

**F. No. 283/63/2019-GRID SOLAR**  
भारत सरकार / Government of India  
**नवीन और नवीकरणीय ऊर्जा मंत्रालय/ Ministry of New & Renewable Energy**  
ग्रिड सौर ऊर्जा प्रभाग / Grid Solar Power Division

ब्लॉक संख्या 14, केंद्रीय कार्यालय परिसर,  
लोदी रोड, नई दिल्ली - 110003  
Block No. 14, C.G.O. Complex,  
Lodi Road, New Delhi - 110003  
Dated: 5<sup>th</sup> November, 2019

**ADVISORY / CLARIFICATION**

**Sub: Advisory / Clarification w.r.t. D.C. Capacity of Solar PV Power Plants**

(1). MNRE has received representations from various Solar Developers/ Solar Developer Associations that recently few States have raised questions and concerns around globally adopted practice of installing additional DC capacity, over and above the nameplate / contracted AC capacity, with the objective of meeting the committed Capacity Utilisation Factor (CUF) in Power Purchase Agreements (PPAs) / Power Supply Agreements (PSAs).

(2). It has further been stated that the State Governments feel that installation of such additional capacity serves as a medium for additional revenue generation for the developers and that such additional DC capacity cannot be allowed.

(3). The issue has been examined in the Ministry of New & Renewable Energy (MNRE), and it is noted that:

- i. As per the present bidding practice, the procurer, whether State Government Agencies/ DISCOMS or Central Government entities like SECI/ NTPC, invite bids from solar power developers for setting up solar PV power plant of a certain capacity (MW). The capacity won by the successful bidder (solar PV power developer), on signing of Power Purchase Agreement (PPA) becomes the "Contracted Capacity", which is the capacity (MW) in AC terms, allocated for supply by that bidder.
- ii. Along with 'Contracted Capacity', the PPA also provides for a range of energy supply based on Capacity Utilisation Factor (CUF). While the procurer is not obligated to buy energy beyond this range, the developer is liable for penal charges for supply of energy less than the minimum committed energy or minimum committed Capacity Utilisation Factor (CUF).
- iii. Thus, the PPAs define the relationship between the Solar Developers and the procurer in terms of AC capacity, and range of energy supply based on CUF, with procurement obligation within this range.
- iv. The requirement of designing and installation of additional DC panels may emanate from the contractual need to supply the committed energy and does not cast any obligation on the procurer to buy generation in excess of the contracted energy range.

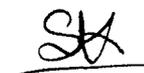


- v. The procurer, without getting into the design and installation of solar capacity on the DC side, should only ensure that the AC capacity of the solar PV power plant set up by the developer corresponds with the contracted AC capacity and that, at no point, the power (MW) scheduled from the solar PV power plant, is in excess of the contracted AC capacity.

(4). Accordingly, all concerned are hereby advised that:

- i. As long as the solar PV power plant is in accordance with the contracted AC capacity and meets the range of energy supply based on Capacity Utilisation Factor (CUF) requirements, the design and installation of solar capacity on the DC side should be left to the generator / developer.
- ii. Even if the installed DC capacity (MWp) [*expressed as the sum of the nominal DC rating (Wp) of all the individual solar PV modules installed*] in a solar PV power plant, is in excess of the value of the contracted AC capacity (MW), it is not violation of PPA or PSA, as long as the AC capacity of the solar PV power plant set up by the developer corresponds with the contracted AC capacity and that, at no point, the power (MW) scheduled from the solar PV power plant is in excess of the contracted AC capacity, unless there is any specific clause in the PPA restricting such D.C. capacity.
- iii. The contracting party is not obliged to buy any power in excess of the contracted quantum. There is provision of penalty in case the supply falls short of the contracted quantity.
- iv. As per law, the setting up of generation capacity is an unlicensed activity and therefore any person is entitled to set up any capacity which he desires to set up, and sell power to any entity which may want to buy it.

(5). This issues with the approval of Hon'ble Minister (Power & NRE).



(Sanjay Karndhar)  
Scientist-C

Email: karndhar.sg@nic.in

**To: All concerned**

**Copy to:** NIC, MNRE, for uploading on MNRE website.

**Copy for internal circulation to:**

Sr. PPS to Secretary/ PPS to SS/ Sr. PPS to JS (AKS)/ Dir (RG)