GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
STARRED QUESTION NO.93
ANSWERED ON 07.12.2021

EFFECT OF COAL SHORTAGE ON POWER GENERATION

93 SHRI JOHN BRITTAS:

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

(a) whether the power generation was affected on account of shortage of coal;

(b) if so, the details of reduction in power generation during the year on this account; and

(c) the details of increase in power tariff being effected by various companies during the last two years?

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.

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STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF STARRED QUESTION NO.93 ANSWERED IN THE RAJYA SABHA ON 07.12.2021 REGARDING EFFECT OF COAL SHORTAGE ON POWER GENERATION

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(a) to (c) : In the year 2020-21, power generation was affected due to less demand during the Covid-19 pandemic. In the year 2021-22, during Apr-Oct 2021, the power generation has actually increased over previous two years as given below:

Apr-Oct/Year	Power Generation from all sources		Coal Based power generation	
	In Billion Units (BU)	% increase over last year	In BU	% increase over last year
2019-20	843.7	--	565.8	--
2020-21	796.6	(-) 5.6	511.9	(-) 9.5
2021-22	886.9	11.3	594.4	16.1

As per the data compiled by Central Electricity Authority (CEA), the weighted average rate of sale of power by coal based power plants during 2019-20 was about Rs.3.97/kWh against Rs.3.84/kWh during 2018-19, an increase of about 3.4%.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.971
ANSWERED ON 07.12.2021

POWER GENERATION CAPACITY IN THE COUNTRY

971 # SHRI RAJENDRA GEHLOT:

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

(a) the details of the existing power generation capacity in the country and its sources;

(b) the State-wise details of the quantum of electricity produced in the country, especially including the State of Rajasthan; and

(c) the details of future action plan in the field of electricity generation in the country?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The source-wise details of existing power generation capacity in the country are at **Annexure-I**.

(b) : The State-wise details of Power Generation during the current year (upto October 2021) are given at **Annexure-II**.

(c) : The Central Electricity Authority estimates the installed generation capacity to be 817 GW by 2029-30. The source-wise details are at **Annexure-III**.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO.971 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Installed Capacity (Fuel-wise) as on 31.10.2021

Category			**Installed Generation Capacity (MW)**
Fossil Fuel	**Coal**		**2,02,415**
	Lignite		**6,620**
	Gas		**24,900**
	Diesel		**510**
	Total Fossil Fuel :		**2,34,444**
Non-Fossil Fuel	**RES (Incl. Hydro)**		**1,49,567***
	Hydro		**46,512**
	Wind, Solar & Other RE		
	Wind	*39,990*	
	Solar	*47,666*	
	BM Power/Cogen.	*10,176*	
	Waste to Energy	*402*	
	Small Hydro Power	*4,822*	
	Total (Wind, Solar & Other RE)		**1,03,055**
	Nuclear		**6,780**
	Total Non-Fossil Fuel :		**1,56,347**
	Total Installed Capacity (Fossil Fuel & Non-Fossil Fuel)		**3,90,791**

** The RES (including Hydro) as on 18.11.2021 has crossed 150 GW and is 150.05 GW.*

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO.971 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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State-wise (Including Rajasthan) Source-wise Generation During current year 2021-22 (upto October 2021)

State	Fuel CATEGORY	GENERATION(MU) 2021-22 (upto-Oct 21)
CHANDIGARH	Renewable	9.32
CHANDIGARH Total		**9.32**
DELHI	THERMAL	3144.44
	Renewable	260.28
DELHI Total		**3404.72**
HARYANA	THERMAL	12463.91
	Renewable	566.57
HARYANA Total		**13030.48**
HIMACHAL PRADESH	Renewable	30625.96
HIMACHAL PRADESH Total		**30625.96**
JAMMU AND KASHMIR	THERMAL	0
	Renewable	13573.94
JAMMU AND KASHMIR Total		**13573.94**
LADAKH	Renewable	323.62
LADAKH Total		**323.62**
PUNJAB	THERMAL	14486.88
	Renewable	4508.59
PUNJAB Total		**18995.47**
RAJASTHAN	THERMAL	26233.19
	NUCLEAR	4869.44
	Renewable	13512.79
RAJASTHAN Total		**44615.42**
UTTAR PRADESH	THERMAL	79273.77
	NUCLEAR	2000.09
	Renewable	3242.59
UTTAR PRADESH Total		**84516.45**
UTTARAKHAND	THERMAL	1012.32
	Renewable	10529.37
UTTARAKHAND Total		**11541.69**
		220637.07
CHHATTISGARH	THERMAL	81563.99
	Renewable	1430.54
CHHATTISGARH Total		**82994.53**
GOA	THERMAL	0
	Renewable	0.74
GOA Total		**0.74**

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GUJARAT	THERMAL	35911.88
	NUCLEAR	1855.23
	Renewable	17014.92
GUJARAT Total		**54782.03**
MADHYA PRADESH	THERMAL	72417.8
	Renewable	8318.91
MADHYA PRADESH Total		**80736.71**
MAHARASHTRA	THERMAL	70029.01
	NUCLEAR	5331.3
	Renewable	12546.87
MAHARASHTRA Total		**87907.18**
DADRA AND NAGAR HAVELI	Renewable	**25.16**
DADRA AND NAGAR HAVELI Total		**25.16**
DAMAN & DIU	Renewable	**26.16**
DAMAN & DIU Total		**26.16**
		306472.51
ANDHRA PRADESH	THERMAL	32213.66
	Renewable	12451
ANDHRA PRADESH Total		**44664.66**
KARNATAKA	THERMAL	15931.65
	NUCLEAR	4218
	Renewable	25420.5
KARNATAKA Total		**45570.15**
KERALA	THERMAL	0
	Renewable	6523.66
KERALA Total		**6523.66**
PUDUCHERRY	THERMAL	149.53
	Renewable	7.14
PUDUCHERRY Total		**156.67**
TAMIL NADU	THERMAL	36766.12
	NUCLEAR	8049.39
	Renewable	20921.83
TAMIL NADU Total		**65737.34**
TELANGANA	THERMAL	30120.01
	Renewable	8770.32
TELANGANA Total		**38890.33**
LAKSHASDWEEP	Renewable	**0.16**
LAKSHASDWEEP Total		**0.16**
		201542.97
ANDAMAN NICOBAR	THERMAL	57.2
	Renewable	19.84
ANDAMAN NICOBAR Total		**77.04**

