

# The Oklahoma WinCharger

1 September 2001

(A Newsletter for Oklahoma Wind Stakeholders)

Vol. 1, #1



## Oklahoma Wind Power Initiative

A Collaborative Project by the  
University of Oklahoma and Oklahoma State University  
based at the

Environmental Verification and Analysis Center

710 Asp Ave., Suite 8

Norman, OK 73069

Tel: (405) 447-8412

[www.seic.okstate.edu/owpai/](http://www.seic.okstate.edu/owpai/)

## Staff

Editor and contributor: Tim Hughes, OWPI, OU

Copy editor/contributor: Troy Simonsen, OWPI, OU

Contributors:

Steve Stadler, Geography Department, OWPI - OSU

Mark Meo, Science and Public Policy Program, OWPI - OU

Mark Shafer, Oklahoma Climatological Survey, OWPI - OU

## Introduction to 'The Oklahoma WinCharger'

These are exciting times for wind power development. The following all herald the arrival of large wind farms in Oklahoma in the not too distant future:

- improving wind turbine technology;
- lowering costs of electricity generated by wind;
- increasing demand for electricity and rising costs of fossil fuels;
- passage of an Oklahoma renewable energy production tax credit (part of Senate Bill 440 passed June, 2001), coupled with;
- an optimistic outlook for a 5 year extension of the federal production tax credit; and of course,
- Oklahoma's great natural wind resource.

With this tremendous prospect comes the need for a better sharing of information on how rural landowners and communities can benefit from wind power development. This publication is intended to provide information that will help Oklahomans realize the maximum benefit. The information will include, but will not be limited to, discussion on:

- current events with important consequences for wind power in Oklahoma;
- wind resource (how good it is, where and when it is likely to be developed);
- different plans for lease payments;

- how production tax credits can influence lease payments;
- issues that must be addressed to fully realize economic development in rural Oklahoma (transmission, markets for green power, etc.); and
- small home-size turbines.

The Oklahoma Wind Power Initiative (OWPI), comprised of investigators from the University of Oklahoma and Oklahoma State University, will bring the WinCharger reader information from our combined experience with resource assessment, policy assessment, outreach and agriculture. With this introduction, we bring you the first issue of the Oklahoma WinCharger.

## OWPAI project name to be shortened to OWPI

Because our project name is a bit long, and because we are involved in much more than just wind resource assessment (though that is an important aspect of our work), we are shortening our project's title to the "Oklahoma Wind Power Initiative", or OWPI. Please bear with us as we undergo this transition, as you will see web pages, literature and documents referencing both titles for a good while yet. Fortunately, our acronym still rhymes with "cowpie" and will thus be just as easy to remember.

## **OK Senate Bill 440 signed into law by Governor Keating in June, 2001**

An event with great potential to affect wind power development in Oklahoma is the passage of Senate Bill 440. Authored by Kevin Easley (District 18) of the Senate and Jim Glover (District 65) of the House, some of SB440's principal components are:

- a delay to the restructuring of electric utilities (deregulation);
- the formation of an advisory committee to the Governor and the Legislature to continue the examination of electric industry restructuring issues; and
- creation of a state production tax credit (PTC) for zero-emission facilities with 50 Megawatt (MW) rated production capacity or greater.

The PTC will benefit the sellers of green electricity according to this schedule of tax credits:

- 1) 0.75 cents per kilowatt-hour (kWh) generated between the effective date of SB440 and Jan. 1, 2004;
- 2) 0.50 cents per kWh generated between Jan. 1, 2004 and Jan. 1, 2007; and
- 3) 0.25 cents per kWh generated between Jan. 1, 2007 and Jan. 1, 2012

A significant aspect of the tax credit is that it is transferable - tax credits that cannot be used by the seller of the green electricity can be offered for sale to other interests on the open market. This opens the door for entities with little or no state-tax burden to still realize a benefit from the sale of electricity from renewable sources. If you wish to know more about SB440, you can read the enrolled version online at:

[http://www2.lsb.state.ok.us/docs/sb\\_enr.html](http://www2.lsb.state.ok.us/docs/sb_enr.html) .

