



SMALL WIND
CERTIFICATION
COUNCIL™

Medium Wind Turbine Certification Policy

SWCC4

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Contents

A. Introduction.....	4
B. Purpose and Scope	4
C. Definitions.....	5
D. Policy Abbreviations.....	6
E. Certification Commission	6
F. Certification Eligibility Requirements	7
G. Certification Fees.....	8
H. Application Requirements and Actions.....	10
I. Qualified Testing Organizations	12
J. Test and Analysis Report Requirements	13
K. Certificate and Summary Report	15
L. Complaints and Disputes Related to MWT Reporting and Records Requirement .	15
M. Certification Renewal and Conditions	16
N. Applicant Information Confidentiality / Conflict of Interest.....	18
O. Certification Deficiency and Policy Violation Resolution Process	19
P. Deficiency and Violation Decision Appeals	22
Q. Voluntary Termination.....	22
Annex A: SWCC MWT Certificate Formats.....	24
Annex C: Certification Process Summary.....	33
Annex D: References	35
Annex E: MWT Certification Fee Schedule.....	36
Annex F: SWCC MWT Certification Summary Report Formats	37
Annex G: Annual MWT Certification Report Form	38
Annex H: MWT Significant Modification Report Form	39
Annex I: Policy and Procedures Concerning Independence and Impartiality of Testing Personnel.....	40
Annex J: MWT Complaint Matter Reporting Form	42

A. Introduction

The Small Wind Certification Council (SWCC) is an independent, third-party certification body that certifies distributed wind turbines. For medium wind turbines (MWTs), with a rotor swept area that is greater than 200 m² and less than 1000 m², SWCC offers certification services related to wind turbine power performance, acoustic performance, and design certification (Medium Wind Certification). SWCC Medium Wind Turbine Certification represents conformity assessment to IEC 61400-12-1 (Power Performance), IEC 61400-11 (Acoustic Performance) and IEC 61400-1 (Design Requirements), hereinafter referred to as the IEC Standards. Applicants may choose to pursue one, two or all of the following Medium Wind Certification elements:

- SWCC MWT Power Performance Certification;
- SWCC MWT Acoustic Performance Certification; and
- SWCC MWT Design Certification.

For all Medium Wind Certification services, SWCC Certification is granted on the basis of an assessment of the completeness and correctness of the final reports, and whether the performance testing and/or design of the MWT conforms to all requirements of the IEC Standards.

B. Purpose and Scope

1. Purpose. This Medium Wind Turbine Certification Policy (Policy) has been adopted by the SWCC Board of Directors to define appropriate rules and procedures for the voluntary certification of eligible MWTs and to ensure the impartiality and objectivity of SWCC's certification decisions. The Policy is the sole and exclusive means by which an Applicant may apply for SWCC Medium Wind Turbine Certification.

The Policy serves to define the process and requirements for:

- a. Testing of a MWT for the purpose of power and acoustic performance certification;
- b. Design requirements of a MWT for the purpose of design certification;
- c. Reporting requirements;
- d. SWCC Certification of a MWT;
- e. Maintenance and renewal of SWCC Certification; and,
- f. Reviewing and resolving certification deficiencies and violation matters.

2. Scope. SWCC certification requirements, evaluations, and decisions are based on appropriate standards and information specifically related to the purposes and scope of the certification. The scope of this Policy is to establish an objective and otherwise appropriate process to assess and certify that a MWT meets the requirements of the IEC Standards for power performance and/or acoustic performance and/or design requirements.

C. Definitions

The following definitions have been adopted by SWCC for the identified terms used in this Policy.

1. Annual energy production. An estimate of the total energy production of a wind turbine during a one (1) year period as calculated by applying the measured power curve to a Rayleigh frequency distribution at a specified hub height annual average wind speed, assuming 100 % availability.
2. IEC Standards. International Standards developed by the International Electrotechnical Commission. For the purpose of SWCC Medium Wind Turbine Certification; IEC 61400-11: Wind turbines - Part 11: Acoustic noise measurement techniques, IEC 61400-12-1: Wind turbines - Part 12-1: Power performance measurements of electricity producing wind turbines, and IEC 61400-1: Wind turbines – Design Requirements and any other relevant IEC standards referenced in this Policy. These IEC Standards were prepared by IEC technical committee 88: Wind turbines.
3. Medium Wind Turbine. For the purpose of SWCC Medium Wind Turbine Certification; electricity-producing wind turbine with a swept area greater than 200 m² and less than 1000 m².
4. Peak Power. Highest bin-averaged power output of all filled wind speed bins per the power curve from IEC 61400-12-1. Also termed “nameplate capacity”.
5. Qualified Testing Organization. A testing organization that is qualified under this Policy and applicable SWCC requirements to perform MWT testing for the purpose of certification. In order to receive SWCC Qualified Testing Organization status, the organization must demonstrate compliance with all relevant requirements of ISO/IEC Standard 17025.
6. Reference Power. Highest bin-averaged power output of all filled wind speed bins up to 11 m/s per the power curve from IEC 61400-12-1.
7. Reference Annual Energy. Calculated total energy that would be produced during a one-year period at an average wind speed of 5.0 m/s at hub height, assuming a Rayleigh wind speed distribution, 100 % availability, and the power curve derived

from IEC 61400-12-1. For this definition, reference annual energy is AEP-measured and sea-level normalized.

8. Reference Sound Pressure Level. Sound pressure level that will not be exceeded 95% of the time, assuming an average wind speed of 5 m/s (11.2 mph), a Rayleigh wind speed distribution, 100% availability, and an observer location 60 m (~ 200 ft.) from the rotor center. Calculated from the Apparent Sound Power Level at 9.8 m/s.
9. Remanufactured. A turbine which has been previously used, and subsequently disassembled, repaired, and reassembled to be used again.
10. Small Wind Turbine. Electricity-producing wind turbine having a swept area that is less than or equal to 200 m².

D. Policy Abbreviations

1. AC: alternating current
2. AEP: annual energy production
3. C_p: power coefficient
4. ed: edition
5. HAWT: horizontal axis wind turbine
6. IEC: International Electrotechnical Commission
7. ISO: International Organization for Standardization
8. MWT: medium wind turbine
9. VAWT: vertical axis wind turbine

E. Certification Commission

The Certification Commission (Commission) has been established by the SWCC Board of Directors to supervise the evaluation of turbines for SWCC Certification. The structure and composition of the Commission has been developed to ensure impartiality in all matters pertaining to its role.

The Commission is composed of three (3), qualified and independent industry experts appointed by the Board of Directors. The Commission has been delegated the authority to review and approve MWT certification applications in consultation with the Technical Director. Among other responsibilities, and consistent with this Policy, the Commission

will: review each certification application and relevant supporting information under the applicable SWCC Certification standards, in consultation with the Technical Director; determine by majority vote whether each certification application is granted, conditionally granted, or rejected; determine whether each certification renewal application is granted, conditionally granted, or rejected; determine whether a Certification Holder must submit a new certification application when a product has been modified; initiate, review, and resolve all deficiency and violation matters under this Policy related to Certification Holders and Applicants, and determine whether to issue certification sanctions or other appropriate actions; require the submission of additional application renewal information when appropriate; and, review and determine the appropriateness of design changes related to certified MWTs.

