

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

ThiruK.Venkatasamy

.... Member (Legal)

D.R.P. No.35 of 2014

M/s. TCP Limited
TCP SapthagiriBhavan
No.4, (Old No.10), Karpagambal Nagar
Mylapore
Chennai – 600 004.

... Petitioner
(Thiru. Rahul Balaji
Advocate for the Petitioner)

Vs

1. Tamil Nadu Generation and
Distribution Corporation Limited
Represented by its Chairman and Managing Director
144, Anna Salai
Chennai – 600 002.

2. Superintending Engineer
TANGEDCO
Sivagangai EDC
Sivagangai.

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

Dates of hearing : 29-01-2014; 30-01-2014; 28-04-2014;
27-08-2019; 24-09-2019; 22-10-2019;
26-11-2019; 28-01-2020; 11-02-2020;
22-09-2020; 10-11-2020; 08-12-2020;
02-02-2021; 09-02-2021; 23-03-2021;
15-04-2021; 31-08-2021; 21-09-2021;
05-10-2021; 09-11-2021 and 30-11-2021

Date of order : 05-05-2022

The D.R.P.No.35 of 2014 came up for final hearing before the Commission on 30-11-2021 and the Commission upon perusing the petition and connected records and after hearing the submissions of both sides passes the following:-

ORDER

1. Prayer in D.R.P. No. 35 of 2014:-

The prayer of the petitioner in this D.R.P.No.35of 2014 is to direct the Respondent torefix the demand and energy quota for the petitioner taking into account the unique circumstances of the petitioner so as to permit the petitioner to consume power from its captive power plant and captive wind generation units without suffering excess demand and excess energy charges and permit the petitioner to consume self-generated power upto the sanction demand and upon such refixation direct that if any charges towards demand charges or energy charges paid till such time are found to be collected in excess, the same may be directed to be refunded and adjusted.

2. Facts of the Case:-

The petitioner being consumer of TANGEDCO (HT SC No. 31) allotted with a Demand Quota of 186.51 KVA and Energy Quota with zero units during R&C period. In this connection, the petitioner has stated that the petitioner's consumption pattern is unique and that the orders of the Commission do not take into purview the situation such as the one faced by the petitioner. It is therefore necessary that suitable directions are issued to refix the demand and energy quota for the petitioner so as to enable them to

consume captive generated power without being penalized for energy self-sufficiency.

3. Contentions of the Petitioner:-

3.1. The petitioner company is, inter alia, involved in the manufacture of chemicals such as sodium hydrosulphite and liquid sulphur dioxide. The Petitioner has set up a biomass based power generation plant with 6 MW capacity in Sivagangal district. The project uses biomass like rice husk, juliflora, groundnut shells, bagasse, and other agriwaste products as raw material in the biomass based traveling grate boiler. The steam generated drives a condensing turbine to generate power. The project activity generates electricity by firing biomass as fuel. The bulk of the power generated in this plant is sold to TNEB and other 3rd parties. The petitioner submits that in addition to the biomass based power plant, the petitioner is also operating a 63.5 MW capacity coal fired power plant in Gummidipoondi, Thiruvallur district. In addition to the above, the petitioner also owns a number of windmills situate in Thirunelveli and Coimbatore district.

3.2. The power generated from the above mentioned power plants and WEGs is wheeled to the petitioner's chemical factory in Sivagangai district and consumed by the same. The excess power leftover after captive consumption is being sold by the petitioner to TANGEDCO and other 3rd parties. The petitioner submits that its total energy requirements for the chemical manufacturing plant are met from captive power plants and the

WEGs of the petitioner, so much so the total energy consumption by the petitioner from TANGEDCO is zero units.

3.3. The chemical manufacturing plant has a high tension power connection from TANGEDCO in HT SC No. 31. The petitioner submits that as stated above, the total energy consumption from TANGEDCO sources is zero units. However, the petitioner has been allotted a demand quota of 186.51 KVA during normal hours and 63.65 KVA during night hours and an energy quota of zero units for HT SC No. 31.

3.4. The rationale behind the demand quota and energy quota fixed for the petitioner's service connection is not known to the petitioner. However, the quota as fixed does not reflect the actual power consumption patterns of the petitioner in as much as the petitioner's energy consumption from its CPP and WEGs is much higher than the demand quota determined by the TANGEDCO for the petitioner's service connection. As a result of this anomaly the petitioner is put into a situation where in the petitioner is being regularly penalized towards exceeding demand and energy quota and has to pay the penalties as part of the monthly current consumption bill. The petitioner submits that the above mentioned circumstances are unfortunate in as much as the petitioner is being penalized for being completely self-reliant for its energy requirements.

3.5. The TANGEDCO vide its memo in Memo No.CE/Comml/EE/DSM/F.Power Cut/D.001/2008 dated 01.11.2008 had introduced Restriction and Control measures. In this memo, inter alia,

TANGEDCO had also introduced the formula on the basis of which demand and energy quota would be calculated for HT service. As per the terms of this Memo, base demand and base energy was to be average of three months consumption data most advantageous to the consumer between the billing period from October 2007 and September 2008.

3.6. The Commission in its order in MP 42 of 2008 dated 28.11.2008 and in the SuoMotu Order No. 1 of 2009 dated 28.10.2009 approved the memo dated 01.11.2008 issued by the TANGEDCO including the manner of computation of Base demand and Base energy.

3.7. TANGEDCO has subsequently issued memos dated 25.11.2009 and 17.09.2010 fixing the demand and energy quota for TNEB / TANGEDCO supply. The memo dated 17.09.2010 had been issued pursuant to the orders of the Commission in M.P. Nos. 6, 9, and 17 of 2010 and D.R.P. No. 9 of 2010 dated 07.09.2010 wherein the Commission has permitted all HT consumers having captive generation and power purchase from 3rd party sources to get additional demand and energy quota over and above the TNEB demand and energy quota subject to sanctioned demand. However, the memo dated 17.09.2010 was at variance from the order of the Commission and the same had been challenged by before the High Court of Madras in WP 23166 of 2010. The Hon'ble High Court by its order dated 28.02.2011 disposed of the batch of writ petitions with directions to suitably amend the memo dated 17.09.2010 to reflect the orders of the commission dated 07.09.2010. The High Court had directed that the base energy would be the average of any three consecutive months during the base period, as

per the choice of the consumer and to the advantage of the HT consumer; and base demand would be the demand recorded in any month during the base period, as opted by the consumer, limited to the sanctioned demand.

3.8. This method of calculation of demand and energy quota for TNEB supply is still being followed. However, the same formula in the case of the petitioner leads to an anomalous situation. The petitioner submits that its entire energy requirements are met from its captive generation sources and therefore the petitioner has no need for TNEB energy supply. Consequently, the consumption of energy from TNEB sources during the base period for the petitioner would have been zero and hence the base energy for the purpose of calculation of energy quota is also zero.

3.9. On the other hand, the petitioner is reliant on the TANGEDCO grid and therefore requires demand quota to be able to draw and consume the energy needed for its chemical plant. The quota demand which has been accordingly fixed for the service connection in HT SC No. 31 is 186.5 KVA which is inadequate for the petitioner to be able to draw its requisite quantum of energy. This has led to the situation where the petitioner is unable to draw the requisite energy without exceeding its demand quota and is faced with a situation of paying excess demand and excess energy charges on a regular basis as part of the monthly current consumption bill.

3.10. The petitioner has also written to the 2nd respondent by its letter dated 17.08.2012 seeking clarification from the 2nd respondent on the calculation

and methodology adopted by the TANGEDCO in fixing the demand and energy quota for the petitioner's HT SC. No.31. The petitioner submits that calculation details received from the 2nd respondent show that adherence to the calculation of demand and energy quota as approved by the Commission has resulted in the petitioner being allotted a demand quota of 186.51 KVA and energy quota of zero units.

3.11. The petitioner's consumption pattern is unique and that the orders of the Commission do not take into purview the situation such as the one faced by the petitioner. It is therefore necessary that suitable directions are issued to refix the demand and energy quota for the petitioner so as to enable it consume captive generated power without being penalized for energy self-sufficiency.

4. Contentions of the Respondent:-

4.1. The Government of Tamil Nadu implemented Restriction and Control measures on the usage of electricity on all HT Industrial and Commercial consumers in the State of Tamil Nadu. This was communicated to all HT consumers and vide notice dated 01.11.2008. The important features of Restriction & Control measures were:

"1. HT SERVICES:

The cut of 40% is on the base demand and energy for HT industrial and commercial services.

The base energy consumption for HT services will be the average of any three consecutive months advantageous to the consumer between the billing period from October 2007 to September 2008.

The base demand will be the highest maximum demand registered in any month during the period from October 2007 to September 2008”.