### **Federal production tax credit to be extended?**

U.S. House Bill H.R.4 and its Senate companion bill provide for the 5-year extension of a federal production tax credit (PTC) of 1.5 cent per kWh (adjusted for inflation) for electricity produced using wind resources. Under current law, the PTC is set to expire December 31, 2001. While it will be late October to early November before the outcome is certain, there is great optimism that the PTC will pass. This is important for Oklahoma, as

some developers may be holding back on pursuing more wind farm projects until the continuation of the PTC is known.

Prospects for combining (or pancaking) the federal and Oklahoma PTCs is a matter under review by the IRS. A report is expected by early 2002.

### **What landowners and communities should know about lease payment plans.**

There is much activity right now with regard to wind farm planning in Oklahoma (to be covered further in our October issue), so it is a good idea to consider aspects that may benefit landowners and communities when wind farm developers visit to negotiate payments for use of land.

Experience in Iowa, Minnesota and other states with significant wind farm development indicates there are 4 main categories of lease payment plans that developers may propose to compensate landowners for placement of wind turbines:

- 1) *One lump-sum payment up front*: a payment plan wherein the landowner receives one payment up front for placement of turbines on the land, with no ongoing royalties. This arrangement may complicate future sales of the land, since a prospective buyer would stand to receive no benefit from the wind turbines. Also, it prohibits the landowner from benefiting from future increases in value of the wind power, and from the expected longevity of the wind turbines.
- 2) *Fixed payments per turbine over time*: a payment plan wherein the landowner gets a fixed amount per turbine per year (perhaps with a cost-of-living adjustment). The plan guarantees the landowner a certain amount, and therefore lessens the risk. However, it prohibits the landowner from benefiting from future increases in value of the wind power.
- 3) *A set amount per turbine per year + a variable payment per year based on the turbine's gross generated revenue*: for example, one farmer in Iowa receives \$750/year for each turbine on his land, plus a percentage of the gross revenue, resulting in payments of about \$2000 per year per turbine (of capacity 750 kW).
- 4) *Lease payments determined entirely as a percentage of gross revenues*: this increases the

risk to the landowner, but also maximizes his or her benefit as the value of the power increases.

### **What should a landowner consider when negotiating a lease contract?**

Before you decide which of the above lease payment plans you want to propose, or are willing to accept, and certainly before you negotiate amounts, consider these questions:

- 1) *What will be the rated capacity of the turbines placed on your land?* If it is 750kW, then an agreement that would pay you about \$2000 per turbine per year (the amount often referred to in literature) may be appropriate for you, assuming wholesale electricity costs do not climb steeply over the coming years (see no. 2.). If the rated capacity is around 1.5 MW or 1.65 MW (the capacity of many of the turbines coming out today), you should look for an appropriate increase in your lease payments.
- 2) *Do you think electricity costs are likely to climb significantly over the time of your agreement with the developer?* If so, you will likely want a lease payment based on a percentage of gross revenue (perhaps in combination with a flat base, to assure you receive some payment even if the turbines sit idle).
- 3) *Does Oklahoma's PTC combine with the Federal PTC to generate a better deal for the developer?* If this comes to pass, Oklahoma will be one of the most attractive areas in the country. In that case, you may be in a good position to negotiate more in lease payments than have been the standard to date.
- 4) *Did the extension for the federal PTC not pass?* While it is unlikely that this extension will be denied, note that if it is, Oklahoma's state PTC will give it an edge over many other areas. Again, this is likely to strengthen your bargaining position.
- 5) *Does your property have great wind resource? Do you have good proximity to transmission lines with capacity?* If you are approached by a developer(s) today, you will likely have both of the above. Still, you should learn as much as you can about your assets. As time goes on and competition for good resource increases, your understanding of these assets will become more and more valuable (visit the OWPI web pages at [www.seic.okstate.edu/owpai](http://www.seic.okstate.edu/owpai) to learn more).

- 6) *What and where is the market for the electricity from wind farms?* Presently, the market is most likely out of state because many areas have much higher wholesale electricity costs than Oklahoma. If and when state or federal policies lead to a guaranteed market for green power in Oklahoma or across the nation, your wind resource will likely have a much higher value.
- 7) *What are your neighbors with good wind resource doing?* Talk to them. If you do not like the terms of a developer's payment plan, but most of your neighbors have signed up, you may find that the future wind farm will go around your land. This may make your property less attractive for future wind development. Help educate your neighbors with the information needed to make the best decision, and hopefully you will all end up with the best possible deal.