F. Certification Eligibility Requirements

1. General Policy Requirements. SWCC eligibility policies are administered in an objective and non-discriminatory manner and SWCC provides certification services to any Applicant that satisfies the conditions in this Policy. SWCC will not impede or inhibit Applicant access to SWCC services in any unlawful or improper preferential manner.

SWCC makes its services accessible to all Applicants whose activities fall within its declared field of operation. All Application and Certification Fees will be applied uniformly to all Applicants. Access to SWCC certification is not conditioned on the Applicant's size, membership in any association or group, nor the number of certifications previously issued by SWCC.

2. Applicant Eligibility. SWCC Certification Applications may be submitted only by the holder of all ownership rights in and to the MWT (MWT Manufacturer), or the authorized designee of such MWT Manufacturer. If the Applicant is such an authorized designee, the Applicant must submit written proof of authorization from the MWT Manufacturer to seek SWCC certification. SWCC will have the sole and exclusive right to determine whether such a designee is properly authorized to seek SWCC certification.

If the Applicant is an authorized designee, the non-Applicant MWT Manufacturer will be required to accept and agree to comply with all terms of SWCC policies, including the SWCC Medium Wind Turbine Certification Policy and the SWCC Trademark and Certification Mark Use Policy, prior to SWCC issuing MWT Certification.

3. Equipment Eligibility.

Eligible MWTs are defined as newly-manufactured, electricity-producing wind turbines with a swept area greater than 200 m² and less than 1000 m². Previous versions of a MWT design that are no longer available to the market are not

eligible for SWCC certification. Remanufactured MWTs are not eligible for SWCC MWT Certification (see definition in Policy Section C).

Applicants may submit one (1) Application for multiple MWT configurations of the same turbine type, provided that the MWTs are similar in design and other significant characteristics. In this regard, SWCC will make every reasonable effort to consolidate the requirements applicable under this Policy, based on SWCC's review of the information contained in an Applicant's Notice of Intent to Submit an Application. However, each MWT configuration will be issued a separate certification, provided all certification eligibility requirements are met.

4. Certification Eligibility. A turbine is eligible for certification if all of the following requirements are satisfied in full:
 - a. The MWT is compliant with the relevant IEC Standard(s) in all applicable respects;
 - b. The MWT has been tested properly by a Qualified Testing Organization consistent with this Policy and the relevant IEC Standard(s), and such tests demonstrate compliance with the IEC Standards;
 - c. All other SWCC Certification requirements and conditions have been satisfied;
 - d. The Applicant has submitted a complete Notice of Intent to Submit an Application to SWCC;
 - e. The Applicant has signed a Certification Agreement with SWCC, which details the responsibilities of the Applicant and SWCC with respect to the certification application review process;
 - f. The Applicant has submitted a complete MWT Certification Application to SWCC;
 - g. The Applicant has submitted all additional information and materials required by the Certification Commission or the Technical Director;
 - h. The Applicant has submitted all required fees in full; and,
 - i. The Certification Commission has determined that the turbine is eligible for certification, and grants certification to the MWT.

G. Certification Fees

All SWCC Certification fees are approved by the SWCC Board of Directors. The SWCC Certification Fee Schedule is provided in Policy Annex E. All current fees are subject to

change. Fees may be paid by check or by wire transfer. Checks must be in U.S. funds drawn on a U.S. bank and payable to Small Wind Certification Council.

1. Preliminary Review Fee. A non-refundable fee paid by the Applicant with the Notice of Intent to Submit an Application. This fee satisfies all costs related to: an initial review of the MWT design and test plans concerning the MWT seeking certification; and, the development of the Certification Agreement(s).
2. Test Site Evaluation Fee. A non-refundable fee paid by the Applicant related to the on-site evaluation of a non-accredited testing organization (see Section I.2 and I.3), if such an evaluation is deemed necessary by SWCC to fulfill the requirements of this Policy. This fee will be invoiced to the Applicant and must be paid prior to scheduling the evaluation.

Any additional site evaluation expenses to be charged will be determined by SWCC based upon the actual costs incurred to complete the evaluation. Additional expenses related to site evaluation will be payable upon completion of the Test Site Evaluation. If the evaluation identifies deficiencies requiring corrective actions, additional fees will apply for any necessary SWCC reevaluation of the Applicant's completion of the corrective actions.

3. Test Site Travel Expenses. Non-refundable expenses paid by the Applicant related to the travel of SWCC representatives with respect to the Test Site Evaluation. Such expenses will be estimated in accordance with the SWCC Travel Policy and will be charged to the Applicant before the Test Site Evaluation has been scheduled. These expenses must be paid prior to scheduling the evaluation. Eligible travel expenses include:
 - a. Airfare;
 - b. Railroad fare;
 - c. Car rental and fuel;
 - d. Taxi and bus fare;
 - e. Toll fares;
 - f. Parking;
 - g. Meals and incidental expenses per federal rates;
 - h. Person mileage at the federal rate; and,
 - i. Lodging.

4. Certification Application Fee. A non-refundable fee paid by the Applicant with the Certification Application. This fee satisfies the costs related to: the technical review of test and/or design reports; the resolution of application issues; Certification Commission application review; and, the publishing of MWT data.
5. Annual Certification Renewal Fee. A non-refundable fee paid by the Certification holder with the required Annual Certification Report.
6. Reinstatement Fee. A non-refundable fee paid by an Applicant or Certification Holder seeking reinstatement pursuant to section O of this Policy.
7. Certification Reapplication Fee. A non-refundable fee paid by an Applicant submitting a Petition to Reapply for Certification pursuant to section O of this Policy.

H. Application Requirements and Actions

In order to complete the SWCC MWT Certification application process, each Applicant must submit the following completed application materials.

1. Notice of Intent to Submit an Application. An Applicant intending to seek SWCC MWT Certification will first submit a Notice of Intent to Submit an Application (Notice of Intent). After receiving this Notice of Intent, SWCC will review the details of the MWT to be certified and the plans for testing. SWCC will use this information to determine the Certification Fee and develop a Certification Agreement. Guidelines for preparing the Notice of Intent are provided in Policy Annex B.

An SWCC Configuration Description Form will be included in the Application materials. This Form must be completed for each turbine seeking SWCC Certification and must be submitted with the Notice of Intent.

2. Certification Agreement with Applicant. After acceptance of the Notice of Intent by SWCC, the Applicant will sign an Agreement with SWCC, which provides detailed information concerning: the turbine to be certified; the test plans; and, the roles and responsibilities of each party. As part of this Agreement, the Applicant must agree to provide all design documents and raw data, or subsets of processed data (e.g., results for a particular date range), in a suitable format, if requested by SWCC. This Certification Agreement will be presented to the Applicant following the review of the Notice of Intent.
3. Testing Agreement with Testing Organization. Testing organizations that intend to perform testing for certification must sign a Testing Agreement with SWCC, which provides detailed information concerning: the turbine to be certified; the test plans; and, the roles and responsibilities of each party. The Testing

Agreement will be presented to the Testing Organization after the Applicant has signed the Certification Agreement.

