### GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA STARRED QUESTION NO. 261 TO BE ANSWERED ON 17.12.2015

#### PHOTOVOLTAIC POWER PLANTS

### \*261. SHRI KONDA VISHWESHWAR REDDY: SHRI KODIKUNNIL SURESH::

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the number of grid connected solar photovoltaic power plants in the country at present and the quantum of power generated by these plants during each of the last three years, State/UT-wise;

(b) whether any study has been undertaken on the plant load factor of photovoltaic power plants in the last one year, if so, the details and the outcome thereof; and

(c) whether several State Governments have submitted proposals for setting up of solar photovoltaic power projects in their respective States, if so, the details thereof, State/UT-wise and the action taken by the Government thereon?

#### ANSWER

THE MINISTER OF STATE FOR POWER, COAL & NEW AND RENEWABLE ENERGY (INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)

(a),(b)&(c): A Statement is laid on the Table of the House.

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#### **STATEMENT**

## STATEMENT REFERRED TO IN REPLY PARTS(a),(b)&(c) OF THE LOK SABHA STARRRED QUESTION NO. 261 DUE FOR ANSWEER ON 17.12.2015

(a): A capacity of 4879 MW of Solar photovoltaic power has been installed in the country as on 11.12.2015. 9593.563 Million Units have been generated by solar photovoltaic plants during last three years. State-wise details of power generated by such plants during last three years are given at Annexure-I.

(b): Government has not undertaken any study on plant load factor. However, data regarding plant load factor of large solar photovoltaic plants achieved in the projects installed under phase-I, Batch – II of National Solar Mission is collected and it ranges from 16.28% to 21.75%.

(c): Yes, Madam. State-wise details of sanctioned solar photovoltaic project capacity under various Government of India schemes for grid connected solar power are given at Annexure-II.

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# ANNEXURE-I REFERRED TO IN PART (A) OF REPLY TO LOK SABHA STARRED QUESTION NO. 261 FOR ANSWER ON 17.12.2015

# STATE-WISE DETAILS OF POWER GENERATED FROM SOLAR PLANTS DURING LAST THREE YEARS

(All figures in MU)

State	2012-13	2013-14	2014-15
Chandigarh	0.000	0.000	2.230
Delhi	3.677	3.286	3.184
Haryana	0.000	0.000	10.362
Punjab	1.285	51.689	129.889
Rajasthan	266.339	1052.228	1259.185
Uttar Pradesh	14.106	14.962	20.128
Uttarakhand	0.000	5.548	11.630
Oil India Itd.	0.000	0.000	9.090
NTPC			
Dadri+FBD+Unchahar	0.000	6.097	22.896
Chhattisgarh	2.490	11.417	12.653
Goa/NTPC Rajgarh	0.000	0.004	
0 is set	0.000	0.004	62.939
Gujarat	1145.524	1369.390	1474.563
Madhya Pradesh	10.820	247.050	562.292
Maharashtra	28.607	257.424	349.320
Dadra and Nagar			
Haveli	0.000	0.000	0.033
Daman & Diu	0.000	0.000	0.150
Andhra Pradesh	108.840	207.110	159.772
Telangana	0.000	0.000	138.125
Karnataka	16.273	38.253	100.391
Kerala	0.000	0.000	0.000
Puducherry/NTPC			
Ramagundam	0.000	2.451	15.619
Tamil Nadu	25.883	38.873	158.748
Lakshadweep	0.000	0.000	4.904
Jharkhand	6.813	0.000	8.317
Orissa	17.977	34.279	44.939
West Bengal	0.000	0.000	7.583
NTPC			
Andman/Talchar	0.000	6.505	18.790
Assam	0.000	0.000	9.647
Total	1648.634	3346.566	4597.38
Note: 1.The data is as per information received from SLDC/Utilities and is provisional			
2. The figures for 2012-13 and 2013-14 include data for only some of the utilities which furnished information to CEA			

