

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
UTILITIES BOARD

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| IN RE:<br><br>ARCHER DANIELS MIDLAND COMPANY | DOCKET NO. WRU-08-13-2300 |
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**ORDER GRANTING WAIVER WITH  
CONDITIONS AND REQUIRING FILINGS**

(Issued October 29, 2008)

**INTRODUCTION AND PROCEDURAL HISTORY**

On April 10, 2008, Archer Daniels Midland Company (ADM) filed with the Utilities Board (Board) a request for waiver of the generating certificate requirements of Iowa Code chapter 476A with respect to a proposed cogeneration facility, described in greater detail below. ADM stated that it had served a copy of the waiver request on individuals or entities that own property adjoining the proposed facility site, pursuant to 199 IAC 24.15.

The Consumer Advocate Division of the Department of Justice (Consumer Advocate) filed a conditional objection to the request on April 22, 2008; Consumer Advocate withdrew its conditional objection on September 3, 2008. On June 10, 2008, Plains Justice filed a letter objecting to the waiver request. ADM filed a response to the letter on June 18, 2008. No other objections or responses to the waiver request were filed.

On September 27, 2008, the Board issued an order requiring ADM to provide additional information. ADM filed the requested information on September 29, 2008.

ADM owns and operates a facility in Clinton, Iowa, that processes agricultural products. The Clinton facility currently includes a cogeneration plant that produces approximately 28 MW of electricity and steam for ADM's processes. ADM plans to construct a new 180 MW cogeneration facility for its electricity and steam needs. The planned facility would use low and high sulfur coal as fuel and potentially could burn other fuels such as wood waste, tire-derived fuel, and biomass. At a later date, the facility could be capable of burning biodegradable plant materials.

The planned facility would consist of two steam turbine generators, one rated at 75 MW and the other at 105 MW, and five boilers. Once the new facility is operational, ADM will take the existing cogeneration facility out of service. ADM noted that the facility is for its own needs and that it will have no adverse impact on the transmission system.

ADM's planned facility falls within the parameters of Board review under chapter 476A. Pursuant to the statute, a certificate must be obtained for any "facility" with a total capacity of 25 MW or more. Iowa Code § 476A.1(5). However, Iowa Code § 476A.15 grants the Board the authority to waive the requirements of chapter 476A for any size generation unit if it determines that "the public interest would not be adversely affected."

### **PLAINS JUSTICE POSITION**

Plains Justice expressed concerns that ADM is seeking to circumvent consideration of the environmental impacts of the facility by seeking a waiver of the Board's siting statutes and rules. Plains Justice noted that ADM received permission from the Iowa Department of Natural Resources (IDNR) three years ago to replace three coal-fired boilers as part of a plant modernization project, and that two of these three boilers are in operation. Plains Justice said that IDNR had not received any new permit applications regarding the construction of any new coal-fired generators. Plains Justice maintained this lack of communication with IDNR leaves an open question regarding the impact of the proposed facility on human health and the environment and that the Board should consider those impacts pursuant to Iowa Code § 476A.6(3).

Plains Justice argued that a hearing should be held so that the public can share its concerns about coal-fired generator construction, the leading cause of global warming. Plains Justice claimed the planned facility would make it more difficult for Iowa industry to comply with any carbon regulation that may be enacted in the next few years. Because ADM has sent no information to IDNR, Plains Justice maintained that the potential greenhouse gas emissions from the proposed boilers is unknown.

### **ADM RESPONSE**

ADM said that the IDNR issued permits for the facility in May 2005. ADM stated the permits were for three high-pressure boilers fueled by coal and two low-pressure boilers fueled with natural gas (and associated equipment). The two turbine generators (75 MW and 105 MW) were disclosed to the IDNR to the extent they related to the cogeneration aspects of the project. However, ADM noted that IDNR permits were not required in 2005 and are not required now for the addition of the turbine generators because they are not an emission source. In other words, the emissions come from the boilers that generate the steam; the turbines are simply connected to the boilers so that electricity can be also generated, but the turbines themselves do not produce any regulated emissions. While ADM has been producing steam from some of the newly-installed boilers, it stated that no electricity has been or will be generated from the new facility until the Board issues its order.

### **ADDITIONAL INFORMATION**

The additional information requested by the Board related to such things as ADM's plans with respect to the coal-fired boilers and whether the proposed cogeneration facility would displace some of ADM's electricity purchases from Interstate Power and Light Company (IPL). ADM explained that the project had five boilers, two fired by natural gas and three by coal; all five boilers have appropriate permits. ADM said the two gas boilers are complete and in operation, the first coal

boiler is complete, the second will be completed in November 2008, and the third is scheduled for completion in April 2009.

