

**TAMIL NADU ELECTRICITY REGULATORY COMMISSION**

**Order of the Commission dated this the 13<sup>th</sup> Day of August 2024**

**PRESENT:**

Thiru M.Chandrasekar	....	Chairman
Thiru K.Venkatesan	....	Member
Thiru B.Mohan	....	Member (Legal)

**and**

**M.P. No. 23 of 2024**

Tamil Nadu Generation and Distribution  
Corporation Limited (TANGEDCO)  
Represented by its Chief Financial Controller / Revenue  
144, Anna Salai  
Chennai – 600 002.

... Petitioner  
Thiru. Richardson Wilson,  
Advocate

This Miscellaneous Petition stands preferred by the Petitioner TANGEDCO with a prayer to pass an order for the following:

(a) To approve the procedure of adjustment of energy purchased/wheeled by the HT consumers under various open access sources by virtue of DSM Regulations with effect from 01.04.2024 and

(b) and pass such further or other orders as the Commission may deem fit and proper in the facts and circumstances of the case and thus render justice

This petition coming up for final hearing on 25-07-2024 in the presence of Thiru.Richardson Wilson, Advocate for the Petitioner on consideration of the submissions made by the Counsel for the Petitioner this Commission passes the following:

## **ORDER**

### **1. Contentions of the Petitioner:-**

1.1. The petitioner is filing the present Miscellaneous Petition seeking to approve the procedure of adjustment of energy purchased/wheeled by the HT consumers under various open access sources by virtue of DSM Regulations with effect from 01.04.2024.

1.2. During the year 2019, the Commission had notified the TNERC (Forecasting, Scheduling and Deviation Settlement and related matters for Wind and Solar Generation) Regulation, 2019 vide Notification No.TNERC/F&S wind & Solar/21-1, dated 01.03.2019 for wind and solar generators. Now, the Commission has issued the regulations for the wind and solar generators with certain modifications namely TNERC (Forecasting, Scheduling and Deviation Settlement and related matters for Wind and Solar Generation) Regulation, 2024 and directed to implement the same w.e.f. 01.04.2024 along with the regulations issued for conventional generators during the year 2019. In the above regulations among other issues it has been directed to account the energy wheeled by the HT consumers under open access in the following manner:

"16.5 The SLDC/Distribution licensee as mutually agreed shall prepare the statement of accounting of energy in each (15 minutes) time block for the wind and solar energy generators and the procurers on monthly basis for the purpose

of billing. The billing centre of the distribution licensee shall be responsible for energy accounting, adjustment, raising and settlement of bills with the procurers as per the procedure laid by the SLDC. But, the SLDC shall be responsible for sharing the block wise generation data to the Distribution Licensee.

16.6 A detailed energy accounting procedure shall be prepared by SLDC and submitted for approval to the Commission after undertaking stakeholder consultation in accordance to Regulation 5.2".

1.3. In the orders issued vide Order No.9/dt.16.10.2020 and 8/dt.07.10.2020 by the Commission for the Order on procurement of Solar power and Related Issues and for wind generators, respectively, and issued directions on energy accounting as follows :

"5.5.6 Commission has notified the Regulations on Deviation Settlement Mechanism (DSM) for RE wind and Solar, and all other sources on 20.3.2019. The commercial mechanism will come into effect from a date to be notified by the Commission. Till such time the DSM is implemented in the State, if a solar power generator utilizes power for captive use or if he sells it to a third party, the distribution licensee shall raise the bill at the end of the billing period for the net energy supplied. The licensee shall record the slot wise generation and consumption during the billing period. Slot wise adjustment shall be for the billing period. Peak hour generation can be adjusted to normal hour or off peak hour consumption of the billing period and normal hour generation can be adjusted to off peak hour consumption of the billing period. Excess consumption will be

charged at the tariff applicable to the consumer subject to the terms and conditions of supply.

5.5.7 When DSM is implemented, the licensee shall record the time block wise generation and consumption during the billing period. Time block wise adjustment shall be made for the billing period. Excess consumption will be charged at the tariff applicable to the consumer subject to the terms and conditions of supply.

Xxxx"

1.4. Relevant provision of the tariff order issued by the Commission vide Order No. 7 of 2022, dt.09.09.2022 with regard to accounting procedure of partial/full open access consumers under the DSM purview is as below:

#### 5.29 GRID AVAILABILITY CHARGES

5.29.1 xxx.