### **Community to be selected for installation of wind instruments on tall tower**

POWER (Plains Organization for Wind Energy Resources) has offered the Oklahoma Wind Power Initiative program a complete set of wind instruments, data logger, and communications equipment. The equipment is to be placed where our state will likely benefit the most, and where it will benefit the POWER regional wind assessment as well. The data and related products will be made freely available through the OWPI web pages. Target date for installation will be late fall of this year. Data would be collected for at least one year.

Criteria for selection of a region will include, but may not be limited to the following (roughly in order of importance).

- 1) Access to an existing tower, for collection of wind resource data from as high as 100 meters (328 ft.). Higher levels may be desirable, but are not required at this time. Communities wishing to apply must negotiate this access with the tower owner.
- 2) The community(ies) involved must provide resources, like a tower climber, to help install and maintain this equipment. Usually, only infrequent emergency maintenance is needed.
- 3) Strategic value of location, in terms of proving a wealth of resource, to help an area get more transmission capacity or other infrastructure

improvements to encourage economic development that comes with wind farms.

- 4) Will the presence of this data help stimulate wind farm developers' interest in your area?
- 5) Commitment from a nearby college, middle school, and/or high-school science program to get involved. Teachers would not have to service equipment or collect the data - the data and products would be available to a teacher to use in developing a unit on wind energy. A commitment from an educator(s) would help your community qualify. Proximity of the school to the tower would be a bonus, but is not a requirement.
- 6) Prospects in your area for "distributed generation" - that is, a very small wind farm (1-5 turbines) that feeds into your distribution grid without necessarily going into the transmission grid. Can and would your local utility be open to this possibility, assuming further studies indicate that it is economical?
- 7) Are there businesses in the area that would like to investigate the possibilities of a cooperative ownership of a small wind farm?

It is hoped that the success of this pilot project will lead to additional funding to install more instrumentation in other strategic areas. If you are interested in having your community considered for this project, please submit a 2-3 page letter outlining your community's assets for each of the above criteria and mail to the WinCharger address given at the end. Contact Troy Simonsen at [simonsen@ou.edu](mailto:simonsen@ou.edu), or (405) 447-8412, if you have questions.

#### **OWPI Director, Tim Hughes, visits Woodward and Guymon for town meetings on wind power**

Thanks to U.S. Congressman Frank Lucas and his staff, town meetings on wind power were arranged to follow Mr. Lucas' town meetings in Woodward (on August 20) and in Guymon (on August 21). Due largely to this arrangement, turnouts (about 65 in Woodward and 35 in Guymon) exceeded the expectations of Mr. Hughes. Literature was made available and discussion was held on wind power issues important to landowners. Similar meetings are set to follow Congressman Lucas' town meetings in Weatherford (August 27) and Hobart (August 28). More meetings will be scheduled in other towns in the fall, and will be announced in

later editions of 'The Oklahoma WinCharger' and the local papers.

#### **Look for these issues to be covered in the future releases of 'The Oklahoma WinCharger'**

- Likely areas for Oklahoma wind farm development in the next few years
- Impact of transmission capacity on the value of your wind resource
- The positive impacts of large wind farms on communities tax bases.
- Should you consider a small (home size) turbine for your home, farm or ranch?
- What impact does the net metering law have on you and your utility?
- A proposed federal tax credit for small wind systems purchases
- The Oklahoma Renewable Energy Council forms

If you have questions or suggestions for topics to be addressed in future issues of 'The Oklahoma WinCharger', please call or write to:

The Oklahoma WinCharger  
Oklahoma Wind Power Initiative  
710 Asp Ave., Suite 8  
Norman, OK 73069  
(405) 447-8412 or by email: [simonsen@ou.edu](mailto:simonsen@ou.edu)

#### **Calender of Coming Events**

- **Oklahoma Landowners and Tenants Association** is co-sponsoring a conference with The Oklahoma Black Farmers and Agriculturists Association, Langston University, and the Department of Energy's Wind Powering America Program. The conference will address two major issues: wind energy as a cash crop for the black farmer and the Black Farmer Lawsuit. This conference will be 1 to 5 PM Saturday September 1, 2001 at Langston University/Oklahoma City Branch, 4205 N. Lincoln BLVD, OKC, OK.
- **Oklahoma Renewable Energy Council (OREC)** will meet at the Oklahoma State Capital from 10 AM to Noon on Wednesday September 12th.