

**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)**

**M.P. No.9 of 2021**

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

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

**Dates of hearing : 09-02-2021; 23-03-2021; 20-04-2021  
22-06-2021 and 13-07-2021**

**Date of Order : 28-12-2021**

The above Petition came up for final hearing on 13.07.2021. The Commission upon hearing the arguments of ThiruM.Gopinathan, Standing Counsel and after perusing the documents, written submissions filed, passes the following order:-

**ORDER**

**1) Prayer of the Petitioner in M.P.No.9 of 2021:-**

The prayer of the petitioner, TANGEDCO, is to:

**(i)**To approve the proposal to purchase solar power from solar power plants of capacity 1 MW to 2 MW upto a capacity of 500 MW from individual farmers/group of farmers/cooperatives/Panchayats/Farmer Producer Organisations(FPO)/Water User Associations(WUA)/developers for establishing solar power plants under PM KUSUM scheme component –A considering upper ceiling limit of Rs.3.00 per unit with the tender specification as discussed in para 9 and 10 of the petition.

**(ii)** To approve the draft tender specification as enclosed in Annexure –I and draft Power Purchase Agreement as enclosed in Annexure – II.

**(iii)** To approve the deviations as discussed in para 12 of the petition and to fix line loss to be deducted.

**(iv)**To approve and ratify the action of having floated the tender by TANGEDCO in Tamil and English dailies on 21.1.2021 with tender specification number CE/NCES/OT.No.01/2020-21 in view of urgency and

**(v)** To pass such other order or orders as the Commission deems fit.

## **2) Facts of the case:**

**2.1**The Government of India, Ministry of New and Renewable Energy (MNRE) has formulated and launched a New Scheme for the farmers under the name Pradhan Mantri Kisan Urja Surakshaevem Utthan Mahabhiyan (PM-KUSUM) Scheme comprising the following components:

(a) Component-A: Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Grid Connected Solar Power plants of individual plant size upto 2 MW;

(b) Component-B: Installation of 17.50 Lakh Standalone Solar Powered Agriculture Pumps of individual capacity upto 7.5 HP; and

(c) Component-C: Solarisation of 10 Lakh Grid-Connected Agriculture Pumps of individual pump capacity upto 7.5 HP.

The scheme will also give an opportunity to the farmers to increase their income.

**2.2** MNRE has issued the Guidelines for Implementation of Pradhan Mantri Kisan Urja Surakshaevem Utthan Mahabhiyan (PM-KUSUM) Scheme on July 22, 2019 and clarifications there upon. As per the guidelines, **Component-A** will be implemented initially on pilot mode for 1000 MW capacity.

**2.3** Under Component-A, solar or other Renewable Energy based Power Plants (REPPs) of capacity 500 kW (0.5 MW) to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations/ Water User Associations (hereinafter called as Renewable Power Generator (RPG)), preferably within five kilo metre (5 km) radius of the rural 33/11 kV sub-stations to be notified by the distribution companies. In case the farmers/ group of farmers/ cooperatives/ panchayats/ Farmer Producer Organisations/ Water User Associations etc., are not able to arrange equity for setting up of the project, they can opt for developing the project through developer(s) or through local distribution licensee which will be considered as Renewable Power Generator (RPG) in this case.

**2.4** The REPPs are to be commissioned within twelve (12) months from the date of issuance of Letter of Award (LoA) from the respective distribution licensee and the power generated from the same will be purchased at a pre-fixed levelised tariff for a period of twenty-five (25) years from Commercial Operation Date (COD) of the project. The guidelines dated 22.07.2019 and clarifications thereon issued by GoI spell out the modalities of the Scheme in detail. The guidelines also include the model Power Purchase Agreement (PPA) to be executed between RPG and the distribution licensee.

**2.5** The proposal of the petitioner is to purchase solar power under Component A of KUSUM scheme by undertaking a competitive bid mechanism for project capacities of 1 MW and above but upto 2 MW considering an upper ceiling limit of Rs.3.00 per unit.

