

POWERGRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

FINAL TOWER SCHEDULE OF 400 KV (QUAD)

ROORKEE- SAHARANPUR LINE

(UNDER ROORKEE T/L OFFICE)

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

Tower No (Old)	Tower No (New)	Type of Tower		Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
		GE +	EXTN											
1	GENTRY	GE +	EXTN		00°00'00"			0.0	272.510	51.5		POHANA	77°50'46.8"	29°54'35.5"
2	DE/1	DD +	0	Wet	14°41'32"	103.0	103.0	103.0	272.405	81.5	Boundary Wall, Brick Road, 11KV Line	POHANA	77°50'49.4"	29°54'32.6"
3	AP 2	DD +	0	Wet	38°27'49"	60.0	60.0	163.0	271.509	229.0		POHANA	77°50'51.8"	29°54'32.5"
4	AP 3	DD +	9	FS	52°54'36"	398.0	398.0	561.0	269.876	239.0	2 Nos. CT, LT	POHANA	77°51'08.6"	29°54'35.9"
5	3/1	DA +	18	Wet		80.0		641.0	270.354	127.0	3 Nos. CT, LT	POHANA	77°51'08.6"	29°54'31.8"
6	AP 4	DD +	9	FS	48°39'32"		254.0	735.0	269.475	282.0	220KV D/C Line (Pohana to Roshanabad T/L)	POHANA	77°51'08.7"	29°54'43.7"
7	AP 5	DC +	0	PS	18°31'11"	390.0	390.0	1125.0	268.868	370.0	3 Nos. CT, LT	POHANA	77°51'01.7"	29°54'54.7"
8	6/1	DA +	0	FS		350.0		1475.0	263.942	347.5	2 Nos. CT, 11KV		77°50'52.7"	29°55'02.3"
9	6/2	DA +	6	FS		345.0		1820.0	264.392	325.0	CT		77°50'56.1"	29°55'03.6"
10	AP 6	DB +	9	FS	05°55'14"		1000.0	2125.0	264.772	393.0	2 Nos. CT	KIRIAPUR	77°50'34.4"	29°55'17.3"
11	AP 7	DD +	9	Pile	46°29'14"	481.0	481.0	2606.0	268.616	461.0	CT, Solani River	KIRIAPUR	77°50'34.4"	29°55'17.3"

एन.ए.सी. / S.K. Chauhan

Power Grid Corporation of India Limited
 400/220 KV Roorkee Substation, Roorkee-247667
 400/220 KV Roorkee Substation, Roorkee-247667

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
						441.0					Solani River	KISHANPUR	77°50'06.7"	29°55'29.5"
11	AP 8	11	DD + 9	Pile	36°44'30"		441.0	3047.0	264.244	460.5				
12	AP 9	12	DD + 9	Wet	06°05'49"	480.0	480.0	3527.0	273.267	364.5	11KV Line, Solani River	KISHANPUR	77°49'51.1"	29°55'19.4"
13	AP 10	13	DD + 9	Wet	16°53'19"	249.0	249.0	3776.0	274.081	323.5	11KV Line, NH - 73	KARAUNDI	77°49'42.5"	29°55'14.3"
14	10/1	14	DA + 6	PS		398.0		4174.0	273.471	394.0	2Nos. 11KV Line, CT		77°49'31.6"	29°55'10"
15	AP 10/2	15	DB + 3	Wet	05°31'46"	390.0	788.0	4564.0	273.257	382.0	LT Line, 2Nos. CT, 3Nos. 11KV Line	ROHALKI DAYALPUR	77°49'21.5"	29°55'06"
16	AP 11	16	DB + 0	Wet	08°25'04"	374.0	374.0	4938.0	273.012	362.0		ROHALKI DAYALPUR	77°49'06"	29°54'59.4"
17	11/1	17	DA + 0	Wet		350.0		5288.0	273.013	350.0	3Nos. CT, LT Line		77°48'53.4"	29°54'58"
18	11/2	18	DA + 0	Wet				5638.0	272.647	374.0			77°48'41.3"	29°54'57.4"
19	11/3	19	DA + 0	Wet		398.0		6036.0	272.934	398.0	3Nos. CT			

Power Grid Cell No. 30077/4030
 400/220 K.V. Substation Puhana, Roorkee
 400/220 K.V. Substation Puhana, Roorkee