Illustration for notice dated 01.11.2008:-

A) Fixation of quota:-

(i) Fixing of demand quota:-

Base demand = 1009.6KVA

(The Highest demand recorded during the period 10/07 to 10/08)

60% of the base demand $(1009.6 \times 60 / 100) = 605.76$ KVA

The demand quota = 605.76 KVA

During the Evening Peak Hour (18.00hrs to 22.00hrs) quota fixed on 5% of the demand quota fixed for lighting and security purposes

Evening peak Hr demand quota $(605.76 \times 5 / 100) = 30.288$ KVA

(ii). Fixing of energy quota :-

Base Energy = 638123 units

(The highest consecutive three months average during the period 10/07 to 10/08)

60% of the base energy $(638123 \times 60 / 100) = 382874$ Units

The Energy quota = 382874 Units

During the Evening Peak Hour (18.00 hrs to 22.00hrs) quota fixed on 5% of the energy quota fixed.

Evening peak Hr energy quota $(382874 \times 5 / 100) = 19144$ units

4.2. The HT captive consumers of Tamil Nadu made representations requesting fixation of quota of 60% on TNEB supply and to permit them to use 100% of the power received by them from their captive sources in order to exempt power cut from captive consumption. Memo dated 17.11.2008 was issued fixing the demand and energy quota exclusively on TNEB supply for the HT consumers using power from captive sources and TNEB:

Illustration on Memo dated 17.08.2008:

Fixing of Energy quota:-

- | | | |
|-------|---|-----------|
| (i). | Monthly base energy consumption as illustrated} in working instructions dated 1.11.2008. | A |
| (ii) | In that the actual energy supplied (monthly} average) for the above three months average by the CPP | B |
| (iii) | The actual energy availed by consumer from TNEB | A – B = C |
| (iv) | 60% energy on C (C x 60/100) | = D |
| (v) | The quota fixed for energy | = B + D |

Fixing of Demand quota:-

- | | | |
|---|--|-----------|
| (i) | The base demand consumption as illustrated in working instructions dated 1.11.2008 | E |
| (ii). | In that the calculated demand supplied for the Energy for the month by CPP | F |
| $F = \frac{\text{Energy supplied by CPP in a month}}{\text{No. of days in the month} \times 24 \text{ hours} \times \text{P.F} 0.95}$ | | |
| (iii). | The actual demand availed by consumer From TNEB | E – F = G |
| (iv) | 60% demand of G (G x 60/100) | = H |
| (v) | The demand quota fixed | = F + H |

(Calculation of demand supplied by generator may be worked out on par with calculation made for wheeling of power to the captive consumers as communicated in CE/PPP memo. dated 06.11.2007 and subsequent amendment thereof).

4.3. In the above method, the consumer may use their full wheeled energy without any cut. However, the H.T Consumers having Group Captive Power Plants will be permitted to use their wheeled energy only on slot to slot basis.

4.4. The consumer shall not exceed demand/energy quota fixed for the TNEB power for any reasons, either due to outage of generator of their supplier or short supply from their supplier, etc., it is their responsibility to monitor this with their generator. The excess demand/energy charges shall be collected as prescribed by TNERC for the quota violated.”

4.5. The last line in the formula ‘quota fixed for energy = B + D’ means the limit to which the consumer is entitled to utilize its own captive energy. It is the energy a captive consumer proposes to bring in (B) plus the quantum of TNEB’s energy determined under the R&C measures (D). This energy quota “(B) + (D)” is different from actual energy to be availed by HT consumer from TNEB/ TANGEDCO i.e. quota of TANGEDCO’s power “D”. It is explicit from the formula itself. This concept will become more clear from the fact that consumers who do not bring in captive energy i.e. normal HT consumers; are required to limit their consumption upto the quota fixed for TANGEDCO’s power and any excess consumption over the quota of TANGEDCO’s energy / demand is treated as excess energy or demand and charged accordingly. The difference between normal HT consumers and the captive HT consumers is that the captive HT consumers were permitted to go up to the base energy and base demand before 07.09.2010 over and above the quota fixed for TANGEDCO’s power. After 07.09.2010, they have been permitted up to sanctioned demand over and above the quota fixed for TANGEDCO’s power. Right from 12/2008, in respect of captive users, drawl of power from TANGEDCO grid is calculated only after adjustment of captive energy brought by him against actual recorded consumption. This drawl of power from TANGEDCO is compared against

the quota the fixed for TANGEDCO's power. Only in case of consumption in excess over quota, excess energy/demand charges are being levied. In the case of normal HT consumer [who does not have captive consumption], the recorded consumption is compared against the quota fixed for TANGEDCO's power. Only in case of consumption in excess over quota, excess energy/demand charges are being levied.

4.6. There cannot be different parameters for consumption of TNEB's power, one for normal HT consumers and another for captive HT consumers, for calculation of excess energy and demand in respect of "TANGEDCO's quota". From the above it is clear that excess energy and demand charges are charged if a 'captive' or 'normal' HT consumer exceeds the energy or demand quota fixed for the quantum of TANGEDCO's power.

4.7. The above memo had not been adopted with regard to fixation of quotas in respect of wind energy captive users at that point of time. Seeking to calculate demand and energy quota at par with CPP users, the wind energy captive users filed Writ Petitions before the High Court of Madras. Consequent to the order of High Court, directing the issue to be decided by the State Regulatory Commission, the State Commission initiated Suo-Motu Proceedings No.1 of 2009. On 28.10.2009 the State Electricity Regulatory Commission recognized the fixation of quota for wind energy captive users at par with other CPP users and approved the formula in Memo dated 17.11.2008 for re-fixing the demand and energy quota for the period from 12/2008 to 10/2009 and from 01.11.2009 to all captive users, whether thermal or wind shall declare on the first day of every month, the energy

proposed for captive use for the following month, which shall be considered as B and F for the purpose of fixing energy quota and demand quota respectively in the formula dated 17.11.2008 as under:

“11. *The Commission, as detailed in the above paragraphs, directed the TNEB to re-work the demand and energy quota of wind captive users with immediate effect. The method of determination of demand and energy quota for wind energy captive users was to be same as that of other captive users. The TNEB was, further, directed to permit utilization of wind energy banked as on 1-11-2008 in five equal monthly instalments between 1-12-2008 and 30-4-2008, wherever necessary by enhancing the demand and energy quota as in the case of other captive users. The method for determination of demand energy quota for captive users was outlined by the TNEB in Memo CE/Comml./EE/DSM/PMM/F.Powercut/D.28/2008 dated 17-11-2008.*

12. *The Commission in its Order dated 28-11-2008 arrived at the basis of computation of demand and energy quota for wind energy generator on the basis of material available on record at that point of time, that is, the formula contained in the memo of the TNEB dated 17-11-2008. xxxx*

13. *xxxxx Therefore, we have no hesitation in striking down these three memos as violative of the Order of the Commission dated 28-11-2008. The Commission reserves its right to initiate appropriate proceedings under Sections 142 and 146 of the Electricity Act, 2003. It is the formula contained in the memo of TNEB dated 17-11-2008 alone, which is recognized and approved by the*

Commission.

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16. After taking into account the submissions made by both the parties, the Commission directs as follows:-

(1) The base energy consumption and base demand shall be computed for all captive users including the wind energy captive users on the basis of the formula contained in the TNEB Memo No. CE/Comm/EE/DSM/AEE/PMM/F. Power Cut/D.001/08 dated. 1-11-2008;

(2) For any demands sanctioned after 1-10-2008, the additional energy quota and demand energy quota shall be as per the formula prescribed by the TNEB in Memo No. CE/Comm/EE/DSM/F. Power cut/D.001/2008 dated 1-11-2008;

(3) The demand and energy quota for the wind energy supplied after 1-11-2008 shall be fixed in accordance with the memo dated 17-11-2008 of TNEB;

xxxx

(5) Demand quota and energy quota after being redrawn in accordance with the above direction shall be set off against the actual demand and energy consumed between 1-11-2008 and 30-4-2009;

(6) Excess demand charges and excess energy charges for the period from 1-11-2008 to 30-4-2009 shall be computed with reference to the *drawn* demand and energy quota;

xxxxx

(8) For the period from 1-5-2009 to

31-10-2009,

the formula for computation of energy quota and demand quota contained in the circular of TNEB dated 17-11-2008 shall apply, that is with effect from 1-5-2009 the petitioners are entitled to demand quota for current generation in accordance with the formula of 17-11-2008; if the energy quota and demand quota during this period has been exceeded by the captive user, he will be entitled to draw from the energy banked during this period to the extent of adjusting the excess demand and excess energy consumption;

(9) The excess demand charges and excess energy charges for the period from 1-5-2009 to 31-10-2009 shall be determined with reference to the demand and energy quota calculated in accordance with para (8) above;

(10) For the future, from 1-11-2009 the base demand and base energy may continue to be fixed with reference to the formula laid down by TNEB in their memo dated 1-11-2008;

(11) Unutilised banked energy available as on 1-11-2009 may be utilized by the wind captive users in five equal monthly instalments from 1-11-2009 upto 31-3-2010 in addition to current generation of that month;

xxxxxxx

(13) From 1-11-2009, all captive users, whether thermal or wind, shall declare on the first day of every month, the energy proposed for captive use for the following month, which shall be considered as Band F for the purpose of energy quota and demand quota respectively in terms of the memo of TNEB dated 17-11-

2008;the energy sodeclared shall roughly be
the monthly average generation;

*(16) If a consumer opts out of wheeling agreement
and becomes an ordinary consumer, A and E referred in the memo dated 17-
11-2008 shall be deemed to be the base energy and based demand."*

4.8. The TANGEDCO communicated the methodology of quota fixation and calculation of excess charges from the month of 12/2008 onwards in respect of wind energy captive users and from 11/2009, all captive users based on memo dated.17.11.2008 vide Memo. No.CE/Comml/EE/DSM/AEE/PMM/F.Power cut/ D.508/09, dated 25.11.09 as follows:

1. First part = 12/2008 to 04/2009
2. Second part = 05/2009 to 10/2009
3. Third part = 11/2009 to 09/2010 [relevant portion]

Third Part from 1.11.2009 onwards:-

(10) For the future, from 1-11-2009 the base demand and base energy may continue to be fixed with reference to the formula laid down by TNEB in their memo dated 1-11-2008.