### **3. Contentions of the petitioner:-**

**3.1** The Government of India has executed, "Paris Agreement COP 21" wherein the country has committed to reduce the emissions intensity of its GDP by 33.35% by 2030 from 2005 levels by increasing the share of non-fossil fuel based energy resources to 40% of installed electric power capacity by 2030. With this commitment, the Government of India has set a target of 100 GW of Solar power, 60 GW of Wind power, 10 GW from bio-power and 5 GW from small Hydro power.

**3.2**In order to increase the share of renewable energy in the State of Tamil Nadu, Tamil Nadu Solar Energy Policy 2012 was announced, wherein 3000 MW of solar power plants have to be commissioned by 2015. Subsequently Tamil Nadu Solar Energy Policy, 2019 has been announced with an ambitious target of around 9000 MW of solar power plants by 2022.

**3.3** The total installed capacity of solar PV power plants is 4315 MW of which utility scale is 4006 MW and consumer scale capacity is 309 MW. In order to achieve the renewable energy targets, “Renewable Purchase Obligation“ has been fixed by both Ministry of Power and by the Honble TNERC. The details of RPO targets for Solar power are :

| Sl.No. | Year    | TNERC  | MNRE   |
|--------|---------|--------|--------|
| 1.     | 2014-15 | 0.05%  | ---    |
| 2.     | 2015-16 | 0.50%  | ---    |
| 3.     | 2016-17 | 2.50%  | 2.75%  |
| 4.     | 2017-18 | 5%     | 4.75%  |
| 5.     | 2018-19 | 5%     | 6.75%  |
| 6.     | 2019-20 | 5%     | 7.25%  |
| 7.     | 2020-21 | 8%     | 8.75%  |
| 8.     | 2021-22 | 10.50% | 10.50% |

**3.4** The details of year wise RPO target for solar power fixed to the State by Ministry of Power in MW are as follows:

| Year         | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 |
|--------------|---------|---------|---------|---------|---------|---------|
| Target in MW | 1983    | 3282    | 4553    | 6223    | 8051    | 9398    |

**3.5** As per the MNRE target, approximately 9000 MW of solar power is required for the year 2021-22 to meet Tamil Nadu's Solar Purchase Obligation. As on 31.12.2020 approximately 4006.151 MW of utility scale solar power plants have been commissioned in the State. Hence as per the MNRE target, 4993.849 MW of solar power is required by 2022.

**3.6** To achieve the "Solar RPO target", TANGEDCO has contracted as well as proposed the following :

- a. **250MW** capacity of Floating Solar PV Power Projects to be established at Vaigai, Mettur and BhavaniSagar Reservoirs. The project to be executed by M/s.SECI and expected to be completed by 2022.
- b. Power Sale Agreement has been executed between M/s SECI and TANGEDCO on 5.5.2020 for purchase of power from **500MW** SPV plants to be established under ISTS – Tranche VI at Rs.2.71+0.07 (trade margin) per unit and the project expected to be commissioned during 2022.
- c. MOU signed for Solarisation of Agricultural feeder by installing **50 MW** SPV plants by M/s SECI on pilot basis

- d. Implementation of Component C of PM-KUSUM scheme in 20000 nos of agricultural services with 11 KW solar PV plant totalling **220 MW** is to be initiated by TEDA based on the approval of TNERC.

**3.7** There is yet a shortfall of approximately 3973.849 MW. It is necessary to further procure solar power from the developers establishing solar power plants in Tamil Nadu in order to achieve the RPO targets. MNRE vide its notifications dt.22.7.2019 and 13.11.2020 has issued guidelines for implementation of PradhanMantriKisanUrjaSurakshaevamUtthanMahabhiyan Scheme for launch of new scheme for farmers at All India basis involving three components A, component B and component C.

**3.8** Since there is an RPO shortfall, TANGEDCO has proposed to implement PM KUSUM scheme Component –A in the State of TamilNadu for purchase of solar power through tender process from individual farmers/group of farmers/co-operatives/Panchayats/farmer producer organisations(FPO) /Water user associations(WUA)/Developers on behalf of the farmers for a capacity of 1 MW to 2 MW for a total capacity of 500 MW capacity.

