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Section D

The following document is a New Ulm Public Utilities letter, which in turn is followed by an article from the New Ulm Journal (please excuse the handwritten notes). These highlighted portions indicate that New Ulm has a contract to sell energy to Xcel. Why does New Ulm claim to need additional energy from this project when it is already selling some of its existing energy producing capacity?

LONG-TERM POWER UPDATE

With the goal of bringing you the most efficient, affordable and reliable energy, New Ulm Public Utilities continues to upgrade and improve our current equipment as well as explore new electrical energy resources.



PATRICK WRASE
Utilities Planning
and Development
Engineer

WIND ENERGY

After receiving supply offers from several manufacturers, we are happy to announce that we have an offer from the wind turbine manufacturer Vestas to supply five V82, 1.65 megawatt wind generator units for our wind energy project. These units are highly proven with numerous previous installations and a strong track record.

It's a nice opportunity for us to have a solid company offering equipment for our project. This proven equipment is in high demand. Development of this project is currently in a permitting process with the Minnesota Public Utilities Commission (MnPUC). It is expected that the MnPUC will act on the project within the next 180 days. After the MnPUC grants the site permit, construction will begin on the project.

Once the project is complete, the new wind turbines will provide approximately 13% of New Ulm's electrical needs from renewable sources. Minnesota has a renewable energy goal of 25% by the year 2025.

BOILER CONVERSION / Biomass - 15 MW - MISO MARKET JAN 1 2010?
A permit application has been submitted to Minnesota Pollution Control Agency (MPCA) in order to resume coal fuel utilization. There is a possibility to be able to resume the use of coal with a minimal investment in the boiler using a bag house. The bag house equipment will remove the particulate matter, from the boiler exhaust gas.

COMBUSTION TURBINE 51.5 MW
The generating capacity of the combustion turbines has been sold to Xcel Energy for a five-year term. An additional block has been sold to Xcel for July and August for an extra \$50,000, over and above the \$405,000 in yearly revenue from the five-year term.

15 MW SUPPLY CONTRACT - 2.5 MW WIND

A block of power from Heartland Consumer Power District that includes fossil fuel and wind energy is scheduled to start January 1, 2010. The contract had been subject to securing transmission rights from the Heartland resources to the New Ulm delivery point. We were recently notified that Heartland has secured the needed transmission thereby ensuring the long-term viability of the contract.

POST 2010 - FEDERAL POWER PICK-SLOAN WAPA - Hydro - MW - NOT YET KNOWN -> ? MW

GAS PRICING UPDATE

Although it is difficult to predict price fluctuations, if costs stay at their current levels, gas costs should stay at or possibly be lower than 2008-2009 prices for the next heating season of Nov. 2009-March 2010.

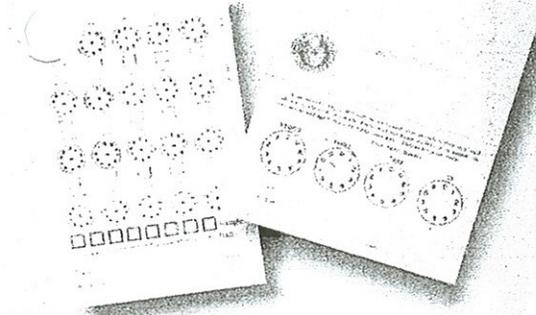
NUPU has over half of its gas pricing locked in for the next two years. This can be advantageous depending upon current markets.

Other factors that affect gas pricing for the customer are weather and daily usage.



Gary Gleisner
Director of Utilities

+ 27 MW FROM 3 NATURAL GAS-FIRED COGENERATION UNITS



ABOVE ARE UTILITY cards that customers filled out during the 1980s and years prior.

streets of town while a computer using meter reading software (MV-RS) collects the data from a radio signal device installed on each home or business's meter. From there the information is transferred to the NUPU office for billing.

What used to take 300 hours a month to accomplish is now completed in 80 hours, making it more efficient and cost-effective.

The system has a range of half a block inside a building and a quarter mile outside. As an example of its capabilities, it took to drive about 10 blocks at a slow to normal rate of speed, 363 meters were read. The MV-RS has a 97.8-99% collection accuracy. If it skips any meters the computer will show the missed locations. Often times it is the structure of the building which accounts for it being missed.