4. Certification Application. Once all eligibility conditions have been satisfied and all required testing and reporting have been completed, Applicant will submit a complete Certification Application, including the final test reports, to SWCC.
5. Publication of Application Status. In the Notice of Intent, an Applicant may request to have the status of the Application published on the SWCC website. Following acceptance of the Certification Agreement, SWCC will publish on the SWCC website the Applicant's name, MWT model, and Application Status with the following status information:

“Under Contract” which indicates that the Applicant has executed a Certification Agreement with the SWCC;

“Under Test” which indicates that the MWT has been installed at the test site, commissioned, instrumented and is collecting data; or,

“Reports Submitted” which indicates that the Applicant has submitted complete test reports to the SWCC with a Certification Application.

Note: the date on which the Applicant has achieved each Application Status will be published on the SWCC website.

6. Inactive Status. Applications are classified as Active or Inactive according the criteria below. Active applications are eligible for completion and the award of a certification when all program requirements established by SWCC have been satisfied. Inactive applications have failed to adequately progress toward certification as established below, and require additional steps in order to be returned to Active status. A certification application shall be considered Inactive and removed from the SWCC website under the any one of the following conditions:
 - a. The SWT has not yet achieved “Under Test” status after eighteen (18) months from the “Under Contract” date.
 - b. The SWT has not yet achieved “Reports Submitted” status after two (2) years from the “Under Test” date.

Upon classification as Inactive, applications are removed from the list of Applicant Turbines posted on the SWCC website. The initial Notice of Intent (NOI) associated with applications that are classified as Inactive becomes invalid. To restore an application to Active status, a new Notice of Intent must be submitted for review along with payment of associated Preliminary Review and reinstatement fees. SWCC staff shall make a good faith effort to notify applicants

whose application is nearing one or both of the Inactive status criteria above, using the latest applicant contact information on file with SWCC.

7. Certification Decision. SWCC will notify the Applicant of the Certification decision. If certification is not granted, SWCC will identify the reasons for the decision.

I. Qualified Testing Organizations

Qualified Testing Organizations must satisfy, and comply with, all relevant requirements of ISO/IEC Standard 17025: *General Requirements for the Competence of Calibration and Testing Laboratories*. In order to be designated as a Qualified Testing Organization, the testing organization must be either: accredited under ISO/IEC Standard 17025 by an authorized third-party accreditation body with a scope that covers the required testing; or, evaluated and approved by SWCC under the ISO/IEC Standard. The three (3) types of Qualified Testing Organizations, and the related requirements, are as follows:

2. Accredited Testing Organization. Test reports will be accepted for turbines tested by an organization accredited to ISO/IEC Standard 17025 by an authorized national or international accreditation body. The scope of the accreditation must include testing to the MWT Certifications sought by the Applicant, IEC 61400-11 (Acoustics) and/or IEC 61400-12-1 (Power Performance), depending on the MWT Certification being sought by the Applicant.

SWCC may conduct an on-site evaluation and inspection of the test facility and laboratory documentation to assure compliance with this policy and conformity with all standards referenced above.

3. Non-Accredited Testing Organization. For MWTs tested by a non-accredited testing organization, SWCC will perform an on-site audit of the test facility to determine suitability and competence, using ISO/IEC Standard 17025 as a guide. The audit will document conformance with the IEC Standards, and will include:
 - a. An evaluation of the testing organization's quality assurance system using ISO/IEC Standard 17025 as a guide. This quality audit will involve SWCC review and verification of the organization's: staff; procedures; instruments; calibrations; signal quality to data acquisition system; data quality procedures; and/or, validated data analysis procedures; and,
 - b. An evaluation of the testing organization's test environment using the IEC Standards as a guide.

If the testing organization fails to satisfy relevant requirements of ISO/IEC Standard 17025, all testing performed on the MWT by that test facility, and all related test analysis reports, will be rejected by SWCC.

4. Manufacturer Testing. For turbines tested at a facility operated by the MWT Manufacturer, SWCC will conduct an on-site audit and evaluation for non-accredited testing organizations, consistent with the requirements of Policy Section I.2. In addition to the audit, the manufacturer must also agree to the following terms:
 - a. Unannounced facility site inspections by SWCC;
 - b. Periodic surveillance of data by SWCC; and,
 - c. Development, maintenance, and enforcement of facility policies and procedures ensuring that all key personnel involved in the MWT testing, and the collection and reporting of data related to the MWT tests, are impartial and free from any undue commercial, financial, and other pressures that might influence their technical and independent judgment. In order to satisfy this requirement, the SWCC Manufacturer/Applicant must either: adopt the procedures identified in Annex I of this Policy; or, submit its policies and procedures concerning this requirement to SWCC for review and approval. SWCC retains the sole authority to accept, reject, or require modification of such MWT Manufacturer policies.

If the test facility fails to satisfy relevant requirements of ISO/IEC Standard 17025, all testing performed on the MWT by that facility, and all related test analysis reports, will be rejected by SWCC.

J. Test and Analysis Report Requirements

1. Test and Analysis Reports submitted to SWCC must clearly and specifically state how each requirement of the relevant IEC Standards has been met with respect to the MWT tested. Applicable to the MWT Certification element(s) being pursued, the following information and elements must be included in the final report(s) in the format required by SWCC.
 - a. Power Performance Test Report. The power performance test report must include:
 1. Reporting requirements of Section 9 (Reporting Format) of IEC 61400-12-1;
 2. A summary of the data analysis tool(s) utilized in this test. These tools shall be made available for an SWCC audit; and,

3. Log Book. A dedicated log book must be maintained during the testing as required by the IEC Standard. This log book must be submitted to SWCC if requested.
- b. Acoustic Test Report. The acoustic test report must include:
1. Reporting requirements of Section 9 (Information to be reported) of IEC 61400-11; and,
 2. A summary of the data analysis tool(s) utilized in this test. These tools shall be made available for an SWCC audit.
- c. Design Report. The design report must include:
1. Loads and load cases. Summary and results of aeroelastic modeling and load calculations for each design load case, load assumptions, model validation in conformance with IEC 61400-1;
 2. Structural Components. Summary and results of structural analysis, dynamic analysis, and ultimate limit state analysis of the load-carrying turbine components, from rotor to foundation - including support structure(s) and excluding the foundation - in conformance with IEC 61400-1;
- Note:* The ultimate strength analysis shall be undertaken in accordance with Section 7.6.2 of IEC 61400-1 (2005) with the exception that the characteristic value of the load shall be the worst case computed transient value without application of statistical load extrapolation to the 50-year recurrence period.
3. Blade Testing. Results of a Static Load Test in conformance with IEC 61400-23, testing may be performed by the manufacturer and is exempt from an SWCC Test Site Evaluation ;
 4. Control and Protection. Summary of control and protection system design in conformance with IEC 61400-1, results of Safety and Function Testing as described in informative Annex D of IEC 61400-22;
 5. Mechanical and Electrical Components. Mechanical and electrical system design drawings and documentation in conformance with IEC 61400-1;
 6. Manuals. Manuals for assembly, installation, erection, commissioning, operation and maintenance in conformance with IEC 61400-1; and,

7. Quality System. Summary of manufacturing quality assurance system in place at the manufacturing facility, such as ISO 9001.

K. Certificate and Summary Report

For each MWT Certification granted to a certified MWT, SWCC will prepare and provide to the Certification Holder a Certificate and Summary Report consistent with the formats provided in Policy Annex A (SWCC MWT Certificate Formats) and Policy Annex F (SWCC MWT Certification Summary Report Formats).