#### **4.0 Tender specification criteria:**

- a) **Earnest Money Deposit (EMD):**Bank Guarantee for a value of Rs. 1 Lakh (Rupees one lakh only) per MW issued by Nationalized/ Scheduled banks in INDIA Valid for a period of 180 days from the date of opening of techno commercial bid.

**b) Processing fees:** non-refundable processing fee of Rs.5000 (Rupees five thousand only) per MW or part thereof of the capacity applied in the form of DD/RTGS and to be paid on or before the due date of opening enclosing proof along with bid.

**c) Performance bank guarantee:** Successful bidders to furnish Performance Bank Guarantee (PBG) of Rs.5 Lakh /MW within 30 days from the date of issue of Letter of Award (LOA).

**d) Criteria for eligible solar power plant developers:**

Solar power plants (Renewable Energy Power Plant -REPP) of capacity 1MW to 2 MW will be setup by individual farmers/ group of farmers/ cooperatives/ Panchayats/ Farmer Producer Organizations (FPO)/Water User associations (WUA)/developer on behalf of the above said categories called as the Solar power Generator (Renewable Power Generator -RPG). The REPP will be preferably installed within five km radius of the sub-stations in order to avoid high cost of sub-transmission lines and to reduce transmission losses.

**e) Land Selection:**

The REPP under the scheme would be implemented primarily on Barren / uncultivable land, fallow and agricultural land, pasture lands and marshlands offarmers. Agricultural land is also permitted under the scheme provided that solar plants are installed in stilt fashion (i.e. raised structure for installation of



Solar panels) and with adequate spacing between panel rows for ensuring that farming activity is not affected.

**f) Substation availability:**

Substation wise and feeder wise sustained peak details are enclosed in Annexure-F of the tender specification. Tenderers whose project site is preferably within 5 KM radius of the notified substation would be considered for evaluation.

**g) Technical Criteria:**

The detailed technical parameters for Solar PV Power Project to be selected are as per Annexure-C of tender specification.

**h) Connectivity with the sub-station:**

(i) REPP of capacity up to 2 MW may be connected at 11 kV/22kV/33kV side of sub-station and the selected RPG will be responsible for laying of dedicated 11 kV line from REPP to sub-station, construction of bay and related switchgear at sub-station where the plant is connected to the grid and metering is done. RPG can also get constructed the 11 kV lines through TANGEDCO by paying the applicable cost and other charges. RPG will be responsible for maintaining this dedicated 11 kV/22kV/33kV line. In case more than one bidders are awarded projects to be connected to same Sub-station, they shall be permitted to coordinate with each other for setting up common transmission line for feeding to Sub-Station if they so desire and with the approval of TANGEDCO.

(ii) Further REPP of capacity 1MW to 2 MW may also be connected to the existing 11kV feeders of the substations. In such case, it is the responsibility of the RPG to isolate the SPV plant in case of abnormality/overloading that may occur in the feeder/Substation. Metering shall be done at the HT side of the SPV plant, where the power is injected into the grid. For interconnection with grid and metering, the RPG shall abide by the relevant CERC/ SERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and TNERC metering regulation as amended and revised from time to time.

(iii)As the REPP is to be connected in the existing 11kV feeders, metering with AMR facility shall be provided in the outgoing HT side of the SPV plant and losses would be to the account of the developer and the payment would be made for the net generation after deducting losses as fixed by the Commission.

**i) Interconnection point/Delivery/Metering point:**

i) If the solar power plants are connected through dedicated feeder it shall mean the point or points at the voltage level of 11kV/22kV/33kV new transmission line laid by the developer, connecting the solar power Projects with the substation system. Metering shall be done at Substation end where the line is connected to the grid. For interconnection with grid and metering, the RPG shall abide by the relevant CERC/ SERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and the Commission's

metering regulation as amended and revised from time to time.

ii) If the solar power plants are connected to the existing 11kV/22kV/33kV feeder of TANGEDCO then it shall mean the point or points at the voltage level of 11kV/22kV/33kV connecting the solar power Projects with the existing 11kV/22kV/33kV transmission line. Metering shall be done at the HT side of the SPV plant, where the power is injected into the grid. For interconnection with grid and metering, the RPG shall abide by the relevant CERC/ SERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and the Commission's metering regulation as amended and revised from time to time.