(11) Unutilized banked energy available as on 1-11-2009 may be utilized by the wind captive users in five equal monthly instalments from 1-11-2009 upto 31-3-2010 in addition to current generation of that month.

(12) The energy, which remains in the bank of wind energy generators as on 1-11-2009 after adjustment in accordance with para (8) above, shall be available for consumption of the wind energy captive user between 1-11-2009 and 31-3-2010 in five equal monthly instalments. In addition, current generation would also be eligible for additional energy and additional

demand quota; both current generation as well as the energy drawn from the bank would count for computation of equivalent demand.

(13) From 1-11-2009, all captive users, whether thermal or wind, shall declare on the first day of every month, the energy proposed for captive use for the following month, which shall be considered as B and F for the purpose of energy quota and demand quota respectively in terms of the memo of TNEB dated 17-11-2008; the energy so declared shall roughly be the monthly average generation.

(14) From 1-11-2009, peak hour current generation as well as peak hour banked energy shall be eligible for peak hour utilization every month subject to the limit of one-twelfth of annual peak hour generation.

(15) Energy which remains unutilized as on 31-3-2010 shall be eligible for encashment (Instruction for this point will be issued separately by CE/NCES).

IIIa) Fixing of Energy quota from 1.11.2009 onwards:-

(i) Monthly base energy consumption as illustrated in working instructions dated 1.11.2008. - A

(ii) The energy proposed for captive use for the following month as per the direction of TNERC vide Para No.13 & 14 of Suo –motu proceedings dt.28.10.09 - B

B is 1/5 of the banked energy available as on 1.11.09, shall be added for the period from 01.11.09 to 31.03.2010 + current generation to be wheeled inclusive of all captive powers (Roughly monthly average Generation as declared by the consumer at the 1st day of every month for the following month)

(iii) The actual energy to be availed by consumer from TNEB $A - B = C$

- (iv) 80% energy on C ($C \times 80/100$) = D
(v) The quota fixed for energy = B + D
(B, D should be shown separately without adding)

The above B shall not exceed A and shall be divided into two part as normal & peak hours for the energy to be wheeled.

(For peak hour, from 01-11-2009, peak hour current generation as well as peak hour banked energy shall be eligible for peak hour utilization every month subject to the limit of one-twelfth of annual peak hour generation).

IIIb) Fixing of Demand quota from 1.11.2009 onwards:-

- (i) The base demand consumption as illustrated} in working instructions dated 1.11.2008 - E
(ii) The demand proposed for captive user for the following month as per the direction of TNERC vide Para No.13 & 14 of Suo – motu proceedings dt.28.10.09 - F

$$F = \frac{\text{Energy supplied by captive user in a month}}{\text{No. of days in the month} \times 24 \text{ hours} \times P.F}$$

F is 1/5 of the banked energy demand available as on 01.11.09 shall be added for the period from 1.11.09 to 31.3.2010 + demand for the current generation to be wheeled inclusive of all captive powers as given by the consumer at the 1st day every month for the following month

- (iii) The actual demand to be supplied by TNEB E – F = G
(iv) 80% demand of G ($G \times 80/100$) = H
(v) The demand quota fixed = F + H
(F, H should be shown separately without adding)

The above F shall not exceed E and shall be divided into two part as normal & peak hours for the demand to be wheeled.

For peak hours, from 01-11-2009, peak hour demand current generation as well as peak hour banked energy demand shall be eligible for peak hour

utilization every month subject to the limit of one-twelfth of annual peak hour generation.

IIIC) Excess demand and energy charges should be levied for part 3 :-

(a) When normal hour recorded demand (minus) normal hour demand actually supplied and demand for 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds H, then excess demand charges shall be levied. (Demand actually supplied means the consumer actually supplied demand in the already declared quantum in F). F is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed E.

(b) When peak hour recorded demand (minus) peak hour demand actually supplied and demand for 1/5 of the peak hour banked energy (for the period from 1.11.09 to 31.3.2010) exceeds peak hour quota of 5% , then excess demand charges shall be levied. (Demand actually supplied means the consumer actually supplied demand in the peak hour already declared quantum in F) F is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed E(peak hour)

(c) When normal hour recorded energy (minus) normal hour energy actually supplied within the proposed quantum and 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds D, then excess energy charges shall be levied. (Energy actually supplied means the consumer actually supplied energy for the month in the already declared quantum in B) B is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed A)

(d) When peak hour recorded energy (minus) peak hour energy actually supplied within the proposed quantum and 1/5 of the peak hour banked energy (for the period from 1.11.09 to 31.3.2010) exceeds peak hour energy quota of 5%, then excess energy charges shall be levied. (Energy

actually supplied means the consumer actually supplied energy in the peak hour as already proposed and declared in B) B is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed A (peak hour)

(16) If a consumer opts out of wheeling agreement and becomes an ordinary consumer, A and E referred in the memo dated 17-11-2008 shall be deemed to be the base energy and base demand. In that case, the consumer is eligible only for 5% of the demand and energy quota during peak hours.

For the above case consumers, B and F are zero, the quota shall be fixed on A & E

Based on the above procedure, quota may be fixed for the past /future periods to the consumers as per the eligible percentage of quota of 60%, 70% & 80% prevailed for the respective periods of past and future in supersession to earlier memos. dated.19.12.08, dt.4.8.09 & dt.21.8.09.

The consumer shall not exceed demand/energy quota fixed for the TNEB power for any reasons, either due to outage of generator of their supplier or short supply from their supplier, etc., it is their responsibility to monitor this with their generator. The excess demand and energy charges shall be collected as prescribed by TNERC for the quota violated.

For the above procedure, the detailed billing and working procedure will be evolved and communicated by the CFC/Revenue for calculation.

For Para No. 7 & 15, regarding payment for banked energy of Suo–Motu proceedings No.1, dt. 28.10.2009 of TNERC, separate instruction from CE/NCES will be issued.”

4.9. The wind captive consumers filed MP 6 of 2010 seeking a relief that since the infrastructure facilities has already been created based in the sanctioned demand

by the Tamil Nadu Electricity Board, it is but logical to allow purchase of power from third parties up to the sanctioned demand instead of restricting the same to the base demand. The State Commission by interim order dated 17.08.2010 and final order dated 07.09.2010 held that:

Interim order dated.17.08.2010:

The base demand as worked out by the TNEB on the basis of the circular dated 17.11.2008.xxxx

The consumer should declare in advance one month prior to the billing period for availing of Open Access procurement. For example for a billing period commencing from 27th September 2010, the declaration should be made before 27th August 2010.

If the Open access procurement does not materialize to the extent projected by the consumer, he will limit his drawal to the extent of actual availability of Open access procurement.

Final Order dated.07.09.2010:

“4.5. The equivalent demand brought in by the consumer from captive and third party sources should be subtracted from the maximum demand recorded by the meter of the consumer. Balance would be the demand actually supplied by the TNEB. If this figure exceeds the quota demand of the TNEB, the consumer would be liable to pay excess demand charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008. Similarly, the energy purchased from captive and third party sources would be subtracted from the total energy consumed by the consumer. The balance would be deemed to be the energy actually supplied by the TNEB. If this quantum exceeds the energy quota of the TNEB, the consumer would be liable to pay excess energy charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008.”

4.10.As per the TNEB's memo dated 17.11.2008, which was approved by the State Commission in the SMP.No.1 of 2009 dated 28.10.2009 in connection with computation of excess charges, wherein it is clearly stated at page no.3 of the circular memo dt.17.11.2008 and 25.11.2009 III [C] (c), which had been issued in accordance with the direction of the State Commission in the order dated 28.10.2009 that:

17.11.2008:

“The consumer shall not exceed demand/ energy quota fixed for the TNEB's power for any reasons, either due to outage of generator of their supplier or short supply from their supplier, etc., it is their responsibility to monitor this with their generator. The excess demand and energy charges shall be collected as prescribed by TNERC for the quota violated.”