ADM said it will use the three coal boilers to produce superheated high-pressure steam and have a common steam header connected to all three coal boilers and the proposed two new steam turbine generators; the project will be able to simultaneously produce electricity and process steam. If the waiver is granted, ADM estimates that approximately 80 percent of the energy from the three coal boilers is in the form of process steam and 20 percent is in the form of electricity, with the project burning approximately 1,400,000 tons of coal annually. In the event the waiver is not granted, ADM still plans to use the three coal boilers to generate steam for its processes.

ADM plans to use all the electric energy (estimated at 1,450,000 MWh each year) for its expanding operations. ADM's current 706,000 MWh annual purchase from IPL, under normal circumstances, will be reduced to zero. ADM anticipates that its reservation for standby service will be less than 60 MW. ADM also noted the three coal boilers are circulating fluidized bed (CFB) boilers capable of burning alternative fuel blends, up to a limit of 20 percent of boiler heat input.

### **BOARD DISCUSSION**

Iowa Code § 476A.15 provides that the Board, if it determines that the public interest would not be adversely affected, may waive any of the generation siting requirements of the statute. Rule 199 IAC 24.15 provides that in determining

whether the public interest would be detrimentally affected by granting a waiver of the generation certificate requirements, the Board should consider the purpose of the facility, the type of facility, whether the facility is for the applicant's own needs, the effect of the facility on the existing transmission system, and any other relevant factors. Here, the facility is for ADM's own use and the new facility will replace old boilers and an old cogenerator with an efficient system that meets ADM's projected steam and energy needs. The three new CFB boilers will burn coal but can potentially burn other types of solid fuel, including some renewable fuels.

The addition of the electric generators will simply allow the facility to produce electricity as well as steam, but the boilers will be operated even if no electricity were being produced. Production costs are an important factor in ADM's ability to compete in a world market and the new facility will enable ADM to continue keeping its production costs down by supplying its own electricity, reducing the amount of electricity IPL must generate to serve its own customers. The new facility will allow ADM to shut down an older and more inefficient cogeneration facility and will allow ADM to increase its number of employees and process more agricultural products.

ADM noted that the facility would have no adverse impact on the existing transmission system. ADM filed a facilities studies report with the Midwest Independent Transmission System Operator, Inc. (MISO), that indicates specific transmission upgrades, which will be funded by ADM, are required for interconnection.

All necessary air permits for the new facility have been issued and most of the boilers have been built and are in operation. As noted earlier, the air permits are for five boilers; the turbines themselves are not emission sources. The CFB boiler technology will give ADM the capability to burn a variety of solid fuels as they become economic to burn and available commercially. The use of CFB boilers, which will replace outdated technology, results in reduced emission rates. The IDNR permits indicated that no adverse comments were received during the comment period.

In addition to the factors listed in 199 IAC 24.15, the decision criterion for issuing a generating certificate must also be examined in determining whether a waiver is not adverse to the public interest. The three criterion in Iowa Code § 476A.6 are (1) whether the facility is consistent with legislative intent, the economic development policy of the state, and will not be detrimental to provision of adequate and reliable electric service, (2) whether the applicant will construct, maintain, and operate the facility pursuant to the provisions of a certificate, and (3) whether the construction, maintenance, and operation of the facility are consistent with reasonable land use and environmental policies.

The first criterion relates to the provision of adequate and reliable service. ADM's facility is consistent with the legislative intent expressed in Iowa Code § 476.53 to develop generation in Iowa to serve Iowa consumers. The facility also supports economic development policies by creating jobs and improving the energy

infrastructure. The facility will not adversely impact the transmission system because ADM has committed to completing any transmission upgrades required by MISO for interconnection of the new facility. Any waiver will be specifically conditioned upon ADM complying with the results of the electric facilities studies and taking appropriate steps to make all transmission system improvements identified in those studies. ADM will also be required to file with the Board a final report listing all of the transmission upgrades completed, all system operating guides put into place, and the costs of the transmission upgrades.

The second criterion is of relatively little importance in this case. A certificate, if required, would merely state that ADM must comply with applicable law. ADM is subject to statutory requirements regardless of whether an actual certificate is issued. For example, Iowa Code § 476A.2(2) provides that Board approval or a waiver must be obtained for a significant alteration to a facility. Granting this waiver will not exempt ADM from this or any other statutory requirement with respect to its future activities.