5.29.2 xxx

5.29.3 The Grid Availability Charges for Open Access consumers shall be applicable as under:

1) xxx xx

2) xxx xx

3) In case of deviation by Open Access Customer who is also a consumer of distribution licensee, the difference between the applicable scheduled open access load and actual drawl shall be accounted Block wise and shall be settled in accordance with the following:

a. The energy consumption of such customer shall be recorded in 15 minutes time block.

b. Deviations between the schedule and the actual injection/drawal shall come under the purview of the intra-state ABT, as notified by the Commission and shall be settled based on the composite accounts for imbalance transactions issued by SLDC on a weekly cycle in accordance with the UI charges specified by the Commission Billing, collection and disbursement of any amounts under the above transactions shall be in accordance with the Commission's orders on Intra-state ABT, as may be applicable from time to time. Till the implementation of Intra-State ABT, the imbalance charge shall be regulated as below:

i. In case of actual energy/demand is more than the scheduled energy/demand but within the permitted energy/demand (based on contracted load and energy or quota demand and energy as applicable), customer shall be liable to pay for such over drawal at the applicable tariff rates of that category of consumer as determined by the Commission from time to time.

ii. In case of actual energy/demand drawal is more-than the scheduled energy/demand drawal and also more than the permitted energy/demand (based on contracted load and energy or quota demand and energy as applicable), payment for the capacity above the contract demand shall have Tamil Nadu Generation and Distribution Corporation (TANGEDCO) True-Up, ARR and Tariff Order, 2022 Tamil Nadu Electricity Regulatory Commission to be made at the

excess demand/energy charges as specified by the Commission for such categories of customers in the Regulations/Order.

1.5. On conjoint reading of the above Regulations and the tariff orders, the energy wheeled/purchased by the HT consumers under open access shall be accounted on 15 minutes block-wise. Further, the SLDC has web hosted the draft procedure for the implementation of said regulations on 12.02.2024 seeking comments from the stakeholders. In continuation, the Commission issued the approved procedure for the implementation of the DSM Regulations in respect of wind and solar generators vide notification dt.28.03.2024. With regard to accounting of power purchased / wheeled by the HT consumers, TANGEDCO has furnished its comments in detail so as to implement the regulations without any objection from the generators. However, without considering the comments, the Commission has issued the procedure of adjustment as follows:

"12 ENERGY ACCOUNTING FOR DEVIATION:

12.1 Energy adjustment at the end of Open Access Consumers shall be carried out as per the respective wind/solar tariff orders issued by the Commission from time to time".

1.6. At present, the adjustment of open access power is being carried out based on the slot- wise/ user wise (captive & 3<sup>rd</sup> party) allotments made by the generators on monthly basis through Open Access Accounting and Adjustment (OAAA) package. If the DSM Regulations are implemented, in the case of captive category, present method of allotment shall have to be automated based on the shareholding percentage of the

captive consumers and in the case of 3rd party sources, the generator shall fix the percentage of allotment for each user at the beginning of the month. Under above circumstances, in order to implement the DSM Regulations for both conventional and RE generators, smoothly, it is suggested the following procedure of adjustment of energy purchased/wheeled by the HT consumers under various open access sources w.e.f.01.04.2024.

**A. Solar Generators:**

Block wise/day wise generation shall be adjusted against the block wise/day wise consumption and the excess consumption if any shall be billed under the relevant tariff of the consumer category.

Excess generation (each block and each day) if any, shall be treated at the end of the month as per the Regulations/orders of the Commission.

As the adjustment has to be carried out on block wise/day wise, the facility of higher slot generation against the lower slot consumption shall not be applicable .

**B. Wind generators commissioned on or after 01.04.2018:**

Block wise/ day wise generation shall be adjusted against the block wise/day wise consumption and the excess consumption if any shall be billed under the relevant tariff of the consumer category.

Excess generation (each block and each day) if any, shall be carried over for the adjustment against consumption of respective block (of subsequent days)

up to end of the month and necessary banking charges as fixed by the Commission shall be applicable for above mentioned carried over for subsequent days.

Surplus energy at the end of the month, if any the same shall be considered for payment at the tariff determined by the Commission.

Same procedure may be adopted for the wind energy generators which were commissioned prior to 01. 04.2018 but completed 20 years of life period.

As the adjustment has to be carried out on block wise/day wise, the facility of higher slot generation against the lower slot consumption shall not be applicable.

