

TO: COMMISSIONERS, ILLONA JEFFCOAT-SACCO AND PAT FAHN
FROM: MARK GRUMAN, RATEPAYER ADVOCACY STAFF MG
SUBJECT: BIG STONE AQCS, CASE NOS. PU-11-163 AND PU-11-165
DATE: APRIL 11, 2012
CC: MARK BRING AND DAN KUNTZ

After listening to the commission's work session held on March 23, 2012, staff is concerned with the possible outcome of not granting a full ADP decision in the above referenced cases. As you know, the ratepayer advocacy staff supported the Big Stone AQCS proposal submitted by MDU and Otter Tail. While we understand the commission's principled objections, we believe the ramifications of maintaining that course will be harmful to the ratepayers in the long-run.

Under North Dakota's Administrative Agencies Practice Act Section 28-32-25, an administrative agency may avail itself of information or evidence not presented at a hearing as long as all parties are in agreement as to its inclusion into the record. A ten days' notice is required for further testimony; however, the required ten days' notice can also be shortened by agreement of the parties to the case if an immediate hearing is desired by the commission.

We request that the commission avail itself of competent and relevant information not presented at the formal hearing. Specifically, we request that the commission consider the following information not discussed at the hearing:

1. Absent a full ADP decision, the project will be delayed and possibly abandoned as it is too large of an investment to secure financing by the largest owner. According to Otter Tail's 2010 annual report to the commission, its total company rate base is \$446 million. Otter Tail's ownership share of the AQCS project is 53.9% of \$489 million or \$263 million.
2. Since the hearing, the U S Senate failed to pass an extension of the Production Tax Credit last month. As you recall, staff's analysis determined that a Wind/Gas/Market approach to securing electricity was slightly cheaper than the proposed AQCS project but that the volatility of natural gas prices and market prices would be a concern for this alternative approach. Without the extension of the PTC, AQCS is now estimated to be nearly 1.5 cents/kWh cheaper than the next least cost resource scenario of Wind/Gas/Market.
3. As the commission will recall from the Big Stone 2 hearing, the building of Big Stone 2 would have enabled the exportation of an additional 500 MW's of electricity from North Dakota. The commission should consider by inference the impact that closing down Big Stone would have on regional transmission facilities, including North Dakota's export capabilities. I say inference because transmission studies are expensive and time consuming to complete. While it is likely Otter Tail would sell its share of Big Stone and

the plant would continue to run, it is not assured and at a minimum would be costly to its ratepayers.

4. There is very strong language supporting the recovery of federally mandated costs in NDCC 49-05-04.2 to not only allow a return on such investments and associated operating expenses but also a current return on construction work in progress. Since the formal hearing in November, the Environmental Protection Agency has taken final action to approve South Dakota's State Implementation Plan to address regional haze. The commission should consider whether this new action constitutes a federal environmental mandate in reaching its decision in these proceedings.
5. If the commission desires to create an incentive for the companies to aggressively manage its AQCS project costs, the commission should consider capping the ADP at the estimated price without coverage for the 20% overage as requested in the application. Doing so will require the companies to request cost recovery for any costs over the estimated price and will help ensure that the project remains the least cost option for ratepayers. This is not to say that imprudently incurred costs are covered so long as the cap it met. Staff believes an ADP is a regulatory compact in principle and does not extend to imprudently incurred costs. In this regard, the responsibilities of management remains throughout the construction period and until final costs and rates are approved by the commission. This approach would provide needed assurance to financing institutions yet put some risk on management to perform.
6. Pursuant to an inquiry from Terry Graumann, Manager of Environmental Services for Otter Tail Power Company, Tom Bachman of the North Dakota Department of Health indicated support for the suite of control technologies as proposed by MDU and OTP. Although Mr. Bachman has not been recently contacted, his presence could be requested if the commission so desires. The following is a copy of the email received:

This email is in response to inquiry about North Dakota's criteria for determining Best Available Retrofit Technology (BART) under the Regional Haze Program. The North Dakota Department of Health (NDDH) used a cost effectiveness threshold of \$3,650 per ton of pollutant removed and an incremental cost threshold of \$6,500 per ton of pollutant removed. Selective Catalytic Reduction (SCR) was not required for North Dakota sources because it was determined to be technically infeasible and/or exceeded our cost thresholds. The high concentration of sodium and potassium in the fly ash from North Dakota lignite can cause SCR catalyst poisoning, blinding and plugging. Since SCR technology was not demonstrated to work for North Dakota lignite, it was considered technically infeasible. However, SCR is a proven technology for units burning subbituminous coal, such as the Big Stone Generating Station (Big Stone). Our review of the BART analysis for Big Stone indicates a cost effectiveness of \$825 per ton of NOx removed for SCR plus separated over fire air. The incremental cost from the next most efficient control technology was \$871 per ton of NOx removed. The NDDH considers these costs to be very reasonable. Not knowing all of the data surrounding the BART determination for Big Stone, and assuming the economic assessment to be valid, it would be the NDDH's view that SCR would have been economically feasible based on the cost effectiveness thresholds used for North Dakota's BART assessments.