

STAFF REPORT
COMPARISON OF BENEFITS FROM
PROPOSED COAL SUPPLY, TRANSPORTATION & DELIVERY BIDS
TO CITY OF AMES ELECTRIC CUSTOMERS
April 14, 2009

The City of Ames operates a municipal electric utility serving approximately 24,000 industrial, commercial, and residential metered customers with a historical peak load demand of 126 megawatts (set on July 31, 2006). The utility provides electric generation, transmission, and distribution services along with interconnections with two other utilities in order to reliably and economically provide electric service to meet the needs of the City of Ames ratepayers.

The electric utility operates a total of four electric generators – two base load steam units which burn coal and refuse derived fuel (RDF), and two combustion turbine peakers which burn #2 fuel oil. The base load steam units are Unit 7 which became operational in 1967 and is rated at 33,000 kilowatts, and Unit 8 which became operational in 1982 and is rated at 65,000 kilowatts. The power plant on average burns approximately 300,000 to 312,500 tons of coal and 30,000 to 35,000 tons of RDF annually.

The primary fuel for Units 7 & 8 is super low-sulfur (compliance) western coal from the Powder River Basin (PRB) of southern Wyoming. The City is currently in the final year of a five-year contract with the Peabody Coal Company for coal from their North Antelope Rochelle Mine. Transportation of the coal from the mine in Wyoming to the City of Ames Power Plant is provided under a concurrent five-year contract with Alliant Energy. Under this contract with Alliant Energy, coal is transported by rail from the mine via the Burlington Northern Santa Fe (BNSF) and Canadian National (CN) Railroads to Alliant Energy's Williams Bulk Transfer facility in Williams, Iowa, where the coal is unloaded from the unit train and temporarily stored. The coal is then reloaded, weighed, and shipped by truck to the City of Ames Power Plant.

On July 28, 2008, the City of Ames issued a request for proposals (RFP) for coal and coal transportation/delivery services to five coal companies and to three other entities who had expressed interest in providing coal transportation/delivery services for the City of Ames. The purpose of this RFP was to secure a contract for coal and coal transportation/delivery services for the City's Power Plant beyond December 31, 2009, which is the expiration date of our current coal and coal transportation/delivery contracts. Following a total time of five weeks to submit proposals, RFPs were received on September 3, 2008, from three coal companies to supply coal, and from two other companies interested in providing transportation/delivery services.

The two proposals for coal transportation/delivery services were from Alliant Energy-Williams Bulk Transfer and from Central Iowa Terminal (a Southern Coal Handling company). Alliant Energy's Williams Bulk Transfer (AE-WBT) facility has delivered coal to the City of Ames Power Plant since 1999. The proposal from Central Iowa Terminal

(CIT) is for transportation/delivery services from a proposed coal terminal to be located and built on the Union Pacific rail line approximately one mile southwest of the city limits of Nevada, Iowa.

After careful review of the coal transportation/delivery proposals from AE-WBT and CIT, and the evaluation of each proposal's pricing, terms, and conditions, CIT's proposal for coal transportation/delivery services was clearly favorable over AE-WBT's for the City of Ames and for its electric ratepayers.

The following discussion will present the major features of AE-WBT's and CIT's proposals, and contrast the differences between them.

Pricing

The base proposal pricing (without escalation factored in) for coal transportation/delivery services from CIT was \$32.34 per ton and from AE-WBT \$36.47 per ton. Escalated pricing at the start of the new contract term (January 1, 2010), and according to the escalation terms stated in each proposal changes the price for CIT to \$36.14 per ton and for AE-WBT to \$40.14 per ton. (For reference and comparison, coal transportation/delivery service under our current contract with AE-WBT as of December 31, 2009, is estimated to be \$28.305 per ton.) The following table compares the costs under our existing contract to that of CIT and AE-WBT under a new contract.

