

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

PRESENT:

ThiruM.Chandrasekar

.... Chairman

and

Thiru.K.Venkatasamy

.... Member (Legal)

D.R.P. No.4 of 2014

B&G Solar Private Ltd
New No. 25, Old No.10
Sir Madhavan Nair Road
Mahalingapuram
Nungambakkam
Chennai – 600 034.

..... Petitioner
(Thiru.Vinod Kumar
Advocate for the Petitioner)

Versus

1. Tamil Nadu Generation and Distribution Corporation Limited.
Represented by its Chairman,
NPKRR Maaligai
144, Anna Salai,
Chennai 600 002.
2. The Chief Finance Controller / Revenue
TANGEDCO (Accounts Branch)
144, Anna Salai,
Chennai 600 002.
3. The Director (Finance)
TANGEDCO
144, Anna Salai,
Chennai 600 002.
4. The Superintending Engineer,
Nagapattinam Electricity Distribution Circle
TANGEDCO
Nagapattinam 611 001.

.... Respondents
(Thiru.M.Gopinathan
Standing Counsel for TANGEDCO)

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Dates of hearing : 19-02-2014; 21-03-2014; 11-07-2014;
06-08-2019; 05-09-2019; 01-10-2019;
28-01-2020; 28-07-2020; 08-09-2020;
13-10-2020; 10-11-2020; 15-12-2020;
12-01-2021; 19-01-2021; 02-02-2021;
09-02-2021; 16-02-2021; 23-02-2021;
01-03-2021 and 02-03-2021

Date of Order : 13-07-2021

The DRP No. 4 of 2014 came up for final hearing on 02-03-2021. The Commission upon perusing the affidavit filed by the petitioner, counter affidavit filed by the respondent and all other connected records and after hearing both the parties passes the following:-

ORDER

1. Prayer of the Petitioner in DRP No.4 of 2014:-

The prayer of the Petitioner in the above DRP No. 4 of 2014 is to declare that the impugned communication in Letter No. SE/NEDC/NGT/AO/RCS/AS/F.HTSC-086/D.694/13, dated 09-12-2013 is illegal and contrary to the orders of the Commission and consequently set aside the same.

2. Facts of the case:-

This petition has been filed seeking a declaration that the impugned instructions in Letter No. SE/NEDC/NGT/AO/RCS/AS/F.HTSC-086/D.694/13, dated 09-12-2013 is illegal and contrary to the orders of this Commission.

3. Contentions of the Petitioner:-

3.1. The third respondent has assigned Service No. HT SC 086 and fixed the sanctioned demand of 100 KVA to the petitioner's 1 MW Solar Power Plant as the demand permitted as start-up power for the petitioner's plant. Further, the 4th respondent has informed that the petitioner will be billed under HT Tariff V (Temporary Supply) under two part system from 01-08-2012.

3.2. The tariff for start-up power was initially fixed as Rs.6.218/- per unit as per the Tariff Order No.2 dated 15.5.2006. Thereafter, there have been subsequent revisions in the tariff orders passed by the Commission. The average billing rate (ABR) payable by High Tension Tariff V category consumers was made applicable to start-up power. In the latest Tariff Order dated 20.6.2013 issued by the Commission the ABR for start-up power has been fixed at Rs.10.68/- per unit.

3.3. The Tariff Order dated 27.5.2010 and the EPA between the parties requires the Petitioner to raise monthly bill for the power sold to after deducting the charges payable towards standby power. However ever since the Petitioner's plant commenced generation of power in June 2011, the practice has been that the Petitioner makes separate payment for the import power based on the joint meter reading. In line with the tariff order dated 27.5.2010, the Respondents have been applying the tariff applicable for start- up power in respect of the import power and collecting the payments from the Petitioner. The impugned communication which alters the charges in respect of standby power/import power availed by the Petitioner's plant from the grid is in clear conflict with clause 21 of the Tariff Order No.1 dated 27.5.2010 issued by the Commission.

3.4. By communication dated 08.8.2013; the second Respondent informed the Petitioner that instead of paying for import power at the prevailing tariff, the Petitioner will have to raise its monthly invoices on the basis of unit to unit adjustment. In effect, the petitioner has to pay for import power at Rs.18.45 per unit which is the tariff payable by the TANGEDCO for the power purchased from the Petitioner's plant. As per the communication dated 08.8.2013, the Petitioner was to raise its monthly invoices by adjusting the units consumed/imported from the grid by its plant against the units generated and exported into the grid.

3.5. The petitioner filed W.P. 25361 of 2013 challenging the said communication dated 12.8.2013. The Hon'ble High Court of Madras was pleased to grant an order of interim stay on 10.9.2013. Thereafter, by order dated 10.10.2013, the Hon'ble High Court was pleased to extend the interim order until further orders. The writ petition is still pending and the Respondents have not yet filed their counter in the said writ petition.

3.6. On 12.12.2013, the Petitioner received the impugned communication from the Fourth Respondent whereby the Fourth Respondent has assigned service no. H.T. SCNo. 086 and fixed the sanctioned demand of 100 KV A to the Petitioner's 1 MW solar power plant as the demand permitted as start-up power for the Petitioner's plant. Further, by the impugned communication, the Fourth Respondent has informed that the Petitioner will be billed under HT Tariff V (Temporary Supply) under two part system from 01-08-2012.

3.7. Order No.7 dated 31.7.2012 issued by the Commission is a comprehensive tariff order for bagasse based co-generation power plants. Order No. 8 dated 31-07-2012 issued by the Commission is a comprehensive tariff order for biomass based power plants. The petitioner plant being a solar power plant, the said two tariff orders have no application to the petitioner. In respect of solar power plants like that of the petitioner set up under the Central Government's RPSSG programme, the Commission has issued a specific Tariff Order No.1 dated 27.5.2010.

3.8. Under the Central Government's RPSSG programme, in all 6 solar power plants have been set up in the State. None of the such solar power plants have received a communication similar to the one received by the Petitioner. None of the other similarly placed solar power plants are required to pay demand charges in respect of sanctioned demand fixed by the Respondents for the import power being drawn by them.

3.9. Even in respect of the import power availed in November 2013, the Petitioner has made payment calculated at Rs.10.68/- per unit. The Petitioner will lose substantial amounts if consequent to the impugned communication the Fourth Respondent raises any demand. The term of the Agreement between the parties being for 25 years i.e. till 2035, the total loss occasioned to the Petitioner will be enormous.

3.10. The total investment for setting up the plant is Rs.1840.29 lakhs of which Rs.538.50 lakhs is the equity brought in by the promoters. The tariff of Rs.18.45 per

unit has been arrived at by the Commission in its Tariff order dated 27-05-2010, based on varied factors including the 12% rate of interest to be paid to the banks and 19.85% pre-tax return on equity. Based on the tariff of Rs.18.45 per unit, the petitioner is projected to recover the cost of setting up the plant only in the 13th year. If the Respondents were to demand Rs.30,000/- per month from 01.8.2012 based on the impugned communication, it would alter the said projection and thereby cause hardship to the Petitioner.

3.11. The unilateral decision of the First to Fourth Respondent conveyed in the impugned communication will seriously impact the Petitioner and adversely affect the revenue model on which the plant was set up for generation and supply of entire solar power to the TANGEDCO's grid for a period of 25 years. The interim order of the Hon'ble High Court of Madras in W.P. 25361 of 2013 had stayed the earlier attempt of the Respondents to alter the charges for import power. The present impugned communication if given effect to will circumvent the said interim order granted by the Hon'ble High Court of Madras.

3.12. The impugned instructions the Respondents have incorporated the two part tariff for the start-up/stand by power consumed by the petitioner and have raised the threat of disconnection.

3.13. The levelled tariff for 25 years for the projects being developed under the Programme has been determined in the tariff order as Rs.18.45 per kWh by the Commission. Such high tariff is a result of the high capital cost to be incurred for setting up solar plant using photovoltaic material.

3.14. An Energy Purchase Agreement (EPA) dated 13.08.2010 came to be executed between the Petitioner and the TNEB whereby inter alia it was agreed that the tariff of Rs.18.45 per unit as determined by the Commission will be paid to the Petitioner towards energy exported by the Petitioner's plant for the period of twenty five years. The 1st Respondent is availing of generation based incentive from the Central Government of Rs.12.245/kWh for purchasing the power from the Petitioner's plant. Further, the power purchased from the Petitioner's power plant also enables the First Respondent to comply with the mandatory Renewable Purchase Obligation (RPO).

