

TAMIL NADU ELECTRICITY REGULATORY COMMISSION
(Constituted under section 82 (1) of the Electricity Act, 2003)
(Central Act 36 of 2003)

PRESENT:

Thiru M. Chandrasekar	...	Chairman
Thiru K. Venkatasamy	...	Member (Legal)
	and	
ThiruR.Jarard Kishore	...	Member

M.P. No.1 of 2022

Tamil Nadu Generation and Distribution
Corporation Limited
Represented by the Chief Engineer /
Non-Conventional Energy Sources
144, Anna Salai
Chennai – 600 002.

... Petitioner
Thiru. M.Gopinathan
Standing Counsel for TANGEDCO)

Dates of hearing : 11-01-2022 and 08-02-2022

Date of Order : 01-03-2022

The M.P.No.1 of 2022 came up for final hearing on 08-02-2022. The Commission, upon perusal of the petition and after hearing the submissions of the petitioner hereby makes the following order:-

ORDER

1. Prayer of the Petitioner in M.P No. 1 of 2022:-

The prayer of the petitioner in this petition is to pass an appropriate order to amend the Commission's Grid Interactive Solar PV Energy Generating System(GISS) Regulations,2021for extending Net feed-in methodology to all HT

consumers for the establishment of roof top / ground mounted SPV plants within their premises irrespective of voltage level for all roof top loads of 1 MW and above within sanctioned load duly collecting the networking charges from them as envisaged in the (GISS) Order No. 8 dated 22-10-2021.

2. Facts of the Case:-

2.1. The petition seeks direction for implementation of Gross metering methodology to HT consumers with Solar Power Plants inside their premises with capacities of 1 MW and above or equal to the sanctioned demand whichever is less, with separate feeder subject to technical feasibility

2.2 The Tamil Nadu State Solar Energy Policy was announced by the Government of Tamil Nadu on 19.10.2012 vide G.O.No.121, dated 19.10.2012. Clause 14 of the solar policy envisaged establishment of 3000 MW of solar PV power plants by 2015.

2.3. Pursuant to the directives in the Solar Energy Policy 2012 by the State of Tamil Nadu, the Commission issued an order on LT connectivity and net metering vide Order No.3 of 2013, dated 13.11.2013. Accordingly TANGEDCO has extended net- metering facility to eligible L T consumers only.

2.4. In the year 2013, some of the HT consumers have requested the TANGEDCO to connect their proposed rooftop/ground mounted solar power plants, within their service connection premises, in their HT/LT network without export of energy into grid i.e for mere parallel operation. As there was no

technical issue found, TANGEDCO started facilitating parallel operation approvals to all such interested HT consumers.

2.5 An amendment to the Tamil Nadu Electricity Distribution Code, 2004 in respect of "distribution system interface with generators" was issued vide Notification No.TNERC/DC/S-22, dated 23.01.2015.

2.6. By considering the said amended regulations, the facility of parallel operation for the establishment of roof top/ground mounted Solar photo voltaic plants within the premises of HT consumers for captive use without export of power has been accorded by the TANGEDCO to the HT consumers but only to those who have separate feeders/dedicated feeders, irrespective of the capacity, with a condition that in future, no other HT service connection or distribution transformer shall be connected in the existing feeder, feeding the HT service of the concerned generator.

2.7. Subsequently, the Government of India have envisaged an ambitious cumulative Renewable Energy target achievement of 175 GW. The cumulative solar power generation of 100 GW Solar installed capacity was planned by the Government of India, which is to be achieved by 2022 and out of which 9000MW of cumulative solar generation was the target fixed for Tamil Nadu.

2.8. Based on the Gol target, the Tamil Nadu Solar Policy, 2019 was announced by the Government of Tamil Nadu on 04.02.2019. The 2019 Policy

has set a target of 9000 MW to be achieved by 2023 of which 40% is earmarked for consumer category solar energy systems.

2.9. Pursuant to the directives in the Solar Energy Policy 2019, the Commission issued an order on Rooftop Solar Generation vide Order No.3 of 2019 dated 25-03-2019. This order on new scheme of Rooftop Solar Generation, namely, Solar net feed in-consumer category is applicable to all Consumers under Low Tension category except Hut and Agricultural category of tariff. Under net feed-in scheme, the power purchase rate is fixed as Rs.2.08 per unit for the year 2020-21 in the above order. The existing consumers under the net metering scheme continued to be governed by the provisions in the Order No.3 of 2013 dated 13.11.2013.

2.10. TANGEDCO filed Miscellaneous Petition in M.P.No.14 of 2018, praying to pass an appropriate order granting exemption to HT consumers for the establishment of roof top/ground mounted solar power plants within the premises for mere parallel operation for captive use without export of power by applying the amended regulation 8 of the Tamil Nadu Electricity Distribution Code, 2004 as amendment through TNERC's Notification dated 23.01.2015.

2.11. The Commission passed Orders in M.P. No.14 of 2018 on 29-10-2019 to the effect that TANGEDCO may permit parallel operation to HT consumers with Solar Power Plants in a premises with capacities less than 1 MW or equal to the sanctioned demand subject to technical feasibility, safety norms and other

conditions normally being followed and collection of parallel operation charges as applicable.

