GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
STARRED QUESTION NO.199
ANSWERED ON 08.08.2023

STATUS OF BHADRADRI AND YADADRI POWER PLANTS IN TELANGANA

199 DR. K. LAXMAN:

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

(a) whether there is any proposal to increase coal production for more generation of thermal power;

(b) if so, the details thereof; and

(c) the status of the Bhadradri and Yadadri power plants in Telangana, which have been financed by REC Ltd. and Power Finance Corporation Ltd.?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : A Statement is laid on the Table of the House.

****

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) IN RESPECT OF RAJYA SABHA STARRED QUESTION NO.199 FOR REPLY ON 08.08.2023 REGARDING STATUS OF BHADRADRI AND YADADRI POWER PLANTS IN TELANGANA ASKED BY DR. K. LAXMAN.

******

(a) & (b) : Most of the requirement of coal in the country is met through indigenous production. In the year 2022-23, coal production increased by 14.77% over the previous year. During the current year till June' 2023, domestic coal production has increased over 8.51% compared to the same period of last year. All India target of coal production for the year 2023-24 has been estimated at 1012.14 Million Tonnes (MT), about 13% higher than production during 2022-23.Company wise details is as under:

Company	Production (Million Tonnes)
Coal India Limited & its Subsidiaries	780.00
Singareni Colliery Company Limited	70.00
Captive and Others	162.14
Total	**1012.14**

The supply of domestic coal to the power plants during 2022-23 has been about 738 Million Tonnes (MT) and the likely availability of domestic coal for power plants, as per Ministry of Coal, during 2023-24 is 821 MT.

(c) : (1) **Status of Bhadradri Thermal Power station(4x270 MW):** All the four units of Bhadadari TPS (4x270 MW) have been commissioned and running successfully. Unit-wise details of commissioning date are given below:

State/ Developer	Unit	Capacity (MW)	Commissioning Date	Estimated Cost (Rs. Cr)
Telangana (TSGENCO)	U-1	270	05-06-2020	10,515.84
	U-2	270	07-12-2020	
	U-3	270	26-03-2021	
	U-4	270	09-01-2022	

(2) **Status of Yadadari Thermal power station (5x800 MW) :** The present status of plant is as under:-

(as on 31-07-2023)

State/ Developer	Unit	Capacity (MW)	LOA Date	Original commissioning Date	Anticipated commissioning Date	Time Over run	Physical progress (%)
Telangana (TSGENCO)	U-1	800	17-10-2017	Oct.-2021	Dec-2023	2 y, 2 m	80 %
	U-2	800		Oct.-2021	Dec-2023	2 y, 2 m	81 %
	U-3	800		Jun.-2022	Sep-2024	2 y, 3 m	74 %
	U-4	800		Jun.-2022	Aug-2024	2 y, 2 m	77 %
	U-5	800		Oct.-2022	Apr-2025	2 y, 6 m	72 %

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
STARRED QUESTION NO.205
ANSWERED ON 08.08.2023

WITHHOLDING OF PAYMENTS TO SMALL ENTERPRISES BY TANGEDCO

205 SHRI RAJMANI PATEL:

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

(a) whether Government has received representations from small enterprises for withholding of payments by Tamil Nadu Generation and Distribution Corporation (TANGEDCO) for procurement of energy meters;

(b) whether the Union Government and REC Ltd. have funded the TANGEDCO for procurement of energy meters; and

(c) if so, the steps Government and REC Ltd. have taken on the representations of small enterprises for release of legitimate dues without any further delay?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : A Statement is laid on the Table of the House.

****

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) IN RESPECT OF RAJYA SABHA STARRED QUESTION NO.205 FOR REPLY ON 08.08.2023 REGARDING WITHHOLDING OF PAYMENTS TO SMALL ENTERPRISES BY TANGEDCO ASKED BY SHRI RAJMANI PATEL.

******

(a) : Yes, Sir, a representation from M/s. Capital Power Systems Ltd dated 18.07.2023 with forwarding letter from Shri Naranbhai J. Rathwa, Hon'ble Member of Parliament (Rajya Sabha) dated 18.07.2023 has been received, regarding release of balance 30% payment on account of supply of energy meters to TANGEDCO, Chennai, which was deducted towards failure of random sample of meters.

The procurement of above meters was done in the year 2012-14 and funding was arranged by TANGEDCO from its own resources and not through financial assistance from Government of India or its institutions i.e. REC & PFC.

(b) : Details of funding provided to TANGEDCO by Central Government/ REC/ PFC for procurement of meters is detailed as below:

(i) An amount of Rs. 190.99 Crore was disbursed under Integrated Power Development Scheme (IPDS) by Government of India for installation of 25,16,056 consumer meters; 1,206 Feeder meter; 46,000 DT meters and 2,055 boundary meters.

(ii) REC Ltd funded Loan Schemes to TANGEDCO for procurement of energy meters for three schemes sanctioned, on 24.03.2020. The total Sanctioned loan amount was Rs.187.49 Crore, out of which the disbursed amount was Rs.186.40 Crore (99%). These three schemes stand closed as on 28.03.2023. Also, REC has funded loan schemes to TANGEDCO for replacement of 11,95,856 nos. of electromechanical meters to static meters under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) for a sanctioned loan of Rs.119.66 Crore, out of which, the disbursed amount was Rs.110.46 Crore. The above scheme has also been closed.

(iii) As per TANGEDCO, for the project of installing energy meters by M/s. Chennai Smart city Ltd, the share of Central Government and State Government was 50% each. Under this project, 1,42,069 nos. of meters were to be installed for which funding from Government of India was Rs. 43 Cr. only. As on date, 1,26,335 nos. of meters have installed.

(c) : The matter regarding outstanding dues in respect of procurement of energy meters from TANGEDCO's own resources relates to the contractual obligations between the contracting suppliers and TANGEDCO. Hence, the representation of M/s Capital Power Systems Ltd with forwarding letter by Hon'ble MP Shri. Narennhai J. Rathwa vide letter Dt 18.07.2023, has been forwarded to TANGEDCO for taking further necessary action at their end.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2081
ANSWERED ON **08.08.2023**

PRODUCTION OF RENEWABLE AND NON-RENEWABLE ENERGY

2081 # LT.GEN. (DR.) D. P. VATS (RETD.):

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

(a) the details of total power (renewable and non-renewable) generated in the country especially in Haryana during the last three years, State-wise, power category-wise and year-wise;

(b) the major schemes being run by Government to promote the production of renewable energy;

(c) whether an increase has been registered in the production of renewable energy by means of these schemes during last three years, if so, the details thereof; and

(d) whether Government is planning to implement any special scheme in the renewable energy sector assimilating the concept of collective participation at the Gram Panchayat level?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The details of State/UT-wise power generation in the country from Renewable and Non-Renewable sources, including the State of Haryana, during the years 2020-21, 2021-22, 2022-23 and the current year 2023-24 (upto June, 2023), are given at **Annexure-I.**

(b) to (d) : Following schemes/programmes have been undertaken by the Government for enhancing the renewable energy capacity in the country:

(i) Grid Connected Rooftop Solar Scheme

(ii) Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for grid-connected Solar Photovoltaic (PV) Power Projects

(iii) PLI Scheme 'National Programme on High Efficiency Solar PV Modules'

(iv) Solar Park Scheme

(v) PM-KUSUM scheme

(vi) Green Energy Corridor Scheme

……2.

(vii) Biomass Programme

(viii) Waste to Energy Programme

(ix) Biogas Programme

(x) R&D programme

(xi) Incentive Schemes for Green Hydrogen production and Electrolyser Manufacturing

Further, Government of India have taken a number of policy measures to promote the renewable energy in the country:

(i) Waiver of Inter State Transmission System (ISTS) charges for inter-state sale of Solar, Wind, Green Hydrogen/Green Ammonia, Pump Storage Plants & Energy Storage Source;

(ii) Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029-30;

(iii) Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power

(iv) Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.

(v) Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.

As a result of these measures, power generation in the country from Renewable Energy Sources has increased during the last three (3) years. The details are at **Annexure-II.**

****

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2081 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

State/UT-wise Details of Renewable and Non-Renewable Power Generation in the country for the year 2020-21

Name of State/UT	Power Generation from Non-Renewable Sources		Power Generation from Renewable Energy Sources		Total Power Generation
	Thermal(Coal/Lignite/ Gas/Diesel)	Nuclear	Hydro (Large)	Other Renewable Energy Sources	
	(MUs)	(MUs)	(MUs)	(MUs)	(MUs)
Chandigarh	0.00	0.00	0.00	10.16	10.16
Delhi	5304.01	0.00	0.00	426.70	5730.71
Haryana	14896.38	0.00	0.00	760.75	15657.13
HP	0.00	0.00	37473.47	2160.30	39633.77
J & K	0.00	0.00	17002.68	439.29	17441.97
Ladakh	0.00	0.00	376.21	0.00	376.21
Punjab	17994.79	0.00	4747.03	2864.47	25606.29
Rajasthan	46235.27	7386.05	469.63	16516.38	70607.33
Uttar Pradesh	122063.71	3284.81	1572.35	5747.78	132668.65
Uttarakhand	721.97	0.00	13592.49	1236.85	15551.31
Northern Region	**207216.13**	**10670.86**	**75233.86**	**30162.68**	**323283.53**
Chhattisgarh	134614.50	0.00	419.19	1633.89	136667.58
Gujarat	95936.00	3712.96	4233.36	17977.39	121859.71
Madhya Pradesh	123089.78	0.00	6477.33	8517.86	138084.97
Maharashtra	104137.26	7886.62	5548.46	14232.67	131805.01
Daman and Diu and Dadra and Nagar Haveli	0.00	0.00	0.00	52.00	52.00
Goa	0.00	0.00	0.00	1.46	1.46
Western Region	**457777.54**	**11599.58**	**16678.34**	**42415.27**	**528470.73**

Andhra Pradesh	49468.95	0.00	3280.12	14133.83	66882.90
Telangana	44760.76	0.00	3645.38	6933.37	55339.51
Karnataka	19861.24	7093.92	12587.35	27850.33	67392.84
Kerala	109.24	0.00	6628.39	1092.12	7829.75
Tamil Nadu	51200.05	13664.72	5212.71	21659.05	91736.53
Lakshadweep				0.45	0.45
Puducherry	232.15	0.00	0.00	6.39	238.54
Southern Region	**165632.39**	**20758.64**	**31353.95**	**71675.53**	**289420.51**
Andaman Nicobar	118.48	0.00	0.00	39.51	157.99
Bihar	33866.14	0.00	0.00	226.61	34092.75
Jharkhand	27219.97	0.00	223.09	26.47	27469.53
Orissa	55206.47	0.00	6859.97	877.77	62944.21
Sikkim	0.00	0.00	10879.50	55.96	10935.46
West Bengal	72735.07	0.00	3212.28	1530.70	77478.05
Eastern Region	**189146.13**	**0.00**	**21174.84**	**2757.01**	**213077.98**
Arunachal Pradesh	0.00	0.00	3451.34	2.10	3453.44
Assam	5698.14	0.00	270.87	51.51	6020.52
Manipur	0.00	0.00	621.62	7.71	629.33
Meghalaya	0.00	0.00	1151.99	56.79	1208.78
Mizoram	0.00	0.00	158.85	33.52	192.37
Nagaland	0.00	0.00	203.86	69.77	273.63
Tripura	7043.21	0.00	0.00	15.62	7058.83
North Eastern Region	**12741.35**	**0.00**	**5858.53**	**237.02**	18836.90
All India Total	**1032513.54**	**43029.08**	**150299.52**	**147247.51**	**1373089.65**

State/UT-wise Details of Renewable and Non-Renewable Power Generation in the country for the year 2021-22

