

Dale Niezwaag – Dakota Gasification Company
Report to the Energy Development & Transmission Committee
2012 Carbon Dioxide Capture Credit Report
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In 2009 when the State Legislature provided a coal conversion tax credit for plants that captured carbon dioxide (CO₂), we were all fairly certain that either climate change legislation or a carbon tax bill would be passed at the federal level. Dakota Gasification Company (DGC) qualifies for this incentive.

Also at that time Basin Electric was conducting a Front End Engineering and Design (FEED) study on taking a portion of the exhaust gases from the Antelope Valley Station (AVS) and installing carbon capture equipment. The FEED study examined the technical feasibility and estimated the cost to capture CO₂ from an existing power plant. A strong benefit to the AVS project was the ability to use, and add to, the existing pipeline and compression infrastructure at DGC.

After reviewing the FEED engineering study on the AVS project, the board of directors decided in 2011 to put the project on hold and then later abandoned the Project entirely.

However two recent events keep the need for this incentive relevant. One is the ruling by the Washington DC Court of Appeals to uphold the Environmental Protection Agency's (EPA) finding that CO₂ is an endangerment to public health and therefore insuring that the EPA will push forward with more CO₂ regulations on coal based power plants. The second is EPA's proposed New Source Performance Standard (NSPS) for new coal plants. Under the NSPS, coal plants must meet the same CO₂ emission levels as a high efficiency natural gas plant to receive operating permits. The only way for new coal plants to meet this regulation would be with carbon dioxide capture and storage technology.

Since 2000, CO₂ that would otherwise be emitted into the atmosphere has been captured, compressed and transported through a 205-mile pipeline to oilfields near Weyburn, Saskatchewan, Canada, for use in enhanced oil recovery (EOR). Virtually all of the injected CO₂ is expected to remain permanently sequestered in the depleted oil fields long after they have been abandoned.

Today, DGC exports about 125 million cubic feet per day of CO₂ to Canada - about 40 percent of the CO₂ it produces. As of Dec. 31, 2011, Dakota Gas has successfully captured more than 21 million tons of CO₂ for EOR.

DGC receives no additional benefits from federal regulation or law by capturing CO₂ from the plant.