Each certification is valid for one year from the date issued. If a turbine has been granted more than one certification (e.g. Power Performance and Acoustic Performance), SWCC may revise the expiration dates so all certifications for the same turbine expire on the same date.

L. Complaints and Disputes Related to MWT Reporting and Records Requirement

As a condition of SWCC certification and certification renewal, each Certification Holder is required to report to SWCC all complaints and disputes (complaint matters) , including any legal, government, or other third party communications received by the Certification Holder, questioning or objecting to the operation or performance of the MWT, depending on the MWT Certification(s) granted by SWCC. Such complaint matters must be reported to SWCC within thirty (30) days of Certification Holder's knowledge of such matter.

With respect to this reporting requirement, the Certification Holder must submit to SWCC a Complaint Matter Reporting form, as provided in Policy Annex J, which includes the following information:

- Identification of the complaining party, if known;
- A description of the nature of the complaint matter; and,
- An explanation of the Certification Holder's response to the complaint matter, including any corrective actions taken, and the resolution of the matter.

In addition to these information requirements, the Certification Holder must submit to SWCC copies of: all written complaint matter communications; the Certification Holder's response to such complaint matter(s); any additional communications between the complaining party, any involved government agency(ies), and the Certification Holder relating to the matter; and, the final resolution of the matter, if available.

SWCC will review all complaint matters related to the certified MWT in order to determine whether a Notice of Deficiency and Violation will be issued to the Certification Holder under Section O of this Policy.

M. Certification Renewal and Conditions

1. Period of Certification Validity. SWCC MWT Certification is valid during the certification period so long as all Certification Policy conditions are met. Among others, the Certification Holder must satisfy the following conditions:
 - a. The turbine has not been changed in any respect that significantly alters the original design approved in the SWCC Certification;
 - b. Changes to the turbine design have been reported to SWCC by the Certification Holder as required by this Policy and the Certification Commission; All complaint matters, field failures and malfunctions of the MWT have been reported to SWCC consistent with this Policy;
 - c. The Certification Holder is in compliance with all applicable SWCC policies, including the SWCC Trademark and Certification Mark Use Policy. All SWCC marks have been used properly, and in a manner consistent with SWCC policies;
 - d. The Certification Holder has complied with the Complaint and Dispute requirements of Section L; and,
 - e. The Annual Certification Renewal Fee has been paid in full.
2. Certification Period. On or before the end of the certification period, SWCC will take one of the following actions:
 - a. Renew the turbine certification for an additional certification period if the Applicant meets the requirements in Sections M3 of this Policy.
 - b. Grant an extension of up to 3 months for the certification period, if the renewal decision is not complete by the end of the certification period.
 - c. The Applicant voluntarily withdraws the turbine certification. The Certification Holder is not permitted to use any SWCC Certification Mark, certificates, labels, or reports, or make any representation concerning certification by, or affiliation with, SWCC with respect to the relevant SWT that has been withdrawn from certification. SWCC will remove the SWT from certification lists and any other published information.
 - d. Suspend or Revoke the Certification according to the requirements in Section O of this Policy.

When a decision is made to renew a turbine certification, the start date of the new certification period listed on the certificate shall be the renewal decision date. The end date of the certification period will remain the certification anniversary date.

3. Certification Renewal Requirements.

- a. Annual Certification Report. In order to maintain SWCC Certification, the Certification Holder is required to prepare and submit an Annual Certification Report to SWCC each year, at least 45 days before the anniversary of the date that the SWCC certification was issued. In order to be accepted, the Annual Certification Report must include a complete and accurate explanation of the following information:
1. All abnormal operating experiences, equipment failures or malfunctions, and other problems of the certified MWT, relevant to the MWT certification(s) granted;
 2. All modifications to the certified MWT, including all hardware and software changes, relevant to the MWT certification(s) granted; and,
 3. A summary list of all complaint matters regarding the certified turbine within the past twelve (12) months, consistent with the requirements of Section L of this Policy, relevant to the MWT certification(s) granted.

A sample Annual Certification Report Form is provided in Policy Annex G. The template provided in the Annex is for informational purposes only. A custom report form will be sent to the Applicant when Certification is granted.

The Technical Director will assess the Annual Certification Report information, and determine whether the Report satisfies the requirements of this Policy Section. If accepted, the Certification Holder will be notified of continued certification, and will receive an updated Certificate.

If the Technical Director identifies any concerns or anomalies related to the information in the Annual Certification Report, the matter will be referred to the Certification Commission, which will decide whether to accept the report and maintain certification for another year, or whether to require additional testing or other requirements in order to confirm the MWT's ongoing compliance and eligibility. If any MWT changes are deemed significant, then the Requirements of Section M.2.b below will apply. These results will be communicated to the Certification Holder in writing.

- b. Significant MWT Modifications. In the event that a certified turbine is, or will be, modified in any significant respect, the Certification Holder must report such modification to SWCC in a timely and accurate manner, no more than thirty (30) days after such MWT design changes have occurred.

The Certification Holder is required to consult with the Technical Director to determine whether a product change is minor or significant. Thereafter, the Technical Director will consult with the Certification Commission to determine whether there is a material deviation from the initial certified turbine design. Once SWCC determines whether a significant modification to the certified MWT has been proposed, SWCC may: require more information regarding the change; require re-testing or partial re-testing; require re-certification of the turbine; or, determine that the change is minor and no action is required. The Certification Holder must provide all required information and documentation to SWCC.

A sample Significant Modification Report Form is provided in Policy Annex H. The template provided in the Annex is for informational purposes only. A custom form will be sent to the Applicant when SWCC Certification is granted.

- c. Annual Certification Renewal Fee. Payment of the Annual Certification Renewal Fee is required to maintain certification. In the event the information reported in the Annual Certification Report or the Significant Modification Report requires additional SWCC review, the Certification Holder will be charged separately for such SWCC costs and expenses, consistent with the applicable SWCC fee schedule.
4. Change in Ownership of MWT. If ownership rights in and to the MWT changes, or the Certification Holder identified in the SWCC MWT Certificate no longer has any rights in or to the certified MWT, a new SWCC Certification Agreement must be accepted by the new owner of the MWT to maintain the SWCC Performance Certification, or the certification will terminate. A fee will be charged to complete transfer of SWCC certification.

N. Applicant Information Confidentiality / Conflict of Interest

1. Application Confidentiality. Certification Applications, and the information contained therein, will be treated as confidential material by SWCC. The review of Applications by SWCC staff, consultants, and Certification Commissioners will be confidential and conducted in private meetings. Prior to a certification determination and upon request by the Applicant, SWCC will publish the Applicant's name, MWT model, and Application Status, pursuant to Policy Section H.6. All other Application information will remain confidential until a certification determination has been issued by SWCC.

Once certification is granted, the following materials will be made available to the public: a Summary Report, as described in Policy Annex F and the SWCC Certificate, consistent with Policy Annex A. All other turbine information will remain confidential.

2. Conflict of Interest. All SWCC representatives are required to disclose any potential conflict of interest related to a pending MWT Certification Application to the SWCC Executive Director, consistent with SWCC conflict of interest policies and agreements.

O. Certification Deficiency and Policy Violation Resolution Process

SWCC will review and resolve all matters involving: a potential failure of the Certification Holder to satisfy a requirement of this Policy; a complaint or similar communication received by the Certification Holder or SWCC concerning the MWT; and, any other dispute related to SWCC policies.