3.15. Solar Power Plants do not require any start-up power. The requirement of solar power plants for power from external sources is primarily during the night hours when there cannot be any generation by the plant. Such power from external sources is called standby power/ import power. The Petitioner has been meeting its import power requirements by drawing power from the grid. No separate service connection was been given to the Petitioner for availing the import power. The transmission line used for evacuating the power generated from the Petitioner's plant is also used to avail import power. In terms of tariff order dated 27-05-2010 issued by the Commission power drawn by the solar plant from the grid for standby/ start-up purposes is to be charged at the tariff applicable to start-up power prescribed vide the Commission's Order No.2 dated 15.5.2006.

3.16. The tariff for start-up power was initially fixed as Rs.6.218/-per unit as per the Tariff Order No. 2 dated 15.5.2006. Thereafter there have been subsequent

revisions in the tariff orders passed by the Commission. The average billing rate (ABR) payable by High Tension Tariff V category consumers was made applicable to start-up power. In the latest Tariff Order dated 20.6.2013 issued by the Commission the ABR for start-up power has been fixed at Rs.10.68 per unit.

3.17. By communication dated 08-08-2013, the second respondent informed the petitioner that instead of paying for import power at the prevailing tariff, the Petitioner will have to raise its monthly invoices on the basis of unit to unit adjustment. In effect, the Second Respondent wanted the Petitioner to pay for import power at Rs.18.45 per unit which is the tariff payable by the TANGEDCO for the power purchased from the Petitioner's plant. As per the communication dated 8.8.2013, the Petitioner was to raise its monthly invoices by adjusting the units consumed/imported from the grid by its plant against the units generated and exported into the grid.

3.18. The Petitioner has not made any application as required under the Supply Code for a service connection and has also not requested for a sanctioned demand. The Petitioner has also not entered into any agreement for the purpose of sanctioned demand as per the requirement of the Supply Code and the Distribution Code. Hence the fixing of 100 KVA as the sanctioned demand vide the impugned communication is clearly contrary to the requirements of the Supply Code and the Distribution Code.

3.19. The EPA dated 13.08.2010 between the Petitioner and the First Respondent

isa comprehensive one covering all aspects of the power generation and supply by the Petitioner's plant to the First Respondent. The said EPA does not contemplate fixing sanctioned demand for the import power utilized by the Petitioner. The impugned communication has the effect of altering the terms of the EPA. In addition to the Third Respondent not being entitled to unilaterally alter the terms of the EPA, the impugned communication of the Third Respondent is also without jurisdiction in as much as under the Electricity Act 2003 it is only the Commission which is competent to alter the existing terms of the EPA approved by it.

3.20. The EPA between the Petitioner and the TNEB is for total period of 25 years. During this entire period, the Petitioner's plant will be availing import power from the grid. If the impugned communication is given effect to, in addition to the energy charges payable for import power, the Petitioner will be required to pay at the prevailing rate for the 100KVA demand fixed by the Third Respondent, which is presently at Rs.300 per KVA. This will impose grave financial constraints on the Petitioner and will result in substantial loss to the Petitioner during the tenure of the EPA. To the extent of the Petitioner's losses the First Respondent will unjustly enrich itself.

4. Counter affidavit filed on behalf of the Respondents:-

4.1. The startup power provided to the generators shall be billed under HT Temporary Supply tariff under two-part tariff system (i.e) demand charge [fixed charges] and energy charges (variable charges] separately. Further, the tariff policy has been evolved in consultation with the State Governments and the Central Electricity Authority (CEA) keeping in view of the advice of the Central Electricity

Regulatory Commission and suggestions of various stakeholders. Hence, the impugned letter is in order and valid.

4.2. The respondent (TANGEDCO) had collected the CC charges from the consumer/generators at tariff applicable to the HT industrial consumers until 15-05-2006 (i.e.) demand charges and energy charges separately. The TNERC in its Order No.2 dated.15-05-2006 on transmission and wheeling charges had specified in connection with start-up power under the head, " Grid availability charges" [relevant portion].

4.3. The Commission had issued Order No.3 dated. 15.05.2006 in connection with "Power purchase and allied issues in respect of Non- Conventional Energy Sources based Generating Plants and Non-Conventional Energy Sources based Co-Generation Plants".

4.4. In accordance with above order, the Respondent [TANGEDCO] has collected energy charges plus the energy equated demand charges in respect of the Conventional Energy Sources based Generating Plants, Conventional Energy Sources based Co-Generation Plants, Non-Conventional Energy Sources based Generating Plants and Non-Conventional Energy Sources based Co-Generation Plants (i.e.) Fossil fuel, Biomass and Bagasse based generating and Co-gen plants.

4.5. The Commission has issued Comprehensive Tariff Order for Biomass Based power plants vide Order No.2 of 2009, dated.27.04.2009.

4.6. Similarly, the Commission has issued Comprehensive Tariff Order for Bagasse Based Co-generation plants vide Order No.3 of 2009, dated.06.05.2009.

4.7. In accordance with above order, the Respondent (TANGEDCO) has collected energy charges plus the energy equated demand charges in respect of all the generators except wind energy generators.

4.8. After the re-organization of the TNEB, the Commission has issued Tariff Order on Determination of Tariff for Generation and Distribution of TANGEDCO vide T.O.No.1 dated 30.03.2012 and Tariff Order on Determination of Intra-State Transmission Tariff and other related charges of TANTRANSCO vide T.O No.2 dt.30.03.12. All the charges reflected in the Order No.2 dated 15.05.2006 stand revised/modified and purported to have been approved by the Commission vide aforesaid orders. Therefore, the Order No.2 dated.15.05.2006 is replaced by orders mentioned above, effective from 01.04.2012 onwards. In the Tariff Order.No.1 dated.30.03.2012, a new category was introduced under HT Tariff for Temporary Supply - Tariff V. The charges fixed to this category of consumers are (i) Energy charges - RS.9.50 per unit and (ii) Demand charges - Rs.300 per KVA per month.

4.9. The Commission has issued the Comprehensive Tariff order for Bagasse based Co-generation plants vide Order NO.7 of 2012 dated 31.7.2012 effective from 01.8.2012.

4.10. In the said order, the Commission has ordered that if a generator is an open access customer, the start-up power shall be provided by the Distribution Licensee for a maximum period of 42 days in a year subject to the limitation of demand not exceeding 15 % of the capacity of the generator. The generator shall pay the distribution licensee at the rate applicable for temporary supply of that voltage category.

4.11. The start up power provided to the Biomass and Bagasse based Co-gen plants shall be billed under HT Temporary Supply tariff under two-part tariff system [i.e.] demand charge [fixed charges] and energy charges [variable charges] separately with effect from 01.08.2012. Hence, the impugned order is legal and valid.

4.12. The Commission has determined the Tariff for Generation and Distribution vide T.P.No.1 of 2013 dated.20.06.2013 with effect from 21.06.2013, wherein with regard to grid availability charges.

4.13. The tariff schedule is as follows:

“6.8 High Tension Tariff V:

<i>Tariff Category</i>	<i>Tariff</i>	
	<i>Demand Charge in Rs./ kVA/month</i>	<i>Energy charge in paise per kWh (Unit)</i>
<i>High Tension Tariff V</i>	300	950

xxxxxx

c) This tariff is also applicable to start-up power provided to generators. The generators are eligible to get start-up power under this tariff after declaration of CoD. The demand shall be limited to 10% of the highest capacity of the generating unit of the generating station or the percentage auxiliary consumption as specified in the regulation, whichever is less. The supply shall be restricted to 42 days in a year. Drawal of power for a day or part thereof shall be accounted as a day for this purpose. Power factor compensation charges are not applicable for start-up power. "

4.14. The start-up power provided to generators has to be billed under HT Tariff V [Temporary supply] under two part tariff system (i.e.) demand charges and energy charges separately.

