

CLIENT :-POWER GRID CORPORATION OF INDIA LIMITED											
CONTRACTOR:- KEC INTERNATIONAL LIMITED											
132 KV S/C ON D/C TOWER TAWANG-LUMLA TRANSMISSION LINE											
DETAILS OF ANGLE,SECTION LENGTH,MAJOR CROSSING											
APPROX TOWER QTY. OF ROUTE -1											
Sl.No	Loc. No. (Provisional)	Type of Tower	R.L (Mtr)	Deviation Angle (Deg)	Span (Mtr)	Section Length	Cummu. Dist. (M)	Remarks & Crossings.	GPS Coordinates (WGS-84)-UTM		Village Name
									EASTING (X)	NORTHING (Y)	
0	Tawang GNT		2908.3	00° 00' 00"			0		389328	3053896	Changbu
					55.86						
1	01/0	DDE+0	2891.62	26° 4' 18"LT		55.86	55.86		389363	3053853	Changbu
					59.36						
2	2/0	DC+0	2873.11	20° 22' 9"RT		59.36	115.22	Strengthening check required due to Single Side wt. span Violation	389413	3053821	Changbu
					383.11			Valley, Nala, 33kv line			
3	4/0	DD+3	2839.98	37° 35' 38"LT		383.11	498.33		389650	3053520	Changbu
					83.95						
4	5/0	DBN+00	2823.53	5° 27' 46"LT		83.95	582.28	Strengthening check required due to Single Side wt. span Violation	389732	3053502	Khinmey
					227.71						
5	5A/0	DBN+09	2742.41	11° 5' 29"LT		227.71	809.98	Strengthening check required due to Single Side wt. span Violation	389957	3053467	Khinmey
					58.03			33kv line			
6	5B/0	DBN+03	2720.72	3° 32' 55"RT		58.03	868.02	Strengthening check required due to Single Side wt. span Violation	390015	3053469	Khinmey
					165.01						
7	6/0	DD+0	2637.1	30° 15' 0"RT		165.01	1033.03	Strengthening check required due to Single Side wt. span Violation	390180	3053467	Khinmey
					314.93			Cart track, valley			
8	8/0	DD+0	2584.52	47° 34' 35"LT		314.93	1347.96	Strengthening check required due to Single Side wt. span Violation	390453	3053310	Khinmey
					246.38			Nala, Valley			

9	9/0	DC+0	2498.05	29° 47' 13"RT		246.38	1594.33	Strengthening check required due to Single Side wt. span Violation	390688	3053384	Khinmey
					262.77			MENTSAMGCHU NALA			
10	10/0	DD+3	2508.9	37° 2' 33"RT		262.77	1857.11		390941	3053313	Sartha
					201.59			Valley			
11	11/0	DC+0	2492.71	28° 44' 36"RT		201.59	2058.69		391080	3053167	Daragao
					287.92			Nala, Valley			
12	12/0	DD+6	2494.23	31° 32' 36"RT		287.92	2346.61	Strengthening check required due to Single Side wt. span Violation	391133	3052884	Daragao
					85.73						
13	13/0	DD+3	2472.52	39° 10' 54"RT		85.73	2432.34	Strengthening check required due to Single Side wt. span Violation	391108	3052802	Daragao
					384.39			Drain, LT line, 33Kv line, MENTSAMGCHU NALA, NH-13			
14	14/0	DD+0	2404.55	54° 49' 9"LT		384.39	2816.73		390775	3052610	Namet
					197.34						
15	15/0	DC+0	2391.51	26° 25' 59"LT		197.34	3014.07		390752	3052414	Bomdir
					212.53						
16	16/0	DBN+00	2396.48	11° 28' 53"LT		212.53	3226.60		390841	3052221	Bomdir
					246.59						
17	17/0	DD+6	2368.47	36° 49' 18"RT		246.59	3473.20		390981	3052018	Bomdir
					317.96			Valley			
18	17A/0	DD+0	2316.28	30° 36' 28"LT		317.96	3791.15	Strengthening check required due to Single Side wt. span Violation	390931	3051704	Dharamkang
					93.35						
19	18/0	DC+0	2285.14	23° 46' 21"RT		93.35	3884.50	Strengthening check required due to Single Side wt. span Violation	390996	3051637	Dharamkang
					147.22			33kv line, Foot track			
20	19/0	DBN+03	2248.65	12° 38' 32"RT		147.22	4031.72	Strengthening check required due to Single Side wt. span Violation	390988	3051490	Dharamkang