1. Notice of Potential Certification Deficiency or Policy Violation.

The Certification Commission will issue a Notice of Deficiency and/or Notice of Policy Violation (Notice) to a Certification Holder where the Commission has determined that:

- a. the Certification Holder may have violated any requirement of this Policy; or,
 - b. a deficiency may exist with respect to the Certification Holder's SWCC certification.
2. Required Response to Deficiency Notice. Within thirty (30) days of receipt of such Notice, the Certification Holder must: respond to each identified deficiency and/or Policy violation; provide all relevant information and materials; and, otherwise satisfy all requirements set forth in the Notice. Following the timely submission of a complete and accurate response to the Notice, all deficiency and violation matters will be resolved by the Certification Commission pursuant to this Policy Section.
 3. Failure to Respond. In the event that the Certification Holder does not provide a timely, complete, and accurate response to a Notice, the Certification Commission may issue any sanction(s) or corrective action(s) authorized by this Policy, or any other applicable SWCC Policy. The Certification Holder must comply fully with all sanctions and/or corrective actions issued by the Commission.

4. Grounds for Sanction and Corrective Actions. The circumstances under which the Certification Commission may issue certification sanctions and/or corrective actions include, but are not limited to, the following:
- a. The Certification Holder has failed to satisfy an SWCC Policy requirement with respect to a Certification Holder's SWCC certification;
 - b. The Certification Holder makes a material misrepresentation to SWCC;
 - c. The Certification Holder makes a public misrepresentation concerning its activities, operations, or a tested product;
 - d. The Certification Holder fails to comply with a condition of the certification;
 - e. The Certification Holder violates, or acts contrary to, an SWCC Policy;
 - f. The Certification Holder fails to remit required certification fees and charges to SWCC;
 - g. Other good and reasonable cause exists and supports the issuance of sanctions or corrective actions under this Policy.
5. Certification Deficiency and Policy Violation Decisions. Based on an objective and complete review of the information received, the Certification Commission, in its sole discretion, will determine whether a certification deficiency or Policy violation exists, or whether to dismiss the Notice. Upon the finding of any such deficiency or violation, the Certification Commission will determine the severity of such deficiency(ies) or violation(s), and issue a Deficiency and/or Violation Decision. In its sole discretion, the Commission may issue one or more of the following actions:
- a. Private or Public Reprimand.
 - b. Conditions of Continued Certification.
 - c. Certification Probation. The term of certification probation will be for a period of up to six (6) months. Certification probation status will not be published on the SWCC website. During the period of SWCC certification probation, the SWCC certification remains in effect.
 - d. Certification Suspension. The term of a certification suspension will be for a period of at least six (6) months, and a maximum of thirty-six (36) months. Notice of certification suspension will be published on the SWCC website. During the period of SWCC certification suspension, the Certification Holder is not permitted to use any SWCC Certification Mark or make any representation concerning certification by, or affiliation with,

SWCC with respect to the relevant MWT that is the subject of the deficiency or Policy violation. In addition, the Certification Commission may require that the Certification Holder perform certain, appropriate corrective actions related to the suspension.

- e. Certification Revocation. Upon certification revocation, all rights of the Certification Holder to SWCC Certification will terminate in all respects, and the MWT will be removed from the listing of SWCC certified turbines on the SWCC website. Notice of certification revocation will be published on the SWCC website. The Certification Holder is not permitted to use any SWCC Certification Mark, or make any representation concerning certification by, or affiliation with, SWCC with respect to the MWT that is the subject of the deficiency or Policy violation.
6. Probation Order/Reinstatement. Following the expiration of a final Certification Probation Decision and Order issued under Policy Section O.5.c, the Certification Commission will do the following: if the Certification Holder has satisfied the terms of probation in full, verify that the probation has been completed and reinstate the Certification Holder to full certification status; or, if the Certification Holder has not satisfied the terms of probation in full, determine whether the probation order will continue, and/or issue additional, appropriate sanctions or actions. A reinstatement fee may apply for any necessary SWCC evaluation of the Applicant's completion of the corrective actions and processing of reinstatement, consistent with the Certification Fee Schedule.
 7. Suspension Order/Reinstatement Request. After the expiration of a final Certification Suspension Decision and Order issued under Policy Section O.5.d, the Certification Holder may submit a Request for Reinstatement (Reinstatement Request) to the SWCC Executive Director for review by the Certification Commission.
 - a. Contents of Reinstatement Request. The Reinstatement Request must include the following information: a statement of the reasons that the Certification Holder believes support or justify the acceptance of the Reinstatement Request; and, copies of any relevant materials which support the Request. The Certification Commission may require any additional information or documents related to its review of the Reinstatement Request. A reinstatement fee may apply for any necessary SWCC evaluation of the Applicant's completion of the corrective actions and processing of reinstatement, consistent with the Certification Fee Schedule.
 - b. Certification Reinstatement Decision. Within thirty (30) days of the conclusion of its review of a Reinstatement Request, or as soon as practical, the Certification Commission will prepare and issue a written Reinstatement Decision and Order explaining its decision with respect to

the Request. The final Decision and Order will indicate: whether the Reinstatement Request is granted, denied, or continued to a later date; whether all certification deficiencies and Policy violations identified in the Deficiency and/or Violation Decision have been appropriately remedied and resolved; or, whether additional deficiencies or Policy violations exist justifying the continuation of the Suspension Order, and/or issuance of additional certification actions. If appropriate, the Decision and Order will indicate any conditions of SWCC certification.

8. Revocation Order/Reapplication Petition. Two (2) years after the date of a final Certification Revocation Decision and Order issued under Policy Section O.5.e, the MWT Manufacturer, or its authorized designee, may submit a Petition to Reapply for Certification (Reapplication Petition) to the SWCC Executive Director for review by the Certification Commission.
 - a. Contents of Reapplication Petition. The Reapplication Petition must include the following information: a statement of the reasons that support or justify the acceptance of the Reapplication Petition, copies of any relevant materials which support the Petition, and the Certification Reapplication Fee. The Certification Commission may require any additional information or documents related to its review of the Reapplication Petition.
 - b. Certification Reapplication Decision. Within thirty (30) days of the conclusion of its review of a Reapplication Petition, or as soon as practical, the Certification Commission will prepare and issue a written Reapplication Decision and Order explaining whether the Petition is accepted, denied, or continued to a later date. If the Reapplication Petition is accepted, then the MWT Manufacturer, or its authorized designee, may submit a new Notice of Intent to Submit an Application for SWCC Certification.

P. Deficiency and Violation Decision Appeals

A Certification Holder may appeal an adverse Certification Deficiency or Policy Violation Decision, or any part thereof, to the SWCC Appeals Committee, pursuant to the terms of the SWCC Certification Appeal Policy.

