## GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

#### **LOK SABHA**

### **UNSTARRED QUESTION NO. 4029**

TO BE ANSWERED ON 10.08.2017

#### SUBSIDY TO GRID AND OFF GRID UNITS

#### 4029. SHRI NARANBHAI KACHHADIYA:

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

- (a) the amount of subsidy being provided to grid and off grid units producing solar energy;
- (b) whether the subsidy is likely to be continued during the next five years period;
- (c) if so, the details thereof;
- (d) whether the Government has formulated any policy to encourage the production of solar energy; and
- (e) if so, the details thereof?

#### **ANSWER**

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

- (a): The details of Central Financial Assistance available under various schemes of grid connected and off-grid solar programmes are given in **Annexure**.
- **(b) & (c):** As per the Cabinet approval, different schemes are issued for a specified period, after which schemes are continued, if required.
- (d) & (e): No specific 'Solar Energy Policy' has been formulated. However, the Government has launched following schemes to promote solar energy.:
  - i. Solar Park Scheme for setting up of over 50 Solar Parks and Ultra Mega Solar Power Projects targeting over 40,000 MW of solar power projects.
  - ii. Scheme for setting up 1000 MW of Grid-Connected Solar PV Power Projects by Central Public Sector Undertakings (CPSUs) and Government of India organisations with Viability Gap Funding (VGF).
  - iii. Scheme for setting up 300 MW of Grid-Connected Solar PV Power Projects by Defence Establishments and Para Military Forces with VGF.
  - iv. Pilot-cum-demonstration projects for development of grid connected solar PV power plants on canal banks and canal tops.
  - v. Bundling Scheme 15000 MW grid-connected solar PV power plants through NTPC Ltd./ NVVN.
  - vi. VGF Scheme for setting up of 2000 MW of Grid Connected Solar PV Power Projects through SECI.
  - vii. VGF Scheme for setting up of 5000 MW of Grid Connected Solar PV Power Projects through SECI.
  - viii. Installation of Grid Connected Solar Rooftop Power Plants.

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# ANNEXURE REFERRED TO IN REPLY TO PART (A) OF LOK SABHA UNSTARRED QUESTION NO. 4029 FOR 10.08.2017

## **Details of Schemes and Incentives for promotion of Solar Energy**

Sr.	Scheme	Central Financial Assistance/Subsidy
No.		
1.	Scheme for Development of Solar Parks and Ultra Mega Solar Power Projects	<ul> <li>Rs.20 lakhs/MW or 30% of the project cost including Grid-connectivity cost, whichever is lower</li> <li>CFA @ Rs 25.00 lakh per park for DPR preparation of solar parks, conducting surveys, etc.</li> </ul>
2.	Operationalization of 300 MW Solar PV Projects by defence establishment and para military forces	<ul> <li>The bidders selected on the basis of bids for minimum VGF requirement for the project with commitment to supply solar power at Rs. 5.50/KWh for 25 years.</li> <li>The upper limits of the VGF are as follows: <ul> <li>(i) Category-I: Rs.2.5 crore/MW for project capacity up to 5 MW or 30% of the project cost whichever is lower;</li> <li>(ii) Category-II: Rs. 2 crore/MW for project capacity greater than 5 MW up to 25 MW or 30% of the project cost whichever is lower; and</li> <li>(iii) Category-III: Rs. 1.5 crore /MW for project capacity greater than 25 MW or 30% of the project cost whichever is lower.</li> <li>Keeping in view the technology upgradation and economies of scales, the upper limit of VGF was revised on 17.02.2017 to @ Rs. 1.10 Cr./MW for all projects irrespective of sizes for which tenders were not brought out.</li> </ul> </li> </ul>
3.	Scheme for Setting up of 750 MW Grid-connected Solar PV Power Projects under Batch-1 of Phase-II of JNNSM with Viability Gap Funding Support	The selection of the bidders has been based on the Viability Gap Funding (VGF) required for the project in an ascending order upto the full capacity. Viability Gap Funding (VGF) is limited to 30% of the project cost or 2.5 crore per MW, whichever is lower. Solar Energy Corporation of India (SECI) has signed PPA with such project developers for purchasing entire power from the project for 25 years at 5.45 Rs. per unit (4.75 Rs. per unit for projects availing accelerated depreciation).
4.	Scheme for Setting up of 2000 MW Grid-connected Solar PV Power Projects under Batch-III of Phase-II of JNNSM with Viability Gap Funding Support	The Project developer is provided a viability gap funding based on his bid. The upper limit for VGF is kept at Rs.1.0 Crore/MW for open category (Rs. 1.31 Crore/MW for projects in DCR category).