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BIHAR	THERMAL	23482.86
	Renewable	100.23
BIHAR Total		**23583.09**
JHARKHAND	THERMAL	16546.59
	Renewable	469.6
JHARKHAND Total		**17016.19**
ODISHA	THERMAL	34497.48
	Renewable	4316.73
ODISHA Total		**38814.21**
SIKKIM	Renewable	9354.43
SIKKIM Total		**9354.43**
WEST BENGAL	THERMAL	46722.62
	Renewable	3362.66
WEST BENGAL Total		**50085.28**
		138930.24
ARUNACHAL PRADESH	Renewable	3122
ARUNACHAL PRADESH Total		**3122**
ASSAM	THERMAL	4248.13
	Renewable	615.96
ASSAM Total		**4864.09**
MANIPUR	THERMAL	0
	Renewable	347.22
MANIPUR Total		**347.22**
MEGHALAYA	Renewable	686.01
MEGHALAYA Total		**686.01**
MIZORAM	Renewable	77.8
MIZORAM Total		**77.8**
NAGALAND	Renewable	120.96
NAGALAND Total		**120.96**
TRIPURA	THERMAL	3452.12
	Renewable	4.77
TRIPURA Total		**3456.89**
		12674.97
Bhutan (IMP)	Renewable	6608.1
Bhutan (IMP) Total		**6608.1**
IMPORT Total		**6608.1**
Grand Total		**886865.86**

Note:

1.Gross Generation from fuel sources (Thermal, Nuclear and Renewable incl. large Hydro)

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO.971 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Likely Installed Capacity by the end of the year 2029-30

Fuel Type	Capacity (MW) in 2029-30
Hydro *	60,977
PSP	10,151
Small Hydro	5,000
Coal + Lignite	2,66,911
Gas	25,080
Nuclear	18,980
Solar	2,80,155
Wind	1,40,000
Biomass	10,000
Total	**8,17,254**

**Including Hydro Imports of 5856 MW*

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1109
ANSWERED ON 07.12.2021

GENERATION OF RENEWABLE ENERGY IN THERMAL POWER PLANTS

1109. SHRI PARIMAL NATHWANI:

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

(a) whether Government has recently issued revised guidelines providing for thermal generation companies to set up renewable energy generation capacity either by themselves or through developers by open bids and supplying it to the consumers under the existing Power Purchase Agreements (PPAs);

(b) if so, the details thereof;

(c) whether this will enable the replacement of fossil fuel based energy by renewable energy under the existing PPAs;

(d) whether the gains from bundling of renewable energy with thermal power will be shared between the generator and distribution companies/other procurers; and

(e) if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Yes Sir, Government have issued a "Revised scheme for flexibility in Generation and Scheduling of Thermal/Hydro Power Stations through bundling with Renewable Energy and Storage Power", vide letter dated 15th November, 2021. Under the revised scheme, any Generating Company having coal/lignite/gas based thermal generating station or hydro power station may establish or procure renewable energy from a Renewable Energy (RE) power plant which is either co-located within the premises or at new locations within its vicinity.

(c) to (e) : The scheme, wherever feasible, provides for replacement of Thermal/ Hydro power of any of the Generating Station of the Generating Company with RE power under the existing PPAs. The RE power will be supplied to the beneficiaries at a tariff which shall be less than the Energy Charge Rate (ECR) of the Generating Station which was originally scheduled. Also, the net savings realized, if any, from supply of RE power in place of Thermal or Hydro power under the existing PPA will be passed on to the beneficiary by the Generating Company on a monthly basis. The net savings will be shared between the generator and the beneficiary in the ratio of 50:50 subject to a cap of 7 paise / kWh for the Generator.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1110
ANSWERED ON 07.12.2021

FAST TRACK POWER PROJECTS

1110 SHRI HARSHVARDHAN SINGH DUNGARPUR:

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

(a) the progress related to the eight Fast Track Power Projects and out of them, the number of Power Projects that have started generating power in the country;

(b) the specific details of the power project operated by multinational company and their detailed aspects-related to efficient functioning;

(c) the quantity and the tariffs of the power generated;

(d) whether the concerned State Governments have started purchasing power from the above said company or because of the default in the Power Purchase Agreement, the same is paying penalty to the power company; and

(e) 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) : Out of eight fast track projects, five projects have been commissioned and started generating power in the country as per the information available in Central Electricity Authority (CEA). The details of capacity and commissioning dates are given at **Annexure-I**.

(b) & (c) : The five commissioned projects (including multinational companies) are generating power as per the requirement of procuring States. The quantity of power generated and tariff during the FY 2018-19 and FY 2019-20 are given in **Annexure-II**

(d) & (e) : Yes, Sir, the concerned State Governments are procuring power from the above generating companies as per their requirement. In case of Dabhol Power Project (now Ratnagiri Gas and Power Private Limited - RGPPL), Maharashtra State is not procuring power and RGPPL is selling power of 500 MW to Railway since April'2017.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO.1110 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Details of Fast track power projects					
Sl. No.	**Name of Project**	**State**	**Utility Name**	**Capacity (MW): Date of capacity addition**	**Total Capacity (MW)**
1	GODAVARI CCPP	Andhra Pradesh	SPECTRUM POWER GENERATION	GT-1(47 MW):21.06.1997 GT2(47MW):09.01.1997 GT3:(47MW):17.02.1997 ST(67MW):31.03.1998	208
2	JEGURUPADU CCPP PH-I	Andhra Pradesh	EASTERN POWER DISTRIBUTION	GT-1:(52.8MW):04.07.1996 GT-2:(52.8MW):26.10.1996 GT-3:(52.8MW): 11.12.1996 ST(77MW):01.04.1998	235.4
3	NEYVELI TPS(Z)	Tamil Nadu	ST-CMS ELECTRIC COMPANY	U-1(250MW):11.10.2002	250
4	VIZAG TPP	Andhra Pradesh	HINDUJA NATIONAL POWER CORP	U-1(520MW):27.12.2015 U-2(520MW):30.03.2016	1040
5	Dabhol (RGPPL)	Maharashtra	Maharashtra Dabhol Power Co.	Block 1:12.11.1998 Block 2:07.05.2006 Block 3:28.10.2007	1967
6	Ib Valley	Odisha	AES Transpower	Not commissioned	420
7	Bhadravati	Maharashtra	Maharashtra Ispat	Not commissioned	1072
8	Mangalore	Karnataka	Mangalore Thermal Power	Not commissioned	1000