400 KV (QUAD) ROORKEE-SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	OP6 EAST	GPS NORTH
20	11/4	20	DA + 6	Wet		395.0		6434.0	272.840	394.0	2Nos. 11kV Line, 2Nos. CT, Nala		77°48'13.1"	29°54'44.2"
21	11/5	21	DA + 0	Wet		390.0		6824.0	273.179	375.5	CT, Metal Road		77°47'59.5"	29°54'40.3"
22	11/6	22	DA + 3	Wet		361.0		7185.0	274.213	379.5	11kV Line, CT, Metal Road		77°47'46.7"	29°54'36.7"
23	11/7	23	DA + 0	Wet		398.0		7583.0	274.090	394.0	LT Line, CT		77°47'32.8"	29°54'32.4"
24	11/8	24	DA + 9	Wet		390.0		7973.0	273.904	382.5	CT, LT Line		77°47'18.9"	29°54'28.1"
25	11/9	25	DA + 0	Wet		375.0		8348.0	273.760	387.5	11kV Line, 2Nos. CT, 2Nos. 33kV		77°47'05.9"	29°54'24.5"
26	11/10	26	DA + 0	PS		400.0		8748.0	273.673	400.0	2Nos. CT, GAS Pipe Line, 11kV		77°46'51.4"	29°54'19.8"
27	11/11	27	DA + 9	Wet		400.0		9148.0	274.076	394.5	2Nos. 11kV Line, Brick Road, LT		77°46'37.6"	29°54'15.9"
28	AP 12	28	DC + 3	Wet	19°07'00"	389.0	4599.0	9537.0	273.168	379.5	3Nos. 11kV Line, PIT			

शुभा/ S.K. Chauhan
 प्रबंधक / Manager
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 एमएसडी

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
 Power Grid Corporation of India Limited
 400/220 K.V. Substation Puhana, Roorkee-247667

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
						370.0					2Nos. 11KV Line, Metal Road, CT,		77°46'10.7"	29°54'11.6"
29	12/1	29	DA + 0	Wet		400.0		9907.0	272.593	385.0	2Nos. CT, 11KV line.			
30	12/2	30	DA + 6	Wet				10307.0	272.841	398.0	Brick Road. 2Nos. 11KV Line		77°45'56"	29°54'11.1"
31	12/3	31	DA + 0	Wet		396.0		10703.0	273.000	398.0			77°44'47"	29°54'09.6"
32	AP 14	32	DB + 9	Wet	09°02'05"	400.0	1566.0	11103.0	273.354	383.5	11KV Line, CT, Mango Garden	GHODIALA	77°45'26.7"	29°54'10.8"
33	14/1	33	DA + 9	Wet		367.0		11470.0	273.227	374.0	Mango Garden, CT, 11KV Line	GHODIALA	77°46'12.8"	29°54'13"
34	AP 15	34	DD + 6	Wet	54°39'41"	381.0	748.0	11851.0	273.771	321.0	2Nos. Metal Road, 33KV Line, Metal Road, LT Line, CT, 132KV D/C Line (Saharanpur to Roorkee T/L)	MAHESHRI	77°44'58.3"	29°54'14.4"
35	AP 16	35	DD + 18	Wet	47°16'23"		261.0	12112.0	274.395	330.5	11KV Line, 2Nos. CT, LT Line	TEJUPUR	77°44'50.3"	29°54'08.6"
36	16/1	36	DA + 0	Wet		400.0		12512.0	273.329	355.0				

TEJUPUR / Sk. Chauhan
 11KV Line, 2Nos. CT, LT Line
 पब्लिक / Manager
 कॉर्पोरेशन ऑफ इंडिया लिमिटेड
 Power Grid Corporation Limited
 400/220 KV Substation Puhana, Roorkee-247667

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
37	16/2	37	DA + 0	Wet		310.0		12822.0	273.087	343.5	CT, LT Line		77°44'24.6"	29°54'09.4"
38	AP 17	38	DC + 0	Wet	15°34'02" LT	377.0	1087.0	13199.0	270.276	368.5	CT, Nala	TEJUPUR	77°44'11"	29°54'10"
39	17/1	39	DA + 0	Wet		360.0		13669.0	271.799	370.0	Metal Road, CT		77°43'57.4"	29°54'07.3"
40	17/2	40	DA + 0	Wet		380.0		13939.0	271.099	357.5			77°43'42.7"	29°54'03.7"
41	AP 18	41	DD + 0	Wet	56°50'46" LT	335.0	1075.0	14274.0	273.880	268.0	11kV Line, 2Nos. EP, TP Line, Railway Line D/T (B.G. Electrified)	TEJUPUR	77°43'31.7"	29°54'01.8"
42	AP 19	42	DD + 6	Wet	55°00'00" RT	400.0	201.0	14475.0	273.880	300.5	Metal Road	FAKHARHER A	77°43'31.7"	29°53'56"
43	AP 20	43	DB + 0	Wet	12°50'46" RT	399.0	400.0	14875.0	271.800	399.5	Mango Garden, 2Nos. CT, LT	FAKHARHER A	77°43'14.8"	29°53'52.2"
44	20/1	44	DA + 6	Wet		398.0		15274.0	272.765	398.5	CT		77°42'59.6"	29°53'52"
45	AP 21	45	DB + 0	Wet	13°04'35" LT	395.0	797.0	15672.0	269.276	396.5			77°42'04.9"	29°53'51.5"

