

## Note on Engineering Details

- No:** DWL-KFre-extern-001 Rev.1
- Title:** **Modifications in „Richtlinie für Windenergieanlagen, Einwirkungen und Standsicherheitsnachweise für Turm und Gründung (Guideline for wind turbines, loads and strength analysis for tower and foundation)“, Edition March 2004, Deutsches Institut für Bautechnik – DIBt – (German Institute for Civil Engineering – DIBt –), Berlin**
- Ref.:** „Richtlinie für Windenergieanlagen, Einwirkungen und Standsicherheitsnachweise für Turm und Gründung (Guideline for wind turbines, loads and strength analysis for tower and foundation)“, Edition March 2004, Deutsches Institut für Bautechnik – DIBt – (German Institute for Civil Engineering – DIBt –), Berlin general, section 7 table 1, Annex B
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- Key Words:** DIBt 2004, DIN EN 61400-1, DIN 1055-4, load calculations, DLC1.0

The German approval institute "Deutsches Institut für Bautechnik" (DIBt) has published decisions on two discussed items within the DIBt guideline "Richtlinie für Windenergieanlagen" edition March 2004. An accordant document can be found on the DIBt homepage ([www.dibt.de](http://www.dibt.de)).

1. The "Richtlinie für Windenergieanlagen" edition March 2004 refers to the DIN EN 61400-1:2004, not to DIN EN 61400-1:2006. This means that DIN EN 61400-1:2006 must not be applied for type approvals according to DIBt "Richtlinie für Windenergieanlagen" edition March 2004.
2. In section 7, table 1 "Tabelle 1: Einwirkungskombinationen", column "Sonstige Bedingungen" the text in line DLC 1.0 "**Beanspruchungen mit einer Überschreitungshäufigkeit von mehr als  $10^4$** " is to be replaced by "**Beanspruchungen mit einer Überschreitungswahrscheinlichkeit von  $pf=10^{-2}$  (1750h in 20 Jahren)**".

In section 7, table 1 "Table 1: Design Load Cases", column "other conditions" the text in line DLC 1.0 "**loads with a frequency of exceedance of more than  $10^4$** " is to be replaced by "**loads with a probability of exceedance of  $pf=10^{-2}$  (1750h in 20 years).**"  
(English translation)

A third item discussed within the DIBt guideline "Richtlinie für Windenergieanlagen" edition March 2004 has been decided and published in the "M-Liste der Techn. Baubestimmungen" Anlage 2.7/10, item 5, showing the following result:

3. Annex B remains valid. The first sentence of Annex B within the DIBt Guideline must be neglected. The already issued succeeding edition of DIN 1055-4, edition August 1986 must not be applied.

However, in order to cover possible changes in the validity of Annex B in the future, it is recommended by Germanischer Lloyd to include the requirements of the DIN 1055-4 for dimensioning of wind turbines for German type approvals.

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