INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

_____

IEC 61400-1:2019
Amendment 1 to Edition 4.0 2025-12

Wind energy generation systems -
Part 1: Design requirements

IEC 61400-1:2019
Amendement 1 à l'édition 4.0 2025-12

Systèmes de génération d'énergie éolienne -
Partie 1: Exigences de conception

CORRIGENDUM 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

Sample Document

11.9.2 Assessment of the fatigue load suitability by reference to wind data

Add, after last paragraph, the following new text:

get full document from standards.iteh.ai

Replace, in item e), Equation (37) with the following:

$$\rho_{\text{design}}\, V^2_{\text{ave,design}}\, \cos^2 \varphi_{\text{design}} \geq \rho_{\text{site}} \times V^2_{\text{ave,site}}\, \cos^2 \varphi_{\text{site}} \tag{37}$$

11.9.3 Assessment of the ultimate load suitability by reference to wind data

Add, after last paragraph, the following new text:

Replace item b) with the following new text:

b) The site estimate of the extreme 10-min average wind speed V_{50} at hub height with a return period of 50 years shall be less than or equal to V_{ref} adjusted to the site-specific air density and site flow inclination. If the only input basis for the site assessment is an extreme 3 s average wind speed V_{e50} at hub height, the 10-minute average V_{50} may be determined using the following equation:

$$V_{50} = \frac{V_{\text{e50}}}{k_T} \tag{39}$$

where k_T = 1,28, derived from k_T = 1 + $g_v I_v$ (according to ISO 4354), g_v = 2,56 and I_v = $\sigma_1 / V_{\text{hub}}$ = 0,11. See Equation (17).

IEC 61400-1:2019-02/AMD1:2025-12/COR1:2026-10(en-fr)

IEC 61400-1:2019/AMD1:2025/COR1:2026 • https://standards.iteh.ai/catalog/standards/iec/40bb7d17-ef19-48b6-9d16-5f78f3fcc893/iec-61400-1-2019-amd1-2025-cor1-2026