4.15. The distribution licensee [TANGEDCO] is also paying capacity charges to Transmission Company [TANTRANSCO]. Long term transmission charges have to be paid whether the distribution licensee uses the capacity or not in a particular month. Applying the same analogy, TANGEDCO is entitled to collect the fixed and variable charges for supplying electricity to the petitioners including from the generators for supply of start-up power. Further, the fixed charge is not charged for the transmission line owned by the petitioner. The said contention is wrong. The transmission line owned by the petitioners is only a minuscule portion which connects the petitioner premises to the electricity grid. But, for the main transmission grid, the TANGEDCO pays the capacity charges as fixed by the Commission which fact has been glossed over by the petitioner. Since the distribution licensee has to pay the fixed charge to the generators from whom it purchases the electrical energy and to the Transmission Company for transmitting the power, the distribution licensee collects the same from the petitioners to whom it supplies start-up power.

4.16. The Commission has envisaged the Two part system so as to recover the full demand charges/fixed charges relating to providing all infrastructure facilities in accordance with section 45 (3)(a) as well as tying up of the generation capacity.

4.17. When a consumer is connected to a system, the utility has to provide or keep in readiness certain capacity of the system to serve the consumer. Machine capacity, transmission system, certain work force and supervisory staff is kept on the job of monitoring the system, attending to emergency, restoring the supply in the event of outage, routine and periodic maintenance, meter reading, billing, bill delivery, defraying administrative expenses not directly related to the consumption of energy. This element of the fixed charges, as an accepted practice, is recovered through the mechanism of demand charges.

4.18. As per section 45(3) (a) of the Electricity Act, 2003, the demand charges could be taken as fixed charges. Hence, the licensee / TANGEDCO to recover the demand charges, may claim the fixed / demand charges.

4.19. Two part tariff, namely, the fixed charges in the name of demand charges and variable charges in the name of energy charges are being levied on the consumers and the generators who have been supplied start-up supply by the distribution licensee. The reason behind charging of fixed charges and variable charges by the distribution licensee is that such charges are paid by the distribution licensee in purchasing of such power from the generators and transmitting the same through transmission network. Power purchase from the generators by the

distribution licensee again will have two components namely the fixed charges and variable charges.

4.20. It could be clearly observed that the petitioner who is availing start-up power from distribution licensee cannot be an exception.

4.21. Once the consumer/petitioner has contracted certain demand with the licensee, the licensee is bound to secure availability of that much of power irrespective of whether the consumer uses/draws it or not. The investment made in securing the contracted power by the licensee needs to be compensated. Demand charges by their very nature are leviable irrespective of the actual consumption of energy, to cover the fixed cost of infrastructure.

4.22. The Commission has not fixed a separate tariff for start-up power in its earlier orders. Therefore, the generators were charged the demand equated energy charges previously for supply of start-up power. The demand equated energy charges also includes the demand charges, but it does not fully recover the fixed charges from the petitioner.

4.23. The petitioner had executed the Solar Purchase Agreement wherein the relevant clauses are as under:-

“7. Billing and Payment:

- (1) The SPG shall raise a bill every month for the net energy sold after deducting the charges for start-up/standby power and reactive power.*
- (2) The Distribution licensee shall make payment to the generator within 30 days of receipt of the bill. Any delayed payment beyond 30 days is liable for interest at the rate of 1 % per month.*

8. *Applicability of the Acts, Regulations and Guidelines:*

The parties shall be bound by the provisions contained in the Electricity Act, 2003, Regulations, notifications, orders and subsequent amendments if any made there under from time to time by the Commission and the guidelines issued by the Government of India/Government of Tamil Nadu.”

4.24. The Commission has determined of Tariff for Generation and Distribution vide T.P.No.1 of 2013 dated.20.06.2013 with effect from 21.06.2013, wherein with regard to grid availability charges are specified as follows:-

“6.8 High Tension Tariff V:

<i>Tariff Category</i>	<i>Tariff</i>	
	<i>Demand Charge in Rs./ kVA/month</i>	<i>Energy charge in paise per kWh (Unit)</i>
<i>High Tension Tariff V</i>	300	950

xxxxxx

c) This tariff is also applicable to start-up power provided to generators. The generators are eligible' to get start-up power under this tariff after declaration of CoD. The demand shall be limited to 10% of the highest capacity of the generating unit of the generating station or the percentage auxiliary consumption as specified in the regulation, whichever is less. The supply shall be restricted to 42 days in a year. Drawal of power for a day or part thereof shall be accounted as a day for this purpose. Power factor compensation charges are not applicable for start-up power. "

4.25. The start-up power provided to the generators has to be billed under HT Tariff V [Temporary supply] under two part tariff system (i.e.) demand charges and energy charges separately. The Commission has not envisaged energy plus energy equated demand charges. Hence, the impugned order is wholly legitimate, lawful and sustainable one.

4.26. The petitioner has to be billed under Two part tariff system from 09.12.2013 i.e from the date of fixation of the sanctioned demand not from the date of 01.08.2012 since the tariff order dated.20.06.2013 vide T.P.No.1 of 2013 is applicable to the all the generators. In addition, it is relevant to note that all the charges reflected in the Order No.2 dated 15.05.2006 stand revised/modified and purported to have been approved by the Commission vide aforesaid orders. Therefore, the Order No.2 dated.15.05.2006 is replaced by orders mentioned above, effective from 01.04.2012 onwards. In the Tariff Order.No.1 dated30.03.2012, a new category was introduced under HT Tariff for Temporary Supply-Tariff V. The charges fixed to this category of consumers are (i) Energy charges - Rs.9.50 per unit and (ii) Demand charges - Rs.300 per KVA per month. The above order was also superseded by the Order No.1 of 2013 dated.20.06.2013 vide T.P.No.1of2013. Therefore, the contention of the petitioner that the average billing rate (ABR) payable by High Tension Tariff V Category consumers was made applicable to the start-up power in the latest Tariff Order dated.20.06.2013 issued by the Commission the ABR for start-up power has been fixed at Rs.10.68/- per unit is misconceived and misleading one.

5. Additional Affidavit filed on behalf of the Petitioner:-

5.1. The Commission had passed Tariff Order dated 27.5.2010 in respect of projects covered by the Jawaharlal Nehru National Solar Mission. The Petitioner's plant was commissioned on 10.06.2011 and the tariff specified in the Tariff Order dated 7.5.2010 was applicable to the Petitioner's plant. As per the Tariff Order dated 27.5.2010, start-up power/stand by power was to be charged as per order No.2 dated 15.5.2006. Accordingly, Respondents were charging single part tariff

towards start up power and based on joint meter reading. Petitioner used to make separate payment towards import power, instead of deducting the charges from the bills raised by it on TANGEDCO.

5.2. During August 2013, the Respondents stated that quantum of import power will have to be deducted from export power in the invoice raised by the Petitioner. In effect, the Respondents wanted to charge Rs.18.45 per unit, in respect of the import power. This was challenged by the Petitioner before the Hon'ble High Court in W.P. 25361 of 2013. On 10/09/2013, the Hon'ble High Court was pleased to grant an interim order which was extended until further orders on 10/10/2013. In view of the interim order, the Respondents continued collecting single part tariff for import power based on joint meter reading.

5.3. In December 2013, vide the impugned communication, the fourth Respondent unilaterally assigned a High-Tension Service connection with sanctioned demand of 100 KVA and stated that two-part tariff will apply in respect of the start-up/import power availed by the Petitioner. The Respondents raised HT bill dated 31.12.2013 on the Petitioner for a total sum of 44,162/-. The Respondents charged Rs.14,440/- towards energy charges at Rs.6.281 per unit and demand charges of Rs.24,300/- at Rs.300 per KVA. The Petitioner paid the amount under protest.

5.4. For the months of January 2014 and February 2014, the Respondents raised HT bills on the Petitioner. For the month of January 2014, the Respondents charged Rs.43,670/- i.e. Rs.13,680/- towards energy charges at Rs.9.50 per unit and demand charges of Rs.27000/- plus ED & meter rents etc. For the month of

February 2014, the Respondents charged Rs.41768/- i.e. Rs.12160/- energy charges at Rs.6.281 per unit and demand charges of Rs.27,000/- plus ED & meter rents etc. These were also paid under protest.

5.5. The respondents have since discontinued raising HT bills and reverted to charging single part tariff for the import power. Since then, the Petitioner has been paying single part tariff for the import power.

