



The [Interstate Turbine Advisory Council](#) (ITAC) is an alliance of clean energy programs and utility incentive providers working jointly to tackle the challenges and promote the potential of the small and medium-scale wind market.

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### **Application to the Unified List of eligible wind turbines**

A primary product of the ITAC collaboration is a unified list of small and medium-sized wind turbines that meet the performance, reliability, acoustic and warranty service expectations of incentive providers. This creation of this list is a critical step in the evolution of the distributed wind market. This list can be used by ITAC member clean energy programs and utilities to qualify eligible wind power projects for incentives.

### **Medium Wind Turbine ITAC Application**

**Note:** Medium wind turbine is defined as turbine wind turbines with a rotor swept area of more than 200 m<sup>2</sup> and less than 1000 m<sup>2</sup>.

**REMINDER:** Any information you wish to remain confidential must be clearly marked “**CONFIDENTIAL**” at the top of the page.

**Application Fee:** A \$1,000 fee is required for the submittal of each application. A \$1000 fee is required for the submittal of each application. Please note that if your turbine does not have all the certifications and test reports ITAC requires, it is likely we would have to hire an outside consultant for technical review. In these cases, ITAC would require the turbine manufacturer to pay half the cost of the consultant. An estimate would be shared with you prior to beginning any outside consultant review.

Manufacturer:

Turbine Name:

Address:

City:  State:  Zip code:

Website:

Name of Person submitting this application:

Address (if different from above):

City:  State:  Zip code:

Telephone:  Email:

## **GENERAL**

- 1) Has this turbine been eligible for state incentives before? If so, please tell us in which states the turbine was eligible.
- 2) If towers are provided by another party, provide the information about the provider, as well as details about the tower heights and types.
- 3) Is this turbine designed primarily for grid intertie or for battery charging?
  - a) Does it require battery backup or special configuration to be grid connected? YES or NO
- 4) Please provide the name and contact information for two references (references are to be from turbine owners).
- 5) Please provide your certification and/or testing bodies with permission to share information regarding your testing and certification status with ITAC.

## **CERTIFICATION AND TESTING**

- 6) Can you provide documentation to demonstrate third-party test reports as per IEC61400-12-1 and IEC61400-11? Reports must be certified by an independent accredited certification body. Please note that ITAC shall make the certified power curve and acoustic data publically available on its website. Contact us with any questions.
  - a) If yes, please provide copies of the reports and certification.
  - b) If no, are you in the process of testing and when do you expect to have completed testing?
    - i) Please provide name and contact information to verify any certifications of the entire system currently in process, but not yet received.
    - ii) Provide a copy of a statement to the testing facility and certification body to allow them to provide details to ITAC on the current status of the turbine's progress.
- 7) Do you have a current certified Design Evaluation according to IEC 61400-1?
  - a) If yes, please provide a copy of the certificate.
  - b) If no, please explain.

- 8) Are all the above reports and certificates above for the applicant turbine model? Have any changes, minor or major, been made to the model?
- a) If yes, please describe in detail.

### **PERFORMANCE DATA**

- 9) Please confirm that you meet our operational history requirements:
- a) At least 500,000 hours of fleet operation
  - b) At least 25 operating turbines
  - c) At least 2 years of operation from 5 wind turbines.
- 10) If you do not meet the above operational history requirements, please provide the most up-to-date data for each.
- 11) Technical specifications, including:
- a) Start-up Wind Speed
  - b) Cut-in Wind Speed
  - c) Rated Wind Speed
  - d) Rated Power at 11 m/s
  - e) Maximum Power
  - f) Cut-out Wind Speed
  - g) Governing Wind Speed
  - h) Max. Design Wind Speed
  - i) Wind Turbine Type
  - j) Rotor Diameter
  - k) Power Regulation
  - l) Overspeed Protection
  - m) Gearbox
  - n) Temperature Range
  - o) Generator
  - p) Specified inverter (if relevant)

12) Provide a power curve\* (third-party certified, if available), in tabular form, for speeds ranging from 0 m/s to 25 m/s, in 0.5 m/s increments. (\*Including Rated Power at hub height wind speed of 11 m/s and Annual Energy Output at a hub height wind speed of 5 m/s. Include the assumptions used in this determination.)

### **MANUALS, AGREEMENTS, WARRANTIES**

13) Provide copies of installation and owner's manuals.

14) What kind of training do you require of installers?

- a) Is training mandatory? If not, how do you ensure that installers are able to safely and correctly install and service your products?
  - i) Do you require any continuing education?

15) Provide a copy of your marketing brochures.

16) Describe your warranty:

- a) How much time does it take to receive replacement parts through your warranty program?
- b) Do faulty parts need to be returned to you for diagnostics prior to shipping out replacements?
- c) Does your warranty cover two-way shipping costs?
- d) When does your warranty coverage commence?
- e) Prior to the warranty taking effect, who is responsible for the system, and how is coverage ensured?
- f) Have you had any problems providing warranty, customer and/or installer support that have resulted in notable complaints? If so, please explain the nature of the issues, the resolution and what steps were taken to address the underlying issues.
- g) Provide a copy of all warranties for this turbine.

### **OPERATION**

17) In the past two years, have any of your installed systems of the current production model suffered a structural or catastrophic system failure? If so, please describe the event, attach any pertinent documentation relating to the failure, and describe what steps were taken to address this issue. A catastrophic or structural failure includes events such as a tower collapse, explosion, fire, blade throw, blade fracture, brake failure, etc.

- 18) Have any versions of your turbine (current production model) experienced systemic problems in the field, such as noise complaints, unexplained underperformance, or other operational difficulties? If so, please explain, and describe what steps have been taken to address these issues.
- 19) Has this turbine design ever been manufactured by a different company under a different name? If so, please explain the genealogy of the turbine design.
- 20) Describe your maintenance schedule for your models.

### **INSTALLATIONS**

- 21) How many units of the turbine have been installed in the U.S.?
- 22) How many units of the turbine have been installed in all of North America?
- 23) How many units have been installed outside of North America?
- 24) To the best of your knowledge, how many units are still operational?

### **SUBMISSION INSTURCTIONS**

Please submit your application materials and any questions to Val Stori at [val@cleanegroup.org](mailto:val@cleanegroup.org).

Please mail a check for the \$1,000 application fee, payable to **CESA ITAC, LLC** to:

Val Stori  
CESA - ITAC LLC  
Clean Energy Group  
50 State Street, Suite 1  
Montpelier, VT 05602

We do not accept credit card payments.

Applications are accepted on a rolling basis and will be reviewed periodically. All supporting documents should contain the manufacturer's name and turbine model in the file name. The ITAC Unified List will be revised and released as additional turbines are added to the list.

(May2013)