**j) Capacity Utilization Factor (CUF):**

TANGEDCO, in any Contract Year shall not be obliged to purchase any additional energy from the RPG beyond the contract capacity. For the first year of operation, the above limits shall be considered on pro-rata basis. There shall be no penalty to RPG for short fall in solar power generation from minimum prescribed CUF.

In case at any point of time, the peak of capacity reached is higher than the contracted capacity and causes disturbance in the system at the point where power is injected, the RPG will have to forego the excess generation and reduce

the output to the contract capacity and shall also have to pay the penalty/charges (if applicable) as per applicable regulations issued from time to time.

**k) Payment clause:**

The due date for payment of energy bill will be 60 days from the date of receipt (excluding the date of receipt) of bill in complete shape from the RPG to account of the RPG, as shall be previously notified by the RPG.

All payment required to be made shall also include any deduction or set off for:

- a) Deduction required by the law and
- b) Amount claimed by TANGEDCO, if any, from the RPG, will be adjusted from the monthly energy payment.

The RPG shall open a bank account (the “RPGs designated account”) for all Tariff payment to be made by TANGEDCO to the RPG and notify TANGEDCO of the details of such account at least by sixty (60) days before the dispatch of the first monthly bill.

The payment will be adjusted first towards energy charges.

In the event of delay in payment of monthly bill by TANGEDCO beyond thirty (30) days of its due date (i.e 60+30 days=90 days) a late payment surcharge shall be payable to the RPG at the rate of 1% simple interest per month on the outstanding amount calculated on a day to day basis. The late payment surcharge shall be claimed by the RPG through Supplementary bill. There will

not be any interest payable on the late payment surcharge under any circumstances.

Any payment received after the due date shall be adjusted first towards energy charges.

**l) Power purchase Agreement:**

Draft PPA (Power Purchase Agreement) to be executed between RPG and TANGEDCO is enclosed herewith in Annexure –II for approval. The duration of PPA will be 25 years from Commercial Operation Date (COD) of the project. The total energy purchased from these RE plants will be accounted for fulfillment of RPO by the TANGEDCO.

**m) Commissioning:**

The selected RPG shall commission the solar power plant within twelve months from date of issuance of LoA after getting necessary approval from the Commission. The RPG may commission the REPP during this period of twelve months and TANGEDCO is obliged to purchase power from that commissioned REPP any time after the issuance of LoA. Duly constituted Committee of TANGEDCO officials will physically inspect the Plant in not more than 03 days from the date of receiving a call from the RPG and certify successful commissioning of the plant.

No part commissioning is permitted

In case any RPG fails to achieve this milestone, TANGEDCO shall encash the Performance Bank Guarantee (PBG) in the following manner:

a) Delay up to two months - The PBG on per day basis and proportionate to the balance capacity not commissioned.

b) In case the commissioning of the solar power plant is delayed over two months, the PPA capacity shall stand reduced / amended to the Project capacity commissioned at the end of 14<sup>th</sup> month from date of issuance of Letter of Award.

**n) Commercial Operation Date (COD):**

Commercial Operation Date (COD) shall be the date on which the commissioning certificate is issued upon successful commissioning of the full capacity of the Project or the last part capacity of the Project as the case may be.

**o) Selection Process:**

The price bids of the short listed eligible bidders will be opened and ranking will be based on the ascending order of the rates quoted by the bidders. The eligible bidders shall be allotted to the nearest substation on the basis of ranking upto the sustained peak demand of the respective feeder/substation on the basis of bucket filling method until the tendered quantity of 500MW is reached. However the ranking (L1, L2..) of the tariff will be the main criteria for the bucket filling process.

