

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.2377
TO BE ANSWERED ON 05.03.2020**

POWER TRANSMISSION INFRASTRUCTURE

2377. SHRI Y. DEVENDRAPPA:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government is aware that high and extra-high voltage underground electricity cable systems rated 220 kv and above have become part of the backbone of modern day power transmission infrastructure;**
- (b) if so, the details thereof;**
- (c) whether the Government has implemented such underground cable systems in any part of the country; and**
- (d) if so, the details thereof and if not, the reasons therefor?**

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : Underground cable systems of 220 kV and upto 400 kV voltage level are part of Indian Transmission Infrastructure. However, due to techno-economic reasons like higher reactive compensation requirement and higher cost compared to overhead system, underground cables are being used on case by case basis for short distances, where laying of overhead transmission lines is difficult particularly in urban areas and underground generation stations. Underground Cable systems of 220 kV and upto 400 kV, wherever they have been laid, are therefore, an integral part of the Modern Day Power Transmission Infrastructure.

(b) to (d) : Underground cable systems have been implemented by Central and State Utilities in various parts of the country. Based on information available, the details of such cable system implemented / under implementation in transmission system of the country is given at Annexure.

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 2377 TO BE ANSWERED IN THE LOK SABHA ON 05.03.2020.

List of underground cable system (220kV & above) in different parts of the country.

Sl. No.	Name of Transmission element	Voltage level (kV)	Executing Agency	Length (Km)	Commissioning Date
1	In Gagangir, Z-Morh area of Srinagar (near Zojila pass) under Srinagar –Leh transmission system	220	PGCIL	6.2	Nov'18
2	Pugalur to North Trichur	320 (HVDC)	PGCIL	32	Under Execution
3	LILO of Padghe (MSEB) – Kharghar (MSEB) at Navi Mumbai (PG)	400	PGCIL	2	Jun'19
4	Sriganayakanahalli S/s – DG Plant Yelahanka Station (UG Cable)	220	KPTCL	6	Sep'18
5	Guindy – Porr GIS (Cable)	220	TANTRANSCO	8	Jul'18
6	Tiruverkadu – Ambattur 3 rd Main road S/s (UG Cable)	220	TANTRANSCO	5	Aug'17
7	Vyasarpadi – Pulianthoppe (UG Cable)	220	TANTRANSCO	1	Aug'17
8	Tondiarpet - Basin Bridge (UG Cable)	220	TANTRANSCO	2	Jul'17
9	Rohini theatre take off structure to CMRL Koyambedu 230kV GIS S/s (230 kV UG cable)	220	TANTRANSCO	1	Jun'17
10	PH Road - Koyambedu (UG Cable)	220	TANTRANSCO	1.5	May'17
11	Mylapore - Tharamani (UG Cable)	220	TANTRANSCO	13	Apr'17
12	Harsh Vihar - Patparganj line (U/G cable link)	220	DTL	15	Feb'17
13	HSR Layout - Nimhans S/S (UG Cable)	220	KPTCL	11	Feb'17
14	Chandrayanagutta - 220KV Imlibun GIS (UG Cable)	220	TSTRANSCO	5	Feb'17
15	Moulali - Osmania University	220	TSTRANSCO	4.5	Dec'16
16	LILO of Shapur Nagar - Gachilbowli feeder at GIS Erragadda SS	220	TSTRANSCO	10	May'15
17	Kadapperi - Guindy (UG Cable)	220	TANTRANSCO	14	Apr'15
18	Maharani Bagh- Gazipur (0.5km cable on Maharani Bagh side & 8.5km OH line)	220	DTL	10	Sep'14
19	Terminating tower point - HSR Layout (Cable work)	220	KPTCL	3	Jul'14
20	Elephantgate - Mylapore (UG cable)	220	TANTRANSCO	12	Oct'13
21	East Div Compound - Nimhans Station	220	KPTCL	5	May'12
22	Malakaram - Gunrock	220	APTRANSCO	16	Mar'12
23	Maharani Bagh - Trauma Centre/AIIMS (UG cable)	220	DTL	10	Jan'12
24	LILO of Mulund - Borivali at Bhandup	220	MSETCL	2	Dec'11
25	East Div Comp. - HAI in Bangalore.	220	KPTCL	8	Nov'11
26	245 kV XLPE UG cable Asifnagar-Karwan	220	Andhra Pradesh	3	Apr'2007
27	Guindy - R.A.Puram (UG Cable)	230	TANTRANSCO	8	Jun'19
28	Periapanachery - Porur (UG Cable)	230	TANTRANSCO	7	Nov'19

