

PUNJAB STATE ELECTRICITY REGULATORY COMMISSION
SITE NO. 3, BLOCK B, SECTOR 18-A MADHYA MARG, CHANDIGARH

Petition No. 25 of 2018
Date of Order:01.10.2019

Petition for Approval of 2 MW Grid Connectivity of Installation of Roof Top Solar Power Plant under Net Metering Application No. PEDA201611851763 dated 09.11.2016 instead of 1 MW upper limit as per the regulations i.e. PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulations, 2015. A submission on behalf of Diesel Loco Modernization Works, Patiala (Punjab) where 2 MWp Roof Top Solar Power is Commissioned.

AND

In the matter of: DIESEL LOCO MODERNISATION WORKS, INDIAN RAILWAYS PATIALA.

.. Petitioner

Versus

1. Punjab State Power Corporation Ltd., the Mall, Patiala.
2. Punjab Energy Development Agency, Chandigarh.

..Respondents

Present: Ms. Kusumjit Sidhu, Chairperson
Sh. S.S. Sarna, Member
Ms. Anjuli Chandra, Member

Order

The present petition has been filed by Diesel Loco Modernization Works, Indian Railways, Patiala under Section 86(1) (e) of the Electricity Act, 2003 read with Regulation 19 of the PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulations, 2015 for allowing setting up 2MWp solar power plant under net metering by amending/relaxing Regulation

3.2(a) and 8.1 of PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulation, 2015. The amendment/relaxation required is to the effect that the restriction on installation of 1 MWp capacity and Voltage level of interconnection of Roof Top Solar PV System be relaxed in order to maximize the generation from Roof Top Space available with the petitioner to the tune of 2MWp capacity.

1.1 The petitioner submitted that a contract was signed between Indian Railway Organization and BHEL for Alternative Fuels (IROAF) vide agreement dated 30.03.2017 for design, supply, installation, testing and commissioning of grid connected roof top solar photovoltaic power plant of 2MWp capacity at Diesel Loco Modernization Works, Patiala. The petitioner further submitted that PSPCL has already given permission for setting up of 1 MWp SPV plant under net metering but the Ministry of Railways has sanctioned a project to set up 2 MWp SPV plant at DMW Patiala and accordingly, the work was got executed from BHEL by the petitioner. The petitioner also quoted the policy of Government of Punjab which permits solar plant under net metering upto 10 MWp and the judgment of Telangana SERC, in support of the petition. Accordingly, the prayer(s) made by the petitioner are as under:

- a) Amend the regulations titled “ Grid Interactive Rooftop Solar Photo Voltaic systems based on Net Metering, 2015” issued by Punjab State Electricity Regulatory vide Notification No. PSERC/Secy./ Regu. 101 dt. 7th May, 2015 in line with amendment issued by Govt. of

Punjab Department of New & Renewable Energy, vide Notification No. 18/7/2014 PE 1/1709 dated 22.07.2015 permitting installation of Solar Power Plant projects upto to MWp (AC side) under Net Metering System. This will enable PSPCL to accord approval for 2 MWp Solar Power Plant Commissioned at DMW, Patiala.

- b) To pass any other order/s as deem fit and appropriate under the circumstances of the case and in the interest of justice.

1.2 The petitioner has submitted an Order dated 19.12.2018 passed by SERC, Telangana, Hyderabad in O.P No. 62 of 2018 in support of the averments made in the petition, wherein permission for installation of 2MW Solar Power Plant under developer mode on Net metering basis by relaxing the provision of Regulations, which restrict the maximum capacity at 1MW, was granted on the ground that the petitioner is a PSU under the Ministry of Defence and under a target fixed by Central Government.

1.3 Vide Order dated 21.02.2019, notice was issued to PSPCL to give its reply on admission of the petition. Accordingly, PSPCL submitted its reply vide memo no. 5666 dated 27.02.2019 on the admission of the petition that as per the prevailing Regulations the maximum capacity of Roof top SPV plants has been specified as 1MWp. However, in the present case there are two options to continue using this Solar Plant. First is to go for Captive Power Plant to use the energy for captive use and second is to sell the entire

power from their plant to PSPCL by signing a PPA and Railway Authority can procure power from PSPCL for its use.

2. Vide Order dated 07.03.2019 the petition was admitted. PSPCL was directed to file its reply considering the technical and commercial aspects of allowing Net Metering for 2MWp Solar Plant. Further, PSPCL was also directed to arrange a meeting of its concerned department including commercial PP&R with the Railways to provide further clarification to the options given in the aforementioned memo no. 5666 dated 27.02.2019. Accordingly, PSPCL submitted minutes of the meeting held on 13.03.2019, wherein PSPCL suggested to the petitioner that they can apply for CPP without sale of Power at online single window system under ESIM instruction 125.2. Further, with respect to the request of the petitioner for banking of power, the petitioner was asked to give their terms and proposal regarding banking of power in detail. Consequently the petitioner submitted the requisite details to PSPCL.

