

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC 61400-1
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WIND ENERGY GENERATION SYSTEMS –

Part 1: Design requirements

INTERPRETATION SHEET 1

This interpretation sheet has been prepared by IEC technical committee 88: Wind energy generation systems.

The text of this interpretation sheet is based on the following documents:

DISH	Report on voting
88/1065/DISH	88/1078/RVDISH

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

[IEC 61400-1:2019/TSH1:2025](https://standards.iteh.ai/catalog/standards/iec/9acb4dec-12ce-48c1-ac39-16b20a1753c4/iec-61400-1-2019-ish1-2025)

<https://standards.iteh.ai/catalog/standards/iec/9acb4dec-12ce-48c1-ac39-16b20a1753c4/iec-61400-1-2019-ish1-2025>

Question 1:

Subclause 6.4.2 mentions normal other environmental conditions that shall be taken into account and, specifically speaking, an ambient temperature range of -10 °C to $+40\text{ °C}$. Does this mean that the wind turbines shall be designed to operate at rated power up to 40 °C on the maximum limit, or does it mean that the wind turbine can be designed to operate at any maximum temperature limit below 40 °C , let's assume 35 °C or 32 °C , etc. ?

Answer 1:

The standard requires that turbines designed to one of the design classes stated in Table 1 in Subclause 6.2 be capable of operating and generating at temperatures up to $+40\text{ °C}$. There is no requirement that the turbine shall generate maximum rated power at $+40\text{ °C}$.