Name of State/UT	Power Generation from Non-Renewable Sources		Power Generation from Renewable Energy Sources		Total Power Generation
	Thermal(Coal/Lignite/ Gas/Diesel)	Nuclear	Hydro (Large)	Other Renewable Energy Sources	
	(MUs)	(MUs)	(MUs)	(MUs)	(MUs)
Chandigarh	0.00	0.00	0.00	14.19	14.19
Delhi	4948.57	0.00	0.00	458.73	5407.30
Haryana	22967.73	0.00	0.00	1135.42	24103.15
HP	0.00	0.00	36459.64	2043.76	38503.40
J & K	0.00	0.00	17074.02	415.81	17489.83
Ladakh	0.00	0.00	405.98	0.00	405.98
Punjab	24175.82	0.00	3709.73	3242.15	31127.70
Rajasthan	51107.41	8308.85	481.84	24099.31	83997.41
Uttar Pradesh	131847.42	3580.25	1402.68	6328.94	143159.29
Uttarakhand	1012.32	0.00	14332.13	872.32	16216.77
Northern Region	**236059.27**	**11889.10**	**73866.02**	**38610.64**	**360425.03**
Chhattisgarh	140870.87	0.00	404.13	1938.21	143213.21
Gujarat	56922.27	3503.47	2621.51	24839.53	87886.78
Madhya Pradesh	129634.45	0.00	4686.72	8716.73	143037.90
Maharashtra	122610.11	8602.18	6007.38	15845.64	153065.31
Daman and Diu and Dadra and Nagar Haveli	0.00	0.00	0.00	96.83	96.83
Goa	0.00	0.00	0.00	16.82	16.82
Western Region	**450037.70**	**12105.65**	**13719.74**	**51453.76**	**527316.85**

Andhra Pradesh	55421.08	0.00	3113.83	15662.61	74197.52
Telangana	51550.06	0.00	5626.63	7345.89	64522.58
Karnataka	30505.26	7492.05	13936.46	28634.28	80568.05
Kerala	0.00	0.00	9317.44	1614.62	10932.06
Tamil Nadu	61182.76	15625.26	5212.07	24061.28	106081.37
Lakshadweep	0.00	0.00	0.00	0.30	0.30
Puducherry	251.13	0.00	0.00	12.24	263.37
Southern Region	**198910.29**	**23117.31**	**37206.43**	**77331.22**	**336565.25**
Andaman Nicobar	117.24	0.00	0.00	34.77	152.01
Bihar	43940.40	0.00	0.00	239.83	44180.23
Jharkhand	28338.72	0.00	547.96	28.71	28915.39
Orissa	60161.29	0.00	5230.63	1081.10	66473.02
Sikkim	0.00	0.00	11493.90	12.35	11506.25
West Bengal	83216.77	0.00	3189.84	1845.09	88251.70
Eastern Region	**215774.42**	**0.00**	**20462.33**	**3241.86**	**239478.61**
Arunachal Pradesh	0.00	0.00	4161.28	2.13	4163.41
Assam	7600.55	0.00	676.24	122.10	8398.89
Manipur	0.00	0.00	455.48	6.72	462.20
Meghalaya	0.00	0.00	841.82	44.68	886.50
Mizoram	0.00	0.00	137.44	28.09	165.53
Nagaland	0.00	0.00	100.55	63.47	164.02
Tripura	6332.25	0.00	0.00	7.62	6339.87
North Eastern Region	**13932.80**	**0.00**	**6372.81**	**274.82**	**20580.43**
All India Total	**1114714.48**	**47112.06**	**151627.33**	**170912.30**	**1484366.17**

State/UT-wise Details of Renewable and Non-Renewable Power Generation in the country for the year 2022-23

Name of State/UT	Power Generation from Non-Renewable Sources		Power Generation from Renewable Energy Sources		Total Power Generation
	Thermal(Coal/Lignite/ Gas/Diesel)	Nuclear	Hydro (Large)	Other Renewable Energy Sources	
	(MUs)	(MUs)	(MUs)	(MUs)	(MUs)
Chandigarh	0.00	0.00	0.00	12.61	12.61
Delhi	3784.30	0.00	0.00	530.20	4314.50
Haryana	32139.27	0.00	0.00	1419.73	33559.00
HP	0.00	0.00	38666.98	2912.95	41579.93
J & K	0.00	0.00	16777.42	393.20	17170.62
Ladakh	0.00	0.00	402.78	0.00	402.78
Punjab	31506.16	0.00	4399.65	4169.59	40075.40
Rajasthan	57418.72	6587.27	967.43	40990.05	105963.47
Uttar Pradesh	152063.22	3192.62	974.04	7217.18	163447.06
Uttarakhand	0.00	0.00	15435.77	933.72	16369.49
Northern Region	**276911.67**	**9779.89**	**77624.07**	**58579.23**	**422894.86**
Chhattisgarh	142599.20	0.00	237.37	2003.05	144839.62
Gujarat	55481.62	3639.91	6133.14	29762.63	95017.30
Madhya Pradesh	135838.47	0.00	7309.07	8872.71	152020.25
Maharashtra	126907.03	8985.48	5894.29	17206.59	158993.39
Daman and Diu and Dadra and Nagar Haveli	0.00	0.00	0.00	30.63	30.63
Goa	0.00	0.00	0.00	19.96	19.96
Western Region	**460826.32**	**12625.39**	**19573.87**	**57895.56**	**550921.14**

Andhra Pradesh	61541.93	0.00	3747.58	16411.91	81701.42
Telangana	50738.20	0.00	6010.07	7429.89	64178.16
Karnataka	35014.30	7443.24	13157.34	29575.44	85190.32
Kerala	0.12	0.00	7989.00	1946.26	9935.38
Tamil Nadu	67083.23	16012.57	5965.77	27626.45	116688.02
Lakshadweep	15.02	0.00	0.00	0.10	15.12
Puducherry	233.07	0.00	0.00	12.24	245.31
Southern Region	**214625.87**	**23455.81**	**36869.76**	**83002.29**	**357953.73**
Andaman Nicobar	214.57	0.00	0.00	37.88	252.45
Bihar	55200.21	0.00	0.00	288.85	55489.06
Jharkhand	30472.78	0.00	305.47	19.70	30797.95
Orissa	64874.24	0.00	5462.81	1192.10	71529.15
Sikkim	0.00	0.00	11696.79	12.35	11709.14
West Bengal	87612.45	0.00	3423.73	1959.12	92995.30
Eastern Region	**238374.25**	**0.00**	**20888.80**	**3510.00**	**262773.05**
Arunachal Pradesh	0.00	0.00	4820.94	24.85	4845.79
Assam	8393.08	0.00	481.60	279.01	9153.69
Manipur	0.00	0.00	477.98	8.79	486.77
Meghalaya	0.00	0.00	980.25	71.64	1051.89
Mizoram	0.00	0.00	204.13	62.27	266.40
Nagaland	0.00	0.00	177.37	111.95	289.32
Tripura	7079.48	0.00	0.00	6.58	7086.06
North Eastern Region	**15472.56**	**0.00**	**7142.27**	**565.09**	**23179.92**
All India Total	**1206210.67**	**45861.09**	**162098.77**	**203552.17**	**1617722.70**

State/UT-wise Details of Renewable and Non-Renewable Power Generation in the country for the year 2023-24 (upto June, 2023)

Name of State/UT	Power Generation from Non-Renewable Sources		Power Generation from Renewable Energy Sources		Total Power Generation
	Thermal(Coal/ Lignite/ Gas/Diesel)	Nuclear	Hydro (Large)	Other Renewable Energy Sources	
	(MUs)	(MUs)	(MUs)	(MUs)	(MUs)
Chandigarh	0.00	0.00	0.00	4.93	4.93
Delhi	674.22	0.00	0.00	169.47	843.69
Haryana	6939.38	0.00	0.00	353.38	7292.76
HP	0.00	0.00	9754.75	781.19	10535.94
J & K	0.00	0.00	5772.08	167.86	5939.94
Ladakh	0.00	0.00	85.09	0.00	85.09
Punjab	8203.53	0.00	979.93	1381.28	10564.74
Rajasthan	14811.15	1819.06	8.97	12961.91	29601.09
Uttar Pradesh	38910.19	878.24	152.04	1781.87	41722.34
Uttarakhand	288.57	0.00	3114.94	233.43	3636.94
Northern Region	**69827.04**	**2697.30**	**19867.80**	**17835.33**	**110227.47**
Chhattisgarh	41442.45	0.00	37.64	571.70	42051.79
Gujarat	18806.11	815.70	382.78	11233.85	31238.44
Madhya Pradesh	36152.36	0.00	781.53	2795.53	39729.42
Maharashtra	35251.78	1773.81	1893.79	4408.97	43328.35
Daman and Diu and Dadra and Nagar Haveli	0.00	0.00	0.00	7.28	7.28
Goa	0.00	0.00	0.00	15.91	15.91
Western Region	**131652.70**	**2589.51**	**3095.74**	**19033.25**	**156371.20**

Andhra Pradesh	18596.56	0.00	356.05	4526.48	23479.09
Telangana	13573.93	0.00	163.70	2036.53	15774.16
Karnataka	11520.17	1809.61	2595.39	7406.16	23331.33
Kerala	0.00	0.00	1681.64	469.26	2150.90
Tamil Nadu	19693.61	3121.68	757.10	7643.05	31215.44
Lakshadweep	16.86	0.00	0.00	0.02	16.88
Puducherry	62.03	0.00	0.00	3.06	65.09
Southern Region	**63463.16**	**4931.29**	**5553.88**	**22084.57**	**96032.90**
Andaman Nicobar	88.10	0.00	0.00	8.30	96.40
Bihar	14549.94	0.00	0.00	84.79	14634.73
Jharkhand	8662.96	0.00	17.21	4.41	8684.58
Orissa	16925.64	0.00	1194.25	279.16	18399.05
Sikkim	0.00	0.00	2875.80	3.09	2878.89
West Bengal	23305.07	0.00	704.80	497.01	24506.88
Eastern Region	**63531.71**	**0.00**	**4792.06**	**876.76**	**69200.53**
Arunachal Pradesh	0.00	0.00	945.83	0.76	946.59
Assam	2183.64	0.00	60.26	103.52	2347.42
Manipur	0.00	0.00	15.98	3.23	19.21
Meghalaya	0.00	0.00	165.53	11.41	176.94
Mizoram	0.00	0.00	16.60	24.78	41.38
Nagaland	0.00	0.00	8.22	16.05	24.27
Tripura	1650.55	0.00	0.00	1.48	1652.03
North Eastern Region	**3834.19**	**0.00**	**1212.42**	**161.22**	**5207.83**
All India Total	**332308.80**	**10218.10**	**34521.90**	**59991.14**	**437039.94**

****

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) TO (d) OF UNSTARRED QUESTION NO. 2081 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

The details of power generation in the country from Renewable Energy Sources during the last three (3) years

Year	**Power Generation from Renewable Energy Sources in the Country**		
	Hydro (Large)	**Other Renewable Energy Sources**	**TOTAL**
	(MUs)	**(MUs)**	**(MUs)**
2020-21	150,299.52	147,247.51	**297,547.03**
2021-22	151,627.33	170,912.30	**322,539.63**
2022-23	162,098.77	203,552.17	**365,650.94**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2215
ANSWERED ON **08.08.2023**

BUDGETARY SUPPORT FOR PUMPED STORAGE PLANTS

2215 DR. AMAR PATNAIK:

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

(a) whether Government plans to provide the State viability gap funding for Pumped Hydro Storage Projects highlighted in the Budget speech;

(b) if so, by when the States shall receive the funds and if not, the reasons therefor; and

(c) whether Government plans to share the cess of ₹ 400 per Ton of coal with the States for the development of PSPs?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : In the Budget speech, an announcement was made on formulation of a detailed framework for Pumped Storage Projects. At present, there are no plans to provide viability gap funding for Pumped Hydro Storage Projects.