25.11.2009 III [C](c):

c. When normal hour recorded energy (minus) normal hour energy actually supplied within the proposed quantum and 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds D, then excess energy charges shall be levied.

4.11. From the above, it may be concluded that the procedure in connection with the calculation of excess demand and energy charges i.e. the demand/energy brought in by the consumer would be subtracted from the total recorded demand/energy of the consumer and the balance would be the demand/energy actually supplied by the TANGEDCO, this figure exceeds the demand/energy quota fixed for TNEB's power, the consumer would liable to pay the excess

demand/energy charges had been clearly mentioned in the III C of the memo dated.25.11.2009, thus this procedure was made clear by the TNEB's memo dated 25.11.2009 which was implemented retrospectively from the month of 12/2008. Therefore, it is evident that TNEB had already followed the said procedure and the State Commission in the order dated 07.09.2010 had only reiterated the same. Hence, the State Commission had not decided any new procedure in the said order dated. 07.09.2010 in connection with the method of calculation of excess energy and demand charges.A comparatives statement of Respondent's memo dated 25.11.2009 and order of the State Commission dated.07.09.2010 is given below:

TANGEDCO circular dated. 25.11.2009 [with effect from 12/2008]	State Commission order dated.07.09.2010
<p><u>“ III C) Excess demand and energy charges should be levied for part 3 :-</u></p> <p>a. When normal hour recorded demand (minus) normal hour demand actually supplied and demand for 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds H, then excess demand charges shall be levied. (Demand actually supplied means the consumer actually supplied demand in the already declared quantum in F). F is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed E.</p> <p>c. When normal hour recorded energy (minus) normal hour energy actually</p>	<p>The equivalent demand brought in by the consumer from captive and third party sources should be subtracted from the maximum demand recorded by the meter of the consumer .</p> <p>Balance would be the demand actually supplied by the TNEB. If this figure exceeds the quota demand of the TNEB, the consumer would be liable to pay excess demand charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008.</p> <p>Similarly, the energy purchased from captive</p>

<p>supplied within the proposed quantum and 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds D, then excess energy charges shall be levied.(Energy actually supplied means the consumer actually supplied energy for the month in the already declared quantum in B) B is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed A)</p>	<p>and third party sources would be subtracted from the total energy consumed by the consumer. The balance would be deemed to be the energy actually supplied by the TNEB. If this quantum exceeds the energy quota of the TNEB, the consumer would be liable to pay excess energy charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008.</p>
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4.12. From the above, it is evident that the procedure in connection with the calculation of excess demand and energy charges i.e. the energy brought by the consumer would be subtracted from the total recorded energy of the consumer and balance would be the energy actually supplied by the TANGEDCO, this figure exceeds the energy quota fixed for TNEB's power, the consumer is liable to pay the excess energy charges is clearly mentioned in the III C, thus this procedure was made clear by the TNEB's memo dated 25.11.2009 which was implemented retrospectively from the month of 12/2008. Therefore, it is evident that the Respondent was following the procedure, approved by SMP No. 1 of 2009, communicated by memo of 25.11.2009 and the same was reiterated by the State Commission in its order dated 07.09.2010. Hence, the State Commission had upheld in the said order dated.07.09.2010 in connection with the method of calculation of excess energy and demand charges which was followed by

TANGEDCO right from 12/2008. Hence, the petition is neither maintainable nor on facts.

4.13. The factual position has been set out in previous paragraphs, the basis on which the demand and energy fixed and the excess demand and energy charges levied. For the sake of brevity, those averments are not repeated in this paragraph. However, I crave leave of the Commission to treat the averments made in earlier paragraph and especially in paras 4 to 7 above as having been duly incorporated herein by way of answer to the contentions raised by the Petitioner in these paragraphs. Therefore, the contention of the petitioner that its consumption pattern is unique and that necessary that suitable directions are issued to refix the demand and energy quota for the petitioner so as to enable it consume captive generated power without being penalized for energy self-sufficiency is not acceptable one.

4.14. The petitioner has no prima facie case to further pursue the above Petition. Therefore, the petitioner is not entitled to any relief as prayed for in the above petition. The balance of convenience is clearly in favour of the respondents herein. Hence, the above petition is liable to be dismissed. By dismissing the same, no prejudice will be caused to the petitioner as the demand and energy quota and excess charges fixed and levied in accordance with law and in the manner known to law.

5. Written Submissions on behalf of the Petitioner:-

5.1. The instant petition was filed to direct the respondents to recalculate and refix the demand and energy quota for the petitioner, taking into account the unique

circumstances of the petitioner to consume power from its captive power plant and captive wind generation units without unnecessarily suffering excess demand and excess energy charges and permit the Petitioner to consume self-generated power up to the sanctioned demand and upon such refixation direct that if any charges towards demand charges or energy charges paid till such time are found to be collected in excess, the same may be directed to be refunded or adjusted. This has been necessitated due to the situation the petitioner found itself in and since the quota fixation as well as energy quota is always to be treated as an additionality with respect to open access procurement

5.2. The Petitioner's total energy requirements for its chemical manufacturing plant are met from the captive power plants and the WEGs of the Petitioner, so much so the total energy consumption by the Petitioner from TANGEDCO is zero units. The Petitioner's chemical manufacturing plant has a high tension power connection from TANGEDCO in HTSC No. 31. The Petitioner's total energy consumption from TANGEDCO sources is zero units, however, the Petitioner has been allotted a demand quota of 248.66 KVA during normal hours and 69.87 KVA during night hours and an energy quota of zero units for HTSC No.31.

5.3. The rationale behind this demand quota and energy quota fixed for the Petitioner's service connection is not known. The quota as fixed does not reflect the actual power consumption patterns of the petitioner in as much as the Petitioner's energy consumption from its CPP and WEGs is much higher than the demand quota calculated by the TANGEDCO for the Petitioner's service connection. As a

result of this anomaly, the Petitioner was put into a situation where the Petitioner is being regularly penalised towards exceeding demand and energy quota and had to pay the penalties as part of the monthly current consumption bill. It is submitted that the Petitioner is being penalised for being completely self-reliant for its energy requirements. Further, since the DRPs could not be taken up, substantial loss was caused to the petitioner and prior to the Commission becoming enabled to take up disputes, the R&C measures stood withdrawn. However, for the past period, the calculations are to be redone so that petitioner is caused no prejudice due to no fault on its part.

5.4. The memo dated 01.11.2008 was issued by TANGEDCO wherein, the formula on the basis of which the demand and energy quota would be calculated for HT service. As per the terms of this memo, base demand and base energy was to be the average of three months' consumption data most advantageous to the consumers between the billing period from October 2007 and September 2008.

5.5. Subsequently, TANGEDCO issued two memos dated 25.11.2009 and 17.09.2010 fixing the demand and energy quota for TNEB/TANGEDCO supply. The memo dated 17.09.2010 issued pursuant to the orders dated 07.09.2010 of the Commission in M.P.Nos.6,9 and 17 of 2010 and DRP No.9 of 2010, was challenged before the Hon'ble Madras High Court in WP No. 23166 of 2010 since the memo was at variance from the order dated 07.09.2010 of the Commission. The Hon'ble Madras High Court by its order dated 28.02.2011 disposed of the batch of writ petitions with directions to suitably amend the memo dated 17.09.2010 to reflect

the orders of the Commission dated 07.09.2010. The High Court, *inter alia*, directed that the base energy would be the average of any three consequent months during the base period, as per the choice of the consumer and to the advantage of the HT consumer; and base demand would be the demand recorded in any month during the base period as opted by the consumer, limited to the sanctioned demand.

5.6. This method of calculation was still being followed. However, this formula when applied to the petitioner's situation creates an anomalous situation since the Petitioner's entire energy requirements are met from its captive generation sources and therefore, the petitioner has no need for TNEB energy supply even during normal times as it was a supplier of energy even to TNEB from its plant and had substantial capacity. Consequently, the consumption of energy from TNEB sources during the base period for the petitioner would have been zero and hence, the base energy for the purpose of calculation of energy quota is also zero.

5.7. On the other hand, the Petitioner is reliant on the TANGEDCO grid and therefore, requires demand quota to be able to draw and consume the energy needed for its chemical plant. The quota demand which has been accordingly fixed for the service connection in HTSC No. 31 is 248.66 KVA which is inadequate for the petitioner to be able to draw its requisite quantum of energy and is not reflective of the consumption pattern. This has inevitably led to a situation where the petitioner is unable to draw the requisite energy without exceeding its demand quota and is faced with a situation of paying excess demand and other charges on a regular basis as part of the monthly current consumption bill.