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO.1110 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Details of Fast track power projects							
Sl. No.	**Name of Project**	**State**	**Utility Name**	**Power generated Bus (2018-19)**	**Tariff (Rs./kWh) (2018-19)**	**Power generated BUs (2019-20)**	**Tariff (Rs./kWh) (2019-20)**
1	GODAVARI CCPP	Andhra Pradesh	SPECTRUM POWER GENERATION	1142.85	331.9	566.9	331
2	JEGURUPADU CCPP PH-I	Andhra Pradesh	EASTERN POWER DISTRIBUTION	826.31	Not Available*	656.16	Not Available*
3	NEYVELI TPS(Z)	Tamil Nadu	ST-CMS ELECTRIC COMPANY	1290.36	504	1437.55	524
4	VIZAG TPP	Andhra Pradesh	HINDUJA NATIONAL POWER CORP	949.1	382	2961.32	382
5	Dabhol (RGPPL)	Maharashtra	Maharashtra Dabhol Power Co.	4465.63	550	4263.63	550
* Project has been acquired by the Andhra Pradesh Govt.							

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1111
ANSWERED ON 07.12.2021

SHORTAGE OF POWER IN RURAL AREAS

1111 SHRI HARSHVARDHAN SINGH DUNGARPUR:

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

(a) whether it is a fact that there has been an acute shortage of power in rural areas of many States from last year;

(b) if so, whether any new power generation projects have been set up to provide morepower to needy States; and

(c) if so, the names of the places where work for setting up of new power generation projects was initiated during last five years, alongwith the year-wise details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : There is adequate availability of electricity in the country to meet the electricity demand of all consumers. The installed generation capacity is around 391 GW which is sufficient to meet the highest peak demand of around 200 GW occurred till date. The details of actual All India Power Supply Position during the last year i.e. 2020-21 and the current year i.e. 2021-22 (upto October, 2021), as available with CEA, are given at **Annexure-I.** The details of State/UT- wise Power Supply Position for the last year i.e. 2020-21 and the current year 2021-22 (period April, 2021 to October, 2021) are given at **Annexure-II**.

The procurement, supply and distribution of electricity in all the areas (including the rural areas) within the State is done by the respective State Government/Power Utility which makes arrangements for supply of power to various categories of consumers in the State.

(b) : New Power Generation Projects have been set up to meet the growing demand of power in the States/UTs of the country. The summary details of capacity of conventional power generation projects commissioned during the last five (5) years i.e., from 2016-17 to 2020-21 and the current year i.e., 2021-22 (period April to October, 2021) are given at **Annexure-III**.

(c) : The year-wise details of conventional power generation projects which have been initiated during the last five (5) years are given at **Annexure-IV**.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO.1111 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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The details of actual All India Power Supply Position during the last year i.e. 2020-21 and the current year i.e. 2021-22 (upto October, 2021)

Year	ENERGY [in Million Units (MU)]	
	Energy Requirement (MU)	Energy Supplied (MU)
2020-21	1,275,534	1,270,663
2021-22 (upto October 2021)*	821,705	817,816

(*)-Provisional

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ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO.1111 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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The details of State/UT- wise Power Supply Position for the last year i.e. 2020-21 and the current year 2021-22 (period April, 2021 to October, 2021)

Power Supply Position (Energy) for the year 2020-21 and 2021-22 (period April, 2021 to October, 2021)								
State / System / Region	**April,2021 - October,2021 (Provisional)**				**April, 2020 - March,2021**			
	Energy Requirement	**Energy Supplied**	**Energy not Supplied**		**Energy Requirement**	**Energy Supplied**	**Energy not Supplied**	
	(MU)	**(MU)**	**(MU)**	**(%)**	**(MU)**	**(MU)**	**(MU)**	**(%)**
Chandigarh	1,080	1,080	0	0.0	1,523	1,523	0	0.0
Delhi	20,814	20,809	4	0.0	29,560	29,555	4	0.0
Haryana	36,304	36,150	153	0.4	53,161	53,108	53	0.1
Himachal Pradesh	7,017	7,004	13	0.2	10,186	10,130	56	0.5
UT of J&K and Ladakh	11,077	10,241	836	7.5	19,773	17,222	2,551	12.9
Punjab	43,493	43,196	297	0.7	58,445	58,377	67	0.1
Rajasthan	50,693	50,327	365	0.7	85,311	85,205	106	0.1
Uttar Pradesh	82,469	81,395	1,075	1.3	1,24,367	1,23,383	984	0.8
Uttarakhand	9,093	9,031	62	0.7	13,827	13,818	8	0.1
Northern Region	**2,62,039**	**2,59,233**	**2,806**	**1.1**	**3,96,151**	**3,92,323**	**3,829**	**1.0**
Chhattisgarh	19,041	19,010	31	0.2	30,472	30,449	22	0.1
Gujarat	72,148	71,911	237	0.3	1,11,622	1,11,622	0	0.0
Madhya Pradesh	45,175	45,128	46	0.1	83,437	83,437	0	0.0
Maharashtra	98,475	98,475	0	0.0	1,50,679	1,50,663	16	0.0
Daman & Diu	1,499	1,499	0	0.0	2,223	2,223	0	0.0
Dadar Nagar Haveli	3,963	3,963	1	0.0	5,497	5,497	0	0.0
Goa	2,604	2,592	13	0.5	4,083	4,083	0	0.0
Western Region	**2,42,905**	**2,42,578**	**327**	**0.1**	**3,88,013**	**3,87,975**	**38**	**0.0**
Andhra Pradesh	40,647	40,600	47	0.1	62,080	62,076	4	0.0
Telangana	40,204	40,195	9	0.0	66,998	66,994	4	0.0
Karnataka	40,344	40,331	13	0.0	68,851	68,831	19	0.0
Kerala	15,032	15,025	7	0.0	25,118	25,102	16	0.1
Tamil Nadu	66,009	66,002	8	0.0	1,01,194	1,01,189	5	0.0
Puducherry	1,779	1,779	0	0.0	2,644	2,644	0	0.0
Lakshadweep #	32	32	0	0.0	56	56	0	0.0
Southern Region	**2,04,015**	**2,03,932**	**83**	**0.0**	**3,26,885**	**3,26,836**	**48**	**0.0**
Bihar	23,758	23,425	333	1.4	34,171	34,018	153	0.4
DVC	13,695	13,671	24	0.2	21,368	21,368	0	0.0
Jharkhand	6,429	6,198	231	3.6	9,953	9,675	278	2.8
Odisha	22,665	22,665	1	0.0	29,848	29,848	0	0.0
West Bengal	34,682	34,642	40	0.1	51,644	51,543	100	0.2
Sikkim	323	323	0	0.0	546	546	0	0.0
Andaman-Nicobar #	196	188	8	3.9	346	323	23	6.7
Eastern Region	**1,01,553**	**1,00,924**	**629**	**0.6**	**1,47,530**	**1,46,999**	**531**	**0.4**
Arunachal Pradesh	493	493	1	0.1	719	714	5	0.7
Assam	7,067	7,045	22	0.3	10,192	9,815	377	3.7
Manipur	548	547	2	0.3	974	969	5	0.5
Meghalaya	1,211	1,197	14	1.1	2,031	2,005	26	1.3
Mizoram	363	358	5	1.3	728	723	4	0.6
Nagaland	512	511	1	0.1	826	822	4	0.5
Tripura *	998	997	0	0.0	1,484	1,481	3	0.2
North-Eastern Region	**11,192**	**11,149**	**43**	**0.4**	**16,955**	**16,531**	**424**	**2.5**
All India	**8,21,705**	**8,17,816**	**3,889**	**0.5**	**12,75,534**	**12,70,663**	**4,871**	**0.4**
# Lakshadweep and Andaman & Nicobar Islands are stand- alone systems, power supply position of these does not form part of regional requirement and supply.								
* Excludes the supply to Bangladesh.								
Note: Power Supply Position Report has been compiled based on the data furnished by State Utilities/Electricity Departments. The MU figures have been rounded off to nearest unit place.								