Q. Voluntary Termination

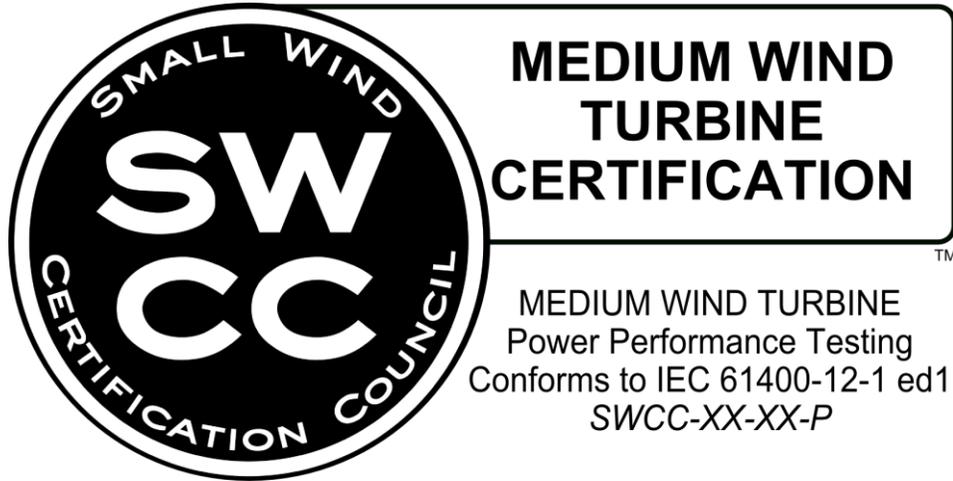
A Certification Holder may elect to voluntarily terminate its SWCC Certification by submitting a written request for certification termination to SWCC. Should a Certification Holder attempt to voluntarily terminate SWCC certification during the course of any complaint, dispute, or deficiency review, SWCC reserves the exclusive right to continue the matter to a final resolution, consistent with this Policy. In its sole

discretion, SWCC may require that a Certification Holder agree to certain terms and conditions related to the voluntary termination of SWCC certification.

Upon SWCC's acceptance of a voluntary termination request, the Certification Agreement with SWCC will be terminated, the MWT will be removed from the listing of SWCC certified turbines on the SWCC website, and notice of the voluntary certification termination will be published on the SWCC website. The Certification Holder is no longer authorized to use the SWCC Certification Mark(s) and consumer product labels, and may not make any representations concerning certification by, or affiliation with, SWCC with respect to the MWT that is the subject of the certification termination.

Annex A: SWCC MWT Certificate Formats
SWCC MWT Power Performance Certificate Format

To be made publicly available once a SWCC Certification has been granted



This Certificate is issued to:

XXXX
Street
City
Country

For the wind turbine:

XXXX

This Certificate represents that the above-identified Medium Wind Turbine (MWT) has been evaluated by SWCC concerning Power Performance testing. The testing and reporting have been found to be in conformance with IEC 61400-12-1. SWCC MWT Certification only applies to the specific MWT model identified above.

Changes to the MWT system design that may affect power performance are to be approved by SWCC. If changes are made to the MWT without approval, this Certificate is not valid and is not in effect.

The wind turbine specifications relevant to this Certificate are provided on the following page.

This Certificate is valid from [Date] to [Date]. Certification must be renewed annually.

Signature _____
SWCC Executive Director for the Certification Commission

Date

SWCC MWT Power Performance Certificate, Page 2

Wind Turbine Specifications:

Manufacturer.....
Model.....
Rotor Description

IEC WT Class	Rotor
--------------------	-------

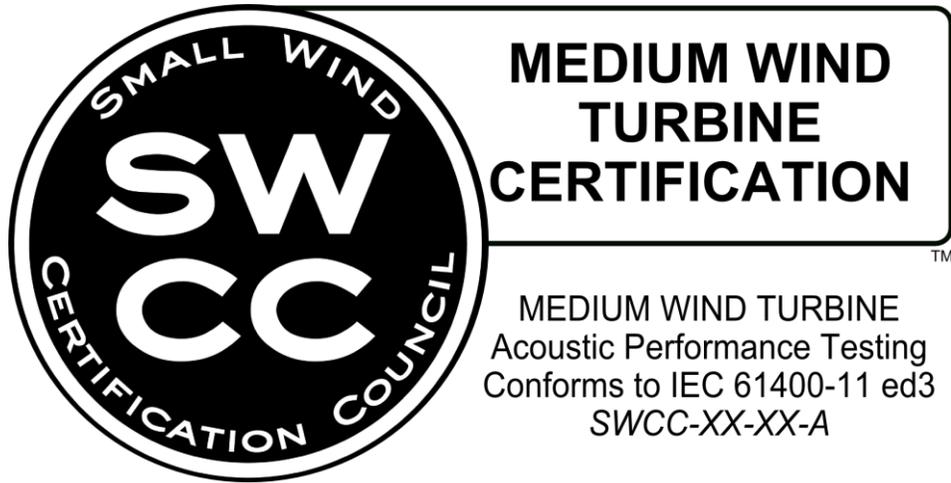
Diameter [m]
Rotor Swept Area [m²]
Power Form

Peak Power (Nameplate Capacity) [kW @ m/s]
Reference Power [kW @ m/s]
Reference Annual Energy [kWh]
Cut-In Wind Speed..... [m/s]
Cut-Out Wind Speed..... [m/s]

Small Wind Certification Council (SWCC)
56 Clifton Country Road, Suite 202
Clifton Park, NY 12065
www.smallwindcertification.org

SWCC MWT Acoustic Performance Certificate Format

To be made publicly available once a SWCC Certification has been granted



This Certificate is issued to:

XXXX
Street
City
Country

For the wind turbine:

XXXX

This Certificate represents that the above-identified Medium Wind Turbine (MWT) has been evaluated by SWCC concerning Acoustic testing. The testing and reporting have been found to be in conformance with IEC 61400-11. SWCC MWT Certification only applies to the specific MWT model identified above.

Changes to the MWT system design that may affect acoustic performance are to be approved by SWCC. If changes are made to the MWT without approval, this Certificate is not valid and is not in effect.

The wind turbine specifications relevant to this Certificate are provided on the following page.

This Certificate is valid from [Date] to [Date]. Certification must be renewed annually.

Signature

SWCC Executive Director for the Certification Commission _____ Date

SWCC MWT Acoustic Performance Certificate, Page 2

Wind Turbine Specifications:

Manufacturer.....
Model.....
Rotor Description
IEC CWT Class..... Rotor
Diameter [m]
Rotor Swept Area [m²]
Power Form
Peak Power (Nameplate Capacity) [kW @ m/s]
Reference Power [kW @ m/s]
Reference Sound Pressure Level [dB(A)]
Cut-In Wind Speed..... [m/s]
Cut-Out Wind Speed..... [m/s]

Small Wind Certification Council (SWCC)
56 Clifton Country Road, Suite 202
Clifton Park, NY 12065
www.smallwindcertification.org

SWCC MWT Design Certificate Format

To be made publicly available once a SWCC Certification has been granted



This Certificate is issued to:

XXXX
Street
City
Country

For the wind turbine:

XXXX

This Certificate represents that the above-identified Medium Wind Turbine (MWT) has been evaluated by SWCC concerning the turbine design. The design been found to be in conformance with IEC 61400-1. SWCC MWT Certification only applies to the specific MWT model identified above.

Changes to the MWT system design are to be approved by SWCC. If changes are made to the MWT without approval, this Certificate is not valid and is not in effect.

The wind turbine specifications relevant to this Certificate are provided on the following page.

This Certificate is valid from [Date] to [Date]. Certification must be renewed annually.