5.8. The method of calculation followed by them is as per the SuoMotu Order No.1 of 2009 of the Commission and therefore, this petition must not be entertained is fallacious, in as much as, it is the Petitioner's stand that the method of calculation followed by TANGEDCO cannot cause prejudice to a consumer for no fault of such consumer and the entire basis of the additionality orders was such approach. The Respondent's stand is that the order of the Commission does not cover situations like that of the Petitioner and as such the unique circumstances of the Petitioner must be considered. The petitioner sets out the demand and energy quota fixation as below:

- (a) Sanctioned Demand is the power required to run the plant at full load with safety margin - 2700 KVA
- (b) Reached Demand is the actual power consumed by the plant - 2508.4 KVA
- (c) Demand Quota during normal hours is the power allocated by TANGEDCO by taking 3 months' average power drawn by consumer from TANGEDCO - 248.66KVA
- (d) Demand Quota during evening peak hours is the R&C % allocated by TANGEDCO based on the demand quota - 69.78 KVA

5.9. The Demand quota by TANGEDCO is fixed by TNEB by taking 3-months average power consumption by the consumer from TANGEDCO alone, whereas the actual total consumption which includes their captive wheeling, wind adjustment and other sources. Since the 3-month TANGEDCO consumption alone is taken for

fixing the quota, the actual consumption of the petitioner is ignored for calculating the power requirement to run the plant. Hence, the allotted quota becomes insufficient to run the Petitioner's plant. The Petitioner states that by consuming their own generation over and above the quota fixed by TANGEDCO, it is exceeding the demand allotted by TANGEDCO and thus, levied penalty. From March 2000, the Petitioner is consuming power from its own Captive power plant and from that time till date its consumption is stable and equal to the reached demand.

5.10. While so, from December 2008, fixing the demand quota during normal and evening peak hours was common for consumers who are consuming power only from TANGEDCO. For consumers consuming power from sources other than TANGEDCO, the quota should be fixed based on their total consumption. The Petitioner states that penalty for over consumption should evidently be calculated as $\text{Total consumption} - \text{Own generation \& wheeling} - \text{TNEB Quota} \times \text{penalty Rupees}$. However, the present working for penalty is $\text{Total consumption} - \text{TANGEDCO quota} \times \text{penalty Rupees}$. The Petitioner states that the demand quota during evening peak hours was fixed to manage the total peak hour power requirement and TANGEDCO power available during that time. However, the Petitioner's Captive generating plant continues to generate and inject for its own requirement.

5.11. As against the regular quota and demand fixation for the consumers who are depending only TANGEDCO power, the quantum will be same as the Meter reading and billable units.

5.12. In the Petitioner's case, the total consumption (TANGEDCO + own generation) will be higher than the Billable units and the billable units is only considered for fixation of Demand and Quota. Hence, the allotted quota and demand is insufficient to run the plant and by consuming its own power, the Petitioner is placed in a position where it inevitably exceeds the demand and energy quota fixed by TANGEDCO.

5.13. Its consumption pattern is unique and thus, the orders of the Commission dated 07-09-2010 did not envisage a situation as faced by the petitioner. The suitable directions are issued to refix the demand and energy quota for the petitioner so as to enable it to consumer captive generated power without being penalised for energy self-sufficiency.

6. Written Submission filed by Respondents:-

6.1. It is stated that Government of Tamil Nadu implemented Restriction and Control measures on the usage of electricity on all HT Industrial and Commercial consumers in the State of Tamil Nadu. This was communicated to all HT consumers and vide notice dated 01.11.2008. The important features of Restriction & Control measures were:

“1. HT SERVICES:

The cut of 40% is on the base demand and energy for HT industrial and commercial services.

The base energy consumption for HT services will be the average of any three consecutive months advantageous to the consumer between the billing periods from October 2007 to September 2008.

The base demand will be the highest maximum demand registered in any month during the period from October 2007 to September 2008”.

Illustration for notice dated 01.11.2008:-

A). Fixation of quota:-

(i) Fixing of demand quota:-

Base demand = 1009.6KVA

(The Highest demand recorded during the period 10/07 to 10/08)

60% of the base demand $(1009.6 \times 60 / 100) = 605.76$ KVA

The demand quota = 605.76 KVA

During the Evening Peak Hour (18.00hrs to 22.00hrs) quota fixed on 5% of the demand quota fixed for lighting and security purposes

Evening peak Hr demand quota $(605.76 \times 5 / 100) = 30.288$ KVA

(ii). Fixing of energy quota :-

Base Energy = 638123 units

(The highest consecutive three months average during the period 10/07 to 10/08)

60% of the base energy $(638123 \times 60 / 100) = 382874$ Units

The Energy quota = 382874 Units

During the Evening Peak Hour (18.00 hrs to 22.00hrs) quota fixed on 5% of the energy quota fixed.

Evening peak Hr energy quota $(382874 \times 5 / 100) = 19144$ units

6.2. It is stated that HT captive consumers of Tamil Nadu made representations requesting fixation of quota of 60% on TNEB supply and to permit them to use 100% of the power received by them from their captive sources in order to exempt

power cut from captive consumption. Memo dated 17.11.2008 was issued fixing the demand and energy quota exclusively on TNEB supply for the HT consumers using power from captive sources and TNEB:

Illustration on Memo dated 17.08.2008:

Fixing of Energy quota:-

- (i). Monthly base energy consumption as illustrated in working instructions dated 1.11.2008. A

- (ii). In that the actual energy supplied (monthly average) for the above three months average by the CPP B

- (iii). The actual energy availed by consumer from TNEB A – B = C

- (iv) 60% energy on C (C x 60/100) = D

- (v) The quota fixed for energy = B + D

Fixing of Demand quota:-

- (i). The base demand consumption as illustrated in working instructions dated 1.11.2008 E

- (ii). In that the calculated demand supplied for the Energy for the month by CPP F

$$F = \frac{\text{Energy supplied by CPP in a month}}{\text{No. of days in the month} \times 24 \text{ hours} \times \text{P.F } 0.95}$$

- (iii). The actual demand availed by consumer From TNEB E – F = G

- (iv) 60% demand of G (G x 60/100) = H

- (v) The demand quota fixed = F + H

(Calculation of demand supplied by generator may be worked out on par with calculation made for wheeling of power to the captive consumers as communicated in CE/PPP memo. dated 06.11.2007 and subsequent amendment thereof).

In the above method, the consumer may use their full wheeled energy without any cut. However, the H.T Consumers having Group Captive Power Plants will be permitted to use their wheeled energy only on slot to slot basis.

The consumer shall not exceed demand/energy quota fixed for the TNEB power for any reasons, either due to outage of generator of their supplier or short supply from their supplier, etc., it is their responsibility to monitor this with their generator. The excess demand/energy charges shall be collected as prescribed by TNERC for the quota violated.”

The last line in the formula ‘quota fixed for energy = B + D’ means the limit to which the consumer is entitled to utilize its own captive energy. It is the energy a captive consumer proposes to bring in (B) plus the quantum of TNEB’s energy determined under the R&C measures (D). This energy quota “(B) + (D)” is different from actual energy to be availed by HT consumer from TNEB/ TANGEDCO i.e. quota of TANGEDCO’s power “D”. It is explicit from the formula itself. This concept will become more clear from the fact that consumers who do not bring in captive energy i.e. normal HT consumers; are required to limit their consumption upto the quota fixed for TANGEDCO’s power and any excess consumption over the quota of TANGEDCO’s energy / demand is treated as excess energy or demand and charged accordingly. The difference between normal HT consumers and the captive HT consumers is that the captive HT consumers were permitted to go up to the base energy and base demand before 07.09.2010 over and above the quota fixed for TANGEDCO’s power. After 07.09.2010, they have been permitted up to sanctioned demand over and above the quota fixed for TANGEDCO’s power. Right

from 12/2008, in respect of captive users, drawl of power from TANGEDCO grid is calculated only after adjustment of captive energy brought by him against actual recorded consumption. This drawl of power from TANGEDCO is compared against the quota the fixed for TANGEDCO's power. Only in case of consumption in excess over quota, excess energy/demand charges are being levied. In the case of normal HT consumer [who does not have captive consumption], the recorded consumption is compared against the quota fixed for TANGEDCO's power. Only in case of consumption in excess over quota, excess energy/demand charges are being levied.

It is therefore clear that there cannot be different parameters for consumption of TNEB's power, one for normal HT consumers and another for captive HT consumers, for calculation of excess energy and demand in respect of "TANGEDCO's quota". From the above it is clear that excess energy and demand charges are charged if a 'captive' or 'normal' HT consumer exceeds the energy or demand quota fixed for the quantum of TANGEDCO's power.