(c) : There is no such proposal under consideration.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2229
ANSWERED ON **08.08.2023**

COAL CONSUMPTION BY POWER PLANTS

2229 DR. C.M. RAMESH:

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

(a) the details of coal consumption by power plants in the country during the last three years and whether coal supply to these power plants are adequate;

(b) whether power plants to meet the shortage of coal are also importing coal, the details thereof, power plant-wise; and

(c) whether there is any Government guidelines regarding import of coal by these power plants, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): The domestic coal receipt, imported coal receipt and coal consumption by power plants in the country during the last three years and current year are as under:

Year	Opening Stock (Million Tonnes)*	Domestic Coal Receipt (Million Tonnes)	Imported Coal Receipt (Million Tonnes)	Total Coal Receipt (Million Tonnes)	Total Availability of Coal (Million Tonnes)	Total Consumption (Million Tonnes)
2020-21	51.7	550.8	45.5	596.3	648	615.4
2021-22	31.9	667.6	27.0	694.6	726.5	697.3
2022-23	27.2	731.6	55.6	787.2	814.4	776.8
2023-24 (Apr-June)	37.2	196.8	14.2	211.0	248.2	212.2

*Stock adjusted by Plants during the year.

The power plants designed on imported coal import coal for their fuel requirement and the power plants designed on domestic coal import coal for blending purpose keeping in view their requirement, domestic coal availability and commercial prudence. Further, the power plants use their coal stock to meet requirement whenever the receipt of coal is less than consumption.

The details of receipt and consumption of coal in Domestic Coal Based (DCB) Plants during last 3 years and current year (Apr-June) is attached at **ANNEXURE**.

(c): Coal, whether domestic or imported, is procured by Thermal Power Plants (DCBs or ICBs) separately and as per their requirements. As Coal is under open general licence (OGL) since 1993, thermal power plants/generators are regularly importing coal as per their preference (imported coal has high GCV value and therefore is of better quality) and needs based on their commercial prudence. Thermal Coal imports increased with the construction of Imported Coal Based coastal power plants especially between 2002-03 and 2019-20 (pre-pandemic year). Even Domestic Coal Based plants has shown an increasing trend of blending of imported coal between 2011-12 (6.6%, 26.5 Million Tonnes) and 2014-15 (9.9%, 48.5 Million Tonnes). Information regarding coal imports by DCBs and ICBs is regularly collected and monitored by CEA.

……..2.

The import of coal by power plants during the last 5 FYs and the first quarter of the current FY is as under:

All figures in Million Tonnes

Imported Coal Receipt at Coal based Power Plants			
Year	**Domestic Coal based Plants (Blending)**	**Imported Coal based Plants**	**Total**
2018-19	21.4	40.3	61.7
2019-20	23.8	45.5	69.2
2020-21	10.4	35.1	45.5
2021-22	8.1	18.9	27.0
2022-23	35.1	20.5	55.6
2023-24 (April-June)	6.5	7.7	14.2

The above table clearly shows that import of coal, for DCBs, has been on decline since 2019-20 primarily due to increased availability of domestic coal on account of various policy measures taken to increase domestic coal production. Accordingly, the Ministry of Power, in FY 2020-21, also gave advisory to GENCOS to reduce their imports as Ministry of Coal informed that sufficient domestic coal was available. However, from July, 21 onwards the consumption of coal exceeded the supplies because of increased demand such that the coal stocks at the power plants end came down from 28.7 Miilion Tonnes (MT) as on 30.06.2021 to about 8.1 Million Tonnes (MT) as on 30.09.2021. This was largely enough for three and half days only. During this period (Q2 of FY 2021-22) stocks, the gap between consumption and supply of domestic coal has been about 2.38 Lakh Tonnes/day. The Ministry of Power, while observing the trend of domestic coal supplies viz-a viz consumption and to ensure non repetition of the situation of critical domestic stocks at the end of Q2, advised all the States Gencos & IPPs, in December 2021, to import coal @4% (by weight) and NTPC/DVC @ 10% (by weight) for meeting their requirements during 2022-23. During the month of April, 2022, the Power Demand and the coal consumption in power plants have grown by about 12 % as compared to April, 2021. In view of the high demand for power and receipt of coal being less than consumption leading to depletion of coal stock, MOP on 28.04.2022 advised States and IPPs to import coal @ 10% (by weight) of their requirement in order to meet the requirements of power generation.

The procurement and payment of the imported coal is done by the Gencos.

During April-Sep, 2022 (QI, Q2 of FY 2022-23) the receipt of domestic coal was about 355 MT against the consumption of 385 MT (Dom: 359 MT +1mp: 1.4 x 18.9 MT). If there would have been no import for blending purpose, the coal stock available at the domestic coal based plants, which was about 24 MT at the beginning of the FY 2022-23 would have reduced to ZERO during September, 2022. The gap between supply of domestic coal and consumption of coal was about 1.6 lakh tons/day during first half of FY 2022-23. On the improvement of the situation MOP advised GENCOs on 01.08.2022 to take decision regarding blending at their level taking into account the domestic coal supply and stock position (need based blending) with continuous monitoring of stock levels. However, during September, 2022 to January, 2023, the gap between daily coal consumption and daily arrival of domestic coal ranged from 0.26 Million Tonnes to 0.05 Million Tonnes. Therefore Ministry of Power advised Central, State Gencos and Independent Power Producers (IPPs) on 09.01.2023 to import coal through a transparent competitive procurement for blending so as to have sufficient coal stocks at their power plants for smooth operations till September, 2023.

****

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2229 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

PLANT-WISE COAL RECEIPT AND CONSUMPTION FROM 2020-21 to 2023-24 (Apr-Jun))

		2020-21				2021-22				2022-23				2023-24 (Apr-Jun)			
Sl. No	**Name of TPS**	**Domes-tic Receipt**	**Impor-ted Receipt**	**Total Receipt**	**Total Consump-tion**	**Domes-tic Receipt**	**Impor-ted Receipt**	**Total Receipt**	**Total Consump-tion**	**Domestic Receipt**	**Imported Receipt**	**Total Receipt**	**Total Consum-ption**	**Domes-tic Receipt**	**Impor-ted Receipt**	**Total Receipt**	**Total Consump-tion**
1	PANIPAT TPS	522	0	522	847	1819	0	1819	1942	3482	222	3704	3469	414	0	414	601
2	RAJIV GANDHI TPS	790	0	790	1162	1762	0	1762	1868	4592	425	5018	4861	555	0	555	850
3	YAMUNA NAGAR TPS	1406	0	1406	1823	1795	0	1795	1846	2804	235	3039	2939	545	0	545	639
4	INDIRA GANDHI STPP	1970	0	1970	2450	4400	0	4400	4669	4802	592	5394	5335	1583	113	1696	1263
5	MAHATMA GANDHI TPS	2814	0	2814	2862	4535	0	4535	4714	4636	401	5038	5018	1108	0	1108	1176
6	GH TPS (LEH.MOH.)	341	0	341	605	1483	0	1483	1344	2610	75	2685	2548	723	0	723	601
7	ROPAR TPS	402	0	402	533	1241	0	1241	1191	2700	75	2775	2635	808	0	808	599
8	GND TPS(BHATINDA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	RAJPURA TPP	4185	0	4185	4237	5116	0	5116	5436	5903	122	6024	5821	1650	35	1685	1567
10	TALWANDI SABO TPP	4498	0	4498	4884	5720	0	5720	6019	8190	125	8315	8151	2113	4	2117	2079
11	GOINDWAL SAHIB TPP	753	0	753	853	1207	0	1207	1335	1528	0	1528	1481	422	0	422	438
12	KOTA TPS	3311	0	3311	3674	4857	0	4857	4907	5763	0	5763	5754	1489	0	1489	1494
13	SURATGARH STPS	0	0	0	0	2333	0	2333	2131	2843	199	3042	3014	1054	0	1054	1086
14	SURATGARH TPS	684	0	684	846	3013	0	3013	2804	4685	8	4693	4719	1342	0	1342	1182
15	CHHABRA TPP	8383	0	8383	8493	0	0	0	0	0	0	0	0	0	0	0	0
16	CHHABRA-I PH-1 TPP	0	0	0	0	568	0	568	1177	1739	49	1788	2225	545	0	545	681
17	CHHABRA-I PH-2 TPP	0	0	0	0	1051	0	1051	368	2083	0	2083	1586	363	0	363	291
18	CHHABRA-II TPP	0	0	0	0	3727	0	3727	3906	4446	249	4695	4680	1162	0	1162	1153
19	KALISINDH TPS	3517	0	3517	3540	4324	0	4324	4368	4182	65	4247	4118	1115	0	1115	1241
20	DISHERGARH TPP	0	0	0	0	0	0	0	0	48	0	48	45	15	0	15	20
21	KAWAI TPS	4460	0	4460	4847	4760	0	4760	4856	4532	918	5450	5054	866	0	866	1140
22	ANPARA TPS	9823	0	9823	9907	11242	0	11242	11404	12824	0	12824	12323	2681	0	2681	2909
23	HARDUAGANJ TPS	1491	0	1491	1534	847	0	847	1103	3994	0	3994	3761	971	0	971	1119
24	JAWAHARPUR STPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	OBRA TPS	3357	0	3357	3477	3313	0	3313	3458	4236	0	4236	4336	902	0	902	820
26	PARICHHA TPS	2395	0	2395	2500	2274	0	2274	2613	3829	0	3829	3726	1003	0	1003	903
27	DADRI (NCTPP)	1997	35	2033	2663	3706	139	3846	3847	5672	1212	6884	6957	1537	239	1777	1696
28	RIHAND STPS	14382	0	14382	14008	14132	0	14132	13535	14091	36	14127	14272	3687	0	3687	3830
29	SINGRAULI STPS	9545	0	9545	9463	9505	0	9505	9464	9676	0	9676	9718	2473	0	2473	2540
30	TANDA TPS	3550	0	3550	4231	5684	126	5810	5925	5925	828	6753	6886	1395	362	1757	1488
31	UNCHAHAR TPS	4884	20	4904	5116	5189	130	5319	5542	5254	707	5961	5784	1282	169	1451	1317
32	ROSA TPP Ph-I	3399	0	3399	3948	3546	0	3546	3652	4737	0	4737	4653	1302	0	1302	1217
33	ANPARA C TPS	5106	0	5106	5436	5117	0	5117	5269	5083	0	5083	5202	1422	0	1422	1469
34	MAQSOODPUR TPS	161	0	161	145	155	0	155	158	268	0	268	240	71	0	71	72