	Current Contract (estimated prices as of 12/31/09)	Central Iowa Terminal	Alliant Energy- Williams Bulk Transfer
COAL TRANSPORTATION/DELIVERY SERVICES (RAILROAD MOVEMENT AND TRUCK DELIVERY)			
Proposal Pricing - (\$/ton)		\$32.34	\$36.47
Escalated Pricing (1/1/2010 basis) (\$/ton)	\$28.305	\$36.14	\$40.14
Delivery Cost (312,500 tons x Escalated Pricing)	\$8,845,313	\$11,293,750	\$12,543,750
Delivery Cost Above Base	Base	\$2,448,437	\$3,698,437
Estimated Rate Increase Necessary Due to Coal Movement & Delivery (\$500,000 ≈ 1% Rate Increase)		4.90%	7.40%

As can be seen from the data contained in the table, the increase in annual coal transportation/delivery charges under a new contract (starting on January 1, 2010, and above the current contract) would be \$2,448,437 for CIT and \$3,698,437 for AE-WBT. Therefore, AE-WBT's cost for coal transportation/delivery service is \$1,250,000 greater than CIT's.

Given that each \$500,000 increase in annual cost to the utility would require an increase of approximately 1% in electric rates, CIT's proposal would require an approximate electric rate increase of 5% and AE-WBT's proposal would require an approximate electric rate increase of 7.5%.

Contract Length

CIT proposed pricing for a contract term of five (5) years, while AE-WBT's proposal was for only one (1) year. Electric Service's position is that a longer rather than a shorter contract for coal transportation/delivery service is desirable, and AE-WBT's proposal for only one (1) year is problematic. In fact, the RFP asked for contract term lengths of either 3, 5, 7, or 10 years. In AE-WBT's response to the RFP, they were not able to meet the minimum contract term lengths of the RFP. Subsequently, after the close of the RFP response period (September 3, 2008), AE-WBT has indicated interest in contract terms longer than the one (1) year they initially proposed. However, to date nothing in writing has been received from AE-WBT. It is staff's belief that AE-WBT would need a long term agreement with the City of Ames to remain a reliable coal transportation option for the City of Ames Power Plant.

Coal Storage

CIT's proposed coal terminal would have the capability of storing up to 30,000 tons of coal for the COA indefinitely at their terminal at no additional charge. This would allow the power plant the option of reducing the on-site storage at the plant from their historical storage target of 25,000 +/- tons, down to 10,000 to 15,000 tons. The additional coal storage capability at CIT's site would mitigate coal shortage issues that the power plant has encountered historically, including two periods within the past year. These occurrences required the power plant to reduce normal output in order to conserve coal and in one case forced the utility to purchase replacement power at uneconomical prices (as compared to the cost of generation from Unit 7 & 8). In the first case, we did not put Unit 8 on-line when we could have (the week of January 4th, 2009), because we were concerned that if we did so we would run out of coal in a matter of a few days. The net extra cost to the utility to purchase power to offset the absence of Unit 8 for that week was approximately \$22,000. In the second case, we took Unit 7 off-line and started our maintenance outage early (January 27th through January 30th, 2009) in order to conserve coal.

AE-WBT has no long-term storage capability. The dome's storage capability at AE-WBT is intended to accommodate the surge of coal due to the unloading of unit trains. Once a train of coal is unloaded into the dome, they must work expeditiously to move the coal from the dome to the customer's destination. If they don't do so, in a few

weeks the coal will heat up by spontaneous combustion, risking a coal fire in the dome. (Coal that is properly compacted will not spontaneously combust.) AE-WBT stores coal in the dome in a loose state, due to the fact that they will be re-loading it quickly onto trucks and delivering it to the end-use customer.

CIT would compact all coal intended for long-term storage, thereby essentially eliminating the risk of coal getting hot and catching fire due to spontaneous combustion.

Proximity of the Terminal to the City of Ames Power Plant

The terminal that CIT has proposed southwest of Nevada, Iowa, is approximately nine miles east of the City of Ames power plant. AE-WBT's facility, just off of I-35 at Williams, Iowa, is thirty six (36) miles north of the City of Ames Power Plant. If the same amount of coal was hauled from each facility, hauling from AE-WBT would require four (4) times the truck-miles. If 312,500 tons of coal were hauled annually, hauling from AE-WBT would require 900,000 truck-miles to accomplish the delivery, but only 225,000 truck-miles if hauled from CIT's proposed site near Nevada.