					301.04			11kv line, LT line			
21	20/0	DBN+00	2238.53	4° 34' 2"LT		301.04	4332.76		390953	3051191	Paikhar
					103.39						
22	21/0	DC+0	2237.65	22° 22' 4"RT		103.39	4436.15		390944	3051088	Paikhar
					223.16			Drain			
23	22/0	DC+0	2243.67	21° 5' 5"RT		223.16	4659.32		390843	3050889	Paikhar
					211.10			Tar Road			
24	23/0	DBN+00	2243.09	1° 48' 14"RT		211.10	4870.42		390685	3050749	Gyangar
					196.33			Nala			
25	24/0	DBN+03	2272.17	5° 40' 55"RT		196.33	5066.75	Strengthening check required due to Single Side wt. span Violation	390537	3050620	Gyangar
					356.41			Valley, LT line			
26	25/0	DBN+03	2289.56	4° 29' 36"LT		356.41	5423.15		390242	3050420	Bomba
					521.94			Nala, Valley			
27	26/0	DC+0	2275.62	15° 50' 57"LT		521.94	5945.09		389836	3050092	Bomba
					179.61						
28	28/0	DD+0	2280.58	43° 32' 17"LT		179.61	6124.71		389730	3049947	Bomba
					218.66			Nala			
29	29/0	DBN+00	2261.1	3° 24' 41"LT		218.66	6343.37		389764	3049731	Lamtheng
					197.13			Nala			
30	30/0	DC+0	2237.57	20° 54' 43"RT		197.13	6540.50		389799	3049537	Tiley
					448.19			Valley			
31	31/0	DBN+00	2225.63	12° 10' 8"LT		448.19	6988.69	Strengthening check required due to Single Side wt. span Violation	389731	3049094	Pempaling
					264.09						
32	32/0	DBN+00	2153.9	11° 28' 58"LT		264.09	7252.78	Strengthening check required due to Single Side wt. span Violation	389738	3048830	Pempaling
					204.22						
33	33/0	DD+0	2077.63	43° 7' 13"RT		204.22	7456.99	Strengthening check required due to Single Side wt. span Violation	389788	3048632	Pempaling
					164.60						
34	34/0	DD+0	2077.3	55° 18' 53"RT		164.60	7621.59		389712	3048486	Pempaling

					435.61			Tar Road			
35	35/0	DBN+00	2061.5	8° 25' 30"LT		435.61	8057.21		389280	3048430	Pempaling
					268.49			Tar Road			
36	36/0	DC+3	2021.52	29° 50' 56"RT		268.49	8325.70	Strengthening check required due to Single Side wt. span Violation	389020	3048363	Gormang
					353.19			Tar Road			
37	37/0	DC+0	1960.58	22° 30' 22"LT		353.19	8678.89		388679	3048455	Gormang
					213.41						
38	38/0	DBN+00	1987.77	12° 17' 43"LT		213.41	8892.30		388468	3048423	Gormang
					439.88			11Kv line, valley			
39	40/0	DC+9	1985.05	15° 28' 1"RT		439.88	9332.18		388050	3048286	Yusume
					71.84						
40	41/0	DC+9	1988.93	22° 14' 4"RT		71.84	9404.02		387981	3048266	Yusume
					546.50			Valley			
41	42/0	DD+3	1999.02	48° 50' 24"LT		546.50	9950.53		387460	3048431	Yusume
					206.49			11Kv line			
42	43/0	DBN+09	2000.65	6° 27' 38"RT		206.49	10157.02	Strengthening check required due to Single Side wt. span Violation	387284	3048323	Yusume
					146.32						
43	44/0	DBN+06	2035.13	13° 48' 45"RT		146.32	10303.34	Strengthening check required due to Single Side wt. span Violation	387151	3048262	Yusume
					242.03			LT line			
44	46/0	DBN+09	1955.98	4° 33' 23"LT		242.03	10545.38	Strengthening check required due to Single Side wt. span Violation	386913	3048218	Yusume
					406.87			Valley			
45	AP47	DBN+09	1947.43	6° 31' 12"RT		406.87	10952.25		386521	3048109	Tsegar
					316.97						
46	AP48	DC+9	1949.54	16° 12' 5"RT		316.97	11269.22		386208	3048059	Tsegar
					472.82			VALLEY			
47	AP49	DBN+00	1985.77	9° 0' 24"RT		472.82	11742.04		385739	3048119	Tsegar
					239.84						
48	AP50	DD+3	1965.85	33° 16' 30"LT		239.84	11981.88	Strengthening check required due to Single Side wt. span Violation	385509	3048187	Kangteng
					105.95						
49	AP50A	DBN+09	1930.15	0° 2' 59"RT		105.95	12087.83	Strengthening check required due to Single Side wt. span Violation	385408	3048155	Kangteng
					267.56			COU SHED			