35	KHAMBARKHERA TPS	153	0	153	140	150	0	150	160	272	0	272	219	68	0	68	68
36	BARKHERA TPS	157	0	157	140	144	0	144	161	274	0	274	246	67	0	67	67
37	KUNDARKI TPS	184	0	184	181	207	0	207	214	305	0	305	267	72	0	72	71
38	UTRAULA TPS	199	0	199	197	192	0	192	191	295	0	295	240	68	0	68	64
39	PRAYAGRAJ TPP	6052	0	6052	6384	6922	0	6922	6996	7722	0	7722	7604	1996	0	1996	1959
40	LALITPUR TPS	4004	0	4004	4221	6153	0	6153	5869	7453	0	7453	7036	2063	0	2063	2185
41	MEJA STPP	2923	0	2923	2762	5246	0	5246	5052	4207	407	4615	4751	1345	96	1441	1284
42	DSPM TPS	2543	0	2543	2306	2753	0	2753	2805	2653	0	2653	2592	643	0	643	716
43	KORBA-III	858	0	858	898	0	0	0	0	0	0	0	0	0	0	0	0
44	KORBA-WEST TPS	6678	0	6678	6791	6715	0	6715	6723	7182	0	7182	7031	1683	0	1683	1871
45	KORBA STPS	13812	0	13812	13988	14082	0	14082	14127	14075	98	14174	14475	3670	0	3670	3766
46	SIPAT STPS	15228	0	15228	15048	13974	285	14259	14232	13321	695	14016	14026	3473	0	3473	3319
47	PATHADI TPP	3300	0	3300	3041	2513	0	2513	2758	2519	15	2534	2446	806	0	806	761
48	BHILAI TPS	2301	0	2301	2435	2516	0	2516	2660	2729	170	2899	2728	615	0	615	738
49	BALCO TPS	2734	41	2776	2569	2433	52	2486	2532	1636	101	1737	1874	465	38	502	567
50	MARWA TPS	3709	0	3709	3536	3583	0	3583	3574	3335	0	3335	3413	1583	0	1583	1338
51	AKALTARA TPS	6635	0	6635	6744	5872	0	5872	5828	6933	93	7026	6824	1622	0	1622	1783
52	BARADARHA TPS	5658	0	5658	5818	6723	0	6723	6473	5262	114	5376	5429	1628	0	1628	1506
53	AVANTHA BHANDAR	2322	0	2322	2255	2932	0	2932	2762	2854	31	2884	2970	864	0	864	919
54	TAMNAR TPP	6781	0	6781	6799	7951	0	7951	7862	10394	211	10605	10187	3078	114	3192	3360
55	BANDAKHAR TPP	1276	12	1288	1401	1454	0	1454	1520	1191	0	1191	1105	283	0	283	377
56	NAWAPARA TPP	1631	0	1631	1586	418	0	418	550	2189	0	2189	2110	773	0	773	701
57	OP JINDAL TPS	3472	0	3472	3498	4168	0	4168	4145	4600	116	4716	4841	1613	0	1613	1428
58	BINJKOTE TPP	1336	0	1336	1342	1181	0	1181	1243	1139	0	1139	1105	629	0	629	529
59	LARA TPP	4144	0	4144	3931	8069	0	8069	7946	8328	446	8774	8652	2077	0	2077	2209
60	RAIKHEDA TPP	5471	0	5471	5557	6191	0	6190	6186	4559	476	5035	5133	1517	0	1518	1562
61	UCHPINDA TPP	3376	0	3376	3245	5249	0	5249	5266	4979	0	4979	4826	1478	0	1478	1686
62	SALORA TPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	SABARMATI (D-F STATIONS)	654	106	760	782	1158	235	1393	1378	1253	238	1491	1463	289	72	360	429
64	SIKKA REP. TPS	0	896	896	911	0	388	388	466	0	878	878	800	0	24	24	12
65	GANDHI NAGAR TPS	839	0	839	1012	2301	0	2301	2213	2479	68	2547	2563	678	0	678	609
66	UKAI TPS	2662	0	2662	3095	3478	0	3478	3434	3696	131	3827	3769	1129	0	1129	1091
67	WANAKBORI TPS	3450	0	3450	4266	7524	0	7524	7569	7513	130	7642	7535	2407	0	2407	2061
68	MUNDRA UMTPP	0	9819	9819	10304	0	4366	4366	3635	0	4397	4397	4851	0	1202	1202	1560
69	SALAYA TPP	0	2227	2227	2227	0	0	0	0	0	1280	1280	1017	0	667	667	506
70	MUNDRA TPS	0	13811	13811	13960	0	6515	6515	6583	0	0	0	0	0	0	0	0
71	MUNDRA TPS-I & II	0	0	0	0	0	0	0	0	0	3222	3222	3263	0	282	282	280
72	MUNDRA TPS-III	0	0	0	0	0	0	0	0	0	2278	2278	2215	0	1860	1860	1808
73	AMARKANTAK EXT TPS	949	0	949	999	984	0	984	982	939	0	939	897	240	0	240	279
74	SANJAY GANDHI TPS	5800	0	5800	5813	4903	0	4903	5108	6308	0	6308	6059	1382	0	1382	1521
75	SATPURA TPS	2573	0	2573	3178	2049	0	2049	2255	2558	0	2558	2419	576	0	576	620
76	SHREE SINGAJI TPP	3768	0	3768	4049	6817	0	6817	6884	9541	0	9541	9461	2422	0	2422	2328
77	VINDHYACHAL STPS	24884	0	24884	25063	24719	0	24719	24072	23874	41	23915	23816	5888	0	5888	6052
78	GADARWARA TPP	2794	0	2794	2581	4926	173	5099	5132	5015	1077	6092	5848	955	207	1162	1233
79	KHARGONE STPP	2641	0	2641	2538	3757	0	3757	3846	2770	780	3550	3631	826	130	956	939
80	BINA TPS	1082	0	1082	1316	1816	0	1816	1812	2194	0	2194	2125	570	0	570	585

81	ANUPPUR TPP	4637	0	4637	4510	5496	0	5496	5428	5230	262	5491	5455	1533	0	1533	1549
82	SASAN UMTPP	17832	0	17832	18218	18159	0	18159	18304	16401	0	16401	16471	3998	0	3998	4130
83	NIGRI TPP	4252	0	4252	4512	5015	0	5015	4969	5262	0	5262	4792	1369	0	1369	1555
84	MAHAN TPP	1969	0	1969	2217	2383	0	2383	2380	2892	212	3104	2671	1006	0	1006	1155
85	SEIONI TPP	2588	0	2588	2597	2517	0	2517	2299	2674	0	2674	2610	641	0	641	728
86	BHUSAWAL TPS	3365	0	3365	3746	4747	0	4747	4745	5070	684	5755	5677	1787	16	1803	1610
87	CHANDRAPUR(MAHARASHTRA) STPS	12338	0	12338	12628	11654	0	11654	11804	11083	1488	12571	11940	2926	92	3018	3482
88	KHAPARKHEDA TPS	6479	1	6479	6878	6230	0	6230	6205	6213	543	6755	6614	1638	50	1687	1657
89	KORADI TPS	6308	0	6308	6634	8509	0	8509	8519	9155	548	9703	9360	2285	0	2285	2469
90	NASIK TPS	416	0	416	593	1650	0	1650	1678	2258	206	2464	2491	736	12	748	645
91	PARLI TPS	1629	0	1629	1786	1937	0	1937	1966	3020	0	3020	3007	891	0	891	813
92	PARAS TPS	2439	0	2439	2627	1986	0	1986	1998	2383	0	2383	2377	720	0	720	652
93	TIRORA TPS	11334	0	11334	11470	14095	0	14095	14183	14871	73	14943	14512	3649	0	3649	3778
94	DAHANU TPS	1029	404	1432	1781	1792	0	1792	2005	1973	251	2224	2203	575	0	575	592
95	BUTIBORI TPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	AMRAVATI TPS	1208	0	1208	1701	5479	0	5479	5779	5734	12	5746	5875	1656	0	1656	1643
97	GMR WARORA TPS	2324	0	2324	2500	2331	0	2331	2319	2701	37	2739	2760	797	0	797	741
98	MAUDA TPS	3960	309	4270	4521	7075	1041	8116	8668	8790	1462	10252	10036	2274	364	2638	2394
99	JSW RATNAGIRI TPP	0	1278	1278	1589	0	749	749	734	0	318	318	305	0	195	195	218
100	WARDHA WARORA TPP	1358	0	1358	1361	1479	0	1479	1460	1788	22	1811	1876	677	0	677	654
101	DHARIWAL TPP	2496	0	2496	2745	2733	0	2733	2721	2737	87	2824	2796	857	0	857	796
102	TROMBAY TPS	0	1688	1688	1673	0	2244	2244	2309	0	2204	2204	2191	0	757	757	662
103	SOLAPUR STPS	2235	0	2235	2340	2590	89	2679	3172	3263	763	4026	3872	849	32	880	959
104	MIHAN TPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	BELA TPS	0	0	0	0	0	0	0	0	387	0	387	362	257	0	257	269
106	Dr. N.TATA RAO TPS	6176	0	6176	6650	9076	0	9076	9221	9271	0	9271	9340	2705	0	2705	2641
107	RAYALASEEMA TPS	1304	0	1304	1665	5052	0	5052	5123	7154	0	7154	7116	2054	0	2054	2059
108	SIMHADRI	5906	142	6048	6365	9114	3	9117	8939	8426	1302	9728	9764	1846	276	2123	1949
109	DAMODARAM SANJEEVAIAH TPS	2964	819	3783	4028	3677	0	3677	3632	3917	75	3992	3944	1509	336	1844	1909
110	SIMHAPURI TPS	0	0	0	0	0	0	0	0	0	61	61	61	0	150	150	150
111	THAMMINAPATNAM TPS	0	0	0	0	0	294	294	305	0	0	0	0	0	0	0	0
112	VIZAG TPP	965	0	965	821	95	0	95	210	3819	56	3875	3815	936	168	1104	1074
113	PAINAMPURAM TPP	2957	2205	5161	5263	3905	1833	5738	5652	4258	1476	5734	5598	1110	544	1654	1574
114	SGPL TPP	0	4523	4523	4726	807	3368	4175	4186	1525	3590	5116	4807	574	827	1401	1409
115	RAICHUR TPS	2127	0	2127	2646	4807	0	4807	4738	5250	11	5261	5310	1709	0	1709	1711
116	BELLARY TPS	1487	0	1487	1993	4370	0	4370	4369	5628	21	5650	5574	1907	0	1907	1887
117	UDUPI TPP	0	852	852	988	20	602	622	727	0	692	692	650	39	377	415	432
118	TORANGALLU TPS(SBU-II)	0	590	590	582	0	877	877	862	0	891	891	854	0	286	286	260
119	TORANGALLU TPS(SBU-I)	0	239	239	239	0	476	476	476	0	679	679	679	0	152	152	152
120	KUDGI STPP	3078	128	3206	2883	3481	240	3721	3983	5861	1349	7210	7019	1604	348	1952	1989