2.12. About 72.5 MW capacity has been achieved through parallel operation in respect of roof top/ground mounted Solar PV plants within the premises of HT consumer without power export. Before issuance of order in MP.No.14 of 2018, approximately 154 MW has been achieved through parallel operation and totally 226.15 MW has been achieved through parallel operation, as on 28.02.2021.

2.13. Ministry of Power Gol has initially notified Draft Electricity (Rights of Consumers) Rule 2020, dated 9th September 2020. Clause 9 thereof provides that "the regulations on Grid Interactive Roof Top Solar (RTS) PV system and its related matters shall provide for net metering for loads up to five kW and for gross metering for loads above five kW". However, subsequently, the Ministry of Power Gol has issued another notification, i.e the Electricity (Rights of Consumers) Rules 2020, during December 2020. Clause 11 (4) thereof provides that "the regulations on Grid Interactive Roof Top Solar PV system and its related matters shall provide for net metering for loads up to ten kW and for gross metering for loads above ten kW".

2.14. Accordingly, TANGEDCO filed M.P.No.14 of 2021,praying for gross metering methodology to all HT consumers for establishment of roof top/ground mounted solar PV plants within their premises irrespective of voltage level for all

roof top load above 10KW as recommended in the Electricity (Right of consumer)Rules, 2020.

2.15. The Commission issued Generic Tariff Order for Grid Interactive PV Solar Energy Generating System (GISS) in Order No. 8 of 2021, dated 22-10-2021 for gross metering for Roof top Solar Power Plants in a premises with capacities up to 999KW.

2.16. There are 295 Nos of roof top solar application out of which 37 Nos of applications are seeking connectivity to their roof top solar plants with a capacity of 1 MW and above which could not be considered under this (GISS) Order No.8 of 2021 dated 22-10-2021.

2.17. A bare reading of the TNERC (Grid Interactive Solar PV Energy Generating Systems) Regulations, 2021, particularly Regulation 1.3, 2(m), 4.3, 4.4 (i), serial No.4 in Regulation 15.3 makes it clear that the said Regulations will apply to consumers/generators having sanctioned load/contracted demand of less than 1 MW. However, the TANGEDCO is in receipt of 37 applications for seeking approval to connect solar power generating system having more than 1 MW but within their sanctioned load/ contracted demand. Hence, clarity is required in applicability to such cases as well. If the actual import of the said Regulations 2021 is to include 1 MW and above as well, the said Regulations requires amendments and on such amendment, such of those case may be brought within Clause 9.3 of the Tariff Order No.8 of 2021.

3. Findings of the Commission:

3.1. Heard the submissions of the petitioner. The prayer of the petitioner is to permit connectivity and extend net feed-in methodology to all HT consumers for their rooftop/ground mounted SPV plants installed within their premises irrespective of voltage level and with loads of 1 MW and above but within the sanctioned demand duly collecting network charges mandated in Commission's Order No.8 of 2021.

3.2. It is noted from the submissions made by the petitioner that 295 nos. of applications to install solar roof top with grid connectivity have been received of which 37 nos. of applications seek connectivity to their rooftop solar plants with capacity of 1 MW and above.

3.3. However the petitioner while furnishing the pending applications and seeking orders for net feed-in mechanism has not elaborated on the ancillary issues relating to existing open access norms, scheduling mechanism and grid management to enable the Commission to analyze the technical and financial implications of feed in mechanism so envisaged vis-à-vis other Regulations.

3.4. The sanctity, technical and commercial necessity and applicability of the network charges which bears definition as below, have been widely elaborated in the Commission's GISS regulations 2021:-

"Net work charges" means and includes all charges besides incidental charges incurred by the Licensee for creating, developing and maintaining the network for its functions and operations that includes providing the essential grid support to the Grid interactive Renewable Energy Systems for its dependant parallel operation without which such Grid interactive system cannot operate independently:

3.5. Given the above factors, the point for consideration before us in disposing the petition on hand, encompasses a dual object of facilitating a seamless grid connectivity of captive solar power generation by the prospective applicants subject to grid constraints as envisaged in the Electricity Act besides fulfilling the mandate of network charges as stipulated in the Commission's GISS regulations 2021 to safeguard the interest of the distribution Licensee equitably.

3.6. Accordingly the following order is passed:-

The applicants shall be granted connectivity to Grid to operate their Grid Interactive Solar PV System upto sanctioned/contracted demand by installing a reverse power relay at their cost as specified by the Licensee so that the captive solar power so generated does not enter into the grid. Dedicated feeder is not required in such cases. Connectivity shall be permitted in the existing feeder to which the applicant's service connection is connected. The prosumers shall pay the applicable network charges to the Licensee for the entire generated units of solar power at the rate specified and in accordance with the orders issued by the Commission

from time to time. The parallel operation charges shall not be applicable for such prosumers. The Prosumer shall install a solar generation meter at their cost. Interface meters shall be ABT compliant and as per the CEA (Installation and Operation of Meters) Regulations, 2006 and its amendments, with facility for AMR data transfer suitable to the protocol specified by the licensee.

The petition is disposed of accordingly.

(Sd...)
(R.Jarard Kishore)
Member

(Sd...)
(K.Venkatasamy)
Member (Legal)

(Sd...)
(M.Chandrasekar)
Chairman

/True Copy /

Secretary
Tamil Nadu Electricity
Regulatory Commission