SHAHARPUR / 77°42'04.9" 29°53'51.5"
 रूड़की को शहरपुर तक बिजली के तार
 Power Grid Corporation of India Limited
 400 KV (QUAD) Roorkee Substation, Roorkee-247667
 400 KV (QUAD) Roorkee Substation, Roorkee-247667

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
46	21/1	46	DA + 0	Wet				16067.0	271.963	394.0			77°42'38.5"	29°53'42.9"
						393.0					CT			
47	21/2	47	DA + 6	Wet				16460.0	271.257	395.5	LT Line, CT, 11KV Line		77°42'16.5"	29°53'44.9"
						398.0								
48	21/3	48	DA + 0	Wet				16858.0	272.718	384.0			77°42'02.3"	29°53'41.4"
						370.0					CT			
49	21/4	49	DA + 0	Wet				17228.0	272.092	353.5	Metal Road, 11KV Line		77°41'48.9"	29°53'38.4"
						337.0								
50	21/5	50	DA + 0	Wet				17565.0	271.832	367.5			77°41'37.1"	29°53'35.5"
						398.0					11KV Line			
51	21/6	51	DA + 6	Wet				17963.0	272.302	393.0	Metal Road, 2Nos. 11KV Line		77°41'21.3"	29°53'31.6"
						388.0								
52	21/7	52	DA + 0	Wet				18351.0	271.917	379.5			77°41'10.1"	29°53'28.9"
						371.0						PUNDAIN		
53	AP 22	53	DB + 0	Wet	07°36'24" RT		3050.0	18722.0	271.610	338.5			77°40'55.5"	29°53'25.7"
						306.0								
54	22/1	54	DA + 0	Wet				19028.0	272.810	353.0			77°40'41.9"	29°53'24.2"
						400.0					2Nos. 11KV Line, CT			
55	22/2	55	DA + 6	Wet				19428.0	270.919	395.0			77°40'27.2"	29°53'22.5"

Power Grid Corporation of India Limited
 400/220 KV सॉफ्टो अर्ध-संयुक्त प्रणाली, रूरके-247667
 400/220 K.V. Substation Puhana, Roorkee-247667

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
56	22/3	56	DA + 0	Wet		390.0		19818.0	270.695	395.0	Brick Road, LT		77°40'20.3"	29°53'21.7"
57	22/4	57	DB + 9	Wet		400.0		20218.0	269.207	400.0	2Nos. CT, LT		77°40'59.6"	29°53'18.8"
58	AP 23	58	DD + 30	Wet	01°15'42"	1896.0	1896.0	20618.0	269.153	295.5	11kV Line, 400kV D/C Line (Deharadun to Bagpat T/L), LT Line	BALACHAUR	77°39'45.2"	29°53'17.9"
59	AP 24	59	DD + 30	Wet	00°18'33"	191.0	191.0	20809.0	269.523	292.5		BALACHAUR	77°39'38.1"	29°53'17.5"
60	24/1	60	DB + 9	Wet		394.0		21203.0	269.663	397.0	2Nos. CT, 2Nos. LT Line, Mango Garden		77°39'23.3"	29°53'16.1"
61	24/2	61	DA + 9	Wet		400.0		21603.0	270.217	397.5	Metal Road, 11kV Line, CT		77°39'08.4"	29°53'14.7"
62	24/3	62	DA + 6	Wet		362.0		21998.0	269.917	378.5	11kV Line, LT Line, CT		77°38'41.1"	29°53'09.1"
63	AP 25	63	DC + 3	Wet	18°10'10"	1551.0	1551.0	22360.0	270.342	331.0	33 KV, LT Line, State Highway	KOTA	77°38'40.6"	29°53'12.4"

Power Grid Corporation of India Limited
 400/220 kV Substation Puhana, Roorkee-247667
 300/220 K.V. Substation Puhana, Roorkee-247667

