

Project:

20100624 wysoka_raport.

Description:

WARIANT IV

(rozplanowanie 19szt.)
turbina GE2.5xl 2,5MW;
D=100m; h=100m;

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Calculated:

2010-06-25 11:52/2.7.468

DECIBEL - Main Result

Calculation: WARIANT IV GE2.5xl

Noise calculation model:

ISO 9613-2 General

Wind speed:

8,0 m/s

Ground attenuation:

Alternative

Meteorological coefficient, C0:

0,0 dB

Type of demand in calculation:

1: WTG noise is compared to demand (DK, DE, SE, NL etc.)

Noise values in calculation:

All noise values are mean values (Lwa) (Normal)

Pure tones:

Pure and Impulse tone penalty are added to WTG source noise

Height above ground level, when no value in NSA object:

4,0 m Don't allow override of model height with height from NSA object

Deviation from "official" noise demands. Negative is more restrictive,
positive is less restrictive.:

0,0 dB(A)



Scale 1:50 000

New WTG

Noise sensitive area

WTGs

Poland UKLAD 65 3				WTG type		Noise data					
East	North	Z	Row data/Description	Valid	Manufact.	Type-generator	Power, rated [kW]	Rotor diameter [m]	Hub height [m]	Creator	Name
Poland UKLAD 65 3		[m]									
1	3 338 507	5 905 520	51,2 EW01	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
2	3 338 697	5 905 874	58,2 EW02	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
3	3 337 745	5 906 037	58,2 EW03	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
4	3 338 242	5 906 713	63,7 EW04	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
5	3 338 397	5 908 068	61,2 EW05	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
6	3 338 098	5 908 361	62,0 EW06	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
7	3 337 755	5 908 586	64,5 EW07	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
8	3 337 835	5 908 042	64,1 EW08	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
9	3 337 253	5 907 810	63,7 EW09	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
10	3 336 869	5 907 828	58,7 EW10	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
11	3 336 457	5 908 093	58,8 EW11	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
12	3 336 512	5 908 492	59,3 EW12	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
13	3 336 152	5 908 755	58,7 EW13	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
14	3 336 251	5 909 118	60,0 EW14	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
15	3 336 583	5 908 889	62,5 EW15	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
16	3 336 837	5 909 196	65,0 EW16	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
17	3 337 012	5 909 704	70,0 EW17	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
18	3 335 342	5 907 461	56,3 EW18	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006
19	3 335 116	5 907 731	57,5 EW19	Yes	GE WIND ENERGY	GE 2.5xl-2 500	2 500	100,0	100,0	EMD	Level 0 - Calculated - GE 2.5xl Lwa - 2006

Calculation Results

Sound Level

Noise sensitive area Poland UKLAD 65 3					Demands		Sound Level		Demands fulfilled ?			
No.	Name	East	North	Z	Imission height	Noise	Distance	From WTGs	Noise	Distance	All	
				[m]	[m]	[dB(A)]	[m]	[dB(A)]				
	A tr01	3 339 196	5 906 623	61,3		4,0	45,0	300	38,2	Yes	Yes	Yes
	B tr02	3 339 370	5 907 008	63,8		4,0	45,0	300	36,2	Yes	Yes	Yes
	C tr03	3 339 403	5 906 857	63,8		4,0	45,0	300	36,1	Yes	Yes	Yes
	D tr05	3 339 235	5 907 804	62,5		4,0	45,0	300	37,7	Yes	Yes	Yes
	E tr07	3 338 969	5 908 120	62,5		4,0	40,0	300	41,4	No	Yes	No
	F tr08	3 338 904	5 908 002	60,0		4,0	45,0	300	42,5	Yes	Yes	Yes
	G tr09	3 338 953	5 907 913	61,2		4,0	45,0	300	41,3	Yes	Yes	Yes
	H tr10	3 338 967	5 908 172	63,8		4,0	45,0	300	41,4	Yes	Yes	Yes
	I tr11	3 339 004	5 908 209	63,8		4,0	45,0	300	40,7	Yes	Yes	Yes
	J tr12	3 339 046	5 908 373	65,0		4,0	40,0	300	39,6	Yes	Yes	Yes
	K tr13	3 339 053	5 908 409	66,2		4,0	40,0	300	39,4	Yes	Yes	Yes
	L tr17	3 338 271	5 907 475	68,8		4,0	45,0	300	43,3	Yes	Yes	Yes
	M tr18	3 338 179	5 907 535	68,8		4,0	45,0	300	44,1	Yes	Yes	Yes
	N tr19	3 338 189	5 907 485	68,8		4,0	45,0	300	43,6	Yes	Yes	Yes
	O tr20	3 338 102	5 907 458	68,8		4,0	45,0	300	43,5	Yes	Yes	Yes
	P tr21	3 338 069	5 907 352	66,2		4,0	45,0	300	43,0	Yes	Yes	Yes
	Q tr22	3 338 067	5 907 434	66,2		4,0	45,0	300	43,4	Yes	Yes	Yes
	R tr23	3 338 006	5 907 402	67,0		4,0	45,0	300	43,3	Yes	Yes	Yes
	S tr24	3 337 950	5 907 372	65,0		4,0	45,0	300	43,2	Yes	Yes	Yes

