GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.2369 TO BE ANSWERED ON 16.03.2021

STATUS OF POWER INFRASTRUCTURE

2369. SHRI B. LINGAIAH YADAV:

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

- (a) the steps being taken for provision of Power Infrastructure in the past five years alongwith initiatives taken for reforms and achievements in the power sector and adding Giga Watts of installed capacity and connecting additional households;
- (b) how many lakh circuit km of transmission lines have been added during the past five years as on date along with funds sanctioned/spent thereon, State-wise; and
- (c) the future plan worked out, State-wise?

ANSWER

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) & (b): In order to transform our country from power deficit to power surplus and for strengthening infrastructure in power sector, several initiatives have been taken in the area of capacity addition for power generation and transmission along with reforms in the distribution sector, which are briefly mentioned as under:
- The total installed power generation capacity, including from renewable energy sources, in the country as on 28.02.2021 is 379.1 GW. A total of 117.9 GW power generation capacity has been added during the last five years and current year (up to 28.02.2021), from conventional and renewable energy sources, details are given at **Annexure–I.**
- All regional grids are synchronously connected and the power transmission capacity in Inter State Transmission Systems (ISTS) is adequate for free flow of power in different directions resulting in "One Nation – One Grid – One Frequency". At present, the inter regional transmission capacity of the National Grid is about 103,550 MW (67,600 MW added since April, 2014).
- During the last five years from 1st April 2015 to 31st March 2020, a total of 1,12,153 ckm of transmission lines (220 kV and above) have been added in the country. The State wise details of transmission capacity addition and funds sanctioned/spent for transmission schemes (220 kV & above) during the last five years are given at **Annexure-II.**

									.2
٠	•	٠	٠	٠	٠	٠	٠	٠	•4

- Government of India had launched Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) in December, 2014 for rural electrification works across the country. As reported by the States, all the inhabited un-electrified villages as per Census 2011, stand electrified on 28th April, 2018 across the country under DDUGJY. A total of 18,374 villages were electrified under the scheme.
- Further, Government of India launched Pradhan Mantri Sahaj Bijli Har Ghar Yojana-Saubhagya in October, 2017 with the purpose of electrification of the remaining unelectrified households in rural and urban areas. Since the launch of Saubhagya scheme, 2.81 Crore households have been electrified across the country up to 28.02.2021.
- For improvement of distribution infrastructure in urban areas Government of India has implemented Integrated Power Development Scheme (IPDS).
- Ministry of Power for the first time laid down Rights to the Electricity Consumers through "Electricity (Rights of Consumers) Rules, 2020".
- Hydro Power policy including measures to promote hydro power and reduce hydro power tariff was issued on 8.3.2019.
- Issuance and revision in competitive bidding Guidelines and Standard Bid Documents for procurement of power and transmission service under Section 63 of the Electricity Act 2003.
- (c): To meet the future power demand in the country, National Electricity Plan for Generation and Transmission has been prepared on all India basis to meet the increasing demand of the country.

As per the National Electricity Plan (Generation) notified in 2018, all India power generation installed capacity by the end of 2021-22 is estimated to be 4,79,419 MW which includes 217,302 MW Coal, 25,735 MW Gas, 51,301 MW Hydro, 10,080 MW Nuclear and 1,75,000 MW Renewable Energy Sources.

Further, all India power generation installed capacity by the end of 2026-27 is estimated to be 6,19,066 MW which includes 238,150 MW Coal, 25,735 MW Gas, 63,301 MW Hydro, 16,880 MW Nuclear and 2,75,000 MW Renewable Energy Sources.

Sufficient transmission capacity has been planned in the country for evacuation of power from generating stations to the load centres including strengthening of existing transmission system. Requirement of transmission system addition in the country has been estimated for the period 2017-22 as part of National Electricity Plan. As per the National Electricity Plan, about 110,000 ckm of transmission lines, about 383,000 MVA of transformation capacity in the substations at 220 kV and above voltage levels and 14,000 MW of HVDC bipole/back-to-back capacity, are proposed to be added during the period 2017-22 on all-India basis.

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2369 TO BE ANSWERED IN THE RAJYA SABHA ON 16.03.2021

Power generation capacity addition during the last 5 years and current year (up to 28.02.2021), from conventional and renewable energy sources

Year	Year Power generation capacity addition (GW)				
	From Conventional Sources	From Renewable Energy Sources	Total		
2015-16	24.0	7.0	31.0		
2016-17	14.2	11.3	25.5		
2017-18	9.5	11.9	21.4		
2018-19	5.9	8.5	14.5		
2019-20	7.1	8.8	15.8		
2020-21*	3.8	5.9	9.7		
Total	64.5	53.4	117.9		

^{*} Up to 28-02-2021.