The final decision criterion relates to environmental and land use factors. Iowa Code § 476A.6(3) requires that "construction, maintenance, and operation of the facility will be consistent with reasonable land use and environmental policies and consonant with reasonable utilization of air, land, and water resources, considering available technology and the economics of available alternatives." As the Board noted in its "Final Decision and Order" (Final Decision) issued on August 25, 2008, in

In re: Interstate Power and Light Company, Docket No. GCU-07-1, "[t]his required finding must be parsed carefully to avoid overlapping, and potentially conflicting, decisions by different state agencies." (Final Decision, p. 12).

The phrase "consistent with reasonable land use and environmental policies" refers to the terms and conditions in licenses and permits which are issued by other regulatory agencies, including the authority of the IDNR to issue certain environmental licenses and permits, so long as those policies are reasonable. Environmental permits are within the purview of IDNR and the Board has traditionally deferred to IDNR's expertise in these areas that IDNR regulates and has found this criterion satisfied if IDNR issues the appropriate permits. ADM states it has obtained all necessary air permits from the IDNR. ADM notes that the new CFB boiler will operate efficiently with low air emissions and will be capable of burning fuels other than coal. No one has shown or claimed in this case that the IDNR requirements are unreasonable.

As the Board indicated in its Final Decision, the second clause, "consonant with reasonable utilization of air, land, and water resources ...," can be considered separately and gives the Board authority to consider environmental issues that are not addressed by other regulatory bodies. This second clause must be read with the last clause of Iowa Code § 476A.6(3), which states "considering available technology and the economics of available alternatives." This language provides the standard

the Board must apply when considering environmental issues that are not regulated by other agencies.

While the Board may have the authority to consider environmental issues that are not addressed by other regulatory bodies, it will not do so here. ADM's planned facility will replace outdated technology, resulting in reduced emission rates while providing comparable levels of steam and electrical power. This planned facility not only will provide electricity for ADM's use, but also will produce steam for ADM's operations, making it a more efficient use of air, land, and water resources than a facility that only generates electricity or steam. ADM indicated that 80 percent of the projected coal burn will be used to produce steam and that ADM will produce steam even if the waiver is denied. ADM's proposed facility, with combined production of steam and electricity, is an efficient use of resources and uses less fossil fuel than if the steam and electricity were produced at separate coal-fired facilities. It is important to note that some of the boilers have been installed; adding turbines to these boilers does not increase emission rates or require an air permit because the turbines are not an emissions source. For these reasons, the planned facility satisfies the requirements of § 476A.6(3) without the imposition of environmental requirements beyond those contained in existing law and enforced by the IDNR and other regulatory bodies.

In reviewing the factors cited in 199 IAC 24.15 and the generation siting criteria contained in Iowa Code § 476A.6, the Board finds that the waiver will not

detrimentally affect the public interest. The Board recently approved a similar waiver request. In re: Roquette America, Inc., "Order Granting Waiver with Conditions and Requiring Filings," Docket No. WRU-08-15-3676 (9/9/2008). Given the narrow range of options in both the current waiver docket and the Roquette docket, granting a waiver is not adverse to the public interest. Iowa Code § 476A.15. Both companies need facilities that produce steam. If electricity is not part of the projects, there would be waste heat and some of the coal burn could be wasted because the excess heat would not be used. With the cogeneration facilities, this heat is put to use generating electricity, resulting in a more reasonable utilization of air and water resources than if the waivers were denied.

The Board reminds ADM that it must obtain any other applicable environmental permits and comply with any other state and local regulations. Examples of such regulations include, but are not limited to, applicable zoning or land use restrictions.

**IT IS THEREFORE ORDERED:**

1. The request for waiver filed by Archer Daniels Midland Company on April 10, 2008, is granted, conditioned upon ADM's compliance with the results of any applicable transmission or electric facilities studies and compliance with any other state and local regulations, such as applicable zoning or land use restrictions.
2. ADM shall file a project status report once the facility is completed and begins operation containing the information identified in the body of this order,

including but not limited to all MISO electric facilities studies and a report concerning any and all transmission upgrades associated with or resulting from those studies.

**UTILITIES BOARD**

/s/ John R. Norris

/s/ Krista K. Tanner

ATTEST:

/s/ Judi K. Cooper  
Executive Secretary

/s/ Darrell Hanson

Dated at Des Moines, Iowa, this 29<sup>th</sup> day of October, 2008.