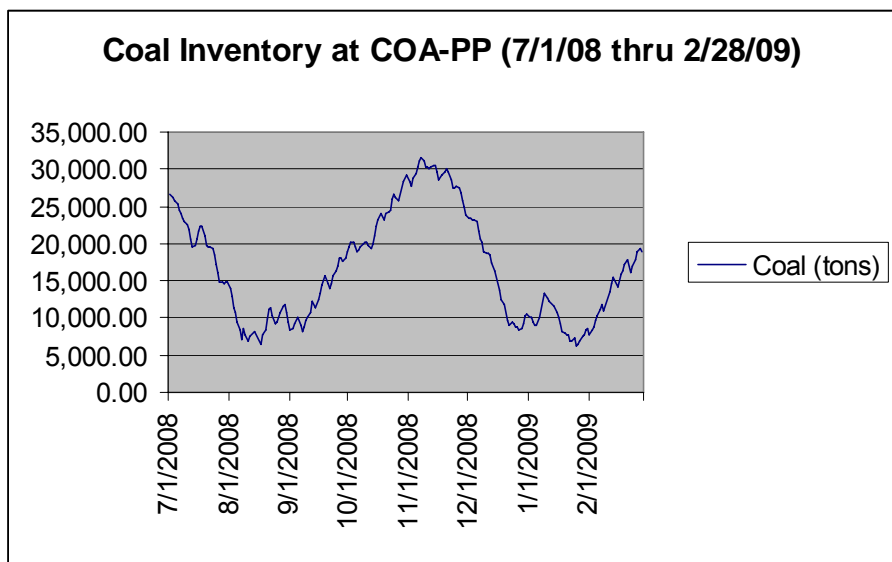
Besides the savings of diesel fuel for trucking and the corresponding reduction of 1303 tons of CO₂ emissions on behalf of the environment, the faster cycle times for the shorter round trip to and from CIT's terminal near Nevada means that the same amount of coal could be hauled in a shorter window of time resulting in reduced overtime costs for coal yard personnel. Moreover, the trucking and the receiving of coal would likely be performed safer because it should be accomplished during daylight hours, especially so during the winter.

Reducing the truck-miles and the turnaround times in the winter should result in a significant improvement in the reliability of coal supply to the power plant. As previously discussed, this past December (2008) and January (2009), due to a combination of factors, not the least of which was trucking issues associated with winter weather, the power plant was unable to receive sufficient coal and twice came precariously close to running out of coal. (See chart below of "Coal Inventory at COA PP".)

CIT's proposed terminal near Nevada with its close proximity to the City's Power Plant would provide a significantly better outcome under similar circumstances. The road conditions that negatively impacted trucking this winter from AE-WBT would have affected trucks less on an 18 mile roundtrip to CIT versus the 72 mile roundtrip north on I-35 to AE-WBT. There would be a greater likelihood that trucks would operate on days with inclement winter weather, plus the turnaround time would be considerably shorter resulting in more coal being delivered. Additionally, with the extended trucking hours to cope with travel conditions and long turnaround times, truckers exhausted their available log-time hours which hurt their ability to move adequate coal quantities.

As the chart below shows, in addition to the December 2008-January 2009 episode discussed above, we also came very close to running out of coal during August and early September of last year (2008). This occurred during our summer peaking season, at a time when the plant is capable of burning 1,250 to 1,500 tons coal per day. With less than 7,000 tons coal shown in inventory on 8/10/08, we got within approximately

five (5) days of the plant being out of coal and unable to generate electricity. The primary reason given by AE-WBT to explain the August-September 2008 coal delivery shortage was that trains hauling coal were backed up following the June rains and flooding in Iowa and in the Midwest.



Owning/Leasing Coal Railcars Versus Using Loaned Cars from the BNSF Railroad

CIT's proposal provides for a complete unit train of coal railcars, either by lease or by purchase. CIT has an additional agreement with the Union Pacific (UP) Railroad that the UP would loan CIT a train set of coal railcars if CIT's own train set would be taken out-of-service (due to derailment, etc.).