121	YERMARUS TPP	1847	0	1847	1981	3239	0	3239	3288	3266	0	3266	3089	1068	0	1068	1148
122	METTUR TPS	2447	202	2649	2760	3839	19	3858	3880	4560	0	4560	4417	1164	0	1164	1245
123	NORTH CHENNAI TPS	6057	483	6540	6538	9238	135	9373	7527	7492	766	8258	8039	2123	551	2674	2580
124	TUTICORIN TPS	3076	235	3310	3439	4553	0	4553	4599	5498	0	5498	5229	1389	0	1389	1544
125	METTUR TPS - II	784	208	992	1077	2092	57	2149	2163	2108	345	2454	2360	463	326	789	776
126	VALLUR TPP	3232	0	3232	3226	5893	0	5893	5971	7141	380	7521	7288	1526	228	1754	1623
127	MUTHIARA TPP	0	1509	1509	1464	4	756	760	802	75	1663	1738	1568	0	746	746	893
128	NTPL TUTICORIN TPP	3215	72	3287	3476	2912	0	2912	2983	3983	661	4645	4441	994	76	1070	1129
129	ITPCL TPP	0	2169	2169	2378	0	1624	1624	1635	0	1558	1558	1327	0	725	725	1011
130	TUTICORIN (P) TPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
131	TUTICORIN TPP ST-IV	0	0	0	0	0	0	0	0	27	410	437	471	0	266	266	260
132	BHADRADRI TPP	1135	0	1135	1133	3630	0	3630	3558	4468	0	4468	4409	1284	0	1284	1261
133	RAMAGUNDEM STPS	10103	0	10103	10516	10792	0	10792	10808	10200	764	10964	10732	2763	0	2763	2780
134	KAKATIYA TPS	3348	0	3348	3384	4102	0	4102	4123	4772	0	4772	4419	1094	0	1094	1191
135	RAMAGUNDEM-B TPS	206	0	206	210	203	0	203	208	197	0	197	201	58	0	58	65
136	KOTHAGUDEM TPS (NEW)	3832	0	3832	4109	4191	0	4191	4212	5190	0	5190	5038	1130	0	1130	1231
137	KOTHAGUDEM TPS (STAGE-7)	2719	0	2719	2794	2877	0	2877	2904	2254	0	2254	2227	827	0	827	785
138	SINGARENI TPP	4216	0	4216	4329	5376	0	5376	5411	5416	0	5416	5402	1312	0	1312	1247
139	MUZAFFARPUR TPS	1928	0	1928	1885	2063	0	2063	2066	1967	0	1967	1985	539	0	539	524
140	KAHALGAON TPS	10886	0	10886	10643	11528	0	11528	11974	10259	770	11029	10881	2742	57	2799	2961
141	BARH I	0	0	0	0	762	0	762	766	459	0	459	488	0	0	0	0
142	BARH II	0	0	0	0	5015	0	5015	4889					0	0	0	0
143	BARH STPS	5110	0	5110	5362	0	0	0	0	7917	309	8226	8079	2055	44	2098	2248
144	BARAUNI TPS	841	0	841	877	1618	0	1618	1525	2408	0	2408	2451	715	0	715	711
145	NABINAGAR TPP	3059	0	3059	3086	3970	0	3970	3951	4715	232	4947	4909	1157	34	1191	1274
146	NABINAGAR STPP	3025	0	3025	2793	5051	0	5051	4950	7162	464	7626	7762	2428	67	2495	2335
147	CHANDRAPURA(DVC) TPS	1831	0	1831	1972	2324	0	2324	2352	2100	194	2294	2241	401	0	401	549
148	TENUGHAT TPS	1654	0	1654	1592	1065	0	1065	1274	2060	0	2060	1893	350	0	350	426
149	BOKARO TPS `A` EXP	1842	0	1842	1854	1782	0	1782	1730	2004	98	2103	2202	606	0	606	566
150	MAITHON RB TPP	3920	0	3920	3993	4640	0	4640	4578	4437	0	4437	4351	1251	0	1251	1139
151	KODARMA TPP	4457	0	4457	4403	4265	0	4265	4299	4318	453	4771	4613	1106	72	1177	1153
152	NORTH KARANPURA TPP	0	0	0	0	0	0	0	0	173	0	173	274	1021	0	1021	834
153	MAHADEV PRASAD STPP	1955	0	1955	2043	2526	0	2526	2533	2436	31	2467	2391	438	0	438	429
154	JOJOBERA TPS	887	0	887	881	1057	0	1057	1084	1212	0	1212	1190	285	0	285	320
155	IB VALLEY TPS	7137	0	7137	7221	8145	0	8145	8015	8787	0	8787	8748	2433	0	2433	2384
156	DARLIPALI STPS	3528	0	3528	3376	6559	0	6559	6390	8378	0	8378	8368	2483	0	2483	2239
157	TALCHER (OLD) TPS	2864	0	2864	3105	0	0	0	0	0	0	0	0	0	0	0	0
158	TALCHER STPS	16182	447	16629	16693	16886	131	17017	17058	15751	579	16330	16491	3989	77	4066	4331
159	VEDANTA TPP	2342	0	2342	2356	1749	0	1749	1731	2725	0	2725	2623	499	0	499	517
160	KAMALANGA TPS	5273	0	5273	5167	5466	0	5466	5458	4905	196	5100	5124	1458	35	1493	1362
161	DERANG TPP	4462	0	4462	4193	6500	0	6500	5862	4853	41	4894	5542	1491	0	1491	1540

162	UTKAL TPP (IND BARATH)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
163	DURGAPUR TPS	7	0	7	109	188	0	188	251	369	0	369	158	0	0	0	0
164	BAKRESWAR TPS	4559	0	4559	4686	4890	0	4890	5134	4921	0	4921	4922	1153	0	1153	1219
165	MEJIA TPS	8383	0	8383	8463	9637	3	9640	9856	9758	605	10363	10804	2330	110	2441	2587
166	BANDEL TPS	762	0	762	807	1308	0	1308	1380	1405	0	1405	1412	321	0	321	323
167	D.P.L. TPS	1690	0	1690	1788	1581	0	1581	1775	1651	0	1651	1751	576	0	576	559
168	KOLAGHAT TPS	1266	0	1266	1385	3216	0	3216	3391	4003	0	4003	4038	938	0	938	951
169	SAGARDIGHI TPS	5925	0	5925	6066	7162	0	7162	7298	7792	0	7792	7835	1948	0	1948	1976
170	SANTALDIH TPS	2302	0	2302	2293	2593	0	2593	2778	2718	0	2718	2850	583	0	583	652
171	BUDGE BUDGE TPS	3111	12	3123	3178	3294	0	3294	3235	3252	10	3262	3228	884	0	884	928
172	SOUTHERN REPL. TPS	59	0	59	64	144	0	144	131	408	0	408	382	120	0	120	164
173	TITAGARH TPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	FARAKKA STPS	8043	0	8043	8184	7844	30	7874	8115	7031	761	7792	7654	2343	111	2454	2355
175	DURGAPUR STEEL TPS	3647	0	3647	3744	4012	16	4028	4122	4194	425	4619	4593	1207	58	1265	1188
176	HALDIA TPP	2708	0	2708	2811	2871	0	2871	2939	3026	50	3076	3030	847	0	847	847
177	RAGHUNATHPUR TPP	3093	0	3093	3284	3922	0	3922	3980	3427	316	3743	3700	1373	19	1392	1174
178	HIRANMAYE TPP	90	0	90	90	884	0	884	860	1455	0	1455	1482	302	0	302	256
179	BONGAIGAON TPP	1427	0	1427	1706	2416	0	2416	2491	2974	141	3115	2988	772	11	784	799
180	CHAKABURA TPP	0	0	0	0	220	0	220	221	475	0	475	474	179	0	179	184
181	KASAIPALLI TPP	0	0	0	0	1475	0	1475	1534	1296	0	1296	1156	598	0	598	503
182	KATGHORA TPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
183	RATIJA TPS	0	0	0	0	920	0	920	928	744	0	744	728	228	0	228	231
184	SVPL TPP	0	0	0	0	0	0	0	0	0	0	0	0	42	0	42	27
185	SWASTIK KORBA TPP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186	NIWARI TPP	0	0	0	0	245	0	245	245	383	0	383	383	133	0	133	121
187	GEPL TPP Ph-I	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		**550795**	**45481**	**596276**	**615431**	**667638**	**26998**	**694635**	**697340**	**731652**	**55635**	**787287**	**776790**	**196773**	**14207**	**210980**	**212231**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2230
ANSWERED ON **08.08.2023**

DECLINE IN THE ELECTRICITY GENERATION BY COAL BASED POWER PLANTS

2230 # SHRI NEERAJ DANGI:

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

(a) the details of electricity generated by coal based power plants in the country during the last two years;

(b) whether there has been a decline in the coal based electricity generation in the country during this period;

(c) if so, the details of decline in power generation registered due to shortage of coal during the said period;

(d) the details of power plants that have shut down due to shortage of coal, State-wise; and

(e) the details of the steps being taken by Government to reduce the dependency on coal based power plants?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : The electricity generated by coal based power plants in the country during the last two years 2021-22 and 2022-23 is given as under: -

Years	Generation (in MUs)
2021-22	1041487.43
2022-23	1145907.58

There is no decline in coal based electricity generation in the year 2022-23 over year 2021-22.

(d) : There is no report of shut down of any coal based power plant due to shortage of coal during 2021-22 and 2022-23.

(e) : The details of the steps being taken by the Government to reduce the dependency on coal based power plants are given below:

i. Renewable purchase obligations (RPO): Renewable Purchase Obligation (RPO) and Energy Storage Obligation (ESO) order has been issued by Ministry of Power (MoP) wherein trajectory for RPO for wind, Hydro Purchase Obligation (HPO) and other RPO as well as ESO targets as a percentage of total consumption of electricity has been laid down for the years up to 2029- 30.

ii. For encouraging RE capacity addition, MoP has issued orders for Waiver of Inter-State Transmission Charges on transmission of the electricity generated from Solar, Wind, Green Hydrogen/Green Ammonia, and Pump Storage Plants & Energy Storage Sources.

…….2.

iii. MoP on 25th Oct, 2021 has notified "Electricity (Promotion of Generation of Electricity from Must-Run Power Plant) Rules, 2021" which mandate that Renewable energy projects including but not limited to wind, solar, wind-solar hybrid, hydropower sources, must be considered must-run projects as per the rules. These projects shall not be subjected to curtailment or regulation of generation or supply of electricity on account of merit order dispatch or any other commercial consideration

iv. For promoting the use of Renewable Energy and replacing the costlier thermal/ hydro power with RE, a revised scheme for "Flexibility in Generation and Scheduling of Thermal/Hydro Power Stations through bundling with Renewable Energy and Storage Power" was issued by MoP on 12th April 2022.

v. MoP notified on 10th March 2022 "Guidelines for Procurement and Utilization of Battery Energy Storage Systems(BESS) as part of Generation, Transmission and Distribution assets, along with Ancillary Services" with the objectives, inter-alia, to facilitate procurement of BESS as part of individual RE power projects or separately for addressing the variability/firming power supply/increasing energy output / extending the time of supply from an individual RE project or a portfolio of RE projects, augmentation of existing RE Projects and/or to provide ancillary, grid support and flexibility services for the grid and also to facilitate procurement of BESS for optimum utilization of transmission and distribution network.

vi. Ministry of Power vide notification dated 27th February, 2023, has mandated the Renewable Generation Obligation as per Revised Tariff Policy, 2016. The resolution, inter-alia, mandates that any generating company establishing a coal/lignite-based thermal generating station (except a captive ones fulfilling Renewable Purchase Obligations), and having the Commercial Operation Date (COD) of the project on or after 1st April 2023 shall be required to establish renewable energy generating capacity (in MW) i.e. Renewable Generation Obligation (RGO) of a minimum of forty percent (40%) of the capacity (in MW) of a coal/lignite-based thermal generating station or procure and supply renewable energy equivalent to such capacity.

vii. Establishment of Renewable Energy Management Centres (REMCs): To facilitate smooth integration of growing RE capacity into the Grid with RE forecasting and scheduling tools, 11 number of REMCs and one Energy Management Centre (EMC) have been commissioned.

viii. To encourage the setting up of "Off Shore Wind Projects", Government of India on 9th June, 2022 decided to bid out offshore wind energy blocks equivalent to a project capacity of 4.0 GW per year for a period of three years starting with the FY 22-23 for development off the coast of Tamil Nadu and Gujarat for sale of power through open access /captive / bi-lateral third party sale / merchant sale. Subsequently a project capacity of 5 GW will be bid out every year for a period of five years i.e. up till FY 29-30.

ix. Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route.

x. Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects at large scale.

xi. Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), Solar Rooftop Phase II, 12000 MW CPSU Scheme Phase II, etc.

xii. Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power.

xiii. Notification of standards for deployment of solar photovoltaic system/devices.

xiv. Setting up of Project Development Cell for attracting and facilitating investments.

xv. Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.

xvi. Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2231
ANSWERED ON **08.08.2023**

USE OF SCADA TECHNOLOGY IN THE GRID

2231 SHRI S. NIRANJAN REDDY:

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

(a) the details of the measures being taken to implement centralized remote monitoring and operation of substations, including the deployment of Supervisory Control and Data Acquisition (SCADA) systems;

(b) whether Government has set a timeline for the deployment of these systems across the State transmission grids;

(c) whether Government plans to predictive maintenance techniques using AI/ML algorithms, cyber security measures, and robots and drones for construction and inspection of transmission assets;

(d) if not, the reasons therefor; and

(e) the details of the steps taken by Government to improve efficiency of substations in the country and the overall electric transmission system?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : GRID-INDIA, a PSU under the Ministry of Power, monitors the real time parameters from various Sub-stations and Generating stations at National and Regional Load Despatch Centres (NLDC/RLDCs) through the well-established Supervisory Control and Data Acquisition (SCADA)/ Energy Management Systems (EMS) for monitoring of power system by State Load Despatch Centres (SLDCs) and RLDCs. Regular upgradation of these systems is being done.