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO.1111 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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The summary details of capacity of conventional power generation projects commissioned during the last five (5) years i.e., from 2016-17 to 2020-21 and the current year i.e., 2021-22 (period April, 2021 to October, 2021).

(Figures in MW)

Year	Thermal	Hydro	Nuclear	TOTAL
2016-17	11550.75	1659.00	1000.00	**14209.75**
2017-18	8710.00	795.00	0	**9505.00**
2018-19	5781.76	140.00	0	**5921.76**
2019-20	6765.00	300.00	0	**7065.00**
2020-21	4926.15	510.00	0	**5436.15**
2021-22 (April, 2021 to Oct, 2021)	2120.00	213.00	0	**2333.00**

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ANNEXURE-IV

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 1111 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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The year-wise details of conventional power generation projects which have been initiated during last five (5) years

Thermal Power Generation Projects

Sl. No.	Project Name	State	Project Start/ LOA Date	Capacity (MW)
1	Patratu STPP	Jharkhand	March, 2018	2400
2	Rourkela PP-II Expansion	Odisha	May, 2016	250
3	Ghatampur TPP	Uttar Pradesh	August, 2016	1980
4	Khurja SCTPP	Uttar Pradesh	August, 2019	1320
5	Buxar TPP	Bihar	June, 2019	1320
6	Jawaharpur STPP	Uttar Pradesh	December, 2016	1320
7	Obra-C STPP	Uttar Pradesh	December, 2016	1320
8	Panki TPS Extn.	Uttar Pradesh	March, 2018	660
9	Udangudi STPP Stage I	Tamil Nadu	December, 2017	1320
10	Yadadri TPS	Telangana	October, 2017	4000
11	Bhusawal TPS	Maharashtra	January, 2018	660
12	Sagardighi Thermal Power Plant Ph-III	West Bengal	December, 2018	660
			Total	**17210**

Hydro Electric Projects (above 25 MW)

Sl. No.	Project Name	State	Date of Start/ Award	Capacity (MW)
1	Naitwar Mori (SJVNL)	Uttarakhand	05.12.2017	60
2	Pakal Dul (CVPPL)	Jammu & Kashmir	21.02.2018	1000
3	Kundah Pumped Storage Phase-I, II & III)	Tamil Nadu	15.02.2018	500
4	Kutehr (JSW Energy Ltd)	Himachal Pradesh	20.10.2019	240
5	Kiru (CVPPL)	Jammu & Kashmir	24.02.2020	624
6	Lower Kopli (APGCL)	Assam	21.08.2020	120
7	Luhri-I (SJVNL)	Himachal Pradesh	22.12.2020	210
8	Dhaulasidh (SJVNL)	Himachal Pradesh	06.05.2021	66
			Total	**2820**

Apart from the above Thermal and Hydro projects, following Nuclear Projects are also under construction:

Sl. No.	Project Name	State	Capacity (MW)
1	PFBR NEW Unit 1	Tamil Nadu	500
2	KAKRAPARA A.P.S. Unit 3-4	Gujarat	1400
3	RAJASTHAN A.P.S. Unit 7-8	Rajasthan	1400
4	KUDANKULAM Unit 3-4	Tamil Nadu	2000
5	GORAKHPUR Unit 1-2	Haryana	1400
6	KUDANKULAM Unit 5-6	Tamil Nadu	2000
		Total	**8700**

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1112
ANSWERED ON 07.12.2021

STATUS OF THERMAL POWER STATION OF NTPC

1112 SHRI PRASHANTA NANDA:

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

(a) whether Government plans to close down NTPC at Talcher, Odisha, if so, the details thereof; and

(b) the present status of the aforesaid Thermal Power Station of NTPC?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : NTPC has two thermal plants at Talcher (Angul District of Odisha). Talcher Kaniha (3000 MW) is in service and there are no plans to shut down the plant.