50	AP51	DD+6	1852.86	37° 29' 27"RT	531.25	267.56	12355.38		385153	3048074	Kudung
								VALLEY			
51	AP51A	DC+6	1991.48	16° 24' 51"RT	531.25	12886.64		Strengthening check required due to Single Side wt. span Violation	384655	3048259	Kudung
					90.60						
52	AP52	DC+3	2033.94	24° 50' 28"LT	90.60	12977.24		Strengthening check required due to Single Side wt. span Violation	384583	3048314	Kudung
					323.12			VALLEY			
53	AP52A	DC+6	2056.63	25° 40' 8"LT	323.12	13300.36			384268	3048386	Kudung
					349.98						
54	AP53	DD+0	2019.34	39° 4' 26"LT	349.98	13650.35		Strengthening check required due to Single Side wind span Violation(SPECIAL TOWER)	383928	3048303	Kudung
					144.03						
55	AP53A	DBN+09	1944.62	11° 6' 56"RT	144.03	13794.38		Strengthening check required due to Single Side wind span Violation(SPECIAL TOWER)	383844	3048186	Kudung
					770.65			VALLEY, NALA			
56	AP54	DC+0	1864.66	16° 29' 13"RT	770.65	14565.03			383212	3047745	Sakyur
					149.04						
57	AP54A	DC+9	1867.44	23° 51' 26"RT	149.04	14714.07		Strengthening check required due to Single Side wt. span Violation	383085	3047667	Sakyur
					111.76						
58	AP55	DBN+09	1900.17	10° 3' 41"LT	111.76	14825.83		Strengthening check required due to Single Side wt. span Violation	382974	3047654	Sakyur
					541.89			VALLEY			
59	AP56	DC+6	1950.55	14° 15' 50"RT	541.89	15367.72			382453	3047505	Sakyur
					277.05						
60	AP57	DC+0	1986.06	16° 9' 28"RT	277.05	15644.76		Strengthening check required due to Single Side wt. span Violation	382176	3047500	Sakyur
					333.52						
61	AP58	DD+3	2145.14	29° 1' 23"LT	333.52	15978.28		Strengthening check required due to Single Side wt. span Violation	381856	3047594	Sakyur
					308.31			VALLEY			
62	AP59	DC+9	2219.79	22° 19' 59"LT	308.31	16286.60		Strengthening check required due to Single Side wt. span Violation	381553	3047537	Sakyur
					194.83						
63	AP60	DBN+09	2243.78	1° 35' 6"LT	194.83	16481.43			381387	3047435	Sakyur
					226.32			VALLEY			
64	AP61	DBN+00	2252.68	7° 55' 25"RT	226.32	16707.75			381199	3047309	Sakyur
					346.16			VALLEY			
65	AP62	DC+0	2247.22	23° 25' 16"RT	346.16	17053.91			380888	3047157	Sakyur
					269.74			VALLEY			
66	AP63	DBN+00	2301.87	13° 29' 19"LT	269.74	17323.65			380619	3047137	Sakyur
					260.28			VALLEY			
67	AP64	DBN+00	2314.43	9° 11' 46"RT	260.28	17583.93		Strengthening check required due to Single Side wt. span Violation	380371	3047058	Sakyur
					77.41						
68	AP65	DC+6	2295.83	13° 39' 57"LT	77.41	17661.34		Strengthening check required due to Single Side wt. span Violation	380294	3047050	Sakyur
					618.75			VALLEY			