Although the technology has improved the speed and accuracy of meter reading, Petersen admits he does miss the interaction with customers that he enjoyed while going from house to house. What he doesn't miss, however, are some of the hazards of reading meters situated in precarious places, such as the top of steep, icy stairs on the roof of Marktplatz Mall.

At present 83% of the new system is computerized, with 100% being the goal in the next two years. Eventually the entire system will go a step further in that it will not be necessary to even drive the neighborhoods to collect the data. The information will transmit itself directly in a "self-read" process.

Changes have become what used to be a biggest part of the meter department—collecting the customer data—to the smallest part.

"The savings are tremendous," said Petersen, referring to the steep decrease in labor hours. "Plus it works so well and is trouble free."

The Journal

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Wind farm set in motion

Leases OK'd for turbine sites

By RON LARSEN Journal Staff Writer

POSTED: August 27, 2008

NEW ULM - Like the pieces of a jigsaw puzzle, the elements needed to put together a 5-megawatt wind energy farm northwest of New Ulm are all coming together for the New Ulm Public Utilities Commission.

Giant steps were taken at the NUPUC meeting Tuesday as the commission approved the land and wind easement leases with three landowners in southwestern Nicollet County to provide space for the wind turbines needed to generate that amount of "green" energy.

In all, New Ulm Public Utilities would be leasing a total of 237.03 acres just off Highway 7, about 5 miles northwest of Klossner.

The 60 acres being leased from Brad and Diane Franta would provide space for two turbines while the 40 acres being leased from Roger Klossner will hold one.

In the case of landowner Sharon Hacker in which 137.03 acres will be leased, the commission authorized an option to purchase an additional 5 acres that would serve as a "support" site for, in the very near future, an anemometer to "pattern" the wind in the next two years or so.

The land also would serve as a possible site for other hardware and a substation, if needed, Director Gary Gleisner said, in urging commissioners to support the purchase. As City Attorney Hugh Nierengarten outlined the purchase, Hacker would be paid \$500 a year until the option is exercised, "at which time [Hacker would be paid] twice the fair market value of the property."

Then, the commission authorized the city manager to prepare requests for proposals, advertise for bids and set a bid opening date for wind turbine supply, equipment and delivery of the needed items for the New Ulm Public Utilities Wind Energy Project.

As for the number of RFPs expected to be returned, "as we have mentioned before, there's quite a demand for wind energy equipment," Utility Planning and Development Engineer Pat Wrase said.

"We got responses back [from an initial contact] from about five suppliers, but we will be sending out RFPs to seven or eight suppliers [including the five original respondents]."

RFPs also would be sent out to any suppliers who have indicated they might have turbines on hand that were ordered but not used, Wrase added.

However, there was more good news for commissioners to consider. While the staffs of NUPUC and Heartland Consumer Power District continue to work on final terms of a contract that calls for HCPD to provide a block of 15 megawatts of power to NUPUC, Xcel Energy has prepared a draft contract for 25 megawatts of NUPUC's existing combustion turbines' output over a five-year period that would have Xcel Energy paying NUPUC \$400,000 a year for a total of \$2 million over the contract period.

The end result is that NUPUC now finds itself in the enviable position of having unexpected revenue from its combustion turbines, a likely backup in Xcel, a current provider, if Heartland doesn't come in with a satisfactory price for its block of 15 megawatts, and a possibility, however remote, of being able to pick up turbines that were ordered and not installed to speed development of its wind energy farm.

Ron Larsen can be reached at rlarsen@nujournal.com

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Section E

The following article is from the New Ulm Journal. It suggests that the NUPUC is willing to use eminent domain to obtain the necessary easements.

The Journal

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PUC wind power plan gets hearing Thursday in St. Paul

By Ron Larsen Staff Writer

POSTED: June 9, 2009

NEW ULM - As the New Ulm Public Utilities Commission staff is learning, bringing a matter, even a site permit application, before the Minnesota Public Utilities Commission is not a simple maneuver.

NUPUC will be getting a hearing before the full Minnesota Public Utilities Commission Thursday morning during a session starting at 9:30 o'clock in St. Paul. [large hearing room, Suite 350, 121 7th Place East, St. Paul, MN 55101-2147]

NUPUC's application for a Large Wind Energy Conversion System Site Permit for its wind project in Nicollet County is the fifth item on the docket.

The issue that the MPUC panel will be determining is whether the utility's application for the site permit is complete or whether more information needs to be gathered.