The operations of more than 54 years old Talcher Thermal Power Station (460 MW) have been stopped w.e.f. 31.03.2021 in view of safety, efficiency and environment considerations. Ministry of Labour & Employment, Government of India accorded approval of its closure w.e.f. 20.08.2021 under Industrial Disputes (ID) Act 1947.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1113
ANSWERED ON 07.12.2021

FINANCIAL ASSISTANCE TO TAMIL NADU GENERATION AND DISTRIBUTION CORPORATION LTD (TANGEDCO)

1113 SHRI P. WILSON:

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

(a) whether Government of Tamil Nadu has sought financial assistance from Power Finance Corporation and Rural Electricity Corporation, if so, the action taken thereon;

(b) the details of reforms for power sectors in Tamil Nadu which was hit by pandemic and to increase the viability of more number of private players in the sector;

(c) whether Government has any plans in place to tap the available resources of the country especially in Tamil Nadu;

(d) the steps taken to exploit more Nuclear Electricity Energy from Kalpakkam Power Plant and Kudankulam Power Plants; and

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

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Power Finance Corporation Ltd. (PFC) and REC Ltd. (formerly known as Rural Electrification Corporation Ltd.) sanction loans to utilities, including Tamil Nadu Generation and Distribution Corporation Ltd. (TANGEDCO) keeping in view the merits of the individual proposals. The details of outstanding loans to TANGEDCO in the Books of PFC and REC as on 30th November, 2021 are placed as **Annexure-I**.

(b) : To tide over the liquidity issues arising out of COVID, the Government of India had announced a Liquidity Infusion Scheme (LIS) with reform linkages. Under the scheme, Special long term transition loans worth Rs.26,428 Crore have so far been disbursed by PFC and REC to TANGEDCO as on 30-11-2021 to clear its outstanding dues of Central Public Sector Undertakings (CPSUs), Generating companies (Gencos) and Transmission Companies (Transcos) as well as Independent Power Producers (IPPs) and Renewable Energy (RE) Generators. The reform conditionalities mandated under the LIS are enclosed as **Annexure-II.**

(c) : The details of Government Plans in place to tap the available resources of the country especially in Tamil Nadu are enclosed as **Annexure-III**.

(d) & (e) : The Government have decided to increase the capacity of Kudankulam Power Plant from the current 2000 MW to 6000 MW.

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO.1113 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Statement showing the details of outstanding loans to TANGEDCO in the books of PFC & REC as on 30th November, 2021:

Outstanding loans (in TANGEDCO as on 30.11.2021)	
PFC (in crores)	**REC (in crores)**
Rs.34,936.64	Rs.36,970

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF UNSTARRED QUESTION NO.1113 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Statement of reform conditionalities mandated to TANGEDCO under LIS:

- Payment of current subsidy by State Government in advance to Discom every quarter. Discom shall submit quarterly accounts of utilization of subsidy given in advance and balance subsidy available or due to be received from State Govt.
- Installation of smart prepaid or prepaid meters in State Government departments, Companies, Bodies, ULBs, PRIs etc. by FY 2023-24.
- Adequate provision in State budget and make timely payment against current electricity dues of State Government departments, Companies, Bodies, ULBs, PRIs etc.
- Declaration of category wise on per unit and / or Kw basis by State Government. The tariff shall be fully cost reflective by FY 24 and without any subsidy.
- Taking over at least 50% of financial losses of FY 20-21 in FY 21-22 and 100% of financial losses from FY 22-23 of TANGEDCO by the State Govt.
- Liquidation of arrears due towards Government departments' electricity bills and loss financing under UDAY as on 31.03.2021 to the extent of Rs.8373 Cr by the State Government.
- Phase-wise action plan for metering distribution transformers on OPEX model by FY 24.
- Issuance of updated/revised tariff by 15.02.2022 by regulator.
- Enabling of digital payment of electricity bill and self-assessment by consumers.
- Reduction of AT&C losses to 12%, 10% and 8% at the end of FY 21-22, FY 22-23 and FY 23-24 respectively.
- Reduction of ACS-ARR Gap to Re.0.51 per kwh, Re.0.25 per kwh and Re.0 per kwh at the end of FY 21-22, FY 22-23 and FY 23-24 respectively.

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ANNEXURE-III

ANNEXURE REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO.1113 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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Statement showing the details of steps taken by the Government to tap available renewable energy resources in the country including the state of Tamil Nadu:-

- Permitting Foreign Direct Investment (FDI) up to 100 percent under the automatic route,
- Waiver of Inter State Transmission System (ISTS) charges for inter-State sale of solar and wind power for projects to be commissioned by 30th June 2025,
- Waiver of transmission charges allowed for trading of electricity generated/ supplied from solar, wind, Pumped Storage Plant (PSP) and Battery Energy Storage System (BESS) in GTAM and Green Day Ahead Market (GDAM) for two years i.e. till 30-06-2023,
- Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power,
- Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2022,
- Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers on a plug and play basis,
- Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), Solar Rooftop Phase II, 12000 MW CPSU Scheme Phase II etc,
- Notification of standards for deployment of solar photovoltaic system/devices,
- Setting up of Project Development Cell for attracting and facilitating investments,
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects,
- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.
- Green Term Ahead Market (GTAM) launched to facilitate procurement of RE power through power exchange in the country,
- Conducting skill development programmes to create a pool of skilled manpower for setting up, operation and maintenance of RE projects.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1114
ANSWERED ON 07.12.2021

UNIFORM ELECTRICITY PRICING STRUCTURE

1114 # DR. KIRODI LAL MEENA:

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

(a) whether Government proposes to review the policy of uniform electricity pricing structure across the country;

(b) if so, the details thereof; and

(c) by when the said review is likely to be done?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : The tariff determination is done by the Appropriate Commission as per the provisions of the Electricity Act, 2003 and the Tariff Policy. Section 62(3) of the Electricity Act, 2003 provides that the Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Accordingly, the retail tariffs are determined by the State Commissions.

