



# City of Grand Island

Tuesday, December 07, 2010

Council Session

## Item G6

**#2010-343 - Approving Power Sales Agreement between the City of Grand Island and the Nebraska Public Power District for Laredo Ridge Wind Project**

Staff Contact: Gary R. Mader

# **Council Agenda Memo**

**From:** Gary R. Mader, Utilities Director  
Dale Shotkoski, City Attorney

**Meeting:** December 7, 2010

**Subject:** Power Sales Agreement for Laredo Ridge Wind Project

**Item #'s:** G-6

**Presenter(s):** Gary R. Mader, Utilities Director

## **Background**

The Utilities Department has made efforts to be involved in developing technologies regarding renewable energy. Presently, the most cost effective form of renewable energy is wind energy. Since 1998, the City's Utilities Department has participated with other of the state's utilities in Wind Turbine projects.

### **Springview Project:**

Grand Island first became involved with wind energy in 1998 with the development of the "Nebraska Distributed Wind Generation Project" or NDWG, often referred to as the "Springview Project" because of its proximity to that community in north central Nebraska. The project included two 750 kilowatt wind turbines installed near Springview, Nebraska. Half of the cost of the project was funded by a grant from the Electric Power Research Institute/Department of Energy-Turbine Verification Program. NDWG is a joint project among Nebraska utilities that includes Auburn Utilities, Grand Island Utilities, KBR Power District, Lincoln Electric System, the Municipal Energy Agency of Nebraska and Nebraska Public Power District (NPPD). Grand Island has received an average of six megawatt hours of energy per month from NDWG. This is enough energy to supply approximately six houses for one month. Due to rising maintenance costs, increasing equipment failures and unit downtime, this facility was decommissioned in August of last year. Including the salvage value of the turbines, the final production cost was approximately \$23/megawatt hour. Currently, there are efforts underway to develop a project to install two new turbines at the Springview site.

### **Ainsworth Project:**

In addition to NDWG, Grand Island is also a participant in the Ainsworth Wind Energy Farm (AWEF) near Ainsworth, NE. This facility was constructed in 2005 and consists of thirty-six 1.65 megawatt turbines for a total project output of 59.4 megawatts. Grand

Island has a one megawatt participation level in AWEF. AWEF is another joint project that is operated by Nebraska Public Power District, and includes participation by Omaha Public Power District, the Municipal Energy Agency of Nebraska, Grand Island Utilities, and JEA of Jacksonville, Florida. Since the start of AWEF, Grand Island has received an average of 293 megawatt hours of energy per month. This is enough energy to supply approximately 293 houses for one month. Currently, the total production cost of power received from AWEF is in the \$45 to \$55 per megawatt hour range.

### *Elkhorn Ridge:*

Elkhorn Ridge Wind, LLC (Elkhorn) is an 80 MW wind farm located near the town of Bloomfield in northeast Nebraska. It consists of twenty-seven 3 megawatt turbines. It began commercial operation January 1, 2009. Unlike AWEF, Elkhorn is a privately owned facility. NPPD entered into a Power Purchase Agreement with Elkhorn to purchase all power produced by the facility. Grand Island then signed a Power Sales Agreement with NPPD to purchase a 1 MW share of the power produced at Elkhorn.

## **Discussion**

The use of fossil fuels for electricity production is coming under increasing scrutiny at the national level and more restrictions and regulations are likely to be placed upon fossil fuels, particularly coal. With the City's primary energy supply being produced from coal, the overall rate impact from a carbon emission tax or other environmental regulations could be significant.

It is the recommendation of City Administration that the Utilities Department stay involved with the various renewable energy projects as they develop in the state. Laredo Ridge Wind, LLC (Laredo) is an 80 MW wind farm currently under construction near the town of Petersburg, Nebraska. It consists of fifty-four 1.5 megawatt turbines. It is anticipated to enter into commercial operation January 1, 2011. Grand Island staff has held discussions with NPPD and other potential participants in the Laredo Ridge Wind Project at a 1 MW participation level. Similar to Elkhorn, Laredo Ridge is a privately owned facility. NPPD has entered into a Power Purchase Agreement with Laredo Ridge to purchase all power produced by the facility. The proposed Power Sales Agreement is with NPPD to purchase a 1 MW share of the power produced at Laredo Ridge.

Upfront participation costs to Grand Island are approximately \$59,000. This cost includes Substation and Transmission expansion and project development. Since this is a privately owned facility, O&M costs are not applicable. The cost of power to Grand Island will be approximately \$45 per megawatt hour increasing 2.5% per year. This equates to an approximate cost of \$145,000 for the first year, increasing 2.5% per year thereafter. The agreement is for twenty years.

## **Alternatives**

It appears that the Council that the following alternatives concerning the issue at hand.

The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to a future date
4. Take no action on the issue

## **Recommendation**

City Administration recommends that the Council approve the 1 MW level of participation in Laredo Ridge Wind facility.

## **Sample Motion**

Move to approve the participation in the Laredo Ridge Wind Facility.

RESOLUTION 2010-343

WHEREAS, the City of Grand Island, the Nebraska Public Power District and other electric utilities have participated in the development of a wind energy project by Laredo Ridge Wind, LLC (Laredo); and

WHEREAS, Nebraska Public Power District has entered into a Power Purchase Agreement with Laredo Ridge Wind, LLC, for the output of the project, and is re-marketing portions of that power to other electric utilities; and

WHEREAS, the parties desire to enter into a Power Sales Agreement to receive electric energy produced by Laredo Ridge Wind, LLC, according to the terms and conditions outlined in the Power Sales Agreement; and

WHEREAS, the City Attorney's office has reviewed and approved the agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Power Sales Agreement for Laredo Ridge Wind, LLC, by and between the City of Grand Island and Nebraska Public Power District be, and hereby is, approved in accordance with the terms of the agreement.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such agreement on behalf of the City of Grand Island.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 7, 2010.

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Jay Vavricek, Mayor

Attest:

\_\_\_\_\_  
RaNae Edwards, City Clerk

Approved as to Form	☐ _____
December 2, 2010	☐ City Attorney