5.6. On 12.9.2014, the Commission passed a Tariff order for solar power plants.

As regards, start-up power, the said order reads as follows:-

“TANGEDCO has requested the Commission to charge temporary supply tariff rate for start-up power drawn by the solar generators. However, the CMD/TANGEDCO suggested in the SAC meeting that since the requirement of power for start-up is very meagre, adjustment should be on net energy basis. The question of start-up power does not arise for solar PV generators. However, the solar PV generator may require power for maintenance of power station especially during night hours. In case of Solar Thermal generators, the start-up may be frequent. Therefore, the drawl of such energy by the Solar Power Generator from the distribution licensee shall be adjusted against the generated energy for every billing period. This is applicable both for the SPGs selling power to the distribution licensee and open access consumers”.

This is also applicable to the existing SPGs from the date of this order. The Commission held that it has decided not to take into account the Auxiliary consumption for determination of tariff for solar PV plant.

5.7. The control period of the order dated 12.9.2014, was extended in 2015. Thereafter, on 28.3.2016, the Commission passed a Tariff order for solar power plants. Para 12.4.1 of the said order states that drawal of start-up power by the solar power generator from the distribution licensee shall be adjusted against the generated energy for every billing period. This Commission made it clear that this is

applicable both for the SPGs selling power to the distribution licensee and open access consumers. This Commission also clarified that this is also applicable to the existing SPGs from the date of this order.

5.8. The Commission passed a Tariff order for solar power plants. The order states that drawl of start-up power by the solar power generator from the distribution licensee shall be adjusted against the generated energy for every billing period. The Commission further held the order that it has decided not to take into account the Auxiliary consumption for determination of tariff for solar PV plant.

5.9. The tariff order for solar power plants dated 28-03-2018, stated that the question of start-up power does not arise for Solar PV generators. The Commission further observed that although the distribution licensee has suggested levy of HT industrial tariff for any drawal above the generation in a month until notification of regulations on Deviation Settlement Mechanism, no reasons have been adduced by the licensee for such an arrangement. On Auxiliary consumption, the Commission reiterated its earlier position. The tariff order dated 29.03.2019, passed by the Commission in respect of solar power plants has identical reasoning regarding start up power and auxiliary power.

5.10. The Respondents have contended that the charges provided in Order No.2 dated 15.05.2006, which was adopted by the Commission in its Solar Tariff Order dated 27.05.2010 has been replaced by Tariff Order dated 30.03.2012.

5.11. The Respondents have further contended that based on the Tariff Orders dated 30.3.2012 and 20.06. 2013, they are entitled to levy and collect two-part tariff, for start-up power availed by generators. The contention of the Respondents is fallacious. In any event, such a contention does not hold good in respect of the Petitioner, which is a solar power plant and is governed by the specific tariff orders passed by the Commission in respect of solar power generators.

6. Written Submission of the Petitioner:-

6.1. The petitioner has set up a 1 MW solar photovoltaic (PV) power plant under the Central Government's, Rooftop PV & Small Solar Power Generation Programme (RPSSG). The plant was commissioned on 10.6.2011. The entire power generated by the power plant is sold to TANGEDCO under a long term (25 years) Solar Energy Purchase Agreement dated 13.8.2010 (EPA).

6.2. The Commission had issued Tariff Order No. 1 of 2010 dated 27.5.2010, in respect of projects under the RPSSG Programme. In terms of clause 21 of the said tariff order, the Commission held that charges prescribed in Order No.2 dated 15.5.2006 will be applicable in respect of start-up power, availed by the solar power plants. Order No. 2 dated 15.5.2006, which was the generic order passed by the Commission for determination of transmission charges, wheeling charges etc.

6.3. Clause 5.22.3 of Order No.2 dated 15.5.2006, determined the charges for drawal of start-up power. Being conscious of the fact that start-up power is not availed by generators on continuous basis, this Commission did not stipulate levy of demand charges in respect of start-up power. The Commission held towards

start-up power generators are liable to pay consumption charges which comprised of energy charges plus energy equated demand charges, applicable to HT -III tariff category. Hence, a single part tariff comprising of energy charges and energy equated demand charges, was prescribed.

6.4. Based on the aforesaid, while no start-up power was being availed by the petitioner (since it is a solar power plant), the petitioner was paying single part tariff for the power imported by its power plant during night hours, for basic lighting etc.

6.5. By a communication dated 8.8.2013, the second respondent informed that the petitioner would have to pay the tariff which the petitioner was being paid by TANGEDCO for the solar power sold by the petitioner under the EPA. The petitioner challenged this before the Hon'ble High Court by filing W.P. 25361 of 2013. An order of interim stay was granted by the Hon'ble High Court and consequently the petitioner was continued to be charged under single part tariff.

6.6. In the communication dated 9.12.2013 which is challenged in the present petition, the fourth Respondent unilaterally assigned a HT service connection and fixed sanctioned demand of 100 KVA and stated that two-part tariff will apply in respect of the start-up/import power availed by the Petitioner.

6.7. The Respondents raised HT bill dated 31.12.2013 on the Petitioner for a total sum of 44,162/-. The Respondents charged Rs.14,440/- towards energy charges at Rs.6.281 per unit and demand charges of Rs.24,300/- at Rs.300 per KVA. The Petitioner paid the amount under protest and approached the Commission by filing the present petition. For the months of January 2014 and

February 2014, the Respondents raised HT bills on the Petitioner. For the month of January 2014, the Respondents charged Rs.43,670/- i.e., Rs.13,680/- towards demand charges and Rs.27,000/- towards demand charges plus ED & meter rents. For the month of February, 2014, the Respondents charged Rs.41,768/- i.e. Rs.12,160/- towards energy charges and Rs.27,000/- towards demand charges plus ED & meter rent. These were also paid under protest.

6.8. TANGEDCO had during 2013, imposed two-part tariff on thermal and bio-mass power plants, who were selling power to captive/ third party consumers. The said action has been challenged before the Hon'ble High Court and writ petitions are pending. However, the case of the petitioner is different as the petitioner is a solar power plant. No start-up power is availed by solar power plants. This aspect has been recognized by the Commission in all the Solar Power tariff orders passed after the first tariff order dated 27.05.2010. In this regard, the relevant clause of the solar tariff order dated 12.9.2014 is extracted below:

Para 12.4.1.1 - TANGEDCO has requested the Commission to charge temporary supply tariff rate for start-up power drawn by the solar generators. However, the CMD/TANGEDCO suggested in the SAC meeting that since the requirement of power for start-up is very meagre, adjustment should be on net energy basis. The question of start-up power does not arise for solar PV generators. However, the solar PV generator may require power for maintenance of power station especially during night hours. In case of Solar Thermal generators, the start-up may be frequent. Therefore, the drawl of such energy by the Solar Power generator from the distribution licensee shall be adjusted against the generated energy for every billing period. This is applicable both for the SPGs selling power to the distribution licensee and open access consumers. This is also applicable to the existing SPGs from the date of this order.

6.9. This has been reiterated in all the subsequent solar tariff orders. In this regard the details are as follows:

Solar Power Tariff Order	Relevant clause stating start up
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	power not applicable
Order No. 2 dated 28-03-2016	Para 12.4.1
Order No. 2 dated 28-03-2017	Para 10.4.1
Order No. 5 dated 28-03-2018	Para 11.4.1
Order No. 5 dated 29-03-2019	Para 11.4.1

6.10. It has been made clear by the Commission that even existing SPGs are covered by the tariff orders. The petitioner being an existing solar power plant, the Respondents cannot impose HT connection in respect of the petitioner by disregarding the tariff orders passed by the Commission. In the additional affidavit filed on 4.9.2020, the petitioner has clearly set-out the subsequent tariff orders.

6.11. In the impugned communication dated 9.12.2013, the Respondents have relied on Order No. 7 and 8 dated 31.7.2012. These tariff orders of the Commission relate to Bagasse based co-generation plants and Biomass based power plants, which cannot be applied to the petitioner which is admittedly a solar power plant.

6.12. The CFC/Revenue in the letter dated 07-09-2013 requested the SEs to fix the sanctioned demand along with assigning service connections and to charge two-part tariff in respect of Fossil fuel, biomass and Bagasse generators. The said letter does not make reference to solar power plants and therefore, it cannot be the basis for fixing sanctioned demand and assigning service connection in respect of the petitioner.

