Deutsche Akkreditierungsstelle

# Annex to the Partial Accreditation Certificate D-PL-14153-02-03 according to DIN EN ISO/IEC 17025:2018

**Valid from:** **19.12.2022**

Date of issue: 19.12.2022

This annex is a part of the accreditation certificate D-PL-14153-02-00.

Holder of partial accreditation certificate:

**TÜV SÜD Industrie Service GmbH**
**Westendstr. 199, 80686 München**

The testing laboratory meets the minimal requirements of DIN EN ISO/IEC 17025:2018 and, if applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities listed below.
The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

with the location*:*

**Niederlassung Regensburg**
**Ludwig-Eckert-Str. 8, 93049 Regensburg**

*This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at https://www.dakks.de.*


**This document is a translation. The definitive version is the original German annex to the accreditation certificate.**

Tests in the fields:

**Measurements and determinations of the wind potential as well as determination of the location quality and the energy yield of wind energy plants; carrying out wind measurements using LiDAR; determination of turbulence; calculation of the shadow flicker immission and noise immission**

The procedures are identified by the following symbols of the sites where they are performed:

R - Regensburg

**Within the accreditation areas marked with *, the testing laboratory is permitted to use the standardized or equivalent test methods listed here with different versions without the prior information and approval of the DAkkS.**

**The testing laboratory has a current list of all testing procedures in the flexible accreditation area.**

**Content**

**1 Measurements and investigations of the wind potential and determination of the energy yield**

1.1 Performing wind measurements using LiDAR

1.2 Site-specific assessment of wind potential and energy yield
Assessment of the site quality

1.3 Evaluation of ambient, characteristic and effective turbulence intensity and calculation of extreme winds

1.4 Shadow flicker prognoses and acoustic noise immission prognoses

## 1. Measurements and investigations of the wind potential and determination of the energy yield

### 1.1 Performing wind measurements using LiDAR

| | | |
|---|---|---|
| AAWSC-001<br>2019-10 | Measurement of wind potential with meteorological measuring devices | R |
| IEC 61400-12-1*<br>2017-03<br>Cor2:2020<br>Cor3:2021 | Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines | R |
| FGW TR 6*<br>2020-09 | Assessment of wind potential and energy yield | R |

### 1.2 Site-specific assessment of wind potential and energy yield; Assessment of the site quality

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|---|---|---|
| AAWSC-002<br>2022:05 | Measurement of wind potential with meteorological measuring devices | R |
| FGW TR5*<br>2020-03 | Assessment and application of des reference yields | R |
| FGW TR6*<br>2020-09 | Assessment of wind potential and energy yield | R |
| FGW TR 10*<br>2021-03 | Determination of site quality following commissioning | R |
| IEC 61400-12-1*<br>2017-03<br>Cor2:2020<br>Cor3:2021 | Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines, 2nd edition<br><br>in conjunction with:<br>*Gesetz zur Neuregelung des Rechts der Erneuerbaren Energien im Stromrecht (EEG 2017)* | R |

### 1.3 Evaluation of ambient, characteristic and effective turbulence intensity and calculation of extreme winds

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|---|---|---|
| AAWSC-004<br>2019-09 | Assessment of the characteristic, representative and induced turbulence of the suitability for the location and the extreme winds | R |
| FGW TR6*<br>2020-09 | Assessment of wind potential and energy yield | R |
| DIBt-Richtlinie<br>2012-10<br>Cor: 2015-03 | Guideline Wind turbines: Actions and stability checks for tower and foundations | R |
| DIN EN IEC 61400-1*<br>2019-12 | Wind energy generation system – Part 1: Design requirements | R |
| IEC 61400-1*<br>2019-02 | Wind energy generation system – Part 1: Design requirements | R |

### 1.4 Shadow flicker prognoses and acoustic noise immission prognoses

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|---|---|---|
| AAWSC-006<br>2019-10 | Shadow flicker prognosis | R |
| AAWSC-007<br>2019-10 | Calculation of Noise Immission | R |
| LAI<br>2020-01 | Information on the determination and assessment of the optical immissions of wind turbines<br>(WEA - Schattenwurf - Hints)<br>Hinweise zur Ermittlung und Beurteilung der optischen Immissionen von Windenergieanlagen<br>(WEA – Schattenwurfhinweise) | R |
| LAI<br>2016-06 | Information on sound immission protection in wind turbines (WKA), with changes<br>Hinweise zum Schallimmissionsschutz bei Windkraftanlagen (WKA), mit Änderungen | R |
| DIN ISO 9613-2*<br>1999-10 | Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation | R |

**Abbreviations used:**

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|---|---|
| AAWSC | QM-Arbeitsanweisung von TÜV SÜD Industrie Service GmbH, Abteilung Wind Cert Services |
| DIBt | Deutsches Institut für Bautechnik |
| DIN | Deutsches Institut für Normung e.V. |
| EN | Europäische Norm |
| FGW TR | FGE e.V. – Fördergesellschaft Windenergie und anere dezentrale Energien, Technische Richtlinien |
| IEC | International Electrotechnical Cimission |
| ISO | International Organization for Standardization |
| LAI | Länderarbeitsgemeinschaft für Immisionsschutz |