Illinois Clean Energy
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K-12 Wind Schools Pilot—Grant Requirements

Grant Amount:

- 90% of total cost of the installation, up to $40,000. The exact cost of your installation will depend on a number of factors. The maximum grant to your school will be $40,000 regardless of how much you pay your installer. If awarded a grant, you are required to collect and present at least three bids to the Foundation, and explain why the winning bid was chosen. We also recommend that you follow your district's contractor selection requirements. Ultimately, the final decisions on all of these matters are your responsibility.

Grant Requirements:

- ***Purpose of the Grant:*** the primary purpose of this grant program is to help schools provide students with a renewable energy teaching tool. The systems installed will generate a small amount of electricity, but most importantly, they help Illinois students better understand renewable energy, electricity, energy efficiency, science, and math. A secondary purpose is to help introduce Illinois students to green jobs and to open up the idea of a career in an evolving area. New jobs provide an opportunity for our students after graduation. We hope to better prepare Illinois students for those jobs. Finally, it is also our hope to introduce renewable energy to local school officials, local government officials, community leaders and local media. If the State of Illinois is going to embrace new energy technology, we want to play a role in preparing the people of Illinois through installations in as many communities as we can.
- ***Reimbursement Grant:*** the project must be completed by the schools before the grant funds are paid.
- ***Terms:*** each grant award notification comes with two copies of a grant agreement that outlines the terms of the grant. Schools need to sign a copy of the agreement and return it to the Illinois Clean Energy Community Foundation. *Schools must follow the recommendations of their Certified Wind Site Assessment. It is highly suggested that schools consult with ICECF when determining the final specifications of the installation,*
    - *Time limit:* projects must be completed within one year, and schools can begin installation work only after formal approval of the grant.
    - *Installer:* due to the additional complexity of installing a wind turbine, schools should hire professionals who specialize in these types of installations. There is no requirement for a school to select a certified installer, but there is a presumption that a certified installer would better understand the terms of this grant and the wind turbine installation process.
    - *Size:* the wind turbine must be approximately 1-5kW in size.
    - *Grid tied*: unless permission is given otherwise by ICECF, each installation must be grid tied. The schools must apply for and sign an interconnection agreement with their electricity provider. ICECF will verify that these interconnection agreements have been signed when reviewing the final report (needed for payment of the grant). Electricity providers that discover any grid tied installations

not covered by an interconnection agreement, may subject the school to penalties. Again, the installers should handle this process, but the schools that do their own installations or that hire sub-contractors for parts of their project need to be aware of this requirement.

- *Warranty:* Since schools select their own installers, and ultimately select their equipment, they need to be aware of the various warranties. Turbines typically have 5 to 10 year warranties. Inverter warranties should be at least 5 years, but many are 10 or even 15 years. There should also be a warranty on the complete system by the installer. These can be as short as 12 months, but can also be as long as 10 years. Schools are responsible for decisions on these issues before they sign agreements with installers.
- *Prevailing rate of wages:* for public schools there are also requirements in Illinois law regarding construction projects on school grounds and prevailing rate of wages. It is important to keep these policies in mind when calculating costs. ICECF does not specify any wage requirements for projects.
- *Data monitoring:* every inverter comes with the ability to monitor the electricity generated by the wind turbine, but due to the educational nature of this program, data must also be publicly available online at www.IllinoisWindSchools.org. This setup enables the public as well as all students to view each school's data. If you have any questions about whether or not the system you plan to use will satisfy the grant requirements, email Glen at glen@learnenergy.org for a review.
    - There are many data collection systems that allow for live data to be posted to the internet. A data monitoring system will collect data from the turbine at your school and transmit it to a central server managed by the data company you contract with as part of your installation package. This data is stored centrally so that it can be displayed on any computer or smartphone with internet access.
    - Most inverters allow you to read your data on-site. As a Wind Schools participant, you are required to make this data available to the public through the Illinois Wind Schools/Illinois Solar Schools web site. ICECF will cover the cost of the real-time data display on the program's web site. Schools are responsible for providing the appropriate links to their data monitoring accounts. If you have any questions about this part of your grant requirements, call Glen at (614) 339-3961 or email glen@LearnEnergy.org
    - Schools that install wind turbines will also have existing data from their solar installations. ICECF has options available to combine the two data streams into a single display.
- *Site:* wind turbines should be installed in accordance with the recommendations of the Certified Wind Site Assessment required as part of the grant application. Schools should work with installers and facilities staff to determine the best setup.
    - It is important to consider tower height, distance to run wire to the school building, ground stability and access for maintenance equipment. The site should also be stable enough for a proper foundation.
    - Although the Wind Schools program is primarily educational, and the turbine should be installed for high visibility to students and the public, they should not compromise safety and performance for the sake of visibility or cost. It is very important that students and the public not only see the equipment, but that *it works* and is installed properly given the conditions at the installation site.
- *Education:* each school should use the wind system in at least one class. ICECF provides teacher training workshops and has online materials available for free downloads on the Illinois Solar Schools/Illinois website and encourages teachers

to find or develop their own educational activities as well. In order for the grant funds to be paid, the schools must comply with the installation parameters and they must also document the curricular use of the wind turbine. ICECF encourages teachers to be creative with how they develop projects and incorporate their solar and wind technology into the curriculum.

- *Wind Celebration:* ICECF encourages schools to be creative in organizing an event to announce the completion of the wind turbine installation and highlight renewable energy and environmental issues.
- *Ongoing Operation & Maintenance:* schools are expected to maintain the wind turbine in good working order and should budget $200-500 annually for unexpected as well as regular maintenance expenses.