3. PSPCL submitted its reply to the petition vide memo no. 5794 dated 25.03.2019. PSPCL opposed the enhancement of maximum capacity limit of 1MWp specified for Rooftop SPV plant under Net Metering Regulations. PSPCL further submitted that maximum capacity of 1 MWp for SPV plants under net metering has been prescribed by Forum of Regulators in the Model Regulations in view of the adverse affect that reverse flow of power might have on grid stability. PSPCL also argued that the issue of insulation co-ordination for the selected voltage levels needs to be kept in view due to limited space availability and safety of the plant & equipment. PSPCL

submitted that since the rooftop solar energy shall be available only during day time and that too for a shorter period hence, it will pose a challenge to the regulation of power system. Further, Net Metering will lead to the reduction in consumption of Electricity supply to existing consumer thereby allowing Solar PV System above one MWp capacity which shall adversely affect the financial health of PSPCL. Accordingly, PSPCL requested that the capacity of SPV plants under net metering should be limited to 1 MWp. The petitioner failed to refute any of the technical constraints pointed out by PSPCL.

3. PEDDA has also submitted its reply to the petition vide letter no. 5211 dated 01.04.2019. PEDDA, while quoting orders of UPERC and TNERC, supported the prayer of the petitioner to relax regulation 3.2(a) of the Net Metering Regulations to allow SPV plant of 2 MWp capacity under these regulations. PEDDA further submitted that Rooftop SPV plants upto 4 MWp may be permitted under Net Metering by amending the regulations.

The parties were heard on 05.09.2019 and the Order was reserved.

4. **Commission's Observations, Findings and Decision**

The Commission has examined the issue in totality and observed that the issue of "capacity limit and inter-connection voltages" has specifically been discussed in the report of the working group constituted by Forum of Regulators to evolve Net Metering Model Regulations. The maximum capacity of 1MWp for single metering point under net metering has been prescribed in view of the adverse affect that reverse flow of power might have on grid stability

and safety norms. The report quoted various international studies and brought out that major challenges in integrating the high amount of solar power on the distribution system are sudden voltage rise, increase in losses & power factor modifications, interaction with capacitor banks and voltage regulators, islanding issues and feeder protection. Thus increasing maximum capacity without detailed technical analysis of its affect on the distribution system cannot be permitted.

The 'Power to remove difficulty' under regulation 18 read with 'Power to relax" under regulation 19 of the PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulation, 2015 can be used only if there is difficulty in effecting the regulations and not when difficulty is caused due to application of the regulations. Hon'ble Appellate Tribunal in the case of Ratnagiri Gas Power Pvt. Ltd. Vs. CERC (2011) ELR (APTEL) 532 has in para 10.3 & 10.07 held as under:

"10.3 In our opinion, power to remove difficulties is to be exercised when there is difficulty in effecting the Regulations and not when difficulty is caused due to application of the Regulation. Thus, the exercising power to remove difficulties does not arise in the present case.

10.7 The above regulations and the decision to give the judicial discretion to the Central Commission to relax norms based on the circumstances of the case. However, such a case has to be one of those exceptions to the general rule. There has to be sufficient reason to justify relaxation. It has to be exercised only in exceptional case and where non-exercise of the discretion would cause

hardship and injustice to a party or would lead to unjust result. In the case of relaxation of the regulations the reasons have to be recorded in writing. Further, it has to be established by the party that the circumstances are not created due to act of omission or commission attributable to the party claiming the relaxation.”

There are no reasons for relaxing the condition of 1 MWp capacity specified in the Net Metering Regulations particularly in view of clause 3.3 of these Regulations which provides that this Regulation do not preclude the right by any person to undertake Rooftop solar project above 1MWp capacity through alternative mechanism. PSPCL in a meeting with the petitioner on 13.03.2019, offered to consider the connectivity of 2MWp solar plant with PSPCL system under PSERC (Harnessing of Captive Power Generation) Regulations, 2009 so that the surplus power of the petitioner can be taken care of under banking arrangement. The petitioner agreed to opt for this facility in the aforesaid meeting but no further action has been taken by the petitioner.

In view of the above, the Commission finds no justification in relaxing the Regulation 3.2(a) of the PSERC (Grid Interactive Rooftop Solar Photo Voltaic Systems based on Net Metering) Regulation, 2015 to allow 2 MWp SPV plant under Net Metering. The petitioner is being fed at 66 kV. PSPCL has already allowed grid connectivity for 1 MWp SPV plant at the same voltage and has also not raised any objection to the connectivity of 1 MWp at 66 kV. However, the petitioner shall adhere to the interconnection conditions

provided in the CEA Regulations for connectivity to the grid at the relevant voltage level.

The petition is disposed of accordingly.

Sd/-
(Anjuli Chandra)
Member

Sd/-
(S.S. Sarna)
Member

Sd/-
(Kusumjit Sidhu)
Chairperson

Chandigarh
Dated:01.10.2019