69	AP66	DBN+09	2287.51	12° 46' 34"RT		618.75	18280.09	Strengthening check required due to Single Side wt. span Violation	379718	3046824	Sakyur
					72.03						
70	AP67	DC+6	2332.1	20° 50' 25"LT		72.03	18352.12	Strengthening check required due to Single Side wt. span Violation	379646	3046822	Sakyur
					176.01						
71	AP67A	DBN+09	2422.54	8° 45' 7"RT		176.01	18528.13	Strengthening check required due to Single Side wt. span Violation	379493	3046735	Sakyur
					72.24			11KV LINE			
72	AP68	DBN+09	2460.82	1° 54' 11"RT		72.24	18600.36	Strengthening check required due to Single Side wt. span Violation	379426	3046708	Sakyur
					217.57						
73	AP69	DC+6	2383.41	14° 56' 6"RT		217.57	18817.93	Strengthening check required due to Single Side wt. span Violation	379220	3046638	Khrilham
					543.19			VALLEY			
74	AP70	DC+6	2253.3	17° 28' 20"RT		543.19	19361.13		378678	3046602	Khrilham
					342.46			VALLEY			
75	AP71	DC+9	2246.77	27° 54' 6"RT		342.46	19703.59	Strengthening check required due to Single Side wt. span Violation	378346	3046686	Khrilham
					338.83			VALLEY			
76	AP72	DBN+09	2127.28	6° 14' 4"RT		338.83	20042.42	Strengthening check required due to Single Side wt. span Violation	378100	3046919	Mangnam
					459.17			VALLEY, NALA			
77	AP73	DD+0	1997.47	56° 49' 31"LT		459.17	20501.58	Strengthening check required due to Single Side wt. span Violation	377797	3047264	Mangnam
					154.87						
78	AP74	DC+6	1935.8	25° 12' 55"LT		154.87	20656.45	Strengthening check required due to Single Side wt. span Violation	377644	3047240	Mangnam
					574.71			VALLEY			
79	AP75	DBN+06	1972.15	12° 6' 50"LT		574.71	21231.16	Strengthening check required due to Single Side wind span Violation(SPECIAL TOWER)	377162	3046927	Mangnam
					416.49			VALLEY			
80	AP76	DD+9	2002.3	54° 16' 52"RT		416.49	21647.65		376868	3046632	Mangnam
					116.25						
81	AP77	DC+6	1989.05	17° 27' 24"RT		116.25	21763.90		376753	3046649	Mangnam
					394.00						
82	AP78	DC+0	1972.66	21° 52' 11"LT		394.00	22157.90	Strengthening check required due to Single Side wt. span Violation	376401	3046826	Mangnam
					300.88			VALLEY			
83	AP79	DD+9	1917.72	34° 27' 46"LT		300.88	22458.78		376101	3046849	Mangnam
					361.81			VALLEY			
84	AP80	DD+6	1881.08	30° 28' 0"RT		361.81	22820.59		375786	3046671	Mangnam
					284.00			NALA			
85	AP81	DBN+00	1883.37	2° 52' 31"LT		284.00	23104.59	Strengthening check required due to Single Side wt. span Violation	375502	3046672	Mangnam
					121.07						
86	AP82	DBN+09	1900.13	7° 25' 40"LT		121.07	23225.66	Strengthening check required due to Single Side wt. span Violation	375381	3046668	Mangnam
					344.95			VALLEY, NALA			
87	AP84	DC+9	1927.69	17° 17' 33"LT		344.95	23570.61		375039	3046623	Mangnam

					301.01			VALLEY			
88	AP85	DBN+00	1961.94	9° 11' 29"LT		301.01	23871.62	Strengthening check required due to Single Side wt. span Violation	374772	3046484	Umla
					236.22						
89	AP86	DBN+00	1911.31	6° 51' 12"LT		236.22	24107.85		374581	3046345	Umla
					191.85			VALLEY			
90	AP87	DBN+06	1931.21	5° 25' 17"RT		191.85	24299.69		374439	3046216	Umla
					217.42			11KV LINE, NALA			
91	AP88	DBN+00	1937.67	8° 35' 42"RT		217.42	24517.12	Strengthening check required due to Single Side wt. span Violation	374267	3046083	Umla
					171.83			NALA			
92	AP89	DC+6	1980.93	15° 54' 26"LT		171.83	24688.94	Strengthening check required due to Single Side wt. span Violation	374116	3046001	Umla
					217.79			11KV LINE			
93	AP90	DC+6	2036.72	27° 5' 1"LT		217.79	24906.74	Strengthening check required due to Single Side wt. span Violation	373961	3045848	Umla
					138.72			FOOT TRACK, 11KV LINE			
94	AP91	DD+9	2072.05	40° 16' 8"RT		138.72	25045.45	Strengthening check required due to Single Side wt. span Violation	373910	3045719	Umla
					143.03						
95	AP92	DD+0	2072.84	58° 16' 48"RT		143.03	25188.48		373787	3045646	Khunba
					284.89			ROAD, 11KV LINE			
96	AP93	DC+0	2121.15	15° 49' 47"LT		284.89	25473.37	Strengthening check required due to Single Side wt. span Violation	373531	3045771	Khunba
					122.18						
97	AP94	DD+6	2142.97	40° 17' 5"LT		122.18	25595.56	Strengthening check required due to Single Side wt. span Violation	373411	3045794	Khunba
					261.47			ROAD			
98	AP95	DBN+06	2241.4	14° 59' 59"RT		261.47	25857.03	Strengthening check required due to Single Side wt. span Violation	373183	3045666	Khunba
					87.80			11KV LINE			
99	AP96	DD+9	2247.83	32° 47' 49"RT		87.80	25944.83	Strengthening check required due to Single Side wt. span Violation	373098	3045644	Lumla
					231.80			ROAD, LT LINE, 11KV LINE			
100	AP97	DDE+0	2353.83	51° 35' 6"LT		231.80	26176.63	Strengthening check required due to Single Side wt. span Violation	372878	3045717	Lumla
					69.63						
101	Lumla GNT		2351.94	09° 00' 53"		69.63	26246		372821	3045677	Lumla