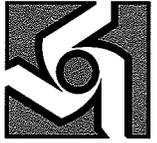


**BASIN ELECTRIC
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May 7, 2010

ND Department of Health
Terry L. O'Clair, Director
Division of Air Quality
918 East Divide Ave, 2nd floor
Bismarck, ND 58501-1947



Dear Mr. O'Clair:

Basin Electric Power Cooperative (**Basin Electric**) appreciates this opportunity to comment on the Department of Health's (**the "Department"**) Notice of Intent to issue a Best Available Control Technology (**BACT**) determination pursuant to Consent Decree in the case of United States of America and the State of North Dakota vs. Minnkota Power Cooperative Inc. and Square Butte Electric Cooperative. The Notice requests comments on the Department's cost estimates and its reasoning for the rejection of low dust and tail end SCR (**TE-SCR**) as BACT.

Basin Electric supports the Department's preliminary determination that low dust and tail-end selective catalytic reduction (**SCR**) do not represent BACT for the Milton R. Young Station.

Basin Electric has particular interest in the Department's decision in this matter because it owns and operates the Leland Olds Station (**LOS**) near Stanton, North Dakota. LOS is a Phase I BART source under the Regional Haze provisions of the Clean Air Act, and, as such, has undergone BART Determination review. LOS Unit 2, like M. R. Young Station, is a cyclone boiler that uses North Dakota lignite feed stock.

Basin Electric retained Sargent & Lundy (**S&L**) to provide a supplemental review for the potential application of SCR controls on the LOS Unit 2 cyclone boiler as part of its BART review. At that time, S&L enjoyed a market participation factor of 46% of all SCR projects built in the United States. Basin Electric's fundamental question to S & L was "is it possible to design an SCR today for Basin Electric's LOS Unit 2 North Dakota Lignite fired cyclone boiler with confidence in its performance?" S&L concluded that they could not design an SCR application for LOS without extensive pilot testing, due to the nature of the cyclone boiler and the burning of North Dakota lignite fuels. This information was presented to the Department and EPA by Basin Electric and S&L representatives in May, 2007 and subsequent discussion specifically relating to the applicability of TE- SCR in March 2009. The presentations were led by S&L's Mr. Bill DePriest, Senior VP and Director of Environmental Services for S&L and Dr. Raj Gaikwad, PhD in Chemical Engineering. S&L's conclusion was that the attributes of lignite gases in an SCR

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environment are not well understood and need an extensive pilot testing level of investigation to predict performance.

The Department then requested Basin Electric prepare a cost effectiveness evaluation for a TE-SCR control system on LOS Unit 2. A hypothetical cost effectiveness study was performed by S&L (May 2009) and submitted to the Department. The analysis was performed recognizing a high level of uncertainty due to the lack of design and operational knowledge surrounding the application of a TE-SCR on a ND lignite-fired cyclone boiler. The cost evaluation analysis determined a cost effectiveness for TE-SCR (assuming technical feasibility) to be in the range of \$4,170 and \$5,976/ton depending on the rate of catalyst degradation and the cost of consumables (ammonia and natural gas). The cost estimate developed by S&L represents similar costs as found by the Departments April 2010 BACT Determination for Control of Nitrogen Oxides for Milton R. Young Station (\$4,201 -\$4,822/ton). These ranges accurately reflect the high cost per ton of implementing SCR technologies and we concur with the Department's determination that these costs are unreasonable for the application of TE-SCR on a North Dakota fired cyclone boiler.

Basin Electric finds it particularly significant that when actually called upon by Minnkota to provide a guarantee, two catalyst vendors, who had apparently earlier indicated that such a guarantee was available, refused to provide a catalyst life guarantee for either low-dust SCR or tail-end SCR without pilot scale testing. That refusal confirms the concerns noted in the report of S&L submitted by Basin Electric to the Department in the spring of 2007 and the follow-up May 2009 report.

In conclusion, Basin Electric supports the Department's findings that BACT for the M. R. Young Station is represented by SNCR plus ASOFA.

Thank you very much for this opportunity to comment.

Sincerely,



Cris Miller
Senior Environmental Project Administrator

cm/df/ds