Sr. No.	Scheme	Central Financial Assistance/Subsidy
5.	Scheme for Setting up of 5000 MW Grid-connected Solar PV Power Projects under Batch-IV of Phase-II of JNNSM with Viability Gap Funding Support	The Project developer is provided a Viability Gap Funding based on his bid. The upper limit for VGF is kept at Rs. 1.0 crore/MW for open category and Rs. 1.25 crore/MW for projects in DCR category. SECI will select projects through competitive e-bidding based on minimum VGF sought (quoted in INR/MW), or there may be a provision for quoting a discounted tariff (quoted in INR/kWh).
6.	Grid Connected Rooftop	CFA is 30% of the benchmark cost for general and 70% CFA for North Eastern and Special Category States for Govt. projects.
7.	Pilot-cum-demonstration project for development of grid connected solar PV power plants on canal banks and canal tops	<ul> <li>Financial support of Rs.3 crore/MW or 30% of the project cost, whichever is lower, for Canal Top SPV projects and Rs. 1.5 crore/MW or 30% of the project cost, whichever is lower, for Canal Bank SPV projects.</li> <li>Total CFA of upto Rs.225 crore for 100 MW (50 MW on Canal Tops and 50 MW on Canal Banks) to be disbursed over a period of maximum 2 years post sanctioning of the plants as under: <ul> <li>upto 40% on sanctioning of the projects.</li> <li>60% on successful commissioning of the projects.</li> </ul> </li> <li>Service charge to SECI @1% of project cost.</li> </ul>
8.	Development of Solar Cities Programme	Financial support up to of Rs. 50 lakh for each city for preparation of the Master Plan alongwith few DPR (up to Rs. 10 lakh), oversight of its implementation (up to Rs. 10 lakh), setting up and functioning of Solar City Cell in the city (up to Rs. 10 lakh) and organizing promotional activities (up to Rs. 20 lakh).
9.	Scheme for setting up of 1000 MW of Grid-Connected Solar PV Power projects by Central Public Sector Undertakings (CPSUs) under Batch- V of Phase II of JNNSM	a fixed rate of Rs. 1 Cr/ MW for projects where domestically produced cells and modules are used and Rs. 50 lakh/ MW in cases where domestically

Sr. No.	Scheme	Central Financial Assistance/Subsidy
10.	Off-Grid scheme- SPV lighting systems and power plants, Solar Pumps	1. Lighting Systems     A. Home lights/Lanterns/Street Lights with Lead acid batteries: Benchmark Cost = Rs. 340/Wp: CFA=Rs. 102/Wp  B. Street lights with Lithium Ferro Phosphate batteries: Benchmark cost= Rs. 475/Wp: CFA= Rs. 142.5/Wp
		2. Power packs with battery bank @7.2 VAh/Wp
		A. Up to 300 Wp: Benchmark Cost = 200/Wp: CFA=Rs. 60/Wp
		B. 300 Wp to 1 kWp: Benchmark Cost = Rs. 135/Wp: CFA=Rs. 40.5/Wp
		3. Solar Power plants with battery bank @7.2 VAh/Wp and capacity up to 10 kWp: Benchmark Cost = Rs. 135/Wp: CFA=Rs. 40.5/Wp
		4. Solar Pumps
		A. Up to 3 HP (DC): Benchmark Cost = Rs. 1,20,000/HP: CFA=Rs. 36,000/HP
		B. 3HP to 5 HP (DC): Benchmark Cost = Rs. 95,000/HP: CFA=Rs. 28,500/HP
		C. Up to 3 HP (AC): Benchmark Cost = Rs. 1,00,000/HP: CFA=Rs. 30,000/HP
		D. 3HP to 5 HP (AC): Benchmark Cost = Rs. 85,000/HP: CFA=Rs. 25,500/HP

Note: CFA stands for Central Financial Assistance.