However, NUPUC's chances of getting the site permit are greatly improved with the favorable recommendations by the Office of Energy Security Energy Facility Permitting Staff.

As to Application Acceptance, the Office recommends Option A.1. - which is to "Accept the New Ulm Public Utilities Commission Site Permit Application for a Large Wind Energy Conversion System, with the condition that the New Ulm Public Utilities Commission will provide additional information as requested by the Commission and the Office of Energy Security for the New Ulm Wind Project."

As to the need for a public advisor (B.1), the Office is recommending the first choice - authorizing "the Minnesota Office of Energy Security Energy Facilities Permitting staff to name a public advisor for this project."

And, finally, as to a Certificate of Need, the Office recommends (C.1) that the Commission "Find that a Certificate of Need is not required."

And, as stated in the Office's recommendation statement, "It is the understanding of OES EFP staff that NUPUC will attempt to acquire the necessary easements and buffer easements; however, they may also attempt to seek an exemption from those requirements. In the event easements cannot be obtained from landowners, or exemptions granted, then NUPUC proposes to use eminent domain to obtain the necessary easements if a site permit is authorized by the PUC."

Ron Larsen can be reached at rlarsen@nujournal.com

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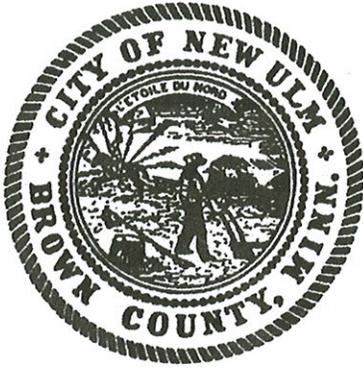
Article PDFs



[Comments and Recommendation of the Office of Energy Security Energy Facility Permitting Staff](#)

Section F

The following document is the response to the questions posed at the listening session held in St. George on February 16, 2009. First, notice the date of the response is March 20, 2009, more than a month after the listening session. This is the NUPUC's idea of a reasonable amount of time to respond. Among the many things that could be criticized about this document is how the NUPUC intentionally avoids answering certain questions directly. A good example is item number ten, which relates to the cost of the project.



Public Utilities Commission

City of New Ulm

Administration
310 First North Street
New Ulm, Minnesota 56073

Telephone: (507) 359-8264
Fax: (507) 354-7318

TO: Area Residents

FROM: New Ulm Public Utilities

RE: New Ulm Public Utilities Wind Farm

DATE: **March 20, 2009**

At the New Ulm Public Utilities Commission's (NUPUC) **February 16, 2009** listening session in St. George, the NUPUC sought to solicit and receive questions and concerns from area residents about the NUPUC's planned wind farm in Nicollet. NUPUC committed to respond to relevant comments and questions in a reasonable amount of time. This correspondence constitutes that response.

As originally envisioned, NUPUC had planned to seek a permit for this project through Nicollet County's wind energy conversion system (WECS) permitting process. That would have allowed the County to stay involved in the planning and permitting for this project in a meaningful manner. However, last fall the Nicollet County Board passed a moratorium on the permitting of such wind energy projects. This moratorium effectively removes the County from any regulatory oversight in permitting this project.

The NUPUC views this project as essential to the economic benefit of its customers and to the larger national goal of achieving greater energy independence via the development of renewable energy resources. This project must move forward and NUPUC does not intend to await the results of Nicollet County's study of its existing regulations. Furthermore, there is no way of predicting the timing or outcome of that process and NUPUC has no assurance that the process will result in responsible and rational regulation of wind facilities.

As such NUPUC will avail itself of a provision of Minnesota law that allows wind energy projects of the size contemplated by the NUPUC to be permitted either at the county level pursuant to county rules, or at the state level under regulations of the MnPUC. The NUPUC has prepared a Large Wind Energy Conversion System (LWECS) application for that purpose and has recently submitted the draft LWECS application to the MnPUC. NUPUC will work with state regulators to complete the permitting process in a timely, efficient and rational manner.

With this preface, NUPUC offers the following responses to questions received at the February 16, 2009 meeting:

1. Why did the public meeting process start now? What are the next steps?

This is not the first public meeting on this issue. The assessment of New Ulm's long-term electric energy future has been a high priority for New Ulm Public Utilities (NUPUC) since 2005. The City formed a Long Term Energy Committee composed of City Councilors, NUPUC Commissioners, City and NUPUC staff, and consultants to discuss options and plan for the future. The Long Term Energy Committee held monthly public meetings that were announced and publicized to facilitate public participation. Members of the public, including Nicollet County residents, attended many of these meetings. The NUPUC's interest in a possible Nicollet County wind project has been well publicized. This project was discussed many times at regular NUPUC public meetings as well.