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DECIBEL - Main Result**Calculation: WARIANT IV GE2.5xl**

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Noise sensitive area Poland UKLAD 65 3

Noise sensitive area					Boland UKLAD 65 3		Demands		Sound Level	Demands fulfilled ?		
No.	Name	East	North	Z	Imission height	Noise	Distance	From WTGs	Noise	Distance	All	
				[m]	[m]	[dB(A)]	[m]	[dB(A)]				
	T tr25	3 337 930	5 907 144	64,0		4,0	45,0	300	43,2	Yes	Yes	Yes
	U tr26	3 338 362	5 907 030	64,0		4,0	45,0	300	46,3	No	Yes	No
	V tr27	3 337 497	5 906 439	58,3		4,0	45,0	300	43,3	Yes	Yes	Yes
	W tr28	3 337 221	5 905 968	46,0		4,0	40,0	300	41,3	No	Yes	No
	X tr29	3 337 061	5 906 055	44,0		4,0	40,0	300	39,1	Yes	Yes	Yes
	Y tr30	3 336 983	5 906 032	44,0		4,0	40,0	300	38,2	Yes	Yes	Yes
	Z tr31	3 336 938	5 906 154	45,0		4,0	40,0	300	38,0	Yes	Yes	Yes
	AA tr32	3 336 349	5 907 048	47,0		4,0	40,0	300	39,7	Yes	Yes	Yes
	AB tr33	3 336 239	5 907 190	51,2		4,0	40,0	300	40,5	No	Yes	No
	AC tr34	3 335 563	5 906 739	47,5		4,0	40,0	300	38,5	Yes	Yes	Yes
	AD tr36	3 335 430	5 906 567	48,0		4,0	40,0	300	36,8	Yes	Yes	Yes
	AE tr37	3 335 371	5 906 519	48,7		4,0	40,0	300	36,4	Yes	Yes	Yes
	AF tr38	3 335 167	5 906 688	51,2		4,0	45,0	300	37,8	Yes	Yes	Yes
	AG tr39	3 334 328	5 907 317	50,0		4,0	45,0	300	36,7	Yes	Yes	Yes
	AH tr40	3 334 429	5 907 459	52,5		4,0	45,0	300	38,4	Yes	Yes	Yes
	AI tr41	3 334 455	5 907 520	54,0		4,0	45,0	300	39,0	Yes	Yes	Yes
	AJ tr42	3 334 647	5 907 968	55,0		4,0	45,0	300	41,6	Yes	Yes	Yes
	AK tr43	3 334 603	5 907 975	55,0		4,0	45,0	300	40,8	Yes	Yes	Yes
	AL tr44	3 334 655	5 908 009	55,0		4,0	45,0	300	41,4	Yes	Yes	Yes
	AM tr45	3 334 779	5 908 143	57,0		4,0	45,0	300	41,6	Yes	Yes	Yes
	AN tr46	3 335 730	5 908 440	58,0		4,0	45,0	300	44,2	Yes	Yes	Yes
	AO tr47	3 335 850	5 908 300	58,0		4,0	45,0	300	44,8	Yes	Yes	Yes
	AP tr48	3 336 049	5 907 975	58,5		4,0	45,0	300	45,9	No	Yes	No
	AQ tr49	3 336 045	5 907 870	55,0		4,0	45,0	300	45,0	No	Yes	No
	AR tr50	3 336 104	5 907 809	57,0		4,0	45,0	300	45,2	No	Yes	No
	AS tr51	3 336 077	5 907 660	55,0		4,0	45,0	300	43,6	Yes	Yes	Yes
	AT tr52	3 336 065	5 907 561	55,0		4,0	45,0	300	42,9	Yes	Yes	Yes
	AU tr53	3 336 434	5 907 443	55,0		4,0	45,0	300	43,5	Yes	Yes	Yes
	AV tr54	3 336 756	5 907 046	53,7		4,0	45,0	300	40,6	Yes	Yes	Yes