6.3. The above memo had not been adopted with regard to fixation of quotas in respect of wind energy captive users at that point of time. Seeking to calculate demand and energy quota at par with CPP users, the wind energy captive users filed Writ Petitions before the High Court of Madras. Consequent to the order of High Court, directing the issue to be decided by the State Regulatory Commission, the State Commission initiated Suo-Motu Proceedings No.1 of 2009. On 28.10.2009 the State Electricity Regulatory Commission recognized the fixation of

quota for wind energy captive users at par with other CPP users and approved the formula in Memo dated 17.11.2008 for re-fixing the demand and energy quota for the period from 12/2008 to 10/2009 and from 01.11.2009 to all captive users, whether thermal or wind shall declare on the first day of every month, the energy proposed for captive use for the following month, which shall be considered as B and F for the purpose of fixing energy quota and demand quota respectively in the formula dated 17.11.2008 as under:

11. The Commission, as detailed in the above paragraphs, directed the TNEB to re-work the demand and energy quota of wind captive users with immediate effect. The method of determination of demand and energy quota for wind energy captive users was to be same as that of other captive users. The TNEB was, further, directed to permit utilization of wind energy banked as on 1-11-2008 in five equal monthly instalments between 1-12-2008 and 30-4-2008, wherever necessary by enhancing the demand and energy quota as in the case of other captive users. The method for determination of demand energy quota for captive users was outlined by the TNEB in Memo CE/Comml./EE/DSM/PMM/F.Powercut/D.28/2008 dated 17-11-2008.

12. The Commission in its Order dated 28-11-2008 arrived at the basis of computation of demand and energy quota for wind energy generators on the basis of material available on record at that point of time, that is, the formula contained in the memo of the TNEB dated 17-11-2008.xxxx

13. xxxxx Therefore, we have no hesitation in striking down these three memos as violative of the Order of the Commission dated 28-11-2008. The Commission reserves its right to initiate appropriate proceedings under Sections 142 and 146 of

the Electricity Act, 2003. It is the formula contained in the memo of TNEB dated 17-11-2008 alone, which is recognized and approved by the Commission.

xxxxxx

16. After taking into account the submissions made by both the parties, the Commission directs as follows:-

(1). The base energy consumption and base demand shall be computed for all captive users including the wind energy captive users on the basis of the formula contained in the TNEB Memo No.CE/ Comm/ EE/DSM/ AEE/PMM/F. Power Cut/ D.001/08 dated.1-11-2008;

(2) For any demand sanctioned after 1-10-2008, the additional energy quota and demand energy quota shall be as per the formula prescribed by the TNEB in Memo No.CE/ Comm/ EE/ DSM/ F.Powercut/ D.001/2008 dated 1-11-2008;

(3) The demand and energy quota for the wind energy supplied after 1-11-2008 shall be fixed in accordance with the memo dated 17-11-2008 of TNEB;

xxxx

(5) Demand quota and energy quota after being redrawn in accordance with the above directions shall be set off against the actual demand and energy consumed between 1-11-2008 and 30-4-2009;

(6) Excess demand charges and excess energy charges for the period from 1-11-2008 to 30-4-2009 shall be computed with reference to the re- drawn demand and energy quota;

xxxxxx

(8) For the period from 1-5-2009 to 31-10-2009, the formula for computation of energy quota and demand quota contained in the circular of TNEB dated 17-11-2008 shall apply, that is with effect from 1-5-2009 the petitioners are entitled to demand quota for current generation in accordance with the formula of 17-11-2008; if the energy quota and demand quota during this period has been exceeded by the captive user, he will be entitled to draw from the energy banked during this period to the extent of adjusting the excess demand and excess energy consumption;

(9) The excess demand charges and excess energy charges for the period from 1-5-2009 to 31-10-2009 shall be determined with reference to the demand and energy quota calculated in accordance with para (8) above;

(10) For the future, from 1-11-2009 the base demand and base energy may continue to be fixed with reference to the formula laid down by TNEB in their memo dated 1-11-2008;

(11) Unutilised banked energy available as on 1-11-2009 may be utilized by the wind captive users in five equal monthly instalments from 1-11-2009 upto 31-3-2010 in addition to current generation of that month;

xxxxxx

(13) From 1-11-2009, all captive users, whether thermal or wind, shall declare on the first day of every month, the energy proposed for captive use for the following month, which shall be considered as B and F for the purpose of energy quota and demand quota respectively in terms of the memo of TNEB dated 17-11-2008; the energy so declared shall roughly be the monthly average generation;

(16) If a consumer opts out of wheeling agreement and becomes an ordinary consumer, A and E referred in the memo dated 17-11-2008 shall be deemed to be the base energy and base demand.”

6.4. The TANGEDCO communicated the methodology of quota fixation and calculation of excess charges from the month of 12/2008 onwards in respect of wind energy captive users and from 11/2009, all captive users based on memo dated.17.11.2008 vide Memo. No. CE/ Comml/ EE/ DSM/ AEE/ PMM/F. Power cut/ D.508/ 09, dated 25.11.09as follows:

1. First part = 12/2008 to 04/2009
2. Second part = 05/2009 to 10/2009
3. Third part = 11/2009 to 092010 [relevant portion]

Third Part from 1.11.2009 onwards:-

(10) For the future, from 1-11-2009 the base demand and base energy may continue to be fixed with reference to the formula laid down by TNEB in their memo dated 1-11-2008.

11) Unutilized banked energy available as on 1-11-2009 may be utilized by the wind captive users in five equal monthly instalments from 1- 11-2009 upto 31-3-2010 in addition to current generation of that month.

(12) The energy, which remains in the bank of wind energy generators as on 1-11-2009 after adjustment in accordance with para (8) above, shall be available for consumption of the wind energy captive user between 1-11-2009 and 31-3-2010 in five equal monthly installments. In addition, current generation would also be eligible for additional energy and additional demand quota; both current generation as well as the energy drawn from the bank would count for computation of equivalent demand.

(13) From 1-11-2009, all captive users, whether thermal or wind, shall declare on the first day of every month, the energy proposed for captive use for the following month, which shall be considered as B and F for the purpose of energy quota and demand quota respectively in terms of the memo of TNEB dated 17-11-2008; the energy so declared shall roughly be the monthly average generation.

(14) From 1-11-2009, peak hour current generation as well as peak hour banked energy shall be eligible for peak hour utilization every month subject to the limit of one-twelfth of annual peak hour generation.

(15) Energy which remains unutilized as on 31-3-2010 shall be eligible for encashment (Instruction for this point will be issued separately by CE/NCES).

IIIa) Fixing of Energy quota from 1.11.2009 onwards:-

- (i) Monthly base energy consumption as illustrated }
in working instructions dated 1.11.2008. - A
- (ii) The energy proposed for captive use for the }
following month as per the direction of TNERC vide }
Para No.13 & 14 of Suo –motu proceedings }
dt.28.10.09 - B

B is 1/5 of the banked energy available as on 1.11.09, shall be added for the period from 01.11.09 to 31.03.2010 + current generation to be wheeled inclusive of all captive powers (Roughly monthly average Generation as declared by the consumer at the 1st day of every month for the following month)

- (iii) The actual energy to be availed by consumer }
from TNEB A – B = C
- (iv) 80% energy on C (C x 80/100) = D
- (v) The quota fixed for energy = **B + D**
(B, D should be shown separately without adding)

The above **B** shall not exceed **A** and shall be divided into two part as normal & peak hours for the energy to be wheeled.

(For peak hour, from 01-11-2009, peak hour current generation as well as peak hour banked energy shall be eligible for peak hour utilization every month subject to the limit of one-twelfth of annual peak hour generation).

IIIb) Fixing of Demand quota from 1.11.2009 onwards:-

- (i) The base demand consumption as illustrated} in working instructions dated 1.11.2008. - E
- (ii) The demand proposed for captive user for the following month as per the direction of TNERC vide Para No.13 & 14 of Suo –motu proceedings dt.28.10.2009 - F

$$F = \frac{\text{Energy supplied by captive user in a month}}{\text{No. of days in the month} \times 24 \text{ hours} \times P.F}$$

F is 1/5 of the banked energy demand available as on 01.11.09 shall be added for the period from 1.11.09 to 31.3.2010 + demand for the current generation to be wheeled inclusive of all captive powers as given by the consumer at the 1st day every month for the following month

- (iii) The actual demand to be supplied by TNEB $E - F = G$
- (iv) 80% demand of G ($G \times 80/100$) = H
- (v) The demand quota fixed = $F + H$
(F, H should be shown separately without adding)

The above **F** shall not exceed **E** and shall be divided into two part as normal & peak hours for the demand to be wheeled.

For peak hours, from 01-11-2009, peak hour demand current generation as well as peak hour banked energy demand shall be eligible for peak hour utilization every month subject to the limit of one-twelfth of annual peak hour generation.

