

Restricted
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Default Power Reduction Mode Allocation List EEG (TR 10) VestasOnline[®] Business VestasOnline[®] Compact

History of this Document

| Version no. | Date | VOB version | Description of changes | Technical approver |
|-------------|------------|-------------|---|--------------------|
| 0 | 2019-08-15 | | Initial version | KR |
| 1 | 2020-10-26 | | Updated after feedback from certifying body | KR |
| 2 | 2022-06-27 | | Added new turbine type, revised list | KR |

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1 Introduction

This document introduces the default EEG Power Reduction Mode Allocation list according to EEG respectively Technische Richtlinie für Windenergieanlagen Teil 10 Bestimmung der Standortgüte nach Inbetriebnahme, Revision 2, Stand 31.03.2021 (TR 10).

NOTE This EEG Event Allocation list is only valid for the following turbine variants:

- V112 3.3/3.45 MW, 50/60 Hz
- V117 3.3/3.45 MW, 50/60 Hz
- V126 3.3/3.45/3.6 MW, 50/60 Hz
- V136 /3.45/3.6 MW, 50/60 Hz
- V136 4.0/4.2 MW, 50/60 Hz
- V150 4.0/4.2 MW, 50/60 Hz
- V150 5.6/6.0 MW, 50/60 Hz
- V162 5.6/6.0/6.2 MW, 50/60 Hz

This EEG Event Allocation list is valid for software releases and sub releases : 2021.XX.XX (XX denotes the number of the sub-release and the built version)

Explanation of columns in default power reduction mode allocation list

| | |
|-----------------|---|
| | |
| No | Number of the Power Reduction Mode |
| Int./Ext. | Internally (WTG) or Externally (Remote) initiated derate mode |
| Description | Description of the event |
| Report Category | Default allocation of Power Reduction Modes in VestasOnline® Business and VestasOnline® Compact |



2 Default Power Reduction Mode Allocation List

| No | Int./Ext | Description | EEG category |
|----|----------|---------------------------------------|---|
| 0 | internal | No power reduction | 0 - Intended Operation |
| 1 | internal | Gear oil cold reduction | 0 - Intended Operation |
| 2 | internal | Gear oil hot reduction | 2 - Restrictions or unavailable for other reasons |
| 3 | internal | Generator hot reduction | 2 - Restrictions or unavailable for other reasons |
| 4 | internal | Transformer hot reduction | 2 - Restrictions or unavailable for other reasons |
| 5 | internal | Low noise mode 1 reduction | 1 - Restrictions for licensing reasons |
| 6 | internal | Low noise mode 2 reduction | 1 - Restrictions for licensing reasons |
| 7 | internal | Low noise mode 3 reduction | 1 - Restrictions for licensing reasons |
| 8 | internal | Low noise mode 4 reduction | 1 - Restrictions for licensing reasons |
| 9 | internal | Low noise mode 5 reduction | 1 - Restrictions for licensing reasons |
| 10 | internal | Low noise mode 6 reduction | 1 - Restrictions for licensing reasons |
| 11 | internal | Low noise mode 7 reduction | 1 - Restrictions for licensing reasons |
| 12 | internal | Low noise mode 8 reduction | 1 - Restrictions for licensing reasons |
| 13 | internal | Low noise mode 9 reduction | 1 - Restrictions for licensing reasons |
| 14 | internal | Low noise mode 10 reduction | 1 - Restrictions for licensing reasons |
| 15 | internal | Ext. 4-20mA power mode | 1 - Restrictions for licensing reasons |
| 16 | internal | Frequency power mode | 1 - Restrictions for licensing reasons |
| 17 | internal | Entry ramp up power mode | 1 - Restrictions for licensing reasons |
| 18 | internal | WMS power mode (remote set point) | <i>Will be reflected in External derate state</i> |
| 19 | internal | Ambient temperature power mode | 1 - Restrictions for licensing reasons |
| 20 | internal | Increased power mode | 0 - Intended Operation |
| 21 | internal | Tower vibration | 2 - Restrictions or unavailable for other reasons |
| 22 | internal | Edgewise vibration | 2 - Restrictions or unavailable for other reasons |
| 23 | internal | Generator hot derate mode | 2 - Restrictions or unavailable for other reasons |
| 24 | internal | Hot VRCC | 2 - Restrictions or unavailable for other reasons |
| 25 | internal | High Voltage | 0 - Intended Operation |
| 26 | internal | Low Voltage | 0 - Intended Operation |
| 27 | internal | Wind | 0 - Intended Operation |
| 28 | internal | User | 2 - Restrictions or unavailable for other reasons |
| 29 | internal | Hot bearing | 2 - Restrictions or unavailable for other reasons |
| 30 | internal | Hot Top Controller | 2 - Restrictions or unavailable for other reasons |
| 31 | internal | Hot IGBT | 2 - Restrictions or unavailable for other reasons |
| 32 | internal | Gear heating | 0 - Intended Operation |
| 33 | internal | Sector Wind Direction System | 1 - Restrictions for licensing reasons |
| 34 | internal | Power Curtailed | 2 - Restrictions or unavailable for other reasons |
| 35 | internal | Cold generator | 0 - Intended Operation |
| 36 | internal | Individual pitch control out of order | 2 - Restrictions or unavailable for other reasons |
| 37 | internal | Load and Power Modes | 1 - Restrictions for licensing reasons |
| 38 | internal | Reactive Power Control (Prio. Q > P) | 1 - Restrictions for licensing reasons |
| 39 | internal | Gearbox Inline Filter | 2 - Restrictions or unavailable for other reasons |
| 40 | internal | Cold Gearbox | 0 - Intended Operation |
| 41 | internal | Hot Hydraulic System | 2 - Restrictions or unavailable for other reasons |
| 42 | internal | Yawing System Derates Speed | 0 - Intended Operation |