	AW tr55	3 336 594	5 906 867	50,0		4,0	40,0	300	38,9	Yes	Yes	Yes
	AX tr56	3 337 093	5 908 420	67,5		4,0	45,0	300	46,5	No	Yes	No
	AY tr57	3 337 349	5 907 359	62,5		4,0	45,0	300	44,8	Yes	Yes	Yes
	AZ tr58	3 337 456	5 907 184	62,5		4,0	45,0	300	42,4	Yes	Yes	Yes
	BA tr59	3 337 585	5 907 137	63,7		4,0	45,0	300	42,1	Yes	Yes	Yes
	BB tr60	3 338 198	5 907 614	66,0		4,0	45,0	300	45,1	No	Yes	No
	BC tr61	3 337 358	5 909 074	65,0		4,0	45,0	300	45,1	No	Yes	No
	BD tr62	3 338 348	5 906 067	58,5		4,0	45,0	300	46,5	No	Yes	No
	BE tr56a	3 337 118	5 908 419	67,5		4,0	45,0	300	46,4	No	Yes	No
	BF tr45a	3 334 807	5 908 164	57,0		4,0	45,0	300	41,7	Yes	Yes	Yes
	BG tr54a	3 336 751	5 906 988	53,7		4,0	45,0	300	40,1	Yes	Yes	Yes

Distances (m)

WTG																				
NSA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
A	1280	881	1565	958	1651	2056	2435	1966	2277	2621	3109	3271	3717	3860	3459	3491	3777	3944	4228	
B	1720	1319	1893	1166	1430	1849	2250	1846	2263	2632	3107	3217	3658	3761	3357	3340	3573	4053	4315	
C	1610	1210	1850	1170	1557	1974	2372	1954	2346	2710	3190	3313	3756	3868	3464	3458	3700	4106	4375	
D	2389	1995	2305	1469	878	1266	1674	1420	1982	2366	2793	2808	3226	3260	2865	2773	2924	3908	4119	
E	2599	2215	2411	1575	574	904	1300	1137	1744	2120	2512	2485	2888	2895	2507	2388	2508	3686	3873	
F	2475	2095	2277	1441	511	882	1289	1070	1662	2042	2449	2441	2853	2878	2484	2387	2542	3603	3798	
G	2427	2046	2232	1395	577	965	1374	1125	1703	2086	2502	2509	2925	2958	2563	2474	2638	3639	3841	
H	2686	2308	2459	1627	579	889	1281	1139	1752	2126	2511	2476	2875	2876	2490	2363	2483	3694	3876	
I	2731	2351	2510	1677	623	918	1304	1180	1795	2168	2549	2508	2903	2899	2514	2381	2489	3737	3917	
J	2888	2506	2675	1844	718	948	1309	1256	1880	2245	2605	2537	2919	2893	2517	2358	2430	3815	3983	
K	2935	2554	2709	1879	740	956	1310	1272	1897	2260	2615	2542	2922	2890	2516	2352	2416	3830	3995	
L	1936	1622	1503	733	602	903	1225	715	1072	1446	1916	2032	2475	2604	2202	2240	2560	2928	3165	
M	2023	1723	1539	806	576	830	1134	612	956	1331	1800	1915	2359	2490	2089	2134	2463	2824	3056	
N	1971	1670	1496	755	620	881	1184	660	987	1358	1831	1955	2400	2534	2133	2181	2512	2837	3074	
O	1927	1639	1420	706	678	903	1181	643	911	1278	1755	1891	2337	2483	2084	2149	2497	2748	2987	