Further, Regulation 43(4) of the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022 specifies the centralized remote monitoring and operation of substations including the deployment of SCADA systems.

(b) : SCADA systems at various SLDCs are under process of replacement/upgradation which is expected to be completed by 2026.

…….2.

(c) : Steps taken by Government for predictive maintenance techniques using AI/ML algorithms, cyber security measures, and robots and drones for construction and inspection of transmission assets are as under:

i. All grid substations use sensors for measuring various parameters of power system asset viz., oil temperature, winding temperature, Dissolved Gas analysis of a transformer, contact resistance of Circuit breakers etc. These parameters are further analyzed with computer aided tools for predictive maintenance.

ii. Central Electricity Authority (CEA) has issued Guidelines for Cyber security in Power Sector in October 2021 leading to development and implementation of Cyber Security measures.

iii. A Computer Security Incident Response Team for Power sector (CSIRT-Power) under guidance of CERT-In has been setup at CEA, to coordinate and support the response to cyber security incidents and hand-hold utilities for preventing, detecting, handling, and responding to cyber security incidents.

iv. Regulation 87 of the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022 specifies the provision for use of Unmanned Aerial Vehicle for construction and inspection of transmission assets in difficult and inaccessible terrains.

(d) : Question does not arise.

(e) : In order to improve efficiency of substations in the country and the overall electric transmission system, CEA has brought out the manual on "Transmission planning criterion" in March 2023 for planning Transmission and Substations.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2232
ANSWERED ON **08.08.2023**

PHASING OUT OF COAL BASED THERMAL POWER PLANTS

2232 SMT. MAMATA MOHANTA:

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

(a) whether Government has formulated any plan to phase out the old coal-based thermal power plants in the country including Odisha;

(b) if so, the details thereof and if not, the reasons therefor; and

(c) the steps taken/proposed to be taken by Government to move towards technologies such as super critical and ultra super critical based thermal power plants?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : No, Sir, Central Electricity Authority vide an advisory dated 20.01.2023 suggested that no retirement or repurposing of coal based power stations will be done before 2030 considering the expected energy demand scenario and availability of capacity in future. Thermal Power Plants were also advised implementation of Renovations & Modernisation (R&M) and Life extension (LE) of their units for running up to 2030 and beyond or operating in two shift mode to facilitate Solar and Wind energy integration in to the grid, wherever feasible. Generation is a delicensed activity as per Section 7 of the Electricity Act, 2003 and phasing out/retirement of units is decided by Power generating companies based on their own techno-economic and environmental reasons.

(c) : In order to achieve higher efficiencies and to reduce carbon footprint, a large number of thermal power plants operating in the country have already adopted super-critical/Ultra Super-critical technologies. As on date 94 coal based thermal units of total capacity of 65150 MW are operating with super-critical/Ultra super-critical technologies.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2233
ANSWERED ON **08.08.2023**

FUNDING TO TANGEDCO

2233 SHRI R. GIRIRAJAN:

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

(a) whether Government through REC Ltd., and Power Finance Corporation Ltd., has provided funds to TANGEDCO for various Power generation projects and power infrastructure development in Tamil Nadu;

(b) if so, the details thereof and steps taken by Government to develop power infrastructure in Tamil Nadu like installation of transformers, smart meters and power transmission centres;

(c) the details of total power generation capacity installed in Tamil Nadu and power sharing agreements with other States; and

(d) the funds allocated and disbursed to TANGEDCO for the development of new power projects including Kundah Hydel Power House, Tamil Nadu?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Yes, Sir, REC Ltd. and PFC Ltd. have provided Loans to Tamil Nadu Generation and Distribution Corporation Limited TANGEDCO for various Power Generation projects and infrastructure development in the State. In all Rs. **27052.49** Crore have been sanctioned to TANGEDCO.

(b) : The steps taken by the Government to develop power infrastructure in Tamil Nadu are as follows:

I. Funds were released under IPDS and DDUGJY Schemes for strengthening of Distribution projects and both these schemes were closed w.e.f 31.03.2022. The details of infrastructure created under IPDS and DDUGJY are enclosed as **Annexure-I.**

II. Revamped Distribution Sector Scheme- (RDSS)

The Revamped Distribution Sector Scheme is a Reforms Based and Results-Linked Scheme launched by Ministry of Power to improve the quality, reliability and affordability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector and to reduce the AT&C losses at pan India levels to 12 – 15% and reduce the ACS –ARR gap to zero.

…….2.

The infrastructure works sanctioned under RDSS scheme are enclosed at **Annexure-II**

(c) : The total power requirement of Tamil Nadu is 34,706 MW. Out of this 22,436 MW is met by TANGEDCO, 3190 MW by the Independent Power Producers (IPP) and 4698 MW by the Central Generating Stations (CGS).

The balance requirement is managed by Power generated outside Tamil Nadu. The share of IPP and CGS in the outside support is 1910 MW and 2472 MW respectively.

(d) : The Funds sanctioned and disbursed to TANGEDCO for the development of new power projects including the Kundah Power House in Tamil Nadu by PFC and REC are enclosed as **Annexure-III.**

****

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2233 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

(i) Major works executed under IPDS, as per closure reports submitted by TANGEDCO

BOQ	Unit	Quantum
33/11 KV New Sub-stations	Nos	68 +7 GIS Substations
Augmentation of Sub-stations	Nos	41
Installation of New Distribution Transformer	Nos	1094
New HT Line	cKm	4266
New LT Lines	cKm	1747
UG Cable	cKm	1747
AB Cable	cKm	153
Solar Panels	KWp	2082

(ii) Major works executed under DDUGJY including Saubhagya, as per closure reports submitted by TANGEDCO

BOQ	Unit	Quantum
New Sub-stations	Nos	106
Augmentation of Sub-stations	Nos	128
Installation of New Distribution Transformer	Nos	1189
New HT Line	cKm	3052
New LT Lines	cKm	1174
Feeder Separation	cKm	797
Consumers Meters	Nos	1195856

****

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2233 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

(i) Loss Reduction works approved by MoP/ GoI.

S. No.	Targeted interventions for loss reduction	Unit	Physical Targets			Total	Estimated Outlay (Rs. Cr.)
			FY23	FY24	FY25		
1	Agriculture Feeder Segregation	No. of Feeders	441	592	652	1685	6,227.81
2	High Voltage Distribution System	No. of Feeders	68	99	106	273	1,592.67
3	Separation of Double DTs using HVDS	Nos.	3207	4455	6230	13,892	1,069.92
4	Reconductoring of Existing 33 KV Feeders	KM	206.50	213.18	122.40	542.08	39.46
5	Deployment of new ERP modules (E-way Bill, GST and Digital Signature 2. Vendor portal)	No. of Modules	2	0	0	2	3.00
	Total						8,932.86

(ii) Metering Works approved by MoP/ GoI.

Works	Unit	Physical Targets			Total	Amount (Rs. Cr.)
		FY 23	FY 24	FY 25		
Prepaid Smart Metering	Nos.	38,52,819	91,09,034	1,70,38,147	3,00,00,000	18,000.00
Distribution Transformer metering	Nos.	1,63,628	2,50,792	58,080	4,72,500	1086.75
Feeder metering	Nos.	15,898		1,076	16,974	76.75
Circle level Boundary Metering	Nos.	480	820		1,300	
					Total	19,163.50

****

ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 2233 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

Funds sanctioned and disbursed by PFC Ltd and REC Ltd for New Power Projects:

PFC/REC	New Project Loans	Amount sanctioned and disbursed (in Cr.)
PFC Ltd	Ennore Annex - 1x660 MW	2499.73
PFC Ltd	Ennore SEZ - 2x660 MW	7666.66
PFC Ltd	Uppur Project - 2X800 MW	4708.62
PFC Ltd	Shore Unloader - Ennore SEZ Coal handling	146.86
PFC's Total		**15021.87**
REC Ltd	Kundah HEP - 4x125 MW	1089.71
REC Ltd	NCTPS Stage-III - 1x800 MW	4838.36
REC Ltd	Udangudi TPP -2x660 MW	5905.96
REC Ltd	Kollimalai SHP Project	196.59
REC's Total		**12030.62**
Grand Total (PFC+REC)		**27052.49**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2234
ANSWERED ON **08.08.2023**

UJALA SCHEME

2234 # SMT. KANTA KARDAM:

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

(a) the total quantity of energy-efficient and cheap LEDs distributed under Unnat Jyoti by Affordable LEDs for All (UJALA) scheme during the last five years, the details of the energy saved from it;

(b) the extent to which UJALA scheme has helped people; and

(c) the steps taken by Government to enroll Self Help Groups for distribution of LED bulbs under UJALA scheme across the country?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Energy Efficiency Services Limited (EESL), a joint venture of PSUs under the Ministry of Power has implemented Unnat Jyoti by Affordable LED for All (UJALA) scheme. Under the Scheme, the total quantity of energy efficient and affordable LED Bulbs and LED Tubelights distributed by EESL during the last five years is 7.4 Crores and 10.23 lakhs respectively which have resulted in an estimated annual energy savings of 9.64 billion units (kWh).

(b) : The UJALA scheme of EESL has resulted in large scale market transformation in the LED industry and has enabled market creation of approximately 70 crores LED bulbs annually. This has resulted in a cumulative distribution of 419 crore LED bulbs and 151 crore LED Tube lights as on 31.03.2023 since the inception of UJALA Scheme. This has resulted in estimated saving of 176.19 billion units of electricity per annum, cost saving of INR 70,477 crore per annum, avoided peak demand of 32.18 GW and 125 Million Tonnes of CO2 reduction annually.

Apart from monetary savings, the consumers also get quality, long lasting and durable light through LED bulbs and tubelights . Energy efficient LED bulbs under UJALA have resulted in considerable reduction in Green House Gases/ CO2 emissions which helps in reducing global warming and environmental pollution and thereby leads to health benefits to the community.

(c): To enroll Self-Help Groups under the UJALA scheme, a tri-party agreement between EESL with State Rural Livelihood Mission (SRLM) and the Self-Help group nominated by the State SRLM for sale of LED bulbs under UJALA Scheme needs to be signed. Interested State SRLM can approach EESL for the enrolment. The process has been initiated in Uttar Pradesh and the tripartite agreement has been signed.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2235
ANSWERED ON **08.08.2023**

ADDITIONAL FUNDS TO THE STATES AFFECTED BY INFRASTRUCTURE DAMAGE

2235 SHRI K.R.N. RAJESHKUMAR:

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

(a) whether it is a fact that, state discoms are facing major challenges, especially during the period of peak summer demand, incurring huge damages to the electrical infrastructure, especially in transformers firing, etc;

(b) if so, whether the Ministry is considering allocating additional funds to the States which are affected by infrastructure damage;

(c) if so, the quantum of funds allocated to States, State-wise; and

(d) if not, the reasons therefor?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : During the period of peak summer demand, DISCOMs witness increased electricity demand due to increased use of air conditioning and cooling load. Critical distribution infrastructure like Distribution Transformers (DTs), cables sometimes get overloaded due to excessive loads and tend to overheat and fail, leading to power outages and damages to the electrical infrastructure. The damage tends to be more in case of over-aged transformers, cables and other distribution equipment.

