GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENRGY

LOK SABHA

UNSTARRED QUESTION NO. 790

TO BE ANSWERED ON 07.02.2019

SOLAR SCHEMES IN HILLY STATES

790. SHRIMATI RITI PATHAK SHRI DEVAJIBHAI G. FATEPARA SHRI JUGAL KISHORE

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

- (a) the names of schemes being run by the Government in the hilly areas of the States specially Madhya Pradesh, Gujarat and Jammu-Kashmir to promote solar power at present;
- (b) the details of the amount of funds provided under these schemes during the last two years;
- (c) whether the Government has also made a provision of providing any subsidy for use of solar power; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER (I/C) (SHRI R. K. SINGH)

- (a) The Ministry of New and Renewable Energy (MNRE) has been implementing various schemes in the country, including in the hilly areas of Madhya Pradesh, Gujarat and Jammu & Kashmir, to promote solar energy. The names of the schemes are as under:
- (i) Development of Solar Parks and Ultra Mega Solar Power Projects.
- (ii) Scheme for setting up 1000 MW of Grid-Connected Solar PV Power Projects by the Central Public Sector Undertakings (CPSUs) and the 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) Roof Top PV and Small Solar Power Generation Programme (RPSSGP).
- (vii) Demonstration Scheme for Generation Based Incentive (GBI) for Solar Power Projects.
- (viii) VGF Scheme for setting up of 750 MW of Grid Connected Solar PV Power Projects through Solar Energy Corporation of India (SECI).
- (ix) VGF Scheme for setting up of 2000 MW of Grid Connected Solar PV Power Projects through SECI.
- (x) VGF Scheme for setting up of 5000 MW of Grid Connected Solar PV Power Projects through SECI.
- (xi) Installation of Grid Connected Solar Rooftop Power Plants.
- (xii) Off-Grid Solar PV Scheme.
- (b) The details of quantum of funds provided to Madhya Pradesh, Gujarat and Jammu & Kashmir under various schemes during the last two years are given in **Annexure-I.**
- (c) & (d) The details of provision of subsidy for consumption of solar energy are given in **Annexure-II**.

ANNEXURE-I

ANNEXURE-I REFERRED TO IN REPLY TO PART (b) OF LOK SABHA UNSTARRED QUESTION NO. 790 FOR 07.02.2019

Scheme-wise detail of funds provided in the States of Madhya Pradesh, Gujarat and Jammu & Kashmir during the last two years is as given below:

A. Madhya Pradesh

(Rs. in Crore)

Sl.	Schemes	2016-17	2017-18
No.			
1.	Development of Solar Parks and Ultra Mega Solar	56.56	13.47
	Power Projects		
2.	Grid Connected Solar Rooftops Scheme	31.96	3.14
3.	Roof Top PV and Small Solar Power Generation	8.78	2.00
	Programme (RPSSGP) Solar GBI Scheme		
4.	Off-Grid SPV Scheme	0.66	69.09
5.	Scheme for Setting up of Grid Connected Solar PV	82.50	114.75
	Power Projects by CPSUs and Govt. Organizations		
	with Viability Gap Funding (VGF)		
6.	VGF Scheme for setting up of 750 MW of Grid	40.88	12.72
	Connected Solar PV Power Projects through Solar		
	Energy Corporation of India (SECI)		
	Total	221.34	215.17

B. Gujarat

(Rs. in Crore)

Sl.	Schemes	2016-17	2017-18
No.			
1.	Development of Solar Parks and Ultra Mega Solar	0	4.13
	Power Projects		
2.	Grid Connected Solar Rooftops Scheme	17.43	23.18
3.	Off-Grid SPV Scheme	26.08	26.22
4.	Pilot-Cum-Demonstration Project for Development of	10.31	0
	Grid Connected Solar PV Power Plants on Canal Banks		
	and Canal Tops		
5.	VGF Scheme for setting up of 750 MW of Grid	6.07	1.04
	Connected Solar PV Power Projects through Solar		
	Energy Corporation of India (SECI)		
	Total	59.89	54.57

A. Jammu & Kashmir

(Rs. in Crore)

Sl. No.	Schemes	2016-17	2017-18
1.	Development of Solar Parks and Ultra Mega Solar Power Projects	0.25	0
2.	Grid Connected Solar Rooftops Scheme	3.68	0
3.	Off-Grid SPV Scheme	24.66	0
_	Total	28.59	0