**C. Wind energy generators commissioned prior to 01.04.2018 with remaining life period:**

Block wise/day wise generation shall be adjusted against the block wise/day wise consumption and the excess consumption if any shall be billed under the relevant tariff of the consumer category.

Excess generation, if any in the block, shall be carried over for the adjustment against consumption of respective block (of subsequent days) up to end of the month and necessary banking charges as fixed by the Commission shall be applicable for above mentioned carried over for subsequent days.



Surplus energy at the end of the month, if any, the same shall be carried over to the banking account in the respective block so as to adjust the same up to the end of the financial year.

As the adjustment has to be carried out on block wise/day wise, the facility of higher slot generation against the lower slot consumption shall not be applicable.

## **2. Stakeholders Comments**

2.1. As per the Commission's daily order dated 25-06-2024 in M.P.No. 23 of 2024, the Miscellaneous Petition filed by the TANGDECO was hosted in the website of the Commission for inviting comments/suggestions of the stakeholders. The Comments received from the stakeholders up to 15-07-2024 were considered. The various comments received from the stakeholders are furnished as below:

### **1. M/s. The Southern India Mills' Association**

1. The block wise adjustment of energy shall be made available only to the prospective generators
2. There is a difference between the prayer of the TANGDECO in the M.P.No. 23 of 2024 and the draft GEOA Regulations published by the Commission

## **2. M/s. Distributed Solar Power Association**

1. The banking since has already been restricted on monthly basis there is no necessity of restricting slot wise banking
2. The power generated in Normal TOD shall be adjusted in Normal TOD and off peak TOD.
3. Power generated in peak TOD shall be adjusted in peak TOD, Normal TOD and off peak TOD
4. Power generated in off peak TOD shall be adjusted in off peak TOD and Normal TOD
5. Power banked in off peak and Normal TODs may not be adjusted in peak TOD

## **3. M/s. Tamil Nadu Spinning Mills Association**

1. Allotment be made by the generators based on consumption based as is being followed and practiced now.
2. The existing method of adjustment (slot wise adjustment) be continued for wind energy generators without any modification.
3. One year banking period may be allowed
4. The petition of the TANGEDCO may be dismissed.

## **4. M/s. Tamil Nadu Power Producers Association**

1. The W.P.No. 27617 of 2019 filed by the Association against the implementation of DSM Regulation, 2019 is pending before the Hon'ble High Court of Madras.

2. Allotment be made by the generators based on consumption based as is being followed and practiced now.
3. One year banking period may be allowed
4. The existing method of adjustment (slot wise adjustment) be continued for wind energy generators without any modification.

#### **5. M/s. AMPIN Energy Transition Pvt. Ltd.**

1. Peak time block shall be adjusted during peak, normal and off-peak hours
2. Banked energy in normal hours shall be adjusted in normal and off-peak hours
3. Banked energy during off-peak hours shall be adjusted only in off-peak hours.

#### **6. M/s. Indian Wind Power Association**

1. The proportionality in consumption for CGP status is to be complied annually and not on a monthly basis.
2. Allotment be made by the generators based on consumption based as is being followed and practiced now.
3. As per the order of Hon'ble APTEL, the existing method of adjustment be continued for WEGs.
4. The Gol in GEOA Rules, consciously has not mentioned about 15 minutes block wise adjustment for OA consumers since that will defeat the very purpose of banking facility extended to the WEGs.
5. The petition of the TANGEDCO may be dismissed.

## **7. M/s. Tamil Nadu Electricity Consumers' Association**

1. The proportionality in consumption for CGP status is to be complied annually and not on a monthly basis.
2. Allotment be made by the generators based on consumption based as is being followed and practiced now.
3. As per the order of Hon'ble APTEL, the existing method of adjustment be continued for WEGs.
4. The Gol in GEOA Rules, consciously has not mentioned about 15 minutes block wise adjustment for OA consumers since that will defeat the very purpose of banking facility extended to the WEGs.
5. The petition of the TANGEDCO may be dismissed.

## **8. M/s. Sembcorp Green Infra Pvt. Ltd.**

1. Excess consumption by a consumer should be first adjusted towards available banked energy and if there is still some excess consumption, it may be billed at relevant tariff.

## **9. Thiru S. Gandhi, PESOT**

1. We endorse the energy adjustment by block wise / day wise than slot wise on monthly basis.
2. Banking of energy disobey DSM Regulation. The deviation alone can be treated as banked energy.