| | | | |
|----|----------|---|---|
| 43 | internal | Fast Run Back | 1 - Restrictions for licensing reasons |
| 44 | internal | Load Dep Operation High Loading | 0 - Intended Operation |
| 45 | internal | Load Dep Operation Safe Mode | 2 - Restrictions or unavailable for other reasons |
| 46 | internal | PTR Lubrication Pump Fault | 2 - Restrictions or unavailable for other reasons |
| 47 | internal | PTR Lubrication Valve Fault | 2 - Restrictions or unavailable for other reasons |
| 48 | internal | PTR Lubrication System Validation | 0 - Intended Operation |
| 49 | internal | Load Power Modes SafeMode | 2 - Restrictions or unavailable for other reasons |
| 50 | internal | High Wind Operation | 0 - Intended Operation |
| 51 | internal | Converter Reduced Number Of Power Modules | 2 - Restrictions or unavailable for other reasons |
| 52 | internal | High Converter Cooling Water Temp | 2 - Restrictions or unavailable for other reasons |
| 53 | internal | Cold Generator Slip Ring | 0 - Intended Operation |
| 54 | internal | Warm Generator Slip Ring | 2 - Restrictions or unavailable for other reasons |
| 55 | internal | Locked Speed Operations | 0 - Intended Operation |
| 56 | internal | High Wind Derate | 0 - Intended Operation |
| 57 | Internal | Converter Torque Limited | 2 - Restrictions or unavailable for other reasons |
| 58 | Internal | Blade Edgewise Sensor Status Invalid | 2 - Restrictions or unavailable for other reasons |
| 1 | external | Utility | 3 - Restrictions due to feed-in management |
| 2 | external | Owner | 2 - Restrictions or unavailable for other reasons |
| 3 | external | Manufacturer | 2 - Restrictions or unavailable for other reasons |
| 4 | external | Power management | 3 - Restrictions due to feed-in management |
| 5 | external | Curtailement | 4 - Restrictions due to optimized marketing |
| 6 | external | Environmental | 1 - Restrictions for licensing reasons |
| 7 | external | Remote pause problem | 2 - Restrictions or unavailable for other reasons |
| 8 | external | No Connection Plant Control | 2 - Restrictions or unavailable for other reasons |
| 9 | external | Frequency Response Utility | 1 - Restrictions for licensing reasons |
| 10 | external | Icing | 1 - Restrictions for licensing reasons |
| 11 | external | Turbine Internal | <i>Will be reflected in Internal derate state</i> |
| 12 | external | Remote Pause by Utility | 3 - Restrictions due to feed-in management |
| 13 | external | Remote Pause by Owner | 2 - Restrictions or unavailable for other reasons |
| 14 | external | Remote Pause by Manufacturer | 2 - Restrictions or unavailable for other reasons |
| 15 | external | Remote Pause by Environmental | 1 - Restrictions for licensing reasons |