To be continued on next page...

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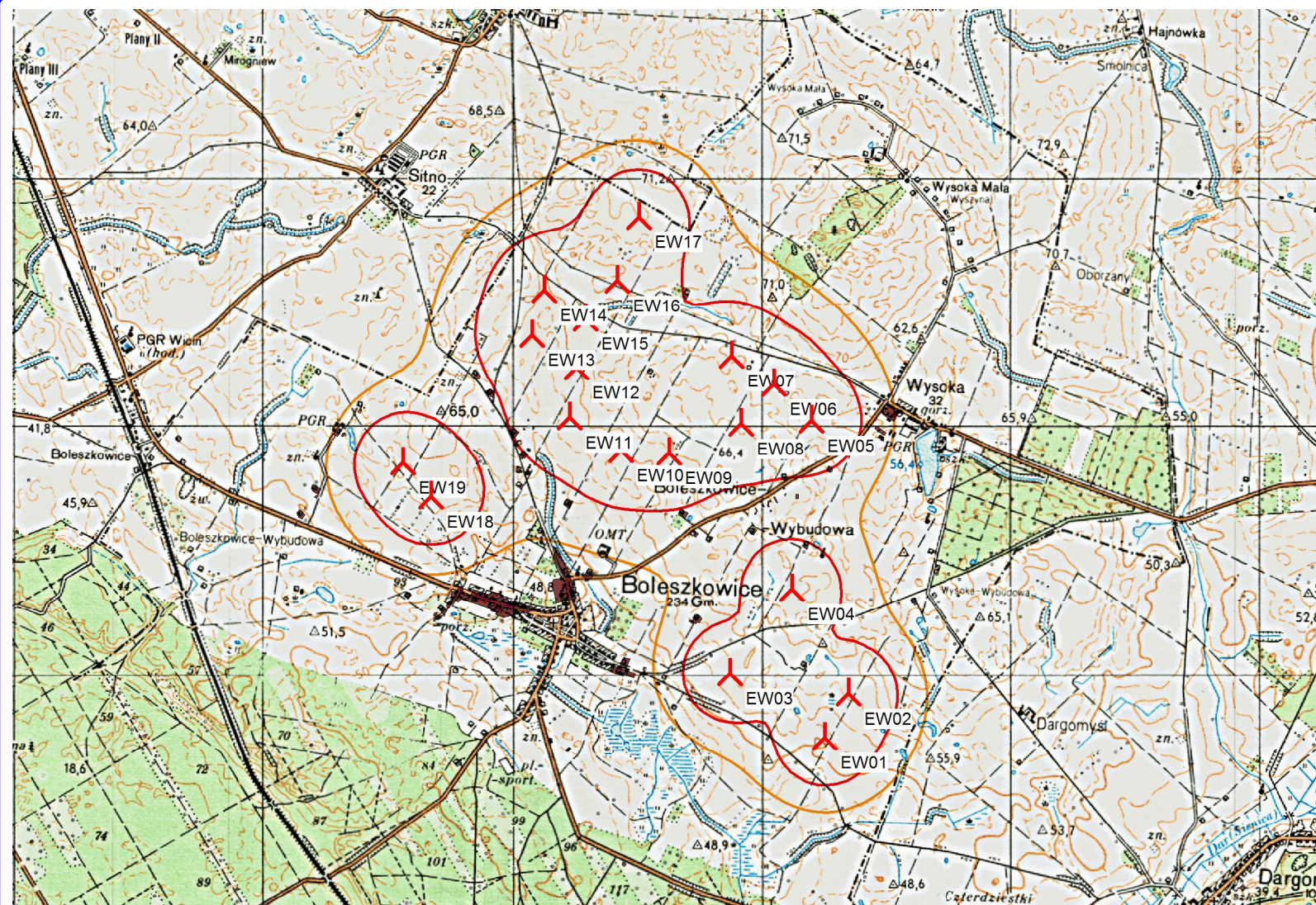
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DECIBEL - Main Result**Calculation: WARIANT IV GE2.5xl**