### **3. Findings of the Commission:-**

3.1. Before going into the merits of the prayer and objections, the commission would like to take notice of the fact that there is no stay granted by any of the courts to the 2024 Regulations and its implementation procedure initiated by the Commission. We have considered the comments/suggestions of the stakeholders and perused the records adduced as evidence. A reading of the prayer of the TANGEDCO and the objections of the objectors necessitates the consideration of the following issues and disposal of the Commission:

**3.2. The first question which arises for consideration is whether to accept the proposal of energy adjustment submitted by the TANGEDCO. i.e. adjustment of block wise / day wise generation against the block wise / day wise consumption?**

It is clear that energy adjustment at the end of Open Access Consumers shall be carried out as per the respective wind/solar tariff orders issued by the Commission from time to time. As per the Order No. 8 of 2020 dated 07-10-2020 issued by the Commission for procurement of wind power and related issues, the distribution licensee shall make block wise adjustment of energy once the deviation settlement mechanism is implemented.

The relevant provisions of the order are extracted as below:

*5.6.1 The energy accounting shall be regulated by the Commission's Regulations/ Order on open access, Deviation Settlement Mechanism (DSM). Till such time the DSM is implemented in the State, if a renewable energy generator utilizes power for captive use or if he sells it to a third party, the distribution licensee shall raise the bill at the end of the billing period for the net energy supplied. The licensee shall record the slot wise generation and consumption during the billing period. Slot-wise adjustment shall be made for the billing period.*

*Peak hour generation can be adjusted to normal hour or off peak hour consumption of billing period. Normal hour generation can be adjusted to off peak hour consumption of the billing period. Excess consumption will be charged at the tariff applicable to the consumer subject to the terms and conditions of supply.*

*5.6.2 When DSM is implemented, the licensee shall record the time block wise generation and consumption during the billing period. Time block wise adjustment shall be made for the billing period and the distribution licensee shall raise the bill for the net energy supplied. Excess consumption will be charged at the tariff applicable to the consumer subject to the terms and conditions of supply.*

Similar provisions were made in the Commission's Order No. 9 of 2020, dated 16-10-2020 in respect of order on procurement of solar power and related issues.

3.3. The Commission has also notified Tamil Nadu Electricity Regulatory Commission (Forecasting, Scheduling and Deviation Settlement and related matters for Wind and Solar Generation) Regulations, 2024, which came into effect from 01-04-2024. In continuation to that, the Commission has also approved the procedure for implementation of forecasting, scheduling and deviation settlement for wind and solar generation. However, almost all the wind and solar generators opposed the move in lieu of infirm nature of the solar and wind generation. At the same time, it is to be noted that many countries forecast the wind and solar power with more accuracy due to advancement in technology. There is no doubt that if the forecasting accuracy is improved, there will be better grid discipline and grid management. In view of the above, Commission is of the view that adjustment of block to block generation and consumption is the need of the hour to bring discipline among all stakeholders, so as to ensure reliable, stable and uninterrupted power supply in the state.

3.4. Accordingly commission decides the following methodology for block to block adjustment of energy between the ends of the generation and consumption:

3.4.1. The energy accounting shall be done in 15 minutes time block basis for Open Access energy accounting purpose. Block wise / day wise generation / purchase shall be adjusted against the same block wise / day wise consumption.

3.4.2. The surplus energy, if any, available after adjustment in the respective same 15 minutes time block basis shall be considered as banked energy along with the banking charges in force and excess consumption over and above the actual injection of energy will be charged at the tariff applicable to the consumer subject to the terms and conditions of supply.

3.4.3. The banking of energy shall be evaluated for energy accounting on 15 minutes time block basis. The positive difference between the injected energy from Wind/Solar generator available at consumption point (excluding losses in kind) and consumer's consumption in same 15 minutes time block basis on the same day shall be considered as banked energy and this banked energy shall be permitted to be consumed on banking cycle basis.

3.4.4. Energy banked can be adjusted during any block period other than peak hour blocks during the banking cycle. In the case of the Pumped Storage System/Battery Energy Storage System (BESS), energy injected can be adjusted in any time block including peak hour blocks.

3.4.5. This order will be applicable with effect from 01-04-2024 as per the TNERC (Forecasting, Scheduling and Deviation Settlement and related matters for Wind and Solar Generation) Regulations, 2024. Commission also directs that the billing software for adjustment of energy at the consumer end for block wise/day wise generation against block wise/day wise consumption shall be made ready within 6 months from the date of issue of this order. Till such time, adjustment of energy at the consumer end shall be made as per the relevant tariff orders issued by the Commission from time to time.