ANNEXURE-II REFERRED TO IN REPLY TO PARTS (c) AND (d) OF LOK SABHA UNSTARRED QUESTION NO. 790 FOR 07.02.2019

DETAILS OF PROVISION OF SUBSIDY FOR USE OF SOLAR ENERGY

Sr.	Scheme	Central Financial Assistance (CFA) / Subsidy
No.		
1.	Scheme for Development of Solar Parks and Ultra Mega Solar Power Projects	 Rs. 20 lakhs/MW or 30% of the project cost including Grid-connectivity cost, whichever is lower CFA @ Rs 25.00 lakh per park for DPR preparation of solar
	,	parks, conducting surveys, etc.
2.	Scheme for setting up 1000 MW of Grid-Connected Solar PV Power Projects by the Central Public Sector Undertakings (CPSUs) and the Government of India organisations with Viability Gap Funding (VGF).	 Viability Gap Funding (VGF) is provided as under: Rs. 1 Cr. /MW, if Cells and Modules were procured for the project from indigenous source; Rs. 50 Lakh /MW, if Modules were procured for the project from indigenous source; The scheme is closed for new sanctions.
3.	Operationalization of 300 MW Solar PV Projects by defence establishment and para military forces	 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. The upper limits of the VGF are as follows: Category-I: Rs. 2.5 crore/MW for project capacity up to 5 MW or 30% of the project cost whichever is lower; 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 Category-III: Rs. 1.5 crore /MW for project capacity greater than 25 MW or 30% of the project cost whichever is lower. 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
4.	Pilot-cum-demonstration project for development of grid connected solar PV power plants on canal banks and canal tops	 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.

 6. 	State Specific Bundling scheme for implementing 15000 MW of Grid-connected Solar PV Power Plants Roof Top PV and Small Solar Power Generation Programme (RPSSGP).	 MNRE issued the Guidelines for selection of 3000 MW of Solar PV Capacity (i.e. identified quantum of Tranche-I) in March 2015. Under the scheme, it was envisaged that the then costlier solar power will be bundled with cheaper thermal power, so as to supply combined power at as affordable price. The Scheme has provision for Central Financial assistance as follows: Solar power projects of 100 kW to 2 MW capacity eligible. Generation Based Incentive (GBI) provided to the State utilities at a rate equal to the difference of the CERC tariff for 2010-11 (Rs. 17.91 per kWh) and a base rate of Rs. 5.5 per kWh. The scheme is closed for new sanctions. Scheme closed for new sanctions.
7.	Demonstration Scheme for Generation Based Incentive (GBI) for Solar Power Projects.	 The Scheme has provision for Central Financial assistance as follows: Solar power projects of 1 MWp to 5 MWp capacity eligible. GBI available for a maximum duration of 10 years. GBI up to Rs. 12 / kWh was available. Scheme closed for new sanctions.
8.	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 up to 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).
9.	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 (VGF) Support	The Project developer is provided a VGF based on his bid. The upper limit for VGF is kept at Rs. 1.0 Crore/MW with a pre-determined tariff of Rs. 4.50/kWh.
10.	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 (VGF) Support	The Project developer is provided a VGF based on his bid. The upper limit for VGF is kept at Rs. 1.0 crore/MW with a pre-determined tariff of Rs. 4.50/kWh. SECI selects projects through competitive e-bidding based on minimum VGF sought (quoted in INR/MW), or quoting a discounted tariff (quoted in INR/kWh) with zero VGF.

11.	Grid Connected Rooftop	CFA of up to 30% of project cost /bench mark cost (whichever is lower) is being provided for installation of Grid Connected Rooftop Solar Projects in Residential, Institutional and Social sectors in General Category States and up to 70% of the project cost/benchmark cost (whichever is lower) in Special Category States (i.e. North Eastern States including Sikkim, Uttarakhand, Himachal Pradesh, Jammu & Kashmir, Lakshadweep and Andaman& Nicobar Islands). For Govt. sector, achievement linked incentives are being provided. Subsidy/CFA is not applicable for commercial and
12.	Off-Grid Solar PV Scheme	industrial establishments in private sector. CFA of up to 30% of project cost /bench mark cost (whichever is lower) is being provided for Solar street lights and solar power packs in General Category States and up to 90% of the project cost/benchmark cost (whichever is lower) in Special Category States. CFA up to 85% of project cost /bench mark cost (whichever is lower) is being provided for solar study lamps in LWE areas and NE States.