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WTG

NSA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
P	1870	1594	1340	650	787	1009	1273	728	931	1285	1769	1926	2372	2532	2136	2217	2578	2721	2970
Q	1910	1634	1373	690	715	927	1193	651	881	1244	1723	1869	2315	2468	2071	2146	2503	2699	2944
R	1918	1648	1362	700	772	964	1210	662	850	1206	1689	1844	2290	2451	2055	2140	2507	2654	2899
S	1882	1627	1293	673	827	1000	1230	680	819	1168	1653	1820	2265	2435	2041	2137	2514	2599	2850
T	1723	1483	1123	533	976	1162	1386	836	903	1225	1715	1910	2354	2540	2151	2265	2656	2575	2841
U	1517	1204	1170	340	1001	1312	1622	1092	1308	1647	2135	2309	2755	2919	2523	2599	2946	3009	3278
V	1366	1324	473	763	1811	1956	2099	1578	1324	1457	1888	2210	2612	2887	2547	2766	3233	2325	2650
W	1362	1479	528	1264	2407	2546	2667	2159	1833	1880	2243	2608	2970	3282	2977	3239	3732	2379	2725
X	1542	1646	684	1352	2416	2528	2622	2131	1762	1778	2119	2492	2842	3161	2868	3144	3645	2210	2557
Y	1607	1721	762	1432	2479	2582	2663	2183	1769	1727	2017	2404	2726	3062	2793	3093	3608	1982	2332
Z	1692	1781	815	1419	2407	2494	2566	2091	1686	1665	1978	2359	2695	3023	2743	3033	3542	2020	2368
AA	2292	2320	1377	1737	2284	2187	2084	1788	1182	937	1050	1453	1718	2072	1856	2203	2737	1083	1405
AB	2781	2757	1860	2037	2329	2197	2060	1809	1188	896	929	1330	1567	1928	1733	2093	2630	919	1231
AC	2561	2626	1665	2090	2697	2644	2576	2235	1658	1450	1527	1922	2088	2462	2322	2693	3230	755	1088
AD	3202	3293	2327	2775	3300	3195	3065	2800	2187	1900	1839	2209	2305	2680	2593	2982	3514	899	1206
AE	3233	3333	2367	2832	3373	3272	3143	2875	2264	1978	1912	2279	2368	2744	2662	3052	3583	942	1239
AF	3515	3601	2637	3059	3505	3371	3209	2987	2364	2047	1908	2251	2290	2661	2618	3014	3536	793	1045
AG	4549	4601	3649	3961	4137	3912	3654	3581	2966	2592	2266	2480	2322	2634	2749	3134	3592	1024	890
AH	4516	4553	3608	3886	4014	3778	3512	3455	2846	2468	2125	2325	2156	2464	2585	2969	3422	913	739
AI	4518	4550	3608	3872	3980	3738	3468	3420	2813	2433	2082	2275	2099	2404	2530	2912	3363	889	694
AJ	4571	4560	3651	3809	3752	3474	3169	3189	2611	2227	1815	1938	1699	1974	2144	2511	2934	859	526
AK	4607	4601	3688	3852	3786	3503	3193	3224	2650	2266	1847	1957	1704	1970	2152	2514	2929	895	568
AL	4586	4571	3665	3815	3742	3461	3153	3180	2606	2221	1804	1919	1673	1943	2119	2484	2903	877	538
AM	4558	4528	3638	3747	3613	3316	2994	3052	2493	2111	1673	1751	1476	1732	1926	2282	2690	884	532
AN	4005	3902	3110	3031	2683	2362	2025	2131	1634	1277	790	778	527	855	964	1341	1800	999	879
