

Note on Engineering Details

No: DWM-TBu-extern-001

Title: **Extended applicability of Chapter 8 “Electrical Installations” to Offshore Substations**

Ref.: GLs “Guideline for the Certification of Offshore Wind Turbines”, Edition 2005 sections 8.1.1 and 8.10

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In the past there was some confusion related to substations at sea with regard to the applicability of some requirements given in chapter 8 of above mentioned guideline.

According to section 8.1.1 the provisions of chapters 8.1 to 8.9 are applicable to wind turbines only. For all other offshore grid devices like high-voltage transformers, switchgears and sea-cables within a wind farm and not installed on the same foundation as the wind turbine itself section 8.10 shall be applied. Unfortunately some items are not properly addressed in section 8.10.

Due to general comparability of electrical components and equipment the requirements of sections 8.1 to 8.9 shall be applied for installations on offshore substations accordingly in addition to section 8.10. In this regard the “foundation” according to section 8.1.1 can be either the wind turbine foundation or the substation foundation.

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