Government is promoting competition through Power Exchanges. The uniform tariff is discovered on the Power Exchanges for a specific time block of the day. Accordingly, to this extent, for the power procured by the distribution utilities from Power Exchanges the price of electricity remains uniform, except in case of market splitting.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1115
ANSWERED ON 07.12.2021

INCOMPLETE COAL-BASED POWER PLANTS

1115 DR. VIKAS MAHATME:

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

(a) the total number and locations of incomplete coal-based power plants in the country; and

(b) by when Government proposes to complete these power plants?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : At present, 52 coal based Thermal Power Projects are under various stages of construction in the country, detailed below:

Sl. No.	State	No. of Projects
1.	Andhra Pradesh	4
2.	Bihar	4
3.	Chhattisgarh	6
4.	Jharkhand	6
5.	Maharashtra	6
6.	Madhya Pradesh	1
7.	Odisha	5
8.	Rajasthan	2
9.	Telangana	3
10.	Tamil Nadu	7
11.	Uttar Pradesh	6
12.	West Bengal	2

As the power generation is a de-licensed activity, the company concerned decides the investment plan and completion schedule.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1116
ANSWERED ON 07.12.2021

SHORTAGE OF ELECTRICITY

1116 SHRI DEREK O' BRIEN:

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

(a) whether the country is facing a shortage of power;

(b) if so, the reasons therefor; and

(c) the measures that Government is taking to prevent such shortage if any, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (c) : There is adequate availability of electricity in the country to meet the electricity demand of all consumers. The installed generation capacity is around 391 GW which is sufficient to meet the highest peak demand of around 200 GW tendered till date. The details of actual All India Power Supply position during the last year i.e. 2020-21 and the current year i.e. 2021-22 (upto October, 2021), as available with CEA, are given at **Annexure.** In order to enhance power to meet the demand in the country, power generation capacity to be commissioned by 2024-25, are at various stages of construction in the country which includes Thermal 36,765 MW, Nuclear 4,800 MW and Renewable Energy 63.74 MW (including Hydro)

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) TO (c) OF UNSTARRED QUESTION NO. 1116 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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The details of actual All India Power Supply Position during the last year i.e. 2020-21 and the current year i.e. 2021-22 (upto October, 2021)

Year	ENERGY [in Million Units (MU)]	
	Energy Requirement (MU)	Energy Supplied (MU)
2020-21	1,275,534	1,270,663
2021-22 (upto October 2021)*	821,705	817,816

(*)-Provisional

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GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.1117
ANSWERED ON 07.12.2021

SCHEMES UNDERTAKEN BY THE MINISTRY SINCE 2014

1117 # SHRI DEEPAK PRAKASH:

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

(a) the details of all the schemes undertaken by the Ministry since 2014 till date along with a brief description of the targets set and the achievements made under each of the schemes; and

(b) whether Government has fixed any time limit to complete the pending schemes and, if so, the details thereof?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b): The details of major schemes launched by the Ministry of Power since 2014 are given as under:

1. Integrated Power Development Scheme (IPDS): Ministry of Power, Government of India notified "Integrated Power Development Scheme" (IPDS) on 3rd December'14 for strengthening the power sub-transmission and distribution networks in urban areas. The main objective of the scheme is strengthening of sub-transmission and distribution networks in the urban areas, metering of distribution transformers / feeders / consumers, enterprise Resource Planning (ERP), IT enablement of balance urban towns, Real Time-Data Acquisition System (RT-DAS) projects etc. The sunset timeline for the scheme is March 2022.

As on 25.11.2021, projects worth Rs.30,904 crore have been sanctioned under IPDS. So far, GoI Grant of Rs.16,478 Cr has been released to States/Discoms under IPDS. Distribution system strengthening works in 524 circles have been successfully completed. The targets set and the achievements made under IPDS System strengthening project for major works are tabulated below:

Items (Unit)	Target	Achievement
New Power Sub Station (Nos.)	999	979
HT Lines (cKm)	24,262	23,304
LT Lines (cKm)	10,769	10,378
AB Cable (cKm)	65,029	62,218
UG Cable (cKm)	21,551	20,086
Roof Top Solar Panels (kWp)	46,544	45,641

……..2.

2. Deendayal Upadhyay Gram Jyoti Yojana (DDUGJY): DDUGJY was launched in December, 2014 for various rural electrification works across the country. As reported by the States, all the inhabited un-electrified census villages stand electrified on 28th April, 2018 well before the stipulated timeline of 1st May, 2018. The **sunset** of the scheme is on 31.03.2022. The Details of electricity infrastructure created under DDUGJY (including additional infra) in the country, are as below:

(As on 31.10.2021)

Sl. No.	Items	Units	DDUGJY	DDUGJY ADDITIONAL INFRA	Total (DDUGJY/ Additional Infra
1	Sub-stations (including augmentation)	Nos.	3,980	227	4,207
2	Distribution Transformers	Nos.	3,91,024	2,17,816	6,08,840
3	Feeder Segregation	CKMs	1,22,123	0	1,22,123
4	11 kV lines	CKMs	1,15,996	66,272	1,82,268
5	LT lines	CKMs	2,88,339	1,93,606	4,81,945
6	33 kV & 66 kV lines	CKMs	22,669	20	22,689
7	Consumer Energy Meters	Nos.	1,51,97,187	-	1,51,97,187
8	Distribution Transformers Meters	Nos.	2,59,472	-	2,59,472
9	11 kV Feeder Meters	Nos.	13,502	-	13,502

3. Pradhan Mantri Sahaj Bijli Har Ghar Yojana – (Saubhagya): Saubhagya was launched in October, 2017 with the objective to achieve universal household electrification for providing electricity connections to all un-electrified households in rural areas and all poor households in urban areas in the country. Under Saubhagya scheme, as on 31.03.2021 all the States have reported 100% electrification of all the willing un-electrified households, identified before 31.03.2019. As reported by the States, 2.817 crore households have been electrified since launch of Saubhagya, up to 31.03.2021.

4. Ujwal Discom Assurance Yojana (UDAY) - UDAY is a scheme for financial turnaround of Power Distribution Companies (DISCOMs) launched in November, 2015 with an objective to improve the operational & financial efficiency of the State Power Distribution Companies (DISCOMs). The scheme had two outcome parameters. The targeted outcome parameter and achievement as reported by State Power Distribution Utilities is as below:

Parameters	Targets	Achievements
Aggregate Technical & Commercial (AT&C) Losses	15%	Reduction in AT&C losses from 23.70% in FY 16 to 20.93% in FY 20 and
Average Cost of Supply (ACS) - Average Revenue Realised (ARR) gap	Zero by March 2019	Reduction of ACS - ARR gap from Re.0.48 per kWh in FY 16 to Re.0.30 per kWh in FY 20.

5. Revamped Distribution Sector Scheme (RDSS)- The Cabinet Committee on Economic Affairs in its meeting held on 30-06-2021 approved the Revamped Distribution Sector Scheme- A Reforms-based and Results-linked Scheme with an outlay of Rs.3,03 ,758 crore and a Gross Budgetary Support of Rs.97,631 crore form Government of India over a period of five years from FY 2021-22 to FY 2025-26. The scheme aims to reduce the AT&C losses to pan-India levels of 12-15% and ACS-ARR Gap to zero by 2024-25. The Guidelines of the Scheme have been issued in the month of July, 2021.