6.13. The Respondents, reliance has been placed on Tariff Order No.2 dated 20.06.2013, passed by the Commission. The said tariff order which is the generic one in respect of intra-state transmission charges and other related charges. While in the first solar tariff order dated 27.5.2010, the Commission held that charges prescribed in Order No. 2 dated 15.5.2006 will be applicable in respect of start-up power, as pointed out above in all subsequent solar tariff orders, the Commission has categorically held that start-up power does not arise for solar PV generators. The subsequent solar tariff orders clearly lay down that the drawl of energy by the solar power generator from the distribution licensee shall be adjusted against the generated energy for every billing period. Such being the case, the Respondents cannot rely on the generic tariff order dated 20.6.2013, to fix sanctioned demand and assign service connection in respect of petitioner, which is a solar power plant.

6.14. The Respondents have singled out the petitioner and that the other 5 solar power plants which were set up under the RPSSG Programme, have not been asked to pay demand charges in respect of the power imported by them. The Respondents cannot treat similar placed solar power plants differently.

6.15. In respect of solar photo PV power plants no auxiliary consumption is applicable. The solar tariff orders dated 28.3.2016, 28.3.2017, 28.3.2018 and 29.3.2019, which followed have reiterated this. Hence, the Respondents contention is without basis. The Respondent's contention that minimum demand of 63 KVA as prescribed under the Supply Code will be applicable, has no basis.

7. Written Submission of the Respondents:-

7.1. The Ministry of Power, Government of India had published the National Tariff Policy on 06.01.2006 wherein the Legal Position, Evolution of the Policy,

Generation and Distribution are stated as follows:

“8.5.6. In case of outages of generator supplying to a consumer on open access, stand by arrangements should be provided by the licensee on the payment of tariff or temporary connection to that consumer category as specified by the Appropriate Commission”.

7.2. It may be seen that the startup power provided to the generators shall be billed under HT Temporary Supply tariff under two-part tariff system (i.e.) demand charge [fixed charges] and energy charges [variable charges] separately.

7.3. The respondent (TANGEDCO) had collected the CC charges from the consumer/generators at tariff applicable to the HT industrial consumers until 15-05-2006 (i.e) demand charges and energy charges separately. The TNERC in its Order No.2 dated.15-05-2006 on transmission and wheeling charges had specified the following in connection with start-up power under the head, "Grid availability charges".

5.22.3. Outage of Generator conditions and providing Start up Power:

Para 8.5.6 of the National Tariff policy stipulates that in case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission. The Commission has not specified any tariff for temporary supply to HT categories. However, it has been specified in the tariff order in force from 16-3-2003, that, the industries requiring HT supply during construction period shall be charged under HT tariff III (Applicable to commercial establishment and other categories of consumers not covered under HT tariff – IA, II A, II B and V). Accordingly, in case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee to meet the demand of the open access beneficiary, on payment of consumption charges (energy charges plus the energy equated demand charges) applicable to HT tariff III, which is presently 621.81 paise per unit. Similarly, in case of drawal by the generator for start up power from the Licensee, the generator shall be permitted to draw the start up power on payment of consumption charges (energy

charges plus the energy equated demand charges) applicable to HT tariff III, which is presently 621.81 paise per unit”.

7.4. Similarly, the Commission had issued Order No.3 dated. 15.05.2006 in connection with Power purchase and allied issues in respect of Non-Conventional Energy Sources based Generating Plants and Non-Conventional Energy Sources based Co-Generation Plants, wherein with regard to grid availability charges the following are stated (relevant portion)

" 10.3 Demand Charges / Grid Availability

The grid support/grid availability charges, have been fixed by the Commission in its order (Order No.2 dated. 15. 05.2006) on transmission and wheeling charges etc. Wherein, the following conditions and the applicable charges for the same are specified. They are applicable for Bio mass and Co-gen generators.

- a) Outage of generator conditions and providing start up power*
- b) When scheduled generation is not maintained and/or when the drawal by the consumer is in excess of the schedule.”*

7.5. In accordance with above order, the Respondent TANGEDCO has collected energy charges plus the energy equated demand charges in respect of the Conventional Energy Sources based Generating Plants, Conventional Energy Sources based Co-Generation Plants, Non-Conventional Energy Sources based Generating Plants and Non-Conventional Energy Sources based Co-Generation Plants (i.e) Fossil fuel, Biomass and Bagasse based generating and Co-gen plants.

7.6. The Commission has issued Comprehensive Tariff Order for Biomass Based power plants vide Order No.2 of 2009, dated.27.04.2009 wherein the TNERC with regard to grid availability charges held as follows:

" 9.5. Grid availability charges:

At present, the biomass power plants are being treated at par with fossil fuel based power plants for levy of grid availability charges, start up power,

demand charges and energy charges as per the Order No.2 dated 15.05.2006 of the Commission. The Commission proposes to retain the same charges for this order also. "

7.7. Similarly, the Commission has issued Comprehensive Tariff Order for Bagasse Based Co-generation plants vide Order No.3 of 2009, dated.06.05.2009 wherein the Commission with regard to grid availability charges held as follows:-

" 9.5. Grid availability charges:

At present, the biomass power plants are being treated at par with fossil fuel based power plants for levy of grid availability charges, start up power, demand charges and energy charges as per the Order No.2 dated. 15.05.2006 of the Commission. The Commission proposes to retain the same charges for this order also."

In accordance with above order, the Respondent (TANGEDCO) has collected energy charges plus the energy equated demand charges in respect of all the generators except wind energy generators.

7.8. Subsequent to the re-organization of the TNEB, the Commission had issued Tariff Order on Determination of Tariff for Generation and Distribution of TANGEDCO vide T.O.No.1 dated 30.03.2012 and Tariff Order on Determination of Intra-State Transmission Tariff and other related charges of TANTRANSCO vide T.O No.2 dt.30.03.12. All the charges reflected in the Order No.2 dated 15.05.2006 stand revised/modified and purported to have been approved by the Commission vide aforesaid orders. Therefore, the Order No.2 dated. 15.05.2006 is replaced by orders mentioned above, effective from 01.04.2012 onwards. In the Tariff Order.No.1 dated.30.03.2012, a new category was introduced under HT Tariff for Temporary Supply - Tariff V. The charges fixed to this category of consumers are

(i) Energy charges - Rs.9.50 per unit and (ii) Demand charges - Rs.300 per KVA per month.

7.9. The Comprehensive Tariff order for Biomass based Power Plants vide Order No.8 of 2012 dated 31.7.2012 effective from 01.8.2012 wherein with regard to Grid availability held as follows [relevant portion]:

"Order No.8 of 2012 dated.31.07.2012

8.2. Related issues:

The following are issues related to power generation, transmission, wheeling and consumption from Biomass based power plants.

*1. xxxxxx
xxxxxx*

*5. Grid Availability charges.
xxxxx*

16.xxxxxxxxx

The above charges/terms are applicable to all biomass based power generating plants irrespective of their year of installation.

*" 8.2.5. Grid Availability Charges:
xxxxx*

8.2.5.2. TANGEDCO has stated that the Grid availability charges as fixed by the TNERC in its Order No.2 of2006 may be adopted.

8.2.5.3. In this regard, the Commission rules as follows:

a). Start up power

If a generator is an open access customer, the startup power shall be provided by the Distribution Licensee for a maximum period of 42 days in a year, subject to the limitation of demand not exceeding 15 % of the capacity of the generator. The generator shall pay the distribution licensee at the rate applicable for temporary supply of that voltage category. "

7.10. Similarly, the Commission has issued the Comprehensive Tariff order for Bagasse based Co-generation plants vide Order No.7 of 2012 dated 31.7.2012

effective from 01.8.2012 wherein with regard to Grid availability which are as follows (relevant portion):

"Order No.7 of 2012 dated.31.07.2012

8.2. Related issues:

The following are Issues related to power generation, transmission, wheeling and consumption from Biomass based power plants.

*1. xxxxxx
xxxxxxx*

*5. Grid Availability charges.
xxxxx*

16.xxxxxxxxx

The above charges / terms are applicable to all bagasse based co-gen plants irrespective of their year of installation.

