

Utah Geological Survey State Energy Program

Utah Anemometer Loan Application – 20-meter tower

Instructions

Utah's Anemometer Loan Program is made possible through the U.S. Department of Energy's Wind Powering America Initiative. To participate in the program, please fill out this application in its entirety. If you are applying for more than one location, please complete separate applications for each specific site. Completion of the application does not guarantee the loan of an anemometer, and the number of anemometer towers available will vary. Applications are due by March 1st and are reviewed once a year. If you submit an application, we will contact you with the outcome by April 15. Anemometers are generally installed at a site for no less than one year.

The following factors are used to evaluate each proposed site:

Wind Resource Map: What is the quality of the wind resource as predicted on Utah's wind resource maps? Sites located within or close to regions that have a high-predicted wind resource are looked on favorably. However, these maps give a rough estimate of available wind resources and are not taken as definite. Many quality sites have been identified inside areas that were predicted to have poor wind resources by these maps. Utah's wind resource maps can be viewed at <http://geology.utah.gov/sep/wind/maps.htm>.

Favorable Topography: Do factors such as elevation, vegetation, and/or nearby land forms/topography suggest a quality wind resource? Factors that would suggest a quality wind site often include being higher than the surrounding area, being clear of obstructions that would create wind flow turbulence (large trees, buildings, geological features, etc.), tree/vegetation flagging (trees are permanently bent in direction of prevailing wind, with branches longer on the downwind side and shorter or missing on the upwind side), and proximity to mountains, valleys, or canyons that may accelerate wind flow. High elevation, whether on a ridge top or a plateau, can also suggest higher wind speeds.

Accessibility: Is there enough clear area at the proposed site to erect a tower and is it easily accessible? A clear, flat space of roughly 100ft x 100ft is required to erect a 20-meter anemometer.

Favorable Land Use: Is the site appropriate for a wind energy project? Are there (or will there be) building restrictions, zoning problems, or opposition from surrounding neighbors?

Project Purpose/Goal: Is the potential project expected to be large scale (commercial), medium scale (school, town, state, non-profit, Indian land), or small scale (private ownership, residential, business, ranch)? How clear are the objectives of the proposed plan? Who will use the power?

Transmission and Load: For large-scale projects, is the site near an electrical transmission line or a load center? For small-scale projects, is there an ability to use power generated on-site or locally?

Proximity to Past Anemometer Sites: Preference is given to sites near locations where data indicate there are quality wind resources and in promising areas where little or no data have been collected. Current and past anemometer sites can be viewed at:
<http://geology.utah.gov/sep/wind/anemometerdata/index.htm>

Contact Information: *(the person our office will be working with for the loan)*

Last Name _____ First Name _____
Mailing Address _____
City _____ State _____ Zip Code _____
Home Phone (include area code) _____
Work Phone _____ Cell Phone _____
E-mail _____ Fax _____

Landowner Information:

Go on to the next section if the Landowner and the Contact person are the same. If they are not the same, please fill out this section.

Last Name _____ First Name _____
Mailing Address _____
City _____ State _____ Zip Code _____
Home Phone (include area code) _____
Work Phone _____ Cell Phone _____
E-mail _____ Fax _____

Application History:

Have you applied with us before? _____
How many times have you applied? _____
What was the last year you applied? _____
Have you had an anemometer on loan before? _____
How many times have you had a loan? _____
When was the last year you received a loan? _____

Project Description:

Purpose and goal of project for this location (*see instructions*): _____

If data reveal favorable wind resources, what kind of wind project do you foresee pursuing:
(circle one) Small (residential), Medium (community), Large (commercial), or Other _____

Location Specifics:

Physical Address _____

City/Town _____

County/Zip Code _____

Please provide **detailed** GPS Coordinates: (i.e. degree, minutes, and seconds):

Latitude: _____ Longitude: _____

Topographic Map: (Please mark the proposed site on a topographic 7.5' quadrangle map and include with application. You can purchase maps from the Department of Natural Resources Map and Bookstore (mapstore.utah.gov) or access them online at geology.utah.gov/maps/topomap/index.htm. www.topozone.com is another website where maps can be accessed for free - downloading maps using topozone.com requires payment, however, you can print images for free. If you would like help with this please contact our office.)

Elevation (in feet): _____ Is the land where the anemometer will be placed higher than the surrounding area? _____

Cleared Area: (Roughly 100ft x 100ft is required to erect a 20-meter anemometer) approximate square feet _____ or acres _____

Accessibility: How far is the site from the nearest paved road _____? Unpaved road _____?

Can the site be easily accessed with a vehicle _____?

Soil type at site: (circle one) Ledge, Rocky, Clay, Sandy, Topsoil

Restrictions: Are there any local restrictions on structure height, zoning, building, or other requirements _____? If so what are they: _____

Neighbor: How far is the nearest neighbor from the site?
approximate feet _____ or miles _____

Nearest Structure: How far is the nearest structure?
approximate feet _____ or miles _____

Please describe the site: (*i.e. vegetation, topography, obstacles, etc. Photographs of the site are also helpful.*) _____

Please explain why you feel that this would be a good site for an anemometer?

Property Line: How far is the nearest property line from the site?
approximate feet _____ or miles _____

Airports: Name of the nearest airport _____

Approximate distance to the airport _____

Transmission/Distribution Lines:

How far are you from electrical transmission or distribution lines?
approximate feet _____ or miles _____

What is the voltage of these transmission/distribution lines (if known)? _____

Who owns these lines? _____

Please describe these lines: _____

Have you discussed the possibility of placing a wind turbine at your site with your local utility?

If so, what was said? _____

Utility Contact Name: _____

Did the utility agree to provide transmission? (*circle one*) Yes or No

Anemometer Monitoring:

Monitor: Who will be responsible for monitoring the anemometer equipment? _____

Data Plugs: Who will be responsible for changing the data plugs? _____

If you have any questions about this application please contact:

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