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2369 TO BE ANSWERED IN THE RAJYA SABHA ON 16.03.2021

<u>Details of Transmission Capacity (CKM) Addition During last 5 years (From 1st April 2015 to 31st March 2020):</u>

Organization/Utilities	States/UTs	Length (Ckm)				
State Sector						
AEGCL	Assam	739				
APTRANSCO	Andhra Pradesh	3907				
BSPTCL	Bihar	1727				
CSPTCL	Chhattisgarh	1686				
DANDD	Daman & Diu	14				
DNH	Dadra & Nagar Haveli	5				
DTL	Delhi	102				
GETCO	Gujarat	4760				
HPPTCL	Himanchal Pradesh	166				
HVPNL	Haryana	1216				
JKPDD	Jammu & Kashmir	324				
JUSNL	Jharkhand	348				
KPTCL	Karnataka	2255				
KSEB	Kerala	71				
MeECL	Meghalaya	4				
MPPTCL	Madhya Pradesh	1856				
MSETCL	Maharashtra	4528				
OPTCL	Odisha	1062				
PSTCL	Punjab	1506				
PTCUL	Uttarakhand	52				
RVPNL	Rajasthan	5691				
Power Deptt, SIKKIM	Sikkim	447				
TANTRANSCO	Tamilnadu	4702				
TSECL	Tripura	21				
TSTRANSCO	Telangana	4049				
UPPTCL	Uttar Pradesh	6948				
WBSETCL	1103					
(5	49289					
C	48206					
Pı	14658					
(112153					

.....2

Details of Actual Fund Expenditure for Transmission Schemes (220kV & above) During the last 5 Years (Rs Crs):

Sl. No.	Sector/ Utilities	States	2015-16	2016-17	2017-18	2018-19	2019-20	Total
I	Central Sector							
	PGCIL	-	22,584.00	24,429.00	25,791.00	25,807.00	15,940.15	114,551.15
	DVC	-	170.60	80.90	47.46	57.88	178.95	535.79
	Total CS	-	22,754.60	24,509.90	25,838.46	25,864.88	16,119.10	115,086.94
II	State Sector							
a.	Northern Region							
1	DTL	Delhi	371.04	211.37	311.00	*	*	893.41
2	HPPTCL	H.P	380.39	161.70	317.28	463.64	366.26	1,689.27
3	HVPNL	Haryana	180.83	212.00	218.69	*	405.19	1,016.71
4	PDD,J&K *	J&K	6.99	50.00	54.51	*	*	111.50
5	PSTCL	Punjab	255.67	264.54	315.41	153.50	88.56	1,077.68
6	RVPNL	Rajasthan	2,079.98	2,076.49	1,772.67	1,315.05	*	7,244.19
7	UPPTCL	U.P.	1,892.00	3,048.00	3,201.03	*	1,885.00	10,026.03
8	PTCUL	Uttarakhand	414.00	85.91	108.33	120.59	153.69	882.52
	Total N.R.		5,580.90	6,110.01	6,298.92	2,052.78	2,898.70	22,941.31
b.	Western Region							
1	CSPTCL	Chhattisgarh	109.33	72.79	169.04	*	*	351.16
2	GETCO	Gujarat	1,548.00	951.28	1,102.00	1,082.00	1,181.96	5,865.24
3	GOA	Goa	6.02	26.42	0.20	*	*	32.64
4	MPPTCL	M.P.	301.79	367.82	991.11	1,603.19	845.10	4,109.01
5	MSETCL	Maharashtra	883.75	581.16	464.29	*	596.41	2,525.61
	Total W.R.		2,848.89	1,999.47	2,726.64	2,685.19	2,623.47	12,883.66
c.	Southern Region							
1	APTRANSCO	A.P.	976.16	1,065.81	499.30	789.92	587.90	3,919.09
2	KPTCL	Karnataka	543.73	807.29	695.85	1,179.54	1,293.98	4,520.39
3	KSEB	Kerala	19.13	82.71	16.13	152.00	567.54	837.51
4	TANTRANSCO	Tamilnadu	3,022.99	2,866.10	2,782.05	3,391.96	4,168.09	16,231.19
5	TSTRANSCO	Telangana	1,746.45	2,506.12	2,475.23	2,913.16	*	9,640.96
6	Puducherry	Puducherry	1.59	25.50	10.73	*	6.25	44.07
	Total S.R.		6,310.05	7,353.53	6,479.29	8,426.58	6,623.76	35,193.21
d.	Eastern Region	T	1		T	_	T	
1	BSPTCL	Bihar	1,263.60	301.13	0.00	*	*	1,564.73
2	OPTCL	Odisha	136.60	339.70	357.82	322.39	626.00	1,782.51
3	JUSNL	Jharkhand	1,011.00	0.00	629.73	*	*	1,640.73
4	WBSETCL	W.B.	895.52	1,127.80	291.39	285.82	242.44	2,842.97
5	Sikkim	Sikkim	0.00	0.00	0.00	*	*	0.00
	Total E.R.		3,306.72	1,768.63	1,278.94	608.21	868.44	7,830.94
e.	N-E Region							
1	Arunachal Pradesh	Ar. Pradesh	0.00	0.00	0.00	0.00	*	0.00
2	AEGCL	Assam	150.58	63.76	48.72	24.24	6.60	293.90
3	Manipur	Manipur	0.00	0.00	0.00	*	*	0.00
4	MePTCL	Meghalaya	25.13	31.21	218.00	*	*	274.34
5	Mizoram	Mizoram	21.59	0.44	8.84	25.23	*	56.10
6	Nagaland	Nagaland	0.00	0.00	14.04	47.48	*	61.52
7	TSECL	Tripura	190.07	95.04	0.00	0.00	*	285.11
	Total N-E Region		387.37	190.45	289.60	96.95	6.60	970.97
	Total State Sector	18,433.93	17,422.09	17,073.39	13,869.71	13,020.97	79,820.09	
	Total all India	41,188.53	41,931.99	42,911.85	39,734.59	29,140.07	194,907.03	

^{*} Information not furnished by the utilities