Signature

SWCC Executive Director for the Certification Commission

Date

SWCC MWT Design Certificate, Page 2

Wind Turbine Specifications:

Manufacturer.....
Model.....
Rotor Description

IEC WT Class

Rotor Diameter [m]
Rotor Swept Area [m²]
Power Form

Peak Power (Nameplate Capacity) [kW @ m/s]
Reference Power [kW @ m/s]
Reference Annual Energy [kWh]
Cut-In Wind Speed..... [m/s]
Cut-Out Wind Speed..... [m/s]

Small Wind Certification Council (SWCC)
56 Clifton Country Road, Suite 202
Clifton Park, NY 12065
www.smallwindcertification.org

Annex B: Notice of Intent to Submit an Application for SWCC MWT Certification



Notice of Intent to Submit an Application for SWCC Medium Wind Turbine Certification

Please submit this form and all attachments electronically to the e-mail address below. If necessary, send a hard copy of this form with payment of the Preliminary Review Fee to the mailing address below:

To: Small Wind Certification Council
56 Clifton Country Road, Suite 202
Clifton Park, NY 12065
info@smallwindcertification.org

Please use the legal corporate or other business name for the Company and the official corporate address.

Date (mm/dd/yyyy) _____

Applicant Name _____

Company _____

Description of Legal Status _____
(e.g. LLC organized in the State of xxxxx)

Website _____

Address 1 _____

Address 2 _____

City, State, Zip, Country _____

Email _____

Phone 1 _____

Phone 2 _____

The Applicant identified above represents the following:

1. The Applicant is the designer and/or manufacturer of the MWT, or the authorized designee of the designer/manufacturer. **Please indicate the Applicant type below:**

- Holder of all ownership rights in and to the MWT (MWT Manufacturer)
- Authorized Designee of the MWT Manufacturer (include written proof of authorization with this application)

2. The Applicant chooses to pursue one or both or the following SWCC Medium Wind Turbine Certification elements. **Please indicate your intent to pursue one (1), two (2) or all:**

- Certification of Power Performance testing according to IEC 61400-12-1
- Certification of Acoustic testing according to IEC 61400-11
- Certification of Design according to IEC 61400-1

3. The rotor swept area is **greater than 200 m² and less than 1000 m².**

4. The Applicant has:

- ✓ Received and accepted IEC 61400-12-1 (Power Performance testing) and/or IEC 61400-11 (Acoustic testing) and/or IEC 61400-1 (Design Requirements)
- ✓ Included the SWCC **Preliminary Review Fee.**

By signing below, the authorized representative of the applicant confirms and agrees that all of the information contained in this Notice of Intent is true and accurate.

Applicant Signature - Applicant agrees to the above representations

Preliminary review fee

- Notice of Intent to Submit an Application for one (1) MWT **US\$ 2500**
- For each additional MWT submitted when multiple MWT configurations of the same turbine type are included in the Notice of Intent, provided that SWCC confirms that the MWTs are similar in design and other significant characteristics. **US\$ 1250**

- Fees may be paid by check or by wire transfer. Checks must be in U.S. funds drawn on a U.S. bank and payable to Small Wind Certification Council. Contact SWCC for wire instructions.

Turbine information. Please provide the following information for each turbine to be certified:

Model: _____
 Rotor: _____
 Rotor diameter (m): _____
 Swept area (m²): _____
 Power form _____ (e.g. 240VAC, 60Hz, 1-phase)

*(Please complete the **SWCC Configuration Description Form** for each turbine)*

Testing plans. Please describe the Testing Organization that will be testing the turbine(s) to be certified:

Testing organization: _____
 Address: _____
 Contact: _____
 Phone: _____
 Website: _____
 Email: _____

Publication of Application Status

The Applicant may request that SWCC publicly list the status of the SWCC Certification Application on the SWCC website, pursuant to Section H.6 of the SWCC MWT Certification Policy.

Please check one box below:

- Yes, I authorize SWCC to publicly list the Applicant’s name, MWT model and Application Status on the SWCC website.
- No, I would like the Applicant’s name, MWT model and Application Status to remain confidential as we pursue certification.

While SWCC makes a significant effort to maintain current and accurate applicant directory information on the SWCC website, SWCC does not warrant or guarantee the accuracy, timeliness, or fitness of the information contained therein for any purpose.

Annex C: Certification Process Summary

The following is an informative summary of the SWCC MWT Certification process.

1. Applicant will acquire from the SWCC website:
 - a. The **SWCC4: SWCC Medium Wind Turbine Certification Policy**;
 - b. The **Notice of Intent to Submit an Application for MWT Certification form**; and,
 - c. The **SWCC Configuration Description form**.
2. SWCC will receive a Notice of Intent to Submit an Application (Notice of Intent) along with the SWCC Configuration Description Form and Preliminary Review Fee
3. SWCC will evaluate Applicant's Notice of Intent to determine detailed plans for testing, the choice of Certification element(s), and will communicate with the Applicant and Testing Organization as required.
4. Applicant will sign a Certification Agreement with SWCC, which details the turbine to be certified, the test and evaluation plans, and the Certification Fees.
5. If the Applicant chooses to authorize SWCC to publicly list the Applicant's name, MWT model and Application Status, such information will be published on the SWCC website.
6. Testing organization will sign an Agreement with SWCC, agreeing to perform appropriate tests on the turbine to be certified, and agreeing to the test plans and SWCC test site evaluation, if applicable.
7. After testing and reporting are complete, Applicant must submit to SWCC:
 - a. A complete Certification Application (an Application form will be provided by the SWCC);
 - b. Final report(s); and,
 - c. The Certification Fee (as listed in the Certification Agreement).
8. SWCC Technical Director and other experts as needed, will evaluate Application materials, reports, and communicate with the Applicant and testing organization to resolve issues.

9. Technical Director will send a technical evaluation report to the Certification Commission documenting the technical evaluation results for the Certification Commission.
10. Certification Commission will review the Technical Director report, and determine whether the Certification Application is granted or rejected.
11. SWCC will grant certification to the MWT, or issue a rejection of the Certification Application describing the reasons for such determination.
12. If certification is granted, SWCC will prepare Certificate(s) signed by the SWCC Executive Director and Summary Report(s) for publication on the SWCC Internet site and distribution by the Certification Holder.

Annex D: References

The following documents were used in the creation of, or are referenced within, this Policy.

1. IEC 61400-1 (2005): *Wind Turbines - Part 1: Design requirements.*
2. IEC 61400-11 (2006): *Wind turbine generator systems - Part 11: Acoustic noise measurement techniques.*
3. IEC 61400-11 (2012): *Wind turbines - Part 11: Acoustic noise measurement techniques.*
4. IEC 61400-12-1 (2005): *Wind Turbines – Part 12-1: Power performance measurements of electricity producing wind turbines.*
5. IEC 61400-22 (2010): *Wind turbines - Part 22: Conformity testing and certification.*
6. IEC 61400-23 (2014): *Wind turbines - Part 23: Full-scale structural testing of rotor blades*
7. ISO/IEC 17025 (2005): *General requirements for the competence of calibration and testing laboratories.*
8. ISO/IEC 17065 (2012): *Conformity assessment - Requirements for bodies certifying products, processes and services.*
9. ISO 9001 (2008): *Quality management systems – Requirements.*

Annex E: MWT Certification Fee Schedule

All fees are non-refundable. Section G of this Policy defines each Certification fee in detail.