IIIC) Excess demand and energy charges should be levied for part 3 :-

a. When normal hour recorded demand (minus) normal hour demand actually supplied and demand for 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds **H**, then excess demand charges shall be levied. (Demand actually supplied means the consumer actually supplied demand in the already declared quantum in **F**). **F** is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed **E**.

b. When peak hour recorded demand (minus) peak hour demand actually supplied and demand for 1/5 of the peak hour banked energy (for the period from 1.11.09 to 31.3.2010) exceeds peak hour quota of **5%**, then excess demand charges shall be levied. (Demand actually supplied means the consumer actually supplied demand in the peak hour already declared quantum in **F**) **F** is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed **E**(peak hour)

c. When normal hour recorded energy (minus) normal hour energy actually supplied within the proposed quantum and 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds **D**, then excess energy charges shall be levied. (Energy actually supplied means the consumer actually supplied energy for the month in the already declared quantum in **B**) **B** is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed **A**).

d. When peak hour recorded energy (minus) peak hour energy actually supplied within the proposed quantum and 1/5 of the peak hour banked energy (for the period from 1.11.09 to 31.3.2010) exceeds peak hour energy quota of **5%**, then excess energy charges shall be levied. (Energy actually supplied means the consumer actually supplied energy in the peak hour as already proposed and declared in **B**) **B** is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed **A** (peak hour)

(16) If a consumer opts out of wheeling agreement and becomes an ordinary consumer, **A** and **E** referred in the memo dated 17-11-2008 shall be deemed to be the base energy and base demand. In that case, the consumer is eligible only for 5% of the demand and energy quota during peak hours.

For the above case consumers, **B and F** are zero, the quota shall be fixed on **A & E**

Based on the above procedure, quota may be fixed for the past /future periods to the consumers as per the eligible percentage of quota of 60%, 70% & 80% prevailed for the respective periods of past and future in super-session to earlier memos dated.19.12.2008, dt.4.8.2009 & dt.21.8.2009.

The consumer shall not exceed demand/energy quota fixed for the TNEB power for any reasons, either due to outage of generator of their supplier or short supply from their supplier, etc., it is their responsibility to monitor this with their generator. The excess demand and energy charges shall be collected as prescribed by TNERC for the quota violated.

For the above procedure, the detailed billing and working procedure will be evolved and communicated by the CFC/Revenue for calculation.

For Para No. 7 & 15, regarding payment for banked energy of Suo–Motu proceedings No.1, dt. 28.10.2009 of TNERC, separate instruction from CE/NCES will be issued.”

6.5. The wind captive consumers filed MP 6 of 2010 seeking a relief that since the infrastructure facilities has already been created based in the sanctioned demand by the Tamil Nadu Electricity Board, it is but logical to allow purchase of power from third parties up to the sanctioned demand instead of restricting the

same to the base demand. The State Commission by interim order dated 17.08.2010 and final order dated 07.09.2010 held that:

Interim order dated.17.08.2010:

The base demand as worked out by the TNEB on the basis of the circular dated 17.11.2008.xxxx

The consumer should declare in advance one month prior to the billing period for availing of Open Access procurement. For example for a billing period commencing from 27th September 2010, the declaration should be made before 27th August 2010.

If the Open access procurement does not materialize to the extent projected by the consumer, he will limit his drawal to the extent of actual availability of Open access procurement.

Final Order dated.07.09.2010:

“4.5. The equivalent demand brought in by the consumer from captive and third party sources should be subtracted from the maximum demand recorded by the meter of the consumer. Balance would be the demand actually supplied by the TNEB. If this figure exceeds the quota demand of the TNEB, the consumer would be liable to pay excess demand charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008. Similarly, the energy purchased from captive and third party sources would be subtracted from the total energy consumed by the consumer. The balance would be deemed to be the energy actually supplied by the TNEB. If this quantum exceeds the energy quota of the TNEB, the consumer would be liable to pay excess energy charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008.”

6.6. As per the TNEB's memo dated 17.11.2008, which was approved by the State Commission in the SMP.No.1 of 2009 dt.28.10.2009 in connection with computation of excess charges, wherein it is clearly stated at page no.3 of the circular memo dt.17.11.2008 and 25.11.2009 III [C] (c), which had been issued in accordance with the direction of the State Commission in the order dated.28.10.2009 that:

17.11.2008:

“The consumer shall not exceed demand/ energy quota fixed for the TNEB's power for any reasons, either due to outage of generator of their supplier or short supply from their supplier, etc., it is their responsibility to monitor this with their generator. The excess demand and energy charges shall be collected as prescribed by TNERC for the quota violated.”

25.11.2009 III [C](c):

c. When normal hour recorded energy (minus) normal hour energy actually supplied within the proposed quantum and 1/5 of the banked energy (for the period from 1.11.09 to 31.3.2010) exceeds D, then excess energy charges shall be levied.

6.7. From the above, it may be concluded that the procedure in connection with the calculation of excess demand and energy charges i.e the demand/energy brought in by the consumer would be subtracted from the total recorded demand/energy of the consumer and the balance would be the demand/energy actually supplied by the TANGEDCO, this figure exceeds the demand/energy quota fixed for TNEB's power, the consumer would liable to pay the excess demand/energy charges had been clearly mentioned in the III C of the memo dated 25.11.2009, thus this procedure was made clear by the TNEB's memo dated

25.11.2009 which was implemented retrospectively from the month of 12/2008. Therefore, it is evident that TNEB had already followed the said procedure and the State Commission in the order dated 07.09.2010 had only reiterated the same. Hence, the State Commission had not decided any new procedure in the said order dated 07.09.2010 in connection with the method of calculation of excess energy and demand charges. A comparative statement of Respondent's memo dated 25.11.2009 and order of the State Commission dated 07.09.2010 is given below:

TANGEDCO circular dated. 25.11.2009 [with effect from 12/2008]	State Commission order dated.07.09.2010
<p><u>" IIIC) Excess demand and energy charges should be levied for part 3 :-</u></p> <p>a. When normal hour recorded demand (minus) normal hour demand actually supplied and demand for 1/5 of the banked energy (for the period from 1.11.2009 to 31.3.2010) exceeds H, then excess demand charges shall be levied. (Demand actually supplied means the consumer actually supplied demand in the already declared quantum in F). F is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed E.</p> <p>c. When normal hour recorded energy (minus) normal hour energy actually supplied within the proposed quantum and 1/5 of the banked</p>	<p>The equivalent demand brought in by the consumer from captive and third party sources should be subtracted from the maximum demand recorded by the meter of the consumer. Balance would be the demand actually supplied by the TNEB. If this figure exceeds the quota demand of the TNEB, the consumer would be liable to pay excess demand charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008.</p> <p>Similarly, the energy purchased from captive and third party sources would be subtracted from the total energy consumed</p>

<p>energy (for the period from 1.11.09 to 31.3.2010) exceeds D, then excess energy charges shall be levied.(Energy actually supplied means the consumer actually supplied energy for the month in the already declared quantum in B) B is 1/5th of banked energy and energy already declared by the consumers for the month which shall not exceed A)</p>	<p>by the consumer. The balance would be deemed to be the energy actually supplied by the TNEB. If this quantum exceeds the energy quota of the TNEB, the consumer would be liable to pay excess energy charges at the rates stipulated in the order of the Commission in M.P.No.42 of 2008.</p>
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6.8. From the above, it is evident that the procedure in connection with the calculation of excess demand and energy charges i.e. the energy brought by the consumer would be subtracted from the total recorded energy of the consumer and balance would be the energy actually supplied by the TANGEDCO, this figure exceeds the energy quota fixed for TNEB's power, the consumer is liable to pay the excess energy charges is clearly mentioned in the III C, thus this procedure was made clear by the TNEB's memo dated 25.11.2009 which was implemented retrospectively from the month of 12/2008. Therefore, it is evident that the Respondent was following the procedure, approved by SMP No. 1 of 2009, communicated by memo of 25.11.2009 and the same was reiterated by the State Commission in its order dated 07.09.2010. Hence, the State Commission had upheld in the said order dated 07.09.2010 in connection with the method of calculation of excess energy and demand charges which was followed by TANGEDCO right from 12/2008. Therefore, the contention of the petitioner that its consumption pattern is unique and that necessary that suitable directions are

issued to refix the demand and energy quota for the petitioner so as to enable it consume captive generated power without being penalized for energy self-sufficiency is not acceptable one. Hence, the petition is neither maintainable in law nor on facts.

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7. Findings of the Commission:-

7.1. The petitioner's prayer in this petition is to direct the respondents to re-fix the Demand and Energy quota to the petitioner, during the R & C period, taking into account of the unique circumstances of the petitioner, so as to permit the petitioner to consume power from its captive power plant (CPP) and captive wind generation units without suffering excess demand and excess energy charges and to permit the petitioner to consume the self-generated power up to the sanctioned demand; and upon refixation sought to direct the respondent to refund the excessively collected Demand/Energy charges.

7.2. The petitioner is having a Biomass based power generation plant of 6 MW capacity in Sivaganga EDC and also operating a 63.5 MW capacity Coal fired power plant in Gummidipoondi, Tiruvallur District. The power generated from these plants are partially sold to TANGEDCO and 3rd parties. And also stated that the petitioner has obtained a HT supply under HT.SC.31 (M/s.Tamilnadu Chemical Products Limited) and the total energy requirements for this chemical manufacturing plant is met from the above captive power plants and the WEGs of the petitioner. Since the entire energy requirement is consumed from the captive

generating plant of the petitioner, their consumption from TANGEDCO is almost zero units.