" 8.2.5. Grid Availability Charges:

8.2.5.1. Empee Sugars & Chemicals Ltd has suggested that the Grid Availability Charges be fixed as per Clause 9.5 of the Commission's Order.No.3 dated.06.05.2009.TANGEDCO has proposed that these charges be fixed as per Commission's Order No.2 of 2006 may be adopted.

8.2.5.2. In this regard, the Commission rules as follows:

a) Start up power

If a generator is an open access customer, the start-up power shall be provided by the Distribution Licensee for a maximum period of 42 days in a year, subject to the limitation of demand not exceeding 15% of the capacity of the generator. The generator shall pay the distribution licensee at the rate applicable for temporary supply of that voltage category. "

Pursuant to the above, it could be observed that the start up power provided to the Biomass and Bagasse based Co-gen plants shall be billed under HT Temporary Supply tariff under two-part tariff system (i.e] demand charge [fixed charges] and energy charges [variable charges] separately with effect from 01.08.2012. Hence, the impugned order is legal and valid.

7.11. The Commission has determined the Tariff for Generation and Distribution vide T.P.No.1 of 2013 dated.20.06.2013 with effect from 21.06.2013, wherein with regard to grid availability charges, which are as follows:-

"Grid Availability Charges: (Start-up power)

5.65. TANGEDCO in its petition has requested the Commission for approval of energy charges plus the energy equated demand charges applicable to HT Temporary Supply tariff as grid availability charges.

5.66. XXXXXXXXX

5.67. The tariff applicable to start-up power has been dealt in Tariff schedule of this Order. "

The tariff schedule is as follows:

6.8 High Tension Tariff V:

Tariff Category	Tariff	
	Demand Charge in Rs./ kVA/month	Energy charge in paise per kWh (Unit)
High Tension Tariff V	300	950

XXXXXX

c) This tariff is also applicable to start-up power provided to generators. The generators are eligible' to get start-up power under this tariff after declaration of CoD. The demand shall be limited to 10% of the highest capacity of the generating unit of the generating station or the percentage auxiliary consumption as specified in the regulation, whichever is less. The supply shall be restricted to 42 days in a year. Drawal of power for a day or part thereof shall be accounted as a day for this purpose. Power factor compensation charges are not applicable for start-up power. "

7.12. From the above it could be clearly observed that if the above orders are read in conjunction with each other, it can be seen that the start-up power provided to generators has to be billed under HT Tariff V [Temporary supply] under two part tariff system (i.e) demand charges and energy charges separately. The Commission has not envisaged energy plus energy equated demand charges. Therefore, the impugned order is wholly legitimate, lawful and sustainable

one. While factual position being so, the petition is neither maintainable in law nor on facts.

7.13. The reason behind charging of fixed charges and variable charges by the distribution licensee is that such charges are paid by the distribution licensee in purchasing of such power from the generators and transmitting the same through transmission network. The distribution licensee (TANGEDCO) is also paying capacity charges to Transmission Company (TRANSCO). Long term transmission charges have to be paid whether the distribution licensee uses the capacity or not in a particular month. Applying the same analogy, TANGEDCO is entitled to collect the fixed and variable charges for supplying electricity to the petitioners including from the generators for supplying electricity to the petitioners including from the generators for supply of start-up power. Further, the fixed charge is not charged for the transmission line owned by the petitioner. The said contention is wrong. The transmission line owned by the petitioners is only a minuscule portion which connects the petitioner premises to the electricity grid. But, for the main transmission grid, the TANGEDCO pays the capacity charges as fixed by the Commission which fact has been glossed over by the petitioner. Since the distribution licensee has to pay the fixed charge to the generators from whom it purchases the electrical energy and to the Transmission Company for transmitting the power, the distribution licensee collects the same from the petitioners to whom it supplies start-up power. Therefore, there is nothing illegal or unjust in levy of start-up charges comprising fixed charge as demand charge and variable charge as energy charge.

7.14. The Commission has envisaged the Two part system so as to recover the full demand charges/fixed charges relating to providing all infrastructure facilities in accordance with section 45(3)(a) as well as tying up of the generation capacity. In this connection, it is stated that the rationale and relevance of Demand Charges is well established in the electricity industry. It is to be recognized that when a consumer is connected to a system, the utility has to provide or keep in readiness certain capacity of the system to serve the consumer. Machine capacity, transmission system, certain work force and supervisory staff is kept on the job of monitoring the system, attending to emergency, restoring the supply in the event of outage, routine and periodic maintenance, meter reading, billing, bill delivery, defraying administrative expenses not directly related to the consumption of energy. This element of the fixed charges, as an accepted practice, is recovered through the mechanism of demand charges.

7.15. As per section 45(3) (a) of the Electricity Act, 2003, the demand charges could be taken as fixed charges. Hence, the licensee/TANGEDCO to recover the demand charges may claim the fixed / demand charges. The general theory in the Electricity Industry is that the demand charges reflect the utilities' fixed costs of providing a given level of power availability to the consumer, and energy charges reflect the variable portion of those costs as the customer actually uses that power availability.

7.16. The Commission has reiterated in Regulation 68 of the tariff regulation which is reproduced below:

68. Component of tariff for supply of electricity:

(1) The charges for the electricity supplied by the Distribution licensee may include:-

(a). a fixed charges/ Demand charges;

(b) Charges for actual electricity supplied;

(c) A rent or other charge in respect of meter or electrical plant provided by the Distribution licensee;

(2) Rent for meter provided by the licensee and other charges are treated as non-tariff charges and shall be determined by the Commission with the provision of the Tamil Nadu Electricity Supply Code and Tamil Nadu Electricity Distribution Code.

(3) Charges for actual electricity supplied and fixed charges are tariff related charges and the Commission shall determine these charges on an application from the Distribution licensee”.

7.17. From the above, it may be seen that two part tariff, namely, the fixed charges in the name of demand charges and variable charges in the name of energy charges are being levied on the consumers and the generators who have been supplied start-up supply by the distribution licensee. The reason behind charging of fixed charges and variable charges by the distribution licensee is that such charges are paid by the distribution licensee in purchasing of such power from the generators and transmitting the same through transmission network. Power purchase from the generators by the distribution licensee again will have two components namely the fixed charges and variable charges. The pricing of power in generating station have been clearly specified in regulation 42, 43 and 49 of Commission's tariff regulation which are reproduced below:

42. Recovery of Capacity Charges:

(1) Full capacity charges [Fixed Charges] shall be recoverable at target availability specified in clause (1) of Regulation 37.

(2) Recovery of capacity charges below the level of target availability will be on pro rata basis. At zero availability, no capacity charges shall be payable.
(3) Payment of capacity charges [Fixed Charges] shall be on monthly basis in proportion to allotted / contracted capacity.

(4) Capacity [Fixed] charges per KWh in the month shall be worked out by dividing the capacity charges recoverable for the month by the quantum of ex-bus energy sent out in the month.

43. Energy (Variable) charges:

The energy charges shall cover fuel costs and shall be computed as follows:

(i). Generating Stations covered under ABT

The Energy [variable] Charges shall be worked out on the basis of ex-bus energy scheduled to be sent out from the Generating Station as per the following formula:

$$\text{Energy Charges (Rs)} = \text{Rate of Energy Charges in Rs/KWH} \times$$

Scheduled Energy (ex-bus) for the month in kWh corresponding to scheduled generation.

xxxxxxxx

49. Components of tariff:

Tariff for sale of electricity from Hydro Power Generating Station shall comprise of two parts, namely, the recovery of annual capacity charges and energy charges to be worked out in the manner provided hereinafter. "

7.18. From the above, it could be clearly observed that the petitioner who is availing start-up power from distribution licensee cannot be an exception. Therefore, the Commission had fixed tariff consisting both demand and energy charges in its Comprehensive Tariff Order for Biomass Based Power Plants (Order No.8 of 2012 dated 31-07-2012) effective from 01-08-2012 and the same has reiterated in the Tariff Order T.P. No. 1 of 2013 dated 20-06-2013 and it is well within the ambit of the Electricity Act,2003, Tariff Policy issued by Government of India and Tariff Regulations issued by the Commission to specify the demand charges on the generators such as petitioner.