Payments may be made by check or by wire transfer. Payments made by check must be in U.S. funds drawn on a U.S. bank and payable to Small Wind Certification Council. If you wish to wire funds, please contact SWCC for wire instructions.

Preliminary review fee

- Notice of Intent to Submit an Application for one (1) MWT US\$ 2500
- For each additional MWT submitted when multiple MWT configurations of the same turbine type are included in the Notice of Intent, provided that SWCC confirms that the MWTs are similar in design and other significant characteristics. US\$ 1250

Test site evaluation fee Varies

Certification application fee Varies

Annual certification renewal fee US\$ 2000

Annual Review Services related to Annual Certification Report Varies

Reinstatement Fee Varies

Certification Reapplication Fee Varies

Annex F: SWCC MWT Certification Summary Report Formats

MWT Power Performance Certification

The MWT Power Performance Summary Report will include a summary of the test results including, but not limited to, the following elements:

1. An introduction that includes a description of the field testing, the testing organization and the configuration of the tested MWT;
2. A table of Peak Power, Reference Power and Reference Annual Energy;
3. tabulated annual energy production for air density at sea level;
4. graph of annual energy production for air density at sea level;
5. graph of the measured power curve for air density at sea level;
6. tabulated measured power curve for air density at sea level;
7. graph of C_p as a function of wind speed for air density at sea level; and,
8. a scatter plot of mean, standard deviation, maximum, and minimum power output as a function of wind speed.

MWT Acoustic Performance Certification

The MWT Acoustic Performance Summary Report will include a summary of the test results including, but not limited to, the following elements:

1. An introduction that includes a description of the field testing, the testing organization and the configuration of the tested MWT;
2. table of reference sound pressure level;
3. table of apparent sound power level $L_{WA,10m,k}$ at integer wind speeds at 10 m height;
4. plot of measured sound pressure levels (total noise and background noise);
5. table and plot of sound power spectrum in 1/3-octaves;
6. results of tonality analysis;

Annex G: Annual MWT Certification Report Form

This template is for informational purposes only. A custom form will be sent to the Applicant when Certification is granted.

SWCC Annual Certification Report Form

According to Section M.2.a of the SWCC Medium Wind Turbine Certification Policy, the Certification Holder shall prepare and submit this Annual Certification Report to SWCC 45 days before the anniversary of SWCC certification each year. To allow time for processing the renewal, please submit this report forty-five (45) days prior to the certification anniversary date.



Section M.2.c of the SWCC Medium Wind Turbine Certification Policy states that in the event the information reported in the Annual Certification Report requires additional SWCC work or review, the Certification Holder will be charged separately for such SWCC costs and expenses, consistent with the applicable SWCC fee schedule.

Date (mm/dd/yyyy): _____

Certification Holder: _____

Turbine Model: _____

SWCC Certification Number (SWCC-XX-XX-X): _____

Issue date(s) of Certification (mm/dd/yyyy): _____

Renewal date (mm/dd/yyyy): _____

Report all abnormal operating experiences, equipment failures, and other problems related to the certified MWT:

--

Summarize all complaints made known to supplier relating to the turbine's performance and compliance with the IEC Standard(s).

--

Identify all modifications to the certified MWT, including all hardware and software changes:

--

Annex H: MWT Significant Modification Report Form

This template is for informational purposes only. A custom form will be sent to the Applicant when Certification is granted.

SWCC Significant Modification Report Form

According to Section M.2.b of the SWCC Medium Wind Turbine Certification Policy, in the event that a certified turbine is, or will be, modified in any significant respect, the Certification Holder must report such modification to SWCC in a timely and accurate manner, no more than thirty (30) days after such MWT design changes have occurred. Please refer to Section M.2.b of the Policy for guidance on defining a Significant Modification.



in

Date (mm/dd/yyyy): _____

Certification Holder: _____

Turbine Model: _____

SWCC Certification Number (SWCC-XX-XX-X) _____

Issue date of SWCC Certification (mm/dd/yyyy): _____

Please report all planned Significant Modifications to the design of the certified wind turbine. Also include a rationale explaining how the changes may or may not affect the validity of the Certification.

Annex I: Policy and Procedures Concerning Independence and Impartiality of Testing Personnel

A. Introduction and Purpose

Testing laboratories and facilities (test facilities) operated by MWT Manufacturers seeking SWCC certification of its product(s) must ensure that key personnel involved in the testing of MWTs (testing personnel), and the reporting of MWT test data, are impartial and free from any undue commercial, financial, and other pressures that might influence their technical and independent judgment. To that end, all test facilities must establish policies and procedures which: identify possible or actual influences which may create a conflict or undue influence on testing personnel; and, identify rules to prevent or limit such influences on those involved in the testing of MWTs and related activities.

The purpose of such policies and procedures is to ensure confidence in the test facility's competence, impartiality, judgment, and operational integrity.

B. Internal and External Influence

A test facility must ensure that all owners, managers, and employees, contractors, and other third parties do not influence, or otherwise affect the validity or impartiality of, the activities and judgment of testing personnel. In order to accomplish this, the test facility must implement and satisfy the following procedures and requirements:

1. Test facility personnel involved in the design, development, and manufacture of the turbine are clearly identified in the related project report and documentation;

AND

2. When conducting tests and collecting data concerning a turbine, the test facility will only assign and use testing personnel who were not, and will not be, involved in the design, development, or manufacture of that turbine, and who are otherwise competent and qualified to perform such testing and data collection activities (approved testing personnel);

OR

In the MWT Manufacturer is unable to identify appropriate testing personnel under this Policy, and intends to use other personnel or contractors who do not qualify for approved testing personnel status, the test facility must:

- a. Ensure that appropriate training concerning potential conflicts and undue influence is provided to such test facility personnel or contractors; and,

- b. Engage a qualified, independent third party evaluator to review and approve all test results and underlying data, and to confirm, modify, or reject such results and data.

C. Training of Testing Personnel/Activity Prohibitions

The test facility is responsible for ensuring that its testing personnel understand the importance of maintaining the competence, integrity, judgment, and operations integrity of the facility and related testing activities. In this regard, the test facility must take appropriate steps to ensure that its testing personnel not act in any manner, or engage in any activities, that may influence his/her independent judgment, or otherwise cast doubt upon its testing activities or the validity of test results or reports, including personnel training and the required disclosure of any involvement in any activities, organizations, or businesses that may relate to the interests or activities of the test facility.

Annex J: MWT Complaint Matter Reporting Form

This template is for informational purposes only. A custom form will be sent to the Applicant when Certification is granted.

Complaint Matter Reporting Form



According to Section L of the SWCC Medium Wind Turbine Certification Policy, each Certification Holder is required to report to SWCC all complaints and disputes (complaint matters) pertaining to the certified MWT. Please refer to Section L of the Policy for more information on Complaint Matters Reporting.

Date (mm/dd/yyyy): _____

Certification Holder: _____

Turbine Model: _____

SWCC Certification Number (SWCC-XX-XX-X): _____

Issue date of SWCC Certification (mm/dd/yyyy): _____

Please use this form to report all Complain Matters to SWCC:

Complaining Party	Nature of Complaint	Response to Complaint