**3.5. The second question arises for consideration is whether the banking period be allowed one year for the Wind Energy Generators irrespective of the year of commissioning?**

3.5.1. The Commission in its order No. 8 of 2020 dated 07-10-2020 issued for procurement of wind power and related issues had decided to allow the banking period of 12 months (from 1<sup>st</sup> April to 31<sup>st</sup> March) for the WEGs commissioned on or before 31-03-2018 along with the banking charges of 14% in kind. For the WEGs commissioned on or after 01-04-2018 under normal or under REC scheme, the facility of banking of energy shall be for a period of one month and there shall be no banking charges. Further, the Commission had decided that there shall be no facility of banking of energy for 3<sup>rd</sup> party power purchase.



3.5.2. While so, the Hon'ble Appellate Tribunal for Electricity in its order dated 28-01-2021 in Appeal Nos. 191 of 2018 & Ors. had set aside the above orders of the Commission in respect of the following issues:

1. Withdrawal of the banking facility to the WEGs commissioned irrespective of the year including the WEGs selling power under 3<sup>rd</sup> party sale,
2. Increase in banking charges from 12% to 14%
3. Increase in cross subsidy from 50% to 60%, etc.

Aggrieved with the order of the APTEL, the TANGEDCO had filed case before the Hon'ble Supreme Court of India, which is still pending. In view of the above, the applicability of banking provisions for the WEGs is subject to the outcome of the case pending before the Hon'ble Supreme Court of India. Regarding Solar Power, the Commission has permitted banking period to the whole billing period of one month. The relevant provisions in the Commission's Order No. 5 of 2019, dated 29-03-2019 (Which continues even now) is reproduced as below:

*11.5.4 Till such time the DSM is implemented in the State, if a solar power generator utilizes power for captive use or if he sells it to a third party, the distribution licensee shall raise the bill at the end of the billing period for the net energy supplied. The licensee shall record the slot wise generation and consumption during the billing period. Slot wise adjustment shall be for the billing period. Peak hour generation can be adjusted to normal hour or off peak hour consumption of the billing period and normal hour generation can be adjusted to off peak hour consumption of the billing period. Excess consumption will be charged at the tariff applicable to the consumer subject to the terms and conditions of supply.*

Summarizing the above, Commission decides the following in respect of the banking provision:

- (i) In view of the APTEL order, Commission refrain from passing any order on banking period in respect of the WEGs and directs status-quo shall be maintained in respect of banking period for WEGs. Regarding solar generation, the banking period is continued to be one month billing period without any banking charges till banking charges are fixed by the Commission under proposed Green Energy Open Access (GEOA) Regulations.
- (ii) In respect of Solar generation, the credit for banked energy shall not be permitted to be carried forward to subsequent months and the credit for energy banked during the month shall be adjusted during the same month as per the energy injected in the respective time block. As stated already, energy banked can be adjusted during any block period other than peak hour blocks during the banking cycle. In the case of the Pumped Storage System/Battery Energy Storage System (BESS), energy injected can be adjusted in any time block including peak hour blocks.
- (iii) The un-utilised surplus banked energy at the end of the banking cycle shall be sold to the Distribution Licensee at the rate of 75% of respective RE tariffs applicable as per the orders of the Commission and where no tariff is determined, at 75% of the latest discovered bid tariff, for normal RE generators. If there are more than one tariffs discovered through bidding

process, the weighted average tariff shall be considered for payment. For the RE generators under REC scheme, the excess generation/unutilized banked energy at the end of the banking cycle may be encashed at the rate of 75% of the Average Pooled Cost of Power Purchase (APPC) for the respective financial year notified by the Commission under the TNERC (Renewable Energy Purchase Obligations) Regulations. When the Average Pooled cost of Power Purchase (APPC) of the Distribution Licensee exceeds the preferential rate fixed by the Commission to that category/sub-category of RE generators for the corresponding year, 75% of the preferential tariff rate fixed by the Commission for the respective year of commissioning of RE generators shall be paid.

The petition is accordingly, disposed of.

(Sd.....)  
Member (Legal)

(Sd.....)  
Member

(Sd.....)  
Chairman

/True Copy /

**Secretary  
Tamil Nadu Electricity  
Regulatory Commission**