7.19. The respondent has contended that levy of demand charges for supply of power by a licensee, even for start-up power is within the scope of the Act. Demand charges are fixed by the Commission based on the annual revenue requirement and reasonable return approved by the Commission. Once the consumer/petitioner has contracted certain demand with the licensee, the licensee is bound to secure availability of that much of power irrespective of whether the consumer uses/draws it or not. The investment made in securing the contracted power by the licensee needs to be compensated. Demand charges by their very nature are leviable irrespective of the actual consumption of energy, to cover the fixed cost of infrastructure. Total exemption from demand charges will cause a financial loss to the licensee which would not be justified. The licensee has to pay fixed cost to Central generating plants and others with which they have entered into contract for purchase of power, irrespective of whether it draws power or not. Therefore, since the licensee has to pay the fixed charges to the generators from whom it purchases the electrical energy, and to the Transmission company for transmitting the power, the distribution licensee collects the same from the petitioner to whom it supplies start-up power. Hence, it is justifiable that anyone who purchases electricity from TANGEDCO shall pay the demand charges towards fixed charges and energy charges towards the variable charges. The petitioner who is availing start-up power from the distribution licensee cannot be an exception. Therefore, the Commission had fixed tariff consisting both demand and energy charges in the tariff order T.P.No.1 of 2013 dated 20.06.2013 and it is well within the ambit of the Electricity Act, 2003, Tariff Policy issued by Government of India and Tariff Regulations issued by the Commission to specify the demand charges on the generators such

as petitioner. Based on the above, the impugned letter dated 07.09.2013 had been issued wherein it had been stated as follows (relevant portion):

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14. *xxx all the Superintending Engineers are requested to fix the sanctioned demand along with assigning the service connection number [wherever not fixed] in respect of the all the generators [Fossil fuel; Biomass; Bagasse). Such services shall be billed under HT Tariff V [Temporary supply] under two part system (i.e demand charges and energy charges separately] as per the TNERC Order No.1 of 2013 dated.20.06.2013 with effect from 21.06.2013 in respect of the conventional fuel based generators and from 01.08.2012 onwards in respect of the Non- Conventional generators as per Order. No.7 and Order. No.8 dated. 31. 07.2012 respectively”.*

7.20. In this regard, it is relevant to note that this Hon'ble Commission has not fixed a separate tariff for start-up power in its earlier orders. Therefore, the generators were charged the demand equated energy charges previously for supply of start-up power. The demand equated energy charges also includes the demand charges, but it does not fully recover the fixed charges from the petitioner. Moreover, the said demand charges covered under Section 45 (3) (a) of the Electricity Act, 2003 as follows:

" 45. Power to recover charges:

(1) Subject to the provisions of this section, the prices to be charged by a distribution licensee for the supply of electricity by him in pursuance of section 43 shall be in accordance with such tariffs fixed from time to time and conditions of his licence.

(2) The charges for electricity supplied by a distribution licensee shall be-

(a) fixed in accordance with the methods and the principles as may be specified by the concerned State Commission;

(b) published in such manner so as to give adequate publicity for such charges and prices.

(3) The charges for electricity supplied by a distribution licensee may include-

(a) a fixed charge In addition to the charge for the actual electricity supplied:

(b) a rent or other charges in respect of any electric meter or electrical plant provided by the distribution licensee.

(4) Subject to the provisions of section 62, in fixing charges under this section a distribution licensee shall not show un due preference to any person or class of persons or discrimination against any person or class of persons.

(5) The charges fixed by the distribution licensee shall be in accordance with the provisions of this Act and the regulations made in this behalf by the concerned State Commission.

62. Determination of tariff

(3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. "

7.21. From the above, it could be observed that the Commission may allow exception to pay the demand charges in respect of the petitioner who is availing start-up power, but the same would result in showing un due preference to the petitioner generators. This may be termed as contradiction to the Section 45(4) and 62(3) of the Electricity Act, 2003. Hence, the impugned letter is wholly sustainable under law. However, the fourth respondent has erroneously fixing the sanctioned demand/contracted demand as 10% of the auxiliary consumption instead of 2% in accordance with the Commission's Order No 1 of 2010 dated 27.05.2010 subject to the condition that minimum demand shall be 63 KVA in accordance with Regulation 3(1)(d) of TNE Supply Code. Further, the fourth respondent has fixed the sanctioned demand vide letter dated 09.12.2013 in accordance with the Commission's order dated 20.06.2013 vide T.P.No.1 of 2013 which is wholly lawful and sustainable one. In this regard, the petitioner has to be billed under Two part tariff system from 09.12.2013 i.e. from the date of fixation of the sanctioned demand not from the date of 01.08.2012.

8. Findings of the Commission:-

8.1. The petitioner has challenged the levy of two part tariff by the respondent by way of assigning a HT SC no.086 with the sanctioned demand of 100 KVA (i.e., 10% of the maximum generation capacity) towards start-up power i.e., import power drawn from the TANGEDCO's grid for the Solar power generation plant in Nagapattinam EDC.

8.2. The petitioner has entered into an Agreement with the TANGEDCO on 13-08-2010 to sell the power generated from its 1 MW solar power plant situated in Komal West village, Kuttalam, Nagapattinam District. The agreement executed between the parties under the conditions of the TNERC's Order No.1 dated 27-05-2010 i.e., Tariff Order for projects covered by 'Jawaharlal Nehru National Solar Mission'

8.3. The Commission came out with this Solar Tariff Order dated 27-05-2010 under JNNSM to promote ecologically sustainable growth in power sector. The petitioner executed the agreement to supply the power at the rate of Rs.18.45 per Unit under the aforesaid order. Under Para 21 of the Order dt.27-05-2010, it was ordered that *'Considering the costly solar power, the Commission decides to adopt the charges prescribed in order No.2 dated 15-05-2006 for start-up / standby power to SPGs'*

"T.O.2 of 2006, dt.15-05-2006, Para 5.22 -

5.22.3. Outage of Generator conditions and providing Start up Power:

Para 8.5.6 of the National Tariff policy stipulates that in case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission. The Commission has not specified any tariff for temporary supply to HT categories. However, it has been specified in the

tariff order in force from 16-3-2003, that, the industries requiring HT supply during construction period shall be charged under HT tariff III (Applicable to commercial establishment and other categories of consumers not covered under HT tariff - IA, IIA, IIB and V) Accordingly, in case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee to meet the demand of the open access beneficiary, on payment of consumption charges (energy charges plus the energy equated demand charges) applicable to HT tariff III, which is presently 621.81 paise per unit. Similarly, in case of drawal by the generator for start-up power from the Licensee, the generator shall be permitted to draw the start up power on payment of consumption charges (energy charges plus the energy equated demand charges) applicable to HT tariff III which is presently 621.81 paise per unit.”

In the above order, the Commission decided to adopt the temporary supply tariff applicable to HT category in the case of Startup / standby power drawn by the generator.

8.4. The Agreement clause states about the Billing and payment as below –

“7. Billing and Payment

(1) The SPG shall raise a bill every month for the net energy sold after deducting the charges for startup / standby power and reactive power.”

In spite of that, in the petitioner’s case, the practice has been that the petitioner makes separate payment for the import power. In line with the Tariff order dated 27-05-2010, the Respondent levied the tariff applicable for start-up power in respect of import power and collecting the payments from the petitioner at the rate of Rs.6.218 per Unit.

8.5. While the charges for start up power fixed by the Commission in Order No.2 of 2006, dt.15-05-2006, it was ordered to adopt the tariff applicable for temporary supply to HT categories. Therefore, until this order is in force, as and when tariff applicable to temporary supply is revised by the Commission, appropriate tariff shall have to be made applicable for start up / stand by power.

8.6. But it is observed that, in the meantime, as per the TANGEDCO's letter dated 08-08-2013, the petitioner was informed to submit its monthly invoices for the net energy generated after adjusting the import power drawn from the Respondent's grid. The petitioner filed a W.P.25361 of 2013 challenging the above and the High Court of Madras in its Order dated 10-10-2013 stayed the respondent action of deducting any amount (or) units from the monthly bills at Rs.18.45 per unit.