By contrast, AE-WBT relies upon the Burlington Northern Santa Fe (BNSF) Railroad to provide train sets to haul coal from the Peabody mine in Wyoming to their terminal in Williams, Iowa. This means that the BNSF has ultimate control of the train set and can take it away from AE-WBT's service to serve other customers. This in fact occurred in early December of 2008. The BNSF requested of AE-WBT to take a unit train out-of-service for one load cycle (approximately 7 days) the first week of December. That train set got "lost" in BNSF's system for at least three weeks – it was eventually located after Christmas sitting in Illinois. Under pressure indirectly from the City of Ames along with direct pressure from AE-WBT, the BNSF put a different train set into service the last week of December to resume transportation of coal from the mine to Williams.

Single Line Haul (CIT) Versus Two Line Haul (AE-WBT)

Coal transported to CIT's proposed terminal outside of Nevada would be hauled from the mine by the Union Pacific (UP) Railroad.

Coal transported to AE-WBT in Williams is first hauled from the mine by the Burlington Northern Santa Fe (BNSF) Railroad to Sioux City, Iowa where the unit train is

transferred over to the Canadian National (CN) Railroad who completes the haul to AE-WBT's terminal in Williams, Iowa.

The single line haul to CIT's proposed terminal is obviously more straightforward which provides both economic and logistical advantages over a two line haul. The two line haul necessary to serve AE-WBT involves more crews plus the coordination and placement of crews between the two railroads (BNSF and CN) in order to orchestrate the handoff that occurs in Sioux City, Iowa.

Flexibility to Handle Multiple Coals

The terminal proposed by CIT would be able to provide the City of Ames Power Plant with the flexibility of using an assortment of coals in the event that we would want to switch or blend coals, or broker our coal supply via the Over the Counter (OTC) trading market. The OTC market for coal is very appealing in that the traded price for coal may be 25 to 50% less than the contract price for a similar coal.

Contract coal prices for 8,400-8,800 Btu/lb coal out of the Powder River Basin (PRB) in the last half of 2008 ranged in price from approximately \$15/ton to more than \$20/ton. If the same coal that sells for \$20/ton under contract could be purchased on the OTC market for \$15/ton, the savings for the approximately 300,000 tons of coal that the City of Ames Power Plant needs annually, is \$1,500,000. For the record, OTC market prices for 8800 Btu/lb PRB coal averaged \$13.03, \$13.44, \$11.57, and \$9.34 per ton for the months January through April 2009, respectively.

In order to consider OTC market coal, the power plant must be capable of burning a variety of coals that may be bought via the OTC market process. The market does not designate a specific coal in the bidding process, it can only specify certain parameters such as heating value (Btu/lb.), sulfur content (%), etc., that the bidders of coal into the market must meet.

AE-WBT's coal terminal and dome does not have the room to unload different coals and keep them separate, plus there are other customers that AE-WBT serves from their facility that do not have the flexibility to burn different coals or ones that have been blended or mixed.

CIT's proposed terminal's capability to unload and store coals separately would provide options for flexibility and for favorable economics over the current capability of AE-WBT. The savings that could be assumed by purchasing OTC coal versus contract coal as discussed above is not included in this analysis. However, this capability offered by CIT further strengthens staff's preference for their bid.

Summary

City of Ames Electric Services is working very hard to provide reliable electric service at the most economical price, all while the utility must continuously maintain and upgrade very expensive equipment, along with adding new equipment and retrofitting existing

equipment to meet new environmental laws and regulations that limit NOx and mercury emissions, and very likely in the future, CO₂.

In summary, Electric Services staff believes that if CIT were able to develop and construct a coal terminal as they have proposed southwest of Nevada, that CIT's proposal to the City of Ames for coal transportation and delivery services would be significantly more favorable than would be the AE-WBT proposal, for the reasons cited in the preceding analysis and presentation. It is understood that the location of this proposed facility raises legitimate concerns by nearby residents who would be impacted by such a facility. However, it is important that Council and the public also understand the economic and reliability advantages that would accrue to Ames Electric Services customers if such a facility were to be built.

Staff will share this report with the Story County Board of Supervisors and answer any questions they may have. It is anticipated that next steps and requested Council action on the September 2008 bids will then be presented to Council at your April 28 meeting.