Peak load management requires DISCOMs to invest in upgrading their distribution infrastructure based on accurate demand forecasts and improve overall operational efficiency.

….2.

Government of India has facilitated the upgradation and creation of distribution infrastructure in DISCOMs through allocation of funds under various schemes such as (a) Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY), where central assistance was provided to ensure electrification of all villages and strengthening of sub-transmission and distribution infrastructure in rural areas; (b) Integrated Power Development Scheme (IPDS), where the strengthening of sub-transmission and distribution network in urban areas was taken up as a key measure in power distribution. Overall Rs.1.85 lakh crore was spent for strengthening the distribution system of the country. State wise details attached as **Annexure-I.**

Recently, Government of India has launched Revamped Distribution Sector Scheme (RDSS) with the objective of improving the quality and reliability of power supply to consumers through a financially sustainable and operationally efficient Distribution Sector. The Scheme has an outlay of Rs. 3,03,758 core and a Gross Budgetary Support of Rs. 97,631 crore from Government of India over a period of five years from 2021-22 to FY 2025-26. The scheme focuses on improving the technical and commercial losses in the distribution sector through result-oriented investments in upgradation of distribution network including network strengthening and system automation. DT augmentation, creation of new substations, upgradation of sub-stations, HVDS, Agriculture feeder segregation, Ring Mains supply systems (RMUs), uprating of conductors, cabling works etc. have been approved for most of the state DISCOMs for Distribution Infrastructure works under RDSS.

(c) & (d): State-wise details of funds sanctioned under RDSS are at **Annexure-II.**

****

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 2235 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

DDUGJY (New+Additional Infra), IPDS and Saubhagya- As per Closure Cost				
Sl. No.	**State/UT**	**Financials (in Rs. Crores)**		
		Closure Project Cost (Rs. Cr.)	**Government Budgetary Support (GBS) Sanctioned (Rs. Cr.)**	**Government Budgetary Support (GBS) Released (Rs. Cr.)**
1	Andaman & Nicobar	35	21	17
2	Andhra Pradesh	2879	1913	1900
3	Arunachal Pradesh	1980	1737	1726
4	Assam	10455	9150	8112
5	Bihar	23697	17383	16351
6	Chhattisgarh	5054	3318	3308
7	Dadra & Nagar Haveli	7	4	2
8	Delhi	179	108	108
9	Goa	185	143	134
10	Gujarat	3387	1929	1954
11	Haryana	1009	745	751
12	Himachal Pradesh	1038	925	901
13	Jammu & Kashmir	2960	2614	2368
14	Jharkhand	11391	7818	7861
15	Karnataka	5441	3520	3448
16	Kerala	2714	1426	1438
17	Ladakh	558	497	485
18	Madhya Pradesh	12083	8030	8119
19	Maharashtra	8269	4513	4578
20	Manipur	1471	1304	1276
21	Meghalaya	1571	1364	1320
22	Mizoram	868	772	765
23	Nagaland	763	670	633
24	Odisha	10718	8557	8251
25	Puducherry	104	45	49
26	Punjab	2527	1123	1132
27	Rajasthan	9988	6275	6196
28	Sikkim	500	441	432
29	Tamil Nadu	5875	2758	3070
30	Telangana	2991	1592	1523
31	Tripura	1443	1261	1293
32	Uttar Pradesh	39488	26392	26284
33	Uttarakhand	2655	2336	2326
34	West Bengal	11111	7545	7481
Grand Total		**185394**	**128231**	**125592**

****

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 2235 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

State-wise details of funds sanctioned under RDSS

State/Discoms	Sanctioned cost of smart metering (including PMA) (Rs. Cr.)	Sanctioned Cost of Infrastructure works including PMA (Rs. Cr.)	Sanctioned Government Budgetary Support (GBS)for smart metering Works (including PMA) (Rs. Cr.)	Sanctioned Government Budgetary Support (GBS)for Infrastructure works (including PMA) (Rs. Cr.)
Andaman & Nicobar Islands	53.56	462.01	12.25	415.81
Andhra Pradesh	4,127.85	9,276.66	815.40	5,566.00
Arunachal Pradesh	183.56	799.99	54.40	719.99
Assam	4,049.54	2,609.10	1,051.65	2,348.19
Bihar	2,021.21	7,081.06	412.33	4,248.63
Chhattisgarh	4,105.31	3,597.55	804.43	2,158.53
Delhi	13.38	323.63	2.03	194.18
Goa	469.17	247.08	94.51	148.25
Gujarat	10,641.96	6,021.48	1,884.60	3,612.89
Haryana	4,966.62	3,158.43	909.36	1,895.06
Himachal Pradesh	1,788.49	1,774.90	466.23	1,597.41
Jammu & Kashmir	1,063.62	4,635.57	272.02	4,172.01
Jharkhand	858.02	3,262.27	190.50	1,957.36
Kerala	8,231.21	2,346.81	1,413.34	1,408.09
Ladakh	-	697.36		627.62
Madhya Pradesh	8,768.98	9,403.43	1,482.10	5,642.06
Maharashtra	15,214.95	14,157.92	2,839.61	8,494.75
Manipur	121.16	400.98	38.14	360.88
Meghalaya	309.56	796.49	86.35	716.84
Mizoram	181.61	237.33	61.08	213.59
Nagaland	207.57	391.18	59.66	352.06
Puducherry	251.10	84.39	56.25	50.63
Punjab	5,768.50	3,873.37	959.80	2,324.02
Rajasthan	9,714.80	9,371.41	1,685.96	5,622.85
Sikkim	97.45	263.61	30.43	237.25
Tamil Nadu	19,235.36	9,066.27	3,398.45	5,439.76
Tripura	318.55	484.56	80.42	436.10
Uttar Pradesh	18,956.29	17,089.62	3,500.57	10,253.77
Uttarakhand	1,050.92	1,447.39	297.47	1,302.65
West Bengal	12,670.45	7,222.57	2,089.18	4,333.54
Grand Total	**135,440.72**	**120,584.40**	**25,048.55**	**76,850.78**

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2236
ANSWERED ON **08.08.2023**

LOAN FROM IBRD

2236 # MS. INDU BALA GOSWAMI:

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

(a) whether a loan from the International Bank for Reconstruction and Development (IBRD) has been approved to facilitate power sector reforms in Himachal Pradesh;

(b) if so, the details thereof; and

(c) whether work would also be done to increase the share of renewable energy in power generation in Himachal Pradesh through the said loan, if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (b) : The Board of the International Bank for Reconstruction and Development (IBRD), World Bank has approved a loan of US $ 200 million on 27th June, 2023 to facilitate power sector reforms in Himachal Pradesh.

(c) : The works proposed under this loan are expected to increase the share of renewable energy in power generation in Himachal Pradesh. The Solar generation capacity to the tune of 200 MW is envisioned through this programme. 180 MW is to be executed by Himachal Pradesh Power Corporation Limited and 20 MW by HIMURJA in the State.

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2237
ANSWERED ON **08.08.2023**

FINANCIAL ASSISTANCE FOR RDSS

2237 SHRI A. A. RAHIM:

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

(a) the prequalification criteria for state power utilities getting financial assistance under Revamped Distribution Sector Scheme (RDSS);

(b) the allocation data of the RDSS funds, State-wise;

(c) whether there is a requirement that financial assistance for Smart metering under RDSS is exclusively disbursed for projects carried out under TOTEX, if so, the reasons for thesame; and

(d) whether the financial assistance for RDSS projects, excluding Smart metering, have an exclusive requirement that it will only be disbursed if Smart metering is carried out under TOTEX?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The prequalification criteria for annual evaluation of State power utilities, to become eligible for availing financial assistance (as per the scheme guidelines) under Revamped Distribution Sector Scheme (RDSS) are placed at **Annexure-I**.

(b) : State-wise detail of sanctions under RDSS are placed at **Annexure-II**.

(c): Yes, Sir, funds for prepaid Smart Metering will be made available to the DISCOMs only after installation and commissioning of smart meters in TOTEX mode and as per the scheme guidelines.

……2.

To avoid post implementation operational issues and to ensure hand-holding support to DISCOMS, the scheme mandates the roll-out of smart meters through PPP (Public Private Partnership) on TOTEX mode. The implementation of Smart Metering in TOTEX mode makes this component self-financing and the DISCOM will not have to pay upfront for the capital expenditure on the same. The AMISP (Advanced Metering Infrastructure Service Provider) will be responsible for supplying, maintaining and operating the metering infrastructure post installation and will be paid for a portion of its capital expenditure initially & the remaining payment would be paid during the O&M period (7-10 years)on per meter per month basis, which are linked with Service Level Agreement (SLA). This approach ensures end-to-end responsibility of AMISP for delivery of services during the entire life cycle of the project.

(d) : Yes, Sir, under RDSS, funding for works other than prepaid Smart metering works would be contingent upon DISCOMs implementing Smart Metering works in TOTEX mode and complying other conditions as per the scheme guidelines. As per RDSS guidelines, Clause 5.2.2.2, the release of 3rd installment for Infrastructure works (Loss Reduction) will be subject to award of prepaid Smart Metering works (in TOTEX mode) to be covered in the first phase which is to be completed by December 2023.

****

ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2237 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

The following pre-qualifying criteria must be mandatorily met by the DISCOM before it is evaluated on the basis of the Evaluation Matrix:

(i) DISCOMs would publish quarterly un-audited accounts within 60 days of the end of each quarter during first two years of operation of the scheme (i.e. for FY 2021-22 and FY 2022-23) and thereafter audited quarterly accounts within 45 days from 3rd year onwards.

(ii) DISCOMs would publish audited annual accounts by end of December of the following year during first two years of operation of the scheme (i.e. for FY 2021-22 and FY 2022-23) and thereafter audited annual accounts by end of September of the following year from 3rd year onwards.

(iii) DISCOMs will have ensured that no new Regulatory Assets have been created in latest tariff determination cycle.

(iv) State Government to ensure 100% payment of subsidy for the previous year and advance payment of subsidy up to current period in line with section 65 of EA2003 and wipe out the remaining subsidy amount by the end of the project period.

(v) All Government Departments/ Attached Offices/ Local Bodies/ Autonomous Bodies/ Boards/Corporations have made 100% payment of current electricity dues for the year under evaluation.

(vi) Progress commensurate to commitment in putting Government Offices on prepaid meters.

(vii) No. of days Payables to Creditors including Gencos for the year under evaluation is equal to or less than the projected trajectory as per results evaluation framework.

(viii) Tariff order for the current year in which evaluation is being done and true up of penultimate year has been issued and implemented w.e.f. 1st April of current FY.