8.7. At the instant of the revised Tariff Order issued by the Commission in T.P.1 of 2013 on 20-06-2013, the respondent initiated to classify the 'start up' power i.e., import power consumption under appropriate category. In the petitioner's case, the respondent has allotted a new HT service connection viz., HT.SC.086 classifying under HT tariff -V applicable for the purpose of start up power with the sanctioned demand of 100 KVA (i.e., assumed 10% of maximum generation capacity of the plant). The petitioner has challenged the notice dated 09-12-2013 issued by the Respondent for having fixed the sanctioned demand at 10% of the generation capacity. And the petitioner was billed to pay the start up power charges under two part tariff method i.e., Energy charges and Demand charges, similar to all other HT consumers.

8.8. The petitioner has stated that none of other similar placed solar power plants were required to pay both Energy charges and Demand charges. The Mooted question arisen here is whether two part tariff is applicable for solar based power generating plants.

8.9. Unlike fossil fuel based power plants and Bagasse/Biomass based power plants, the Solar PV generator does not require any start up power for the purpose of starting generation in these plants; but the Solar generators may require power for maintenance of power station especially during night hours and it may also require to import power for equipments/devices for cooling of the power conditioning units, lighting of office/station yard, water sprinklers, monitoring and control units, communication services etc.,

8.10. Though it is legitimate to apply the conditions as specified under para 6.8 (c) of the T.O. dated 20-06-2013 in respect of start up consumption by every generator, it is not fair expectation that a Solar PV generator shall have to apply for a "Sanctioned demand" towards start up power, but it is the fact that the generator actually in need of a power for other purposes viz., Controlling units, Security lighting purposes, site office lighting, etc., The respondent shall not take this situation in his favour and fix the 10% of the highest capacity of generating unit as its 'Sanctioned demand' to bill the generator's start up power under HT tariff-V applying two part tariff method. In the case of Solar PVs, the actual Import power required for the generator is not actually the power required for start up of generating machines.

Relevant para of T.P.No.1 of 2013 dated. 20.06.2013 with effect from 21.06.2013, wherein with regard to Start-up power charges has its mention is as

follows:

"Grid Availability Charges: (Start-up power)

5.65. TANGEDCO in its petition has requested the Commission for approval of energy charges plus the energy equated demand charges applicable to HT Temporary Supply tariff as grid availability charges.

5.66. xxxxxxxx

5.67. The tariff applicable to start-up power has been dealt in Tariff schedule of this Order."

The tariff schedule is as follows:

"6.8 High Tension Tariff - V:

Tariff category	Tariff	
	Demand Charge in Rs /kVA/month	Energy charge in Paise per kWh (Unit)
High Tension Tariff V	300	950

XXXXXXXX

c) This tariff is also applicable to start-up power provided to generators. The generators are eligible to get start-up power under this tariff after declaration of CoD. The demand shall be limited to 10% of the highest capacity of the generating unit of the generating station or the percentage auxiliary consumption as specified in the regulation, whichever is less. The supply shall be restricted to 42 days in a year. Drawal of power for a day or part thereof shall be accounted as a day for this purpose. Power factor compensation charges are not applicable for start-up power."

8.11. The Tariff order dt.20-06-2013 has not made any mention about the applicability of para 6.8 (c) of the Order on any particular category of generating plant or station, therefore, in the absence of specific mention, the para 6.8 (c) is

generally applicable to all, but considering the nature of generating plant, which does not require actual start up power for its generation, such import power shall have to be treated distinctly. Hence, we find some merit in the contention of the petitioner in this instant case and the petitioner has its prima facie in this case, to be considered by the Commission.

8.12. The Respondent has stated that the Commission may allow exception to pay the demand charges in respect of the petitioner who is availing start up power, but the same would result in showing undue preference to the petitioner under section 62(3) of the Electricity Act, 2003; but in this regard, the respondent should not forget to conjoint reading of entire subsection of 62(3) which states '*but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.*' – as below:

"62. Determination of tariff

(3)The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."

8.13. The petitioner has referred the Energy purchase Agreement Clause 7 “Billing and Payment” as below:

“7. Billing and Payment:

- 1. The SPG shall raise a bill every month for the net energy sold after deducting the charges for start-up/standby power and reactive power.*
- 2. The Distribution licensee shall make payment to the generator within 30 days of receipt of the bill. Any delayed payment beyond 30 days is liable for interest at the rate of 1% per month.”*

The Billing and Payment clause of the Agreement shall be read with the maiden Tariff Order dated 27-05-2010 issued for the projects covered under JNNSM under which the Energy purchase agreement executed between the parties; since T.O. has prescribed to adopt the start up charges as determined in Order no.2 dated 15-05-2006, the respondent has to adopt only the charges as specified in that Order until such HT tariff for temporary supply is revised by the Commission.

8.14. Further, the Commission’s Order no.7 of 2012 dated 31-07-2012 issued for Bagasse based power plants and the Order no.8 of 2012 dated 31-07-2012 issued for Biomass based power plants – both the orders has no relevance with the charges applicable to the Solar PV based generators.

8.15. The Commission finds merit in applicability of energy charges and energy equated demand charges in respect of Solar PV generators as specified in Order no.2 dated 15-05-2006 from the date of its CoD. Further, the respondent has not

stated any reason for levying the start up charges on unit based adjustment, with reference to its instructions dated 08-08-2013.

8.16. Until the Commission issues Suo-motu comprehensive Tariff Order for Solar energy in Order no.4 of 2014 dated 12-09-2014, the power for start up or any other purpose shall be calculated based on Order no.2 dt.15-05-2006 i.e., energy charges plus energy equated demand charges applicable for temporary purposes. Thereafter, the petitioner shall have to be charged for non-generation purposes, as stipulated in the relevant Orders issued for Solar based generators from time to time.

8.17. In light of the above findings, we admit the petition to the extent of the directions given below:

- (i) For the foregoing reasons, the Commission is not inclined to accept the Respondent's notice dated 09-12-2013 wherein the petitioner has been allotted with a HT Service connection assigning number as HT.SC.086 with the sanctioned demand of 100 KVA i.e., 10% of highest generating capacity. Moreover, the two part tariff method adopted in the case of the petitioner is not justifiable, since the petitioner is a solar PV generator which does not require any start up power. Considering the above, the respondent's notice dated 09-12-2013 is set aside.
- (ii) As the Solar PV generators does not require any power for starting up of its generation process, the power imported by the petitioner for other purposes shall have to be billed under the HT tariff applicable for temporary supply (energy charges and energy equated demand charges) as specified under the Tariff Order no.1 of 2010 dated 27-05-2010. In the T.O. dated 20-06-2013, the Commission has classified a separate tariff for temporary supply; hence, for import power drawn by the generator, during the period in question, shall have to be billed at the Average billing rate applicable for temporary supply at Rs.10.68 per unit.

- (iii) The billing for the period in question shall be calculated at rate of tariff mentioned above; entire amount collected under two part tariff method shall be adjusted with and any excess/short have to be settled between the parties.
- (iv) In respect of start up power for the subsequent period, it is to be charged as mentioned hereunder –

Order No. & Date	Applicability
Comprehensive Tariff Order on Solar power – Order no.4 of 2014, dt.12-09-2014	The drawal of energy by the Solar power generator from the distribution licensee shall be adjusted against the generated energy for every billing period.
Comprehensive Tariff Order on Solar power – Order no.2 of 2016, dt.28-03-2016	
Comprehensive Tariff Order on Solar power – Order no.2 of 2017, dt.28-03-2017	
Comprehensive Tariff Order on Solar power – Order no.5 of 2018, dt.28-03-2018	
Comprehensive Tariff Order on Solar power – Order no.5 of 2019, dt.29-03-2019	
Comprehensive Tariff Order on Solar power – Order no.9 of 2020, dt.16-10-2020	Any power drawn during the non generating period of solar power i.e., beyond 7.00 am to 6.00 pm shall be charged at HT Industrial tariff. Power drawn during the solar generating period of 7.00 am to 6.00 pm in excess of generation shall also be charged at HT industrial tariff.

8.18. With the above directions, the respondent's notice dated 09.12.2013 is set aside and the respondent is directed to adopt single part tariff at the rate of Rs.10.68 per unit for the period in question.

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

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

/True Copy /

Secretary
Tamil Nadu Electricity
Regulatory Commission