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400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
25/1	64	DA + 6	Wet		351.0		22660.0	269.621	325.5	Brick Road, 11kv Line, CT	KOTA	77°38'29.7"	29°53'14.3"
5 AP 26	65	DC + 0	Wet	17°46'53"	365.0	651.0	23011.0	270.079	358.0	Metal Road, 11kv Line		77°38'16.9"	29°53'17.1"
26/1	66	DA + 6	Wet		390.0		23376.0	270.449	377.5	4Nos. CT, LT Line	SIRKI	77°37'48.9"	29°53'14.8"
67 AP 27	67	DB + 0	Wet	10°12'05"	88.0	755.0	23766.0	269.975	239.0			77°37'45.6"	29°53'15.2"
68 27A/0	68	DD + 9	Wet	36°44'05"	115.0	88.0	23854.0	269.692	101.5	132 KV Line, Metal Road		77°37'42.1"	29°55'313.2"
69 27B/0	69	DD + 9	Wet	40°55'40"	399.0	115.0	23969.0	269.795	257.0	1 NOS.LT LINE, 1 Nos. CT		77°37'27.7"	29°53'14.8"
70 27B/1	70	DA + 0	Wet		388.0		24368.0	269.687	393.5	2 nos. 11 kv, 1 metal road, 1 CT		77°37'14.3"	29°53'16.9"
71 27B/2	71	DA + 6	Wet		394.0		24756.0	269.425	391.0	1 nos. 11 KV		77°36'58.8"	29°53'18.9"
72 27B/3	72	DA + 0	Wet		400.0		25150.0	269.715	397.0	2 nos. CT			
73 27B/4	73	DA + 0	Wet				25550.0	269.584	398.0				

400/220 K.V. Substation Puhana, Roorkee-247657
 Power Grid Corporation of India Limited
 247657
 400/220 K.V. Substation Puhana, Roorkee-247657

400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
					396.0					LT Line & CT Road			
74 AP 28	74	DC + 3	Wet	16°29'05"		1977.0	25946.0	269.411	401.5	LT Line, 11 kv, metal road	LAKHANPUR	77°36'29.4"	29°53'22"
75 AP 29	75	DD + 6	Wet	19°15'31"	407.0	407.0	26353.0	270.387	312.5	EP, Railway Line S/T (B.G. Electrified), TP Line, 11KV Line	LAKHANPUR	77°36'14"	29°53'20.7"
76 AP 30	76	DD + 3	Wet	28°46'42"		218.0	26571.0	269.685	285.0	11 KV Line,	LAKHANPUR	77°36'06.6"	29°53'16.7"
77 31	77	DA + 6	Wet		352.0		26923.0	269.221	286.0	132kv S/C Line (Saharanpur to Deoband T/L)	LAKHANPUR	77°35'32.2"	29°53'16.4"
78 AP 32	78	DD + 6	Wet	27°59'47"		572.0	27143.0	269.389	306.0	11 KV line, Metal Road		77°35'46.1"	29°53'16.1"
79 32/1	79	DA + 0	Wet		392.0		27535.0	267.283	391.5	1 Nos. CT		77°3'533.6"	29°53'09.8"
80 32/2	80	DA + 0	Wet		391.0		27926.0	266.338	391.0			77°35'22.1"	29°53'03.2
81 32/3	81	DA + 3	Wet		391.0		28317.0	265.810	391.5	CT			

S.K. Chauhan
 Manager
 ZUMARPAR
 Power Grid Corporation of India Limited
 400/220 KV Substation Puhana, Roorkee-247667

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400 KV (QUAD) ROORKEE- SAHARANPUR TRANSMISSION LINE

S. N.	Tower No (Old)	Tower No (New)	Type of Tower	Approved Classification of Foundation	Angle of Deviation	Span Length (m)	Section Length (m)	Distance from Roorkee (m)	Reduced Level (m)	Wind Span (m)	Crossing Details	Village Name	GPS EAST	GPS NORTH
82	32/4	82	DA + 0	FS		392.0		28709.0	265.005	392.0			77°34'55.9"	29°52'49.6"
83	32/5	83	DA + 0	FS		374.0		29101.0	264.439	383.0	Hinden river, CT		77°34'43.4"	29°52'43.1"
84	32/6	84	DA + 6	FS				29475.0	264.000	387.0	11 KV Line,		77°34'31"	29°52'36.3"
85	32/7	85	DA + 0	Wet		400.0		29875.0	263.671	400.0		FIROZPUR BELRAH	77°34'19.3"	29°52'30.2"
86	AP33	86	DD + 0	Wet	32°14'39"	384.0	3132.0	30275.0	264.266	392.0	Metal Road, CT Road, 2 nos. 11		77°34'06.3"	29°52'23.8"
87	33/1	87	DA + 0	FS		384.0		30659.0	263.572	384.0	Nala, CT Road		77°33'51.9"	29°52'23.6"
88	33/2	88	DA + 0	FS		400.0		31043.0	263.655	392.0	CT Road, 2 nos. LT Line	MALHIPUR	77°33'34.5"	29°52'24.1"
89	33/3	89	DA + 6	Wet		355.0		31443.0	268.255	377.5	11 KV, Metal Road, CT Road		77°33'23"	29°52'24.1"
90	33/4	90	DA + 0	Wet		398.0		31798.0	268.246	376.5	CT, 2 nos 11KV Power Grid Corporation of India Limited Roorkee Substation, Roorkee-247667 400/220 K.V. Substation Puhana, Roorkee-247667			29°52'24.1"