……..3.

6. 'North Eastern Region Power System Improvement Project (NERPSIP) for Six (6) States (Assam, Manipur, Meghalaya, Mizoram, Tripura and Nagaland) for strengthening of the Intra-State Transmission and Distribution Systems (33kV and above)' was approved by Government of India in December 2014 at an estimated cost of Rs. 5111.33 crore with estimated completion time of December 2018. The cost was subsequently revised to Rs.6700 cr with revised completion time of December 2021. The scheme is funded by Government of India with 50% of project cost funded by loan from World Bank. The project is implemented by POWERGRID.

Against sanctioned 444 transmission elements, 312 elements have been completed upto October, 2021. Cumulatively, Ministry of Power has released Rs.3361.33 crore under the Scheme upto October, 2021. The scheme is targeted for completion progressively by December 2021.
Overall progress as on 31.10.2021 is mentioned below:

Physical Progress: 68 %
Financial Progress: 63.7 % (w.r.t. original approved cost); 48.6 % w.r.t. Revised cost estimate.

7. 'Comprehensive Scheme for Strengthening of Transmission & Distribution Systems in Arunachal Pradesh and Sikkim' was approved by Government of India in October 2014 at an estimated cost of Rs. 4754.42 crore with estimated completion time of December 2018. The cost has been subsequently revised to Rs.9129.32 crore, with completion time of December 2021 for awarded scope of work (204 elements) and March 2024 for then un-awarded packages (88 elements). The project is entirely funded by Government of India. The project is implemented by POWERGRID.

Out of 292 sanctioned elements (204 awarded and 88 awarded later both), 64 elements have been completed upto October, 2021. Cumulatively, Ministry of Power has released Rs.2964.24 crore to POWERGRID upto October, 2021.

Overall progress as on 31.10.2021 is mentioned below:

Physical Progress: 44 %
Financial Progress: **59.6** % (w.r.t. original approved cost); **31**% w.r.t. Revised cost estimate.

8. Renewable Energy Management Centre (REMC) : Ministry of Power vide order dated 11.09.2017 had approved Establishment of 11 Nos. of Renewable Energy Management Centre (REMCs) in Renewable Energy rich States (viz. NLDC in Delhi, Southern Region (Tamil Nadu, Andhra Pradesh, Karnataka, SLDCs & SRLDC), Western Region (Gujarat, Maharashtra, Madhya Pradesh SLDCs & WRLDC), Northern Region (Rajasthan, SLDCs and NRLDC). All these approved REMCs have been established.

Further, the Ministry vide order dated 16.12.2019 also approved establishment of one REMC at Telangana and one Energy Management Centre (EMC) at South Andaman. The EMC at South Andaman has been commissioned in July, 2021. REMC at Telangana is targeted for commissioning by December, 2021.

9. Unnat Jyoti by Affordable LEDs for All (UJALA): Hon'ble Prime Minister, on 5th January, 2015 launched UJALA programme to provide LED bulbs to domestic consumers for replacement of incandescent bulbs with LED bulbs at an affordable price. EESL's Unnat Jyoti by

…….4.

Affordable LEDs for All (UJALA) is the world's largest lighting replacement programme. As on date, over 36.78 crore LED bulbs, 71 lakh LED Tube lights and 23 lakh energy efficient fans have been distributed by EESL across India. This has resulted in estimated energy savings of 47.07 billion kWh per year with avoided peak demand of 9,570 MW and GHG emission reduction of 39 million t CO_2 per year.

10. Street Lighting National Programme (SLNP): Hon'ble Prime Minister launched SLNP programme on 5th January, 2015 to replace conventional street lights with smart and energy efficient LED street lights. As on date, over 1.2 crore LED Street lights have been installed by EESL across India. This has resulted in estimated energy savings of 8.24 billion kWh per year with avoided peak demand of 1,374 MW and estimated GHG emission reduction of 5.68 million t CO2 per year.

11. Gram Ujala: Gram Ujala program launched on 19th March, 2021 wherein old type of bulbs are replaced by efficient LED bulbs that consumes 88% less electricity. As on date, Convergence Energy Services Limited (CESL) has distributed over 33 lakh LED bulbs under this program. This has resulted in estimated energy saving of 467 million kWh per annum.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1118
ANSWERED ON 07.12.2021

INTEGRATED POWER DEVELOPMENT SCHEME

1118 SHRI IRANNA KADADI:

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

(a) the salient features of the Integrated Power Development Scheme (IPDS) and the status of its implementation in the country;

(b) the total budgetary allocation made, along with the quantum of funds released under the said scheme, State/UT-wise including Karnataka;

(c) the steps taken by Government under the scheme to reduce Aggregate Technical & Commercial (AT&C) losses and to ensure 24x7 power supply as mentioned under the objectives of the scheme; and

(d) the details of completion of work in different towns of Karnataka under the said scheme?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) & (b) : Government of India had launched "Integrated Power Development Scheme" (IPDS) in December, 2014 with the aim to provide quality and reliable power supply in the urban areas with the following components:

I. Strengthening of sub-transmission and distribution network in urban areas.
II. Metering of feeders / distribution transformers/consumers in urban areas.
III. IT enablement of distribution sector and strengthening of distribution network being undertaken under R-APDRP (Restructured Accelerated Power Development and Reforms Programme) as subsumed component.

The IPDS has a total outlay of Rs.32,612 crore, including a budgetary support of Rs.25,354 crore from the Government of India for new projects, in addition to the total outlay of Rs.44,011 crore, including a budgetary support of Rs.22,727 crore under subsumed component of RAPDRP. New projects, worth Rs.30904 crore were sanctioned in 547 circles of 33 States/UTs and an amount of Rs.16478 crore has been disbursed. The State/UT-wise sanction and Disbursement made under IPDS including the State of Karnataka is given at **Annexure-I.**

……2.

(c) : Under IPDS, the Central funding is being provided for strengthening of sub-transmission & distribution networks in the urban areas and metering of distribution transformers/feeders/ consumers for reduction of Aggregate Technical & Commercial (AT&C) losses. Funds have also been sanctioned under IPDS for underground cabling (UG) and Aerial Bunched (AB) cables.

