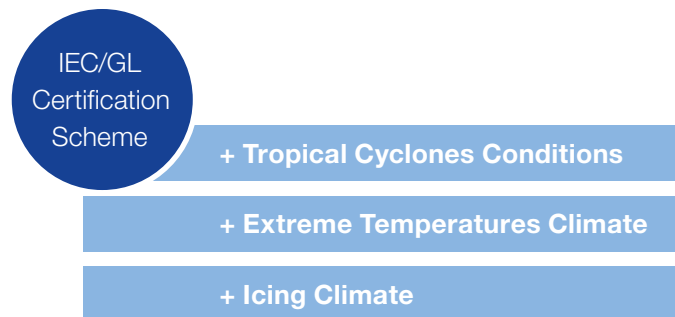


Tropical Cyclones, Low Temperature and Icing Climate

GL – Technical Note – Certification of Wind turbines for Tropical Cyclone Condition, DNVGL-RP-0363, DNVGL-RP-0175

TÜV NORD is accredited for the GL Technical Note – Certification of Wind Turbines for Tropical Cyclone Conditions, the DNVGL Recommended Practice 0363 for Extreme Temperature Climate as well as the DNVGL Recommended Practice 0175 for Icing Climate.

All three standards provide additional principles and technical requirements for wind turbines in extreme climate conditions. These standards are intended for application in connection with certification schemes for type certification, component certification and project certification.



Tropical cyclones are commonly known under various names like hurricanes, cyclones and typhoons, which all stand for the same meteorological phenomenon: a rapid rotating storm system characterized by a low-pressure center, a atmospheric circulation, strong winds, and a spiral arrangement of thunderstorms that produce heavy rain.

Wind turbines are subject to environmental and electrical conditions which may affect their loading, durability and operation. Both IEC and GL certification schemes define these for normal and extreme conditions, but without considering or giving information about tropical cyclone conditions. For turbines in tropical cyclone areas it might therefore be reasonable and required to consider this technical note during design and certification.



The topics extreme temperatures and icing climate, formerly covered in one technical note, were recently divided into the DNVGL Recommended Practices (RP) 0363 and 0175.

The RP 0363 covers conditions of extreme temperatures outside of the normal temperature range, which includes high and low temperature conditions, whereas the RP 0175 considers icing condition, which may also occur in the normal temperature range.



For the topics tropical cyclones conditions, extreme temperature climate and icing climate, TÜV NORD is your accredited partner.

Please contact us, if you need more information about the above mentioned standards.