

**STATE OF NEBRASKA  
NEBRASKA POWER REVIEW BOARD**

IN THE MATTER OF THE APPLICATION	)	<b>PRB-3572</b>
OF THE MUNICIPAL ENERGY AGENCY	)	
OF NEBRASKA, HEADQUARTERED IN	)	
LINCOLN, NEBRASKA, REQUESTING	)	
AUTHORIZATION TO ACQUIRE A 23.5	)	<b>ORDER</b>
PERCENT OWNERSHIP INTEREST IN AN	)	
EXISTING 85 MEGAWATT COAL-FIRED	)	
GENERATION FACILITY LOCATED IN	)	
CAMPBELL COUNTY, WYOMING.	)	

ON THE 13<sup>th</sup> day of June, 2008, the above-captioned matter came on for consideration before the Nebraska Power Review Board (the Board). The Board, being fully advised in the premises, and upon reviewing said application and all evidence presented to the Board at said hearing, HEREBY FINDS AS FOLLOWS (references to testimony are designated by a "T" followed by the transcript page, then the lines upon which the testimony appears, while references to exhibits are designated by "Exh."):

**FINDINGS OF FACT**

1. That on the 27<sup>th</sup> day of May, 2008, the Municipal Energy Agency of Nebraska ("MEAN" or "Applicant") filed an application with the Board requesting authorization to acquire a 23.5 percent ownership interest in an existing coal-fired generation facility located in Campbell County, Wyoming. (Exh. 1). The application was designated "PRB-3572".

2. The estimated total purchase price of the interest to be acquired in the generation station and related substations, switch yards and other related facilities, requested in section (2)A and B on the Board's application form, was submitted to the Board for its consideration, but MEAN submitted the figures as separate documents under seal due to the proprietary and/or commercial nature of the information. The Board deemed the documents to not constitute public records under the provisions of Neb. Rev. Stat. § 84-712.05(3). Therefore, the documents were not and have not been publicly disclosed.

3. That those power suppliers, other than the Applicant, that the Board deemed to be potentially affected by or interested in said application were Black Hills Power, Inc., headquartered in Golden, Colorado, Black Hills Wyoming, Inc., headquartered in Golden Colorado, and Tri-State Generation and Transmission Association, Inc., headquartered in Denver, Colorado. Written notice of the filing of the application and the hearing date was provided to these potentially interested parties and MEAN via certified U.S. mail. (Exh. 2).

4. Notice of the filing of the application and the hearing date was provided to the general public by publication in both the Gillette, Wyoming News-Record newspaper (Exh. 3), and in the Omaha World-Herald newspaper (Exh. 4) on Monday, June 2, 2008.

5. That no Petitions to Intervene, written Protests, or Complaints were filed with the Power Review Board concerning this application.

6. That on June 13, 2008, the Board commenced the formal hearing on PRB-3572.

7. That the generating facility is located on the Neal Simpson Complex, east of the City of Gillette, Campbell County, Wyoming. (T9:24 to 10:1; T13:19-20; Exh. 1, page 1). The facility is known as "Wygen I." (Exh. 1, page 2). The output is currently, and upon approval of PRB-3572 will continue to be, used to serve MEAN's loads in the western interconnect. (T10:1-5; Exh. 5, page 5).

8. That the generation facility uses pulverized coal as its fuel source. (T13:17-19).

9. That pursuant to a contractual arrangement, MEAN currently receives twenty (20) megawatts of the output of the Wygen I unit. MEAN's contract runs through some time in 2013. The 23.5% ownership interest MEAN wants to acquire is approximately equal to the 20 megawatt output rights that MEAN currently has in the facility. The ownership interest involved in application PRB-3572 would therefore convert MEAN's current purchase power contractual rights into an ownership interest. (T9:1-16).

10. Since MEAN's contractual rights to the output from the Wygen I facility expire sometime in 2013, MEAN would need to either renew its power purchase contract or find a replacement source for the power. By acquiring an ownership interest, instead of needing replacement power when the contract expires in 2013, MEAN will be entitled to its share of the output for the life of the facility. The facility is only five years old, and is expected to remain in service for approximately 40 to 50 years. (T10:15 to 11:17;

T9:1-7; Exh. 5, pages 6 and 7). By acquiring an ownership interest in the facility, MEAN will greatly extend its access to its current power allotment from the facility, while mitigating the risks involved in renegotiating the price for the resulting electricity or to find replacement power from another source. (T22:23 to 23:24).

11. That the Wygen I facility is located near Interstate 90. Just to the north of Interstate 90 is a large coal mine known as the Wyodak coal mine. There are eight power plants located on or near the site where Wygen I is located, seven of which are operational and one of which is under construction. Seven of the plants are operated by the Black Hills Corporation and its affiliates, including the Wygen I plant. This centralized location allows the participants to take advantage of the economies of scale, and reduces the number of personnel needed to staff the generation facilities. These factors lead to a reduction in the operating costs of the facilities, including Wygen I. (T13:23 to 14:24; Exh. 5, page 9).

12. MEAN has used its own staff and outside firms, including engineering and law firms, to engage in due diligence and to prepare an operational assessment of the facility. (T15:4-19). MEAN also hired an engineering firm to prepare an environmental assessment on the plant to ensure there are no environmental concerns with the location prior to taking an ownership interest. No problems were found with the location that might subject MEAN to liability and the associated costs. (T15:20 to 16:4).