In continuity of the above measures, Ministry of Power has also notified "Revamped Distribution Sector Scheme - A Reform based and Result linked Scheme" with an outlay of Rs.3,03,758 Crore and an estimated GBS (Gross Budgetary Support) of Rs.97,631 Crore from the Central Government. The Scheme seeks to improve the operational efficiency and financial sustainability of all Discoms/Power Departments excluding private Discoms by providing reform linked financial assistance to Discoms for strengthening of supply infrastructure and for installation of smart Meters in Pre-paid mode.

(d) : The details of completion of works in Karnataka as provided by the State DISCOMs on IPDS portal are available as **Annexure-II.**

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ANNEXURE-I

ANNEXURE REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 1118 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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State-wise details of projects sanctioned and disbursed under IPDS (as on 30-11-2021)

(Rs. in Crore)

Sl. No.	State/ UT	Total		
		Project Cost	GoI Grant	Disbursement
1	A&N Islands	31	19	10
2	Andhra Pradesh	879	529	501
3	Arunachal Pradesh	159	136	92
4	Assam	742	631	509
5	Bihar	3125	1881	1427
6	Chhattisgarh	619	373	284
7	Delhi	198	119	90
8	Goa	84	51	44
9	Gujarat	1067	642	650
10	Haryana	447	269	182
11	Himachal Pradesh	190	162	125
12	Jammu & Kashmir	452	384	318
13	Jharkhand	768	462	367
14	Karnataka	1358	818	717
15	Kerala	659	397	379
16	Ladakh	20	17	15
17	Maharashtra	2551	1536	1299
18	Manipur	138	117	96
19	Meghalaya	108	92	55
20	Mizoram	111	95	74
21	Madhya Pradesh	1674	1008	914
22	Nagaland	138	117	95
23	Odisha	1153	694	590
24	Puducherry	22	13	9
25	Punjab	457	275	236
26	Rajasthan	1550	933	782
27	Sikkim	161	137	92
28	Tamil Nadu	1745	1051	1010
29	Telangana	753	453	446
30	Tripura	221	188	134
31	Uttar Pradesh	5539	3335	2887
32	Uttarakhand	725	617	477
33	West Bengal	3059	1841	1573
Total		30904	19391	16478

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ANNEXURE-II

ANNEXURE REFERRED TO IN REPLY TO PART (d) OF UNSTARRED QUESTION NO.1118 ANSWERED IN THE RAJYA SABHA ON 07.12.2021

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DISCOM-wise infrastructure creation under IPDS in Karnataka

Item/BoQ		BESCOM	CESCOM	GESCOM	HESCOM	MESCOM	
	Unit	Achievement	Achievement	Achievement	Achievement	Achievement	Total Achieved
Nos. of New Sub-station	No.			3	4		**7**
33/11 KV Additional Xr / Capacity Enhancement	No.			2			**2**
Nos. of Installation of New DT	No.	1100	572	989	514	724	**3,899**
Nos. Capacity Enhancement of DT	No.	38	384	30	264	124	**840**
HT Line	cKm	425	248	525	384	341	**1,923**
LT Line	cKm	1350	960	862	1413	1498	**6,083**
AB/UG Cable	Km	1531	362	862	247	366	**3,368**
Consumer Meter	No.	16566	114883		197051	288289	**6,16,789**

(Source : PFC)

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1119
ANSWERED ON 07.12.2021

STATUS OF NATIONAL POWER GRID AND ITS EXPANSION

1119 SHRI PRAKASH JAVADEKAR:

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

(a) the status of National Power Grid in the year 2014;

(b) the details of additions made in last seven years;

(c) the benefits accrued because of its expansion; and

(d) the plans of expansion for the next three years?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The status of national grid, consisting of inter-State and intra-State transmission systems of 220 kV and above voltage, as on 01.04.2014, was as given below:

- 2,91,336 Ckm of transmission lines
- 5,30,546 MVA of transformation capacity
- Inter-regional capacity of 35,950 MW

(b) : Transmission capacity **addition** during the last 7 years is as under:

	Capacity Addition during the last 7 years	% addition in comparison to capacity as on 01.04.2014
Transmission line (ckm)	1,59,216	54.65
Transformation capacity (MVA)	5,40,960	101.96
Inter-regional Capacity (MW)	76,300	212.24

As a result, as on 31st October 2021, the status of national grid is as given below:

- Transmission line (ckm) : 4,50,552
- Transformation capacity (MVA) : 10,71,506
- Inter-regional capacity (MW) : 1,12,250

……2.

Today, the country has one of the largest synchronous grids in the world and we have achieved One Nation-One Grid-One Frequency.

(c) : The above transmission network expansion facilitated seamless transfer of power from power surplus regions to power deficit regions and thus optimizing the use of generation resources as well as meeting the demands of end consumers without any transmission constraints. It has also assisted growth of renewable energy based capacity.

(d) : In the next 3 years, it is targeted to add about 17,500 Ckm of Transmission Lines per year and 80,000 MVA of Transformation Capacity per year.

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GOVERNMENT OF INDIA
MINISTRY OF POWER
RAJYA SABHA
UNSTARRED QUESTION NO.1120
ANSWERED ON 07.12.2021

IMPACT OF LED BULBS ON MARKET AND ENVIRONMENT

1120 SHRI PRAKASH JAVADEKAR:

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

(a) the prices of LED bulb in 2014 and at present;

(b) the number of bulbs distributed under Government's UJALA scheme;

(c) the number of bulbs purchased in private and public sector; and

(d) the environmental benefits of this initiative?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : Under the Unnat Jyoti by Affordable LED for All (UJALA) Programme which is implemented by Energy Efficiency Services Limited (EESL), LED bulbs were sold at Rs.340/- per 7W bulb in 2014. The current price of LED bulbs being sold by EESL is Rs.70/- per 9W bulb. The present retail market price is around Rs. 80/- to Rs.100/- per 9W bulb.

(b) : As on date, 36.78 Crore LED bulbs have been distributed under UJALA scheme.

(c) : Details of the numbers of bulbs purchased in private and public sector have not been compiled by EESL. However, as per the Electric Lamp and Component Manufactures' Association (ELCOMA), more than 160 Cr LED bulbs have been sold to the consumers by the private sector.

(d) : Distribution of 36.78 Crore LED bulbs by EESL has resulted in reduction of around 38.69 million tonnes of CO_2 emissions per annum.

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