7.3. As the TANGEDCO had introduced the Restriction and Control measures vide Memo dated 01-11-2008, the petitioner was allotted with a Demand quota of 186.51 KVA and an Energy quota of zero units to its HT SC No.31 as below -

"M/s. Tamil Nadu Chemical Products. HT SC No.31

TNEB Base Energy consumption Calculation:

1) Base Energy consumption as illustrated in working Instructions dt.1.11.2008	-	13,05,478 units
2) Revised Base Energy (A)	-	13,05,478 units
3) Actual monthly average energy portion from Captive sources (Thermal, Wind, Biomass etc.) / 3 ^d party sources during the three months taken For calculation of Base energy	-	13,55,050 units
		Limited to Base
	(B)	- 13,05,478 units
4) $C = (A) - (B)$	-	0 Units
5) The TNEB energy quota for the consumer $D = (C * 60/100)$	-	0 Units

The petitioner has argued that the quota as fixed to them, does not reflect the actual power consumption patterns of the petitioner in as much as the petitioner's energy consumption from its CPP and WEGs is much higher than the demand quota determined by the TANGEDCO for the petitioner's service connection. As a result of this anomaly the petitioner is put into a situation where in the petitioner is being regularly penalized towards exceeding demand and energy quota. The petitioner being penalized though it is completely self-reliant for its energy requirements. As the energy consumption availed from TNEB sources

during the Base period for the petitioner have been zero, the energy quota calculated from base energy was also zero. Since the petitioner relies on the TANGEDCO grid, it requires adequate demand quota for the consumption of energy required to its plant. The quota demand fixed to HT SC No.31 is 186.5 KVA which is inadequate to the petitioner to draw required quantum of energy. This has led to the situation where the petitioner is unable to draw the requisite energy without exceeding its demand quota. The petitioner also admits that calculation of quota received from the Respondent shows the adherence of the calculation as approved by the Commission. However, the petitioner has stated that its consumption pattern is unique and that the orders of the Commission do not take into purview the situation such as the one faced by the petitioner. Hence, its Demand and Energy quota to be re-fixed so as to enable it consume its captive generated power without being penalized for energy self-sufficiency.

7.4. The Respondent in this connection has stated that the Captive consumers were fixed with Demand and Energy quota based on TNEB's memo dated 17.11.2008, as below :-

Illustration on Memo dated 17.11.2008:

Fixing of Energy quota:-

- | | | | |
|--------|---|-----------|--|
| (i). | Monthly base energy consumption as illustrated} in working instructions dated 1.11.2008. } | A | |
| (ii). | In that the actual energy supplied (monthly } average) for the above three months average by} the CPP } | B | |
| (iii). | The actual energy availed by consumer from} TNEB } | A – B = C | |

- (iv) 60% energy on C ($C \times 60/100$) = D
(v) The quota fixed for energy = B + D

Fixing of Demand quota:-

- (i). The base demand consumption as illustrated }
in working instructions dated 1.11.2008 } E
- (ii). In that the calculated demand supplied }
for the Energy for the month by CPP } F
Energy supplied by CPP in a month

$$F = \frac{\text{Energy supplied by CPP in a month}}{\text{No. of days in the month} \times 24 \text{ hours} \times \text{P.F} 0.95}$$
- (iii). The actual demand availed by consumer }
From TNEB } E – F = G
- (iv) 60% demand of G ($G \times 60/100$) = H
- (v) The demand quota fixed = F + H

The Commission approved the formula / method of computation of Demand and Energy Quota as it contained TNEB's Memo. dated 17.11.2008. The same formula has been adopted in the Commission's subsequent Order in Suo-Motu Proceedings No.1 of 2009 dated 28.10.2009 considering the energy proposed by the Captive user as B and F in the same formula for computation of Energy & Demand Quota for the period from 01.11.2009.

7.5. The petitioner also stated that fixing the demand quota during normal and evening peak hours was common for consumers who are consuming power only from TANGEDCO. For consumers consuming power from sources other than TANGEDCO, the quota should be fixed based on their total consumption. Also stated that penalty for over consumption should evidently be calculated as Total consumption – Own generation & wheeling – TNEB Quota x penalty Rupees.

However, the present working for penalty is = Total consumption – TANGEDCO quota x penalty Rupees. Further stated that the total consumption (TANGEDCO + own generation) will be higher than the Billable units and the billable units is only considered for fixation of Demand quota. Hence the allotted Demand quota is insufficient to run the plant and by consuming its own power, the petitioner is placed in a position where it inevitably exceeds the demand and energy quota fixed by TANGEDCO.

7.6. From the above submissions, we find that, for the petitioner's HT service No.31 in Sivaganga EDC was fixed with the Demand/Energy quota based on the TANGEDCO's Memo.No.CE/Comml./EE/DSM/F.Power cut/D.001/2008 dated 01.11.2008 and 17.11.2008. For fixation of quota during Restriction and Control period, the Base demand and Base energy were arrived based on the highest maximum demand recorded and the average of any consecutive three months period consumption advantageous to the consumer between the billing period from October 2007 and September 2008. Taking into account of captive power supplied during such period, the restriction imposed on the power supplied by the TNEB.

7.7. It is clear that, during the Base period, the total consumption during the 3 months' period was adjusted against its captive generation. Hence, while applying the formula as per Memo.17.11.2008, the petitioner was fixed with zero units as 'Energy quota' and 186.5 kVA as Demand quota.

7.8. The petitioner's contention to calculate the excess Energy/Demand charges under an unique method i.e., "Total consumption (-) Own generation & wheeling (-) TNEB quota" is completely defeating the very concept of methodology approved by the Commission. The petitioner is hereby prayed to consider the entire generation into account for calculation of excess charges, that is, to consider the entire energy available for the calculation of equivalent demand. In this connection, Commission has already stated in many issues that the equivalent demand shall be calculated based on the actual energy adjusted during the month.

7.9. The same has been reiterated in the Order dated 22-02-2019 in M.P.17 of 2013 & others by the Commission -

"11.10. From the above orders of the Hon'ble APTEL, it is clear that the Equivalent Demand has to be calculated based on the energy actually consumed by the captive user or energy adjusted in a month. The said order has not been appealed by any parties and as such it is allowed to become final and hence it is not now open to the parties to reargue the same."

7.10. If at all, the petitioner wants to avail any enhanced quota, the petitioner had the only option as stated by the Commission in para 16(16) in SMP.No.1 of 2009 dated 28.10.2009, to exercise to opt out of wheeling agreement and become an ordinary consumer, as below, but the same was not opted for at that time.

"(16) If a consumer opts out of wheeling agreement and becomes an ordinary consumer, A and E referred in the Memo dated 17.11.2008 shall be deemed to be the based energy and base demand."

7.11. In view of the above, we find that –

(i) The petitioner being the CPP as well as WEG captive user, the Demand & Energy quota fixed in their case based on TNEB's memo dated 01.11.2008 &

17.11.2008. The petitioner is having its grievance that the demand quota fixed to its High Tension service connection No.31 of 186.51 KVA is not adequate in terms of the formula framed in memo. dated 17.11.2008; whereas the Energy quota fixed to the petitioner's case is zero, but it has no objection on it.

(ii) In the above formula TNEB's portion of quota is determined applying 60/70/80 % quota on such resultant energy/demand which arrived by subtracting the Energy / Equivalent demand supplied by CPP/CGP (in such base period) from the Monthly Base energy / Base demand respectively. This has been upheld & approved by the Commission and Appellate tribunal for Electricity in many occasions viz.,

(iii) As the formula has been framed in such a way that the power cut imposed on TNEB portion of power supply during the Base period, in the petitioner's case, we find nothing wrong in it. The Appellate Tribunal for Electricity also upheld the Licensee's Memo dated 17.11.2008 in its various Judgments viz., Appeal No.36 of 2012 & other dated 31.10.2012, Appeal No.51 & 56 of 2012 dated 12.12.2012.

(iv) Moreover, in this petition, the petitioner has not any specific method / recommended of quota fixation except a prayer to allow the petitioner to consume upto the sanctioned demand.

(v) Any unique nature of consumption by a consumer may not provide any privilege to any consumer for a special method of Quota fixation or excess charges calculation, other than a method prescribed under Memo.17.11.2008 by the TANGEDCO. Since the method has already been upheld by Commission as well as Hon'ble APTEL in many Orders, the methodology is said to be reached its finality.

(vi) In result, we are of the considered view that the petitioner has no prima facie case in claiming of any other method of Demand / Energy quota. The petition is dismissed devoid of any merits.

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

/True Copy /

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

Secretary
Tamil Nadu Electricity
Regulatory Commission