Guaranteed Values of the Sound Power Level for the E-53 with reduced rated power					
	$P_{N,red}$ = 750 kW n_N = rpm	$P_{N,red}$ = 700 kW n_N = rpm	$P_{N,red}$ = 600 kW n_N = rpm	$P_{N,red}$ = 500 kW n_N = rpm	$P_{N,red}$ = 400 kW n_N = rpm
SPL at 95% rated power	**102 dB(A)**	**101.5 dB(A)**	**101.0 dB(A)**	**99.5 dB(A)**	**99,0 dB(A)**
Measured value at 95% $P_{N,red}$					

1. The respective SPL is given for 95% $P_{N,red}$ and is therefore valid for all hub heights.

2. A tonality value K_{TN} of 0-1 dB is guaranteed over the whole operational range (valid in the near vicinity of the turbine according to IEC).

3. An impulsivity value K_{IN} of 0 dB is guaranteed over the whole operational range (valid in the near vicinity of the turbine according to IEC).

4. If official measurement at reduced rated power have been carried out, the measurement reports are available (mostly in German language) and are valid in connection with this document. The measurements are being carried out according to the recommended national and international standards and norms (mentioned in the respective reports).

5. An interpolation is possible for values in-between the ones mentioned in the table above.

6. The values of the sound power level are valid for the respective operational parameters, which are defined by the reduced rated power $P_{N,red}$ as well as by the rated rotational speed n_N. The pre-set values of rated power and rated rotational speed are documented within the ENERCON Scada system and thus can be verified for each desired period of time.

7. The accompanying power curves for the respective operational parameters can be found on page 2 of this document. They are identical to the standard power curve at low wind speeds, but of course reflect the reduced rated power in the upper wind speed range.

8. In order to account for the uncertainties of measurement and sound prediction calculations, to increase the acceptance at the authorities and to avoid eventual verification measurements ENERCON recommends a safety factor of 1 dB(A) on the guaranteed values when carrying out sound propagation calculations. In countries where safety factors are already mandatory due to local regulations, the ENERCON recommendation is not applicable.

   Should this recommendation be neglected for any reasons, it is hereby explicitly referred to 9.

9. Due to the measurement uncertainties of sound measurements the verification of the guaranteed values is successful, if the measurement result of a measurement that has been carried out according to the accepted standards is in the range of +/- 1dB(A) of the guaranteed values [guarantee fulfilled when measurement result = guaranteed value +/- 1dB(A)].

Power curves for the operation with reduced rated power:

v [m/s]	$P_{N,red}$ = 750 kW	$P_{N,red}$ = 700 kW	$P_{N,red}$ = 600 kW	$P_{N,red}$ = 500 kW	$P_{N,red}$ = 400 kW
1	0	0	0	0	0
2	2	2	2	2	2
3	14	14	14	14	14
4	38	38	38	38	38
5	77	77	77	77	77
6	141	141	141	141	141
7	228	228	228	228	228
8	336	336	336	336	300
9	480	480	455	420	370
10	630	580	530	475	395
11	698	635	575	495	400
12	729	680	595	500	400
13	745	695	600	500	400
14	750	700	600	500	400
15	750	700	600	500	400
16	750	700	600	500	400
17	750	700	600	500	400
18	750	700	600	500	400
19	750	700	600	500	400
20	750	700	600	500	400
21	750	700	600	500	400
22	750	700	600	500	400
23	750	700	600	500	400
24	750	700	600	500	400
25	750	700	600	500	400