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## FGW Technical committee for Wind Potential (FA WP) – resolution of 24<sup>th</sup> of September 2018:

The Technical committee for Wind Potential votes for an alteration of section C.2.3 of appendix C on page 45 of revision 10 of the TG 6. The alteration is needed to clarify the purpose of section C.2.3.

In the following section C.2.3 is presented with and without visible track changes.

On behalf of FGW TC

FA WP – resolution for

Technical guideline

TG 6 Rev. 10

Bente Klose

## C.2.3 WIND TURBINES WITHOUT A REFERENCE YIELD COMPLIANT WITH THE EEG 2017

In accordance with the EEG 2017, Annex 2, a power curve shall be used for calculation of the reference yield of a wind turbine, which was measured using generally recognised rules of technology. In order to make it possible to determine the site quality and the site specific compensation on the basis of a correction factor, also for wind turbines for which no reference yield data are available, an equivalent power curve and the corresponding equivalent reference yield are determined for this procedure as described below. If there is no reference yield compliant with the EEG 2017 published, the alternative procedure as described below shall be applied:

- 1.—Use of the power curve provided by the manufacturer and previously used for the calculations made in Section 2. If this power curve displays wind speed and wind turbine power values with a bin size of greater than 0.5 m/s, linear interpolation must be performed such that a bin size of 0.5 m/s results.
- 2.1. Determination of the equivalent ("Ersatz") reference yield ( $R_{Ersatz}$ ) in accordance with the EEG 2017, Annex 2, based on the <u>a measured</u> power curve according to Point 1.
- <u>3.2.</u> Determination of the equivalent energy yield ( $E_{StO,Ersatz}$ ) in accordance with Section 2 based on the <u>same</u> power curve according to Point 1. No additional reductions for this power curve may then be adopted.
- <u>3.</u> Determination of the site quality in accordance with Annex C.2.2 using  $E_{StO, Ersatz}$  and  $R_{Ersatz}$  instead of  $E_{StO}$  and R.

In order to make it possible to determine the site quality and enable the determination of the sitespecific compensation on the basis of a correction factor, also for wind turbines for which no corresponding measured power curve is available, an equivalent power curve for this procedure shall be determined as follows:

<u>Use of theA power curve at reference air density according to TG 2<sup>6</sup> provided by the manufacturer has to be used. and previously used for the calculations made in Section 2. If this power curve displays wind speed and wind turbine power values with a bin size of greater than 0.5 m/s, linear interpolation must be performed such that a bin size of 0.5 m/s results. Steps one to three as mentioned above need to be applied with this equivalent ("Ersatz") power curve.</u>

The result of the determination of site quality performed on the basis of equivalent data should be regarded as final and requires no recalculation. However, this only applies in the context of determining site quality for commissioning the wind turbine and the associated determination of the correction factor.

<sup>&</sup>lt;sup>6</sup> FGW E.V. - FÖRDERGESELLSCHAFT WINDENERGIE UND ANDERE DEZENTRALE ENERGIEN, Technical Guidelines for Wind Turbines, Part 2 "Determination of Power Curves and Standardised Energy Yields

## C.2.3 WIND TURBINES WITHOUT A REFERENCE YIELD COMPLIANT WITH THE EEG 2017

In accordance with the EEG 2017, Annex 2, a power curve shall be used for calculation of the reference yield of a wind turbine, which was measured using generally recognised rules of technology. If there is no reference yield compliant with the EEG 2017 published, the alternative procedure as described below shall be applied:

- 1. Determination of the equivalent ("Ersatz") reference yield ( $R_{Ersatz}$ ) in accordance with the EEG 2017, Annex 2, based on a measured power curve.
- 2. Determination of the equivalent energy yield ( $E_{StO,Ersatz}$ ) in accordance with Section 2 based on the same power curve. No additional reductions for this power curve may then be adopted.
- 3. Determination of the site quality in accordance with Annex C.2.2 using  $E_{StO, Ersatz}$  and  $R_{Ersatz}$  instead of  $E_{StO}$  and R.

In order to make it possible to determine the site quality and enable the determination of the site-specific compensation on the basis of a correction factor, also for wind turbines for which no corresponding measured power curve is available, an equivalent power curve for this procedure shall be determined as follows:

• A power curve at reference air density according to TG 2<sup>6</sup> provided by the manufacturer has to be used. If this power curve displays wind speed and wind turbine power values with a bin size of greater than 0.5 m/s, linear interpolation must be performed such that a bin size of 0.5 m/s results. Steps one to three as mentioned above need to be applied with this equivalent ("Ersatz") power curve.

The result of the determination of site quality performed on the basis of equivalent data should be regarded as final and requires no recalculation. However, this only applies in the context of determining site quality for commissioning the wind turbine and the associated determination of the correction factor.

<sup>&</sup>lt;sup>6</sup> FGW E.V. - FÖRDERGESELLSCHAFT WINDENERGIE UND ANDERE DEZENTRALE ENERGIEN, Technical Guidelines for Wind Turbines, Part 2 "Determination of Power Curves and Standardised Energy Yields