The next step is for the NUPUC to submit a Large Wind Energy Conversion System Site Permit application to the MnPUC. As part of this permit process, there will be a public comment period that will include a public meeting.

2. What are the health impacts of living near a wind turbine? What are the health impacts on livestock?

At present there are well over 10,000 wind turbines installed and operating in North America, and tens of thousands of people live and work in proximity to these wind turbines. Of these individuals, a very small number have claimed that their health has been negatively impacted by wind turbines. However, surveys of peer-reviewed scientific literature have consistently found no evidence linking wind turbines to actual human or animal health problems.

It is important to note that all wind energy projects are required to undertake and complete environmental evaluations that assess the potential impacts of wind turbines on ecosystems and human health. In Minnesota this is part of the Site Permit process under the rules of the MnPUC. These studies also ensure that the installations meet strict government regulations with respect to sound, which in Minnesota is regulated by the Minnesota Pollution Control Agency (MPCA).

3. What kind of TV reception will we get if we are only getting a marginal signal now off the Goodahl tower?

This issue has been studied as part of the permit process. The installation of the wind turbines will not affect television and/or communication signals in the Lafayette Township area. The NUPUC has hired Comsearch® to perform an investigation and analysis for the wind turbines. The results of the search identified 4 microwave paths that intersect in the project area. However, the proposed turbines will not conflict with any of the identified microwave paths.

4. How close do electric lines get to livestock barns?

The proposed electrical collector system will be underground and will be located on properties leased by the NUPUC. Electric lines from this project will be no closer to any livestock barns than currently exist.

5. What about stray voltage?

The flow of electricity from the operating wind turbines will be managed in accordance with standard high-voltage engineering practices, which are adequate to prevent stray voltage.

There will be no "stray voltage" when the systems are properly installed and operated in accordance with industry standards.

6. What are the issues once the turbines are up? Maintenance?

The NUPUC will conduct ongoing basic maintenance once the turbines become operational. Each wind turbine will communicate directly with the Supervisory Control and Data Acquisition (SCADA) system at the NUPUC's facilities in New Ulm for purposes of performance monitoring, energy reporting, and trouble-shooting. The SCADA system also provides the overall control of the Project. The NUPUC will augment operation and maintenance (O&M) staff as needed with appropriate contractors to service and maintain the Project.

One of the SCADA systems' primary functions is to serve as the primary control and monitor of each turbine. The SCADA system also offers access to wind turbine generation or production data, meteorological, and communications data, as well as alarms and communication error information. Performance data and parameters for each machine (generator speed, wind speed, power output, etc) can also be viewed and machine status can be changed. There is also a snapshot facility that collects frames of operating data to aid in diagnostics and troubleshooting problems.

Performance testing will be done during the early months of operation by the turbine manufacturer to verify that the Project is operating within expected parameters. Project inspection and maintenance is performed on the following intervals:

First Service Inspection. The first service inspection will take place 1 to 3 months after the turbines have been commissioned. At this inspection, particular attention is paid to tower bolt tensioning as specified by the manufacturer, and equipment lubrication, full greasing and filtering of gear oils.

Semi-Annual Service Inspection. Regular service inspections commence 6 months after the first inspection. The semi-annual inspection consists of lubrication and a test of the turbine trip system.

Annual Service Inspection. The yearly service inspection consists of a semi-annual inspection plus a full component check. Bolts are checked with a torque wrench. The check covers 10% of the bolts. If any bolts are found to be loose, all bolts in that assembly are tightened and the event is logged.

Two Years Service Inspection. The 2 year service inspection consists of the annual inspection, plus checking and tightening of electrical terminal connectors.

Five Years Service Inspection. The 5 year inspection consists of the annual inspection, an extensive inspection of the wind braking system, checking and testing of oil and grease, balance check, and tightness of terminal connectors.

In addition to the indicated inspections, the NUPUC will implement a computerized maintenance management system (CMMS). The CMMS program will be an integral part of the NUPUC's continuing program to schedule and record the historical maintenance performed on the wind turbines, as well as track the inventory of necessary spare parts and lubricants required to perform scheduled and unscheduled maintenance.