13. The location has demonstrated that it has sufficient water resources for the plant. Due to the geographic location of the plant, it uses air condensers to cool the unit instead of cooling towers. This allows the plant to use approximately 250 gallons of

water per minute -- considerably less water than typical coal-fired plants that use between 1,500 to 1,600 gallons for a plant the size of Wygen I. (T16:13 to 17:7).

14. The location is positioned well for availability of coal. The Wyodak mine is located in close proximity to the Wygen I plant. It is estimated that the Wyodak mine has sufficient coal reserves to last forty to fifty years at current use rates. Also, other coal mining sites are available in the area where Wygen I is located. (T17:8-23; Exh. 5, page 10).

15. The Wygen I plant has the advantage of not needing access to rail facilities. The Wyodak coal mine is in such close proximity that the coal can simply be carried under Interstate 90 directly into the Wygen I plant. This reduces the plant's costs and ensures that problems with rail delivery systems or price increases will not affect the availability of the coal or transportation costs. (T18:16 to 19:14; Exh. 5, page 10).

16. As a base load facility, the Wygen I plant has performed very well since it went on-line in 2003. The plant's capacity factor has been in the mid-90 percentages since 2003. From 2007 to current, the plant has had a capacity factor average of 96 percent. The average capacity factor industry-wide for the 2003 to 2006 time frame was 87 percent. (T20:22 to 22:2; Exh. 5, page 12.) Thus, the Wygen I plant has consistently outperformed the industry average for capacity factor ever since its start up in 2003. This higher capacity factor drives down the cost of electricity produced at the plant, and thus for MEAN and its ratepayers. (T22:8-22). Similarly, the average forced outage rate for generation units up to 99 megawatts from 2003 to 2006 was 9.88 percent. The average

forced outage rate for the Wygen I unit was only 2.36 percent. Optimally, a plant should be as near to zero for forced outages as possible. Thus, Wygen I has been a very consistent and dependable generation resource for MEAN. (T25:9 to 26:6; Exh. 5, page 13)

17. Since Wygen I is a relatively new unit, it complies with the Environmental Protection Agency's Best Available Control Technology (BACT). The plant already has an approved permit from the State of Wyoming. (T27:3 to 28:4; Exh. 5, page 15).

18. When compared to other generation options, Wygen I is a cost-efficient resource. Although wind turbines could provide low-cost power during periods of optimum wind speeds, the maximum estimated capacity factor for wind units is normally around 40 percent. This is compared to a capacity factor of 96 percent for Wygen I. Because wind resources are not highly dependable and do not have a high capacity factor, they are not well-suited to supply base load generation needs. As a base load unit, Wygen I has demonstrated it can provide MEAN with a reliable generation resource for MEAN's customers. (T29:1 to 30:3; Exh. 5, page 16). Although combined cycle and combustion turbine resources can provide high reliability, the cost of operating such units as a base load resource for long periods is considerably higher than Wygen I. The projected cost of a combined cycle or combustion turbine would be more than \$100 per megawatt hour, while Wygen I has demonstrated it can produce electricity for under \$50 per megawatt hour. (T30:4-25; Exh. 5, page 16).

19. The cost of MEAN's power allotment from Wygen I will initially be slightly higher after an ownership interest is acquired. However, when reviewed in a

long-term context, the long term price of the power from Wygen I will be lower. As previously stated, by acquiring an ownership interest MEAN also eliminates the risk that power costs could be much higher when its current power purchase agreement for Wygen I ends in 2013. (T37:11 to 38:5).

### **CONCLUSIONS OF LAW**

20. Pursuant to Neb. Rev. Stat. §§ 70-1012, 70-1013, and 70-1014, the Board has jurisdiction to conduct a hearing and either approve or deny an application filed by a power supplier based in Nebraska for authority to acquire a generation facility. MEAN is a power supplier based in Nebraska.

21. The Board concludes that the evidence shows MEAN's proposed ownership interest in the generation facility will serve the public convenience and necessity.

22. The Board concludes that the evidence demonstrates that the Applicant can most economically and feasibly supply the electric service resulting from acquiring an ownership interest in the facility.

23. The Board concludes that the evidence demonstrates that the facility does not unnecessarily duplicate other facilities or operations.

24. Based on the foregoing findings, the Applicant is entitled to an Order approving the acquisition of an ownership interest in the generation facility described in application PRB-3572.

**ORDER**

That during that part of its June 13, 2008, public meeting held subsequent to the hearing on application PRB-3572, a majority of the members of the Power Review Board (4 yes, 0 no) voted in favor of a motion to approve application PRB-3572.

IT IS THEREFORE ORDERED by the Nebraska Power Review Board that, pursuant to the Board's action taken during its public meeting held June 13, 2008, application PRB-3572 for authorization for the Municipal Energy Agency of Nebraska to acquire a 23.5 percent ownership interest in an 85 megawatt coal-fired generation facility located near the City of Gillette, Campbell County, Wyoming, known as "Wygen I" be, and hereby is, APPROVED.

NEBRASKA POWER REVIEW BOARD

BY: Don Kohtz  
Don Kohtz, Chairman

DATED: 7/21/08, 2008.



## CERTIFICATE OF SERVICE

I, Timothy J. Texel, Executive Director and General Counsel for the Nebraska Power Review Board, hereby certify that a copy of the foregoing **Order** in PRB-3572 has been served upon the following parties by mailing a copy of the same to the following persons at the addresses listed below, via certified United States mail, first class postage prepaid, on this 23<sup>rd</sup> day of July, 2008.

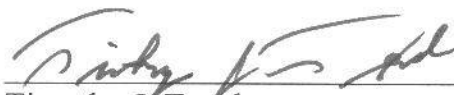
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