29	Nerul-Seawood TSS (U/G Cable Ckt -I)	220	MSETCL	1	Mar'19
30	Chandigarh S/s - Panchkula (PG) (incl. 10 KMs underground cable).	220	PGCIL	10	Under Execution
31	Zakhira - Devnagar D/C U/G	220	DTL	5	Under Execution
32	Dwarka-Budela (U/G) Cable	220	DTL	5	Under Execution
33	Dev Nagar - SubziMandi (U/G Cable)	220	DTL	5	Under Execution
34	IP-Park Street-Electric Lane (Cable)	220	DTL	5	Under Execution
35	Kashmirigate - Timer Pur (U/G Cable)	220	DTL	5	Under Execution
36	LILO of Electric Lane to Park Street at Dev Nagar (U/G Cable)	220	DTL	5	Under Execution
37	Masjid Moth - Tughlakabad (U/G) Cable	220	DTL	8	Under Execution
38	Tughlakabad - R.K.Puram (U/G Cable)	220	DTL	6	Under Execution
39	LILO of both ckt. Kawas - Navsari (PG) line at Vesu S/s (2220kVu/g cable)	220	GETCO	2.5	Under Execution
40	Thuthiyoor - Kaloor (UG Cable)	220	KSEB	7	Under Execution
41	LILO of Aaret (RINFRAT) - Borivalli (MSETCL) (Proposed cable) at GoregaonFilmcity - 5 (UG Cable)	220	MSETCL	2.5	Under Execution
42	LILO of Aarey (RINFRAT) - Borivalli (RINFRAT) at GoregaonFilmcity - 5 (UG Cable)	220	MSETCL	2.5	Under Execution
43	Tondiarpet point Puleanthope (Manali& NCTPS stage-II) (UG Cable)	400	TANTRANSCO	10.5	Under Execution
44	Vellavedu - Guindy 400 kV S/S (U/G Cable)	400	TANTRANSCO	20	Under Execution
45	Basin Bridge - TNEB HQ (UG Cable)	230	TANTRANSCO	23	Under Execution
46	CMRL Central 230 kV SS to Pulianthope 400 kV SS (UG Cable)	230	TANTRANSCO	3.4	Under Execution
47	CMRL Central Jail to proposed Mambalam 230kV GIS SS (UG Cable)	230	TANTRANSCO	9	Under Execution
48	LILO of Tonidapet - Mylapore at TNEB HQ (UG Cable)	230	TANTRANSCO	1	Under Execution
49	Basin Bride - Pulianthope (UG Cable)	220	TANTRANSCO	2	Under Execution
50	LILO of 220kV XLPE UG cable Chandrayangutta - Imlibun to the proposed Chanchalguda	220	TSTRANSCO	1	Under Execution
51	Marripally common point- Hayatnagar S/S XLPE cable	220	TSTRANSCO	7	Under Execution
52	220kV Shivarampally SS- 132 kV Asifnagar SS 2nd circuit (220kV XLPE UG cable-3 km & OH line 0.5 km)	220	TSTRANSCO	3	Under Execution
53	LILO of 220kV XLPE UG Cable Chandrayanagutta- Imlibun to the proposed 220/33 kV ChanchalgudaGIS SS	220	TSTRANSCO	1	Under Execution
54	GSS Basni (Jodhpur) - GSS NPH (U/C) Jodhpur	220	RVPNL	3	Under Execution