumped underground into saltwater aquifers in western North Dakota for permanent storage. One large aquifer is beneath the Freedom lignite coal mine, eight miles northwest of Beulah, which supplies coal to the synfuels plant and Antelope Valley station.

Source URL (retrieved on *12/08/2013 - 8:30pm*):
http://www.chem.info/news/2010/08/basin-electric-project-still-seeking-co2-customers