Source: CEA

# ANNEXURE-II REFERRED TO IN PART (C) OF REPLY TO LOK SABHA STARRED QUESTION NO. 261 FOR ANSWER ON 17.12.2015

SI. No.	State/UTs	Proposals received and In Principle approval given (MWp)
1	Andhra Pradesh	39.50
2	Chhattisgarh	6.20
3	Chandigarh	20.50
4	Delhi	8.00
5	Gujarat	11.75
6	Goa	2.00
7	Jharkhand	5.00
8	Haryana	5.00
9	Kerala	15.28
10	Karnataka	0.94
11	Madhya Pradesh	15.00
12	Manipur	3.40
13	Odisha	4.00
14	Puducherry	0.02
15	Punjab	25.00
16	Rajasthan	6.00
17	Tamil Nadu	311.74
18	Telangana	24.00
19	Uttarakhand	51.00
20	Uttar Pradesh	7.00
21	West Bengal	5.38
	Subtotal	566.71
22*	Solar Energy Corporation of India	899.60
23*	Ministry of Railways	502.50
24*	Public Sector Undertakings	111.87
	Total	2080.68

## STATUS OF GRID CONNECTED SPV ROOFTOP PROJECTS

\* Bulk capacities sanctioned to various agencies which decide locations later depending on availability of land and Power Purchase Agreements with various States

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# ANNEXURE-II REFERRED TO IN PART (C) OF REPLY TO LOK SABHA STARRED QUESTION NO. 261 FOR ANSWER ON 17.12.2015

## STATUS OF CANAL-TOP/ CANAL-BANK SOLAR POWER PROJECTS

Based on the requests received from various States for allocation of canal-top/ canalbank solar power projects under the "Pilot-cum-demonstration project for development of grid connected solar PV power plants on canal banks and canal tops", In-Principle approval given for setting up full targeted capacity of 50 MW canal-top and 50 MW canal-bank solar PV power projects, as follows:

SI. No.	State	Implementing Agency in the State	Capacity for which in- principle approval has been given (MW)
1	Andhra Pradesh	New and Renewable Energy Development Corporation of Andhra Pradesh (NREDCAP)	1 MW
2	Gujarat	Sardar Sarovar Narmada Nigam Limited (SSNNL)	10 MW
3	Karnataka	Krishna Bhagya Jala Nigam Limited (KBJNL)	10 MW
4	Kerala	Kerala State Electricity Board Limited (KSEB)	2 MW
5	Punjab	Punjab Energy Development Agency (PEDA)	20 MW
6	Uttarakhand	Uttarakhand Jal Vidyut Nigam Limited	1 MW
7	Uttar Pradesh	Uttar Pradesh Irrigation Department	6 MW
	Total		50 MW

## State-wise Allocation of 50 MW Canal-Top Solar PV projects

## State-wise Allocation of 50 MW Canal-Bank Solar PV Projects

SI. No.	State	Implementing Agency in the State	Capacity for which in- principle approval has been given (MW)
1	Andhra Pradesh	Andhra Pradesh Power Generation Corporation Limited (APGENCO)	5 MW
2	Gujarat	Sardar Sarovar Narmada Nigam Limited (SSNNL)	15 MW
3	Kerala	Kerala State Electricity Board Limited (KSEB)	1 MW
4	Uttarakhand	Uttarakhand Jal Vidyut Nigam Limited	19 MW
5	West Bengal	West Bengal State Electricity Development Corporation Limited (WBSEDCL)	10 MW
	Total		50 MW

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## ANNEXURE-II REFERRED TO IN PART (C) OF REPLY TO LOK SABHA STARRED QUESTION NO. 261 FOR ANSWER ON 17.12.2015

## STATUS OF ALLOCATION OF SOLAR POWER UNDER THE 3000 MW STATE SPECIFIC BUNDLING SCHEME UNDER NSM PHASE-II, BATCH-II

Based on the requests received from various States for allocation of solar power under the 3000 MW State Specific Bundling Scheme under NSM Phase-II, Batch-II, the following State-wise allocations have been made:

SI. No.	State/ UT	Total Capacity allotted (MW)
1	Andhra Pradesh	1,000
2	Jammu & Kashmir	100
3	Karnataka	600
4	Odisha	20
5	Rajasthan	650
6	Telangana	400
7	Uttar Pradesh	100
	TOTAL	2,870

# STATEWISE DETAILS OF ALLOCATION OF POWER UNDER 750 MW VGF SCHEME

S.No.	State	Capacity (MW)
1	Karnataka	10
2	Madhya Pradesh	100
3	Odisha	70
4	Bihar	10
5	Chattisgarh	70
6	Goa	25
7	Maharashtra	50
8	Rajasthan	115
9	Assam	20
10	Delhi	60
11	Haryana	80
12	Himachal Pradesh	20
13	Jharkhand	10
14	Punjab	30
15	Tamil Nadu	10
	Total	680

Remaining capacity not coming up