****

ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2237 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

State-wise details of sanctions under RDSS:

States	Sanctioned cost of Smart Metering (incl. PMA)	Sanctioned Cost of Infrastructure Works (incl. PMA)	Sanctioned total Outlay (incl. PMA)	Sanctioned GBS of Smart Metering Works (incl. PMA)	Sanctioned GBS of Infrastructure Works (incl. PMA)	Total GBS with incentives with PMA (Infra + Metering)
Andaman & Nicobar Islands	53.56	462.01	**515.57**	12.25	415.81	**428.06**
Andhra Pradesh	4,127.85	9,276.66	**13,404.51**	815.40	5,566.00	**6,381.40**
Arunachal Pradesh	183.56	799.99	**983.55**	54.40	719.99	**774.40**
Assam	4,049.54	2,609.10	**6,658.64**	1,051.65	2,348.19	**3,399.84**
Bihar	2,021.21	7,081.06	**9,102.27**	412.33	4,248.63	**4,660.96**
Chhattisgarh	4,105.31	3,597.55	**7,702.86**	804.43	2,158.53	**2,962.96**
Delhi	13.38	323.63	**337.01**	2.03	194.18	**196.21**
Goa	469.17	247.08	**716.25**	94.51	148.25	**242.76**
Gujarat	10,641.96	6,021.48	**16,663.44**	1,884.60	3,612.89	**5,497.49**
Haryana	4,966.62	3,158.43	**8,125.05**	909.36	1,895.06	**2,804.42**
Himachal Pradesh	1,788.49	1,774.90	**3,563.39**	466.23	1,597.41	**2,063.64**
Jammu & Kashmir	1,063.62	4,635.57	**5,699.18**	272.02	4,172.01	**4,444.03**
Jharkhand	858.02	3,262.27	**4,120.29**	190.50	1,957.36	**2,147.87**
Kerala	8,231.21	2,346.81	**10,578.02**	1,413.34	1,408.09	**2,821.43**
Ladakh	-	697.36	**697.36**		627.62	**627.62**
Madhya Pradesh	8,768.98	9,403.43	**18,172.41**	1,482.10	5,642.06	**7,124.16**
Maharashtra	15,214.95	14,157.92	**29,372.87**	2,839.61	8,494.75	**11,334.37**
Manipur	121.16	400.98	**522.13**	38.14	360.88	**399.02**
Meghalaya	309.56	796.49	**1,106.05**	86.35	716.84	**803.19**
Mizoram	181.61	237.33	**418.93**	61.08	213.59	**274.67**
Nagaland	207.57	391.18	**598.75**	59.66	352.06	**411.73**
Puducherry	251.10	84.39	**335.48**	56.25	50.63	**106.88**
Punjab	5,768.50	3,873.37	**9,641.87**	959.80	2,324.02	**3,283.82**
Rajasthan	9,714.80	9,371.41	**19,086.21**	1,685.96	5,622.85	**7,308.80**
Sikkim	97.45	263.61	**361.05**	30.43	237.25	**267.67**
Tamil Nadu	19,235.36	9,066.27	**28,301.64**	3,398.45	5,439.76	**8,838.21**
Tripura	318.55	484.56	**803.11**	80.42	436.10	**516.53**
Uttar Pradesh	18,956.29	17,089.62	**36,045.91**	3,500.57	10,253.77	**13,754.35**
Uttarakhand	1,050.92	1,447.39	**2,498.31**	297.47	1,302.65	**1,600.12**
West Bengal	12,670.45	7,222.57	**19,893.01**	2,089.18	4,333.54	**6,422.72**
Grand Total	**1,35,440.72**	**1,20,584.40**	**2,56,025.13**	**25,048.55**	**76,850.78**	**1,01,899.33**

GBS: Government Budgetary Support

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2239
ANSWERED ON **08.08.2023**

RISE IN POWER CONSUMPTION

2239 DR. FAUZIA KHAN:

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

(a) whether the year-on-year rise in power consumption during the summer months has been anticipated and prepared for;

(b) if so, the details of the strategies or measures implemented to handle this increase in power demand and if not, the reasons thereof;

(c) whether Government has conducted a nation-wide survey to identify regions experiencing frequent power outages, particularly during the summer; and

(d) if so, the details thereof, and if not, the reasons therefor?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Central Electricity Authority prepares the Load Generation Balance Report (LGBR) which outlines the assessment of the Anticipated Power Supply Position in the country every year for the next year in consultation with all the stakeholders such as generating companies, distribution companies, Regional Power Committees, etc. In order to meet the Anticipated Energy Requirement and Peak Demand, the availability is worked out in consultation with power utilities in accordance with tied up generation capacities.

The following steps have been taken for meeting the increased demand for power during summer months in the country:

(i) Measures have been taken to ensure the maximum availability of the generation capacity. The generators shall complete the maintenance work of their plants well before the period of high demand.

…….2.

(ii) Monitoring and Coordination with Ministries of Coal and Railways on a regular basis for increasing the production and dispatch of coal as much as possible.

(iii) All generators have been asked for timely import of Coal for blending purposes so that adequate coal stock is maintained in the plant.

(iv) All captive coal blocks have been asked to maximize the coal production to supplement the coal supply from domestic coal companies.

(v) Additional arrangement of gas for running gas based stations has been planned from GAIL, during high power demand months.

(vi) The Electricity Amendment Rule, 2022 has been notified on 29th December 2022 which mandate preparation of Resource Adequacy Plan so as to successfully meet the power demand of the consumers.

(vii) Imported Coal Based (ICB) plants have been issued statutory directions under Section 11 of Electricity Act to stock coal and generate power during high demand period.

(viii) Reservoir level of Hydro Stations are being monitored for optimum utilization of water. All hydro plants have been instructed to operate in consultation with Regional Load Dispatch Centre (RLDCs) / State Load Dispatch Centre (SLDCs) to optimize water utilization in current month for better availability in next month.

(c) & (d) : Generation planning is carried out on the basis of LGBR prepared annually by CEA in consultation with all the stakeholders. Consequently there is adequate power generation in the country. The details of demand and supply in terms of energy and peak in the country during the last year i.e. 2022-23 and the current year 2023-24 (upto June, 2023) are given at **Annexure.** The negligible gap between the Energy Requirement and Energy Supplied is on account of factors attributable to DISCOMs such as constraints in distribution network, financial constraints, commercial reasons etc.

****

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 2239 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

The details of All-India electricity generation, its demand and supply in terms of energy and peak in the country during the last year i.e. 2022-23 and the current year 2023-24 (upto June, 2023)

Year	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MUs)	(MUs)	(MUs)	(%)
2022-23	1,511,847	1,504,264	7,583	0.5
2023-24 (till June, 2023)	4,10,519	4,09,622	896	0.2

Year	Peak Demand	Peak Met	Demand Not Met	
	(MW)	(MW)	(MW)	(%)
2022-23	215,888	207,231	8,657	4.0
2023-24 (till June, 2023)	2,24,106	2,23,292	814	0.4

****

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2240
ANSWERED ON **08.08.2023**

STRENGTHENING OF POWER SUPPLY INFRASTRUCTURE

2240 DR. SUDHANSHU TRIVEDI:

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

(a) the measures being taken to ensure that power supply is not hampered due to adverse weather conditions;

(b) the initiatives being taken to ensure sturdy infrastructure, proactive maintenance and preparedness which are crucial to meet any disaster; and

(c) the new technologies being adopted that can mitigate the impact of such events on the power supply?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The following steps have been taken to ensure the unhampered power supply during the summer months:

(i) Measures have been taken to ensure the maximum availability of the generation capacity. The generators shall complete the maintenance work of their plants well before the period of high demand.

(ii) Monitoring and Coordination with Ministries of Coal and Railways on a regular basis for increasing the production and dispatch of coal as much as possible.

(iii) All generators have been asked for timely import of Coal for blending purposes so that adequate coal stock is maintained in the plant.

(iv) All captive coal blocks have been asked to maximize the coal production to supplement the coal supply from domestic coal companies.

(v) Additional arrangement of gas for running gas-based stations has been planned from GAIL, during high power demand months.

(vi) The Electricity Amendment Rule, 2022 has been notified on 29th December 2022 which mandate preparation of Resource Adequacy plan so as to successfully meet the power demand of the consumers.

…….2.

(vii) Imported Coal Based (ICB) plants have been issued statutory directions under Section 11 of Electricity Act to stock coal and generate power during high demand period.

(viii) Reservoir level of Hydro Stations are being monitored for optimum utilization of water. All hydro plants have been instructed to operate in consultation with Regional Load Dispatch Centre (RLDCs) / State Load Dispatch Centre (SLDCs) to optimize water utilization in current month for better availability in next month.

The details of power supply in terms of Energy Requirement and Energy Supplied and peak demand and peak met for the last 3 years and the current year are given at **Annexure.**

(b) & (c): Following measures/ initiatives have been / are being taken by Government of India to mitigate the impact of disaster related events on the power supply:

(i) Ministry of Power has prepared the "Disaster Management Plan" for power sector under the provisions of section 37 of the Disaster Management Act, 2005. The plan addresses the emergencies arising due to occurrence of natural hazards such as earthquakes, cyclones, floods, etc. The plan is revised on a regular basis to keep it abreast with the new challenges and issues coming up with changing times. Central Electricity Authority (CEA) has published Disaster Management Plan for Power Sector in 2022 enumerating measures required to be taken by Generation, Transmission and Distribution Utilities for Mitigation, Preparedness, Response and Recovery from disasters.

(ii) The following provisions for disaster resilience of the system have been provided under Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022 and Central Electricity Authority (Grid Standards) Regulations, 2010:

(a) In coastal areas underground cables shall be used.

(b) Emergency Restoration System (ERS) for restoration of transmission lines of 400 kV and 220 kV lines in order to minimise the outage time of the transmission lines in case of tower failures.

(c) Gas Insulated Sub- station shall be constructed in seismic prone areas, coastal areas, high altitude areas, very heavily polluted areas etc.

(d) Aerial Bunched Cables (ABC) or Insulated Cables or covered conductor shall be used in the congested and accident-prone areas.

(e) Wherever required, the vehicle mounted mobile sub-station comprising of trailer, incoming and outgoing high voltage and low voltage gas insulated or hybrid switchgears, power transformer, and associated connectors etc. shall be considered for putting into immediate service to resume power supply in short time in case of emergency or disaster.

(iii) To avoid disasters and loss of manpower, an advisory for implementation of Early Warning System (EWS) in all Vulnerable Hydro Electric Projects in upper reaches of Himalayan region was issued by the Ministry of Power. EWS has been implemented by most of the Hydro projects which has minimized the damage to manpower and equipment.

……3.

(iv) Disaster Resource Inventory for Power Sector (DRIPS) Portal provides an electronic inventory of disaster resources for power sector, so that the affected States/Organizations can readily see the availability of resources across the country and take quick decisions for requisitioning these resources for mitigating the impact of disaster.

(v) A Task Force on "Cyclone Resilient Robust Electricity Transmission and Distribution Infrastructure in the Coastal Areas" was constituted by Central Electricity Authority. All States and UTs having coastal areas have been requested to mark out the cyclone prone zones and follow the design parameters laid down in the report of the Task Force for new construction / reconstruction of the transmission lines in the cyclone prone areas.

(vi) The Government of India has launched Revamped Distribution Sector Scheme (RDSS) in July 2021 with the objective of improving the quality and reliability of power supply to consumers with an outlay of Rs.3,03,758 crore and an estimated Gross Budgetary Support (GBS) of Rs.97,631 crore from the Central Government. Under the scheme, financial assistance is being provided to the DISCOMs for upgradation of distribution infrastructure and system modernization which would strengthen the distribution system and make them disaster resilient.

****

ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2240 ANSWERED IN THE RAJYA SABHA ON 08.08.2023

****

The details of power supply in terms of Energy Requirement and Energy Supplied in terms of peak demand

Year	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	(%)
2020-21	1,275,534	1,270,663	4,871	0.4
2021-22	1,379,812	1,374,024	5,787	0.4
2022-23	15,11,847	15,04,264	7,583	0.5
2023-24 (upto June, 2023)	4,10,519	4,09,622	896	0.2

The details of power supply in terms of Energy Requirement and Energy Supplied in terms of peak met

Year	Peak Demand	Peak Met	Demand Not Met	
	(MW)	(MW)	(MW)	%
2020-21	190,198	189,395	802	0.4
2021-22	203,014	200,539	2,475	1.2
2022-23	2,15,888	2,07,231	8,657	4.0
2023-24 (upto June, 2023)	2,24,106	2,23,292	814	0.4

****