AO	3823	3723	2926	2860	2558	2249	1927	2002	1484	1118	639	690	547	910	941	1334	1823	929	872
AP	3467	3380	2565	2531	2350	2085	1812	1788	1216	833	425	694	756	1132	1056	1453	1974	805	889
AQ	3403	3319	2500	2484	2360	2111	1854	1798	1210	825	469	774	883	1256	1147	1540	2068	793	916
AR	3296	3213	2390	2382	2294	2059	1818	1734	1134	750	452	788	929	1301	1171	1560	2092	778	940
AS	3235	3170	2324	2364	2356	2139	1917	1799	1186	810	576	939	1082	1455	1327	1714	2246	710	913
AT	3152	3100	2236	2313	2369	2170	1965	1817	1196	832	659	1033	1198	1569	1426	1809	2344	715	960
AU	2761	2694	1853	1898	2025	1874	1731	1493	868	567	650	1052	1342	1685	1454	1799	2334	1066	1333
AV	2303	2250	1393	1508	1925	1874	1834	1463	910	790	1089	1467	1813	2133	1851	2152	2671	1473	1777
AW	2269	2261	1348	1595	2132	2097	2064	1685	1139	1000	1234	1627	1939	2277	2022	2342	2868	1383	1712
AX	3213	2995	2460	2044	1332	988	663	816	620	631	715	585	999	1092	690	810	1278	1996	2094
AY	2091	1928	1297	1034	1235	1243	1292	832	461	671	1155	1409	1839	2074	1711	1907	2369	1989	2249
AZ	1916	1757	1127	877	1286	1341	1433	938	658	872	1351	1613	2042	2279	1916	2105	2559	2125	2397
BA	1833	1655	1086	757	1230	1328	1459	939	750	995	1478	1728	2161	2388	2018	2191	2630	2261	2536
BB	2086	1781	1607	872	491	754	1068	551	933	1313	1775	1876	2319	2441	2039	2075	2399	2822	3048
BC	3698	3430	3029	2483	1403	984	586	1097	1243	1324	1326	1025	1247	1108	797	535	704	2579	2613
BD	570	399	592	622	1969	2275	2557	2009	2032	2277	2749	3017	3447	3677	3302	3446	3845	3300	3621
BE	3206	2986	2457	2035	1312	963	634	800	617	641	737	611	1023	1109	707	809	1268	2018	2117
BF	4547	4514	3627	3729	3588	3293	2974	3027	2469	2087	1649	1732	1463	1724	1912	2271	2683	883	532
BG	2273	2230	1358	1505	1963	1920	1886	1508	963	848	1143	1523	1866	2188	1908	2209	2728	1480	1791



0 500 1000 1500 2000 m

Map: , Print scale 1:50 000, Map center Poland UKLAD 65 3 East: 3 337 146 North: 5 907 626

Noise calculation model: ISO 9613-2 General. Wind speed: 8,0 m/s

Height above sea level: 67,0 m

⚡ New WTG

■ Noise sensitive area

— 45,0 dB(A)

— 40,0 dB(A)

Project:
20100624 wysoka_raport.

Description:
WARIANT IV

(rozplanowanie 19szt.)
turbina GE2.5xl 2,5MW;
D=100m; h=100m;

DECIBEL -
Map 8,0 m/s

Calculation:
WARIANT IV GE2.5xl

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2010-06-25 11:57 / 4

Licensed user:

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Calculated:

2010-06-25 11:52/2.7.468