**p) Bid Qualification Requirement (BQR):**

Documents to be submitted by the individual farmers/ group of farmers/ cooperatives/ panchayats/ Farmer producer organizations (FPO) /Water user associations (WUA) herein after called Renewable Power Generator(RPG).

1. Tenderers shall furnish necessary documentary proof for farmers/ group of farmers/ cooperatives/ Panchayats/Farmer producer organizations (FPO) /Water user associations (WUA).
2. Tenderers shall furnish scanned registered documents of the land where project is to be established.
3. If the tenderer is an independent developer intending to execute the project on behalf of farmers/ group of farmers/ cooperatives/ Panchayats/Farmer producer organizations (FPO) /Water user associations (WUA) necessary scanned copy of the registered lease document of the land where project is to be established shall be submitted.
4. If the tenderers is an independent developer scanned copy of the net worth certificate per the format mentioned in Annexure E of the tender specification shall be furnished.The net worth of the bidder should be equal to or greater than the value calculated at the rate of Rs.1 Crore per MW of the proposed project capacity. The original net worth certificate should reach the office of the Chief Engineer/NCES, Chennai – 600002 on or before the due date of opening.
5. An RPG will not be allowed to apply for more than one renewable power plant

for a particular 33/11 kV sub-station/feeder. The bid of an RPG will also be disqualified if it is found that its proprietor/partner/director/member has also filed bid as proprietor/partner/director /member for another RPG for the same sub-station. The detailed tender specification is submitted for approval.

#### **10. Tariff approval:**

The Commission in its order dated 24.04.2018 in M.P.No.9 of 2018 has advised TANGEDCO to go for procurement of solar power in three stages of 500MW each through reverse bidding process as per GOI guidelines with a ceiling price of Rs.3 per unit

TANGEDCO has executed Power Sale Agreement(PSA) with M/s.Solar Energy Corporation of India (SECI) for the procurement of 500MW solar power from 1200MW ISTS scheme of SECI at the rate of Rs.2.78 per unit(inclusive of SECIs trade margin of Rs.0.07 per unit) on 05.05.2020

In the recent tariff order No.09 of 2020, dt.16.10.2020 issued by Commission it was instructed to go for tender process to purchase power irrespective of the plant capacity.

In this PM KUSUM scheme (Component-A) since the energy generated is locally consumed and as the scheme is proposed for farmers and it is implemented on the 11kV/22kV/33kV distribution feeders the distribution loss will be reduced.

Hence the upper ceiling limit for the purchase of solar energy as Rs.3 per kWh may be approved.



### **11. Quantity approval:**

A petition in M.P.No.9 of 2018 was filed before Commission on 19.02.2018 seeking permission for the procurement of 1500MW of solar power by TANGEDCO from private developers establishing solar power plants in Tamil Nadu through reverse bidding process (e-tender) as per the guidelines for Tariff based competitive bidding process for the procurement of power from grid connected solar PV projects issued by Ministry of Power vide resolution dated 03.08.2017 considering the tariff of Rs.3.00 per unit as upper limit.

The Commission in its order dated 24.04.2018 in M.P.No.9 of 2018 has advised TANGEDCO to go for procurement of solar power in three stages of 500MW each through reverse bidding process as per GOI guidelines with a ceiling price of Rs.3 per unit, instead of inviting tender for entire quantity of 1500MW at one go, to avoid legal issues. Further the Commission has directed that TANGEDCO may straight away go for such reverse bidding process without seeking fresh approval from the Commission in case there is no new deviation in the present procurement other than ones sought for approved by the Commission in the earlier phases.

Based on the approval of the Commission in the above order, TANGEDCO has floated phase 4 tender (CE/NCES/PT.No.1/2018-19) on 12.11.2018 for the procurement of 500MW of solar power to meet its RPO requirement with an upper ceiling limit of Rs.3.00 per unit with last date of submission of tender as 27.12.2018. Since there is no response from the

bidders, time extension has been given upto 10.01.2019 & 31.01.2019 in two spells.

Since no bidders had participated in the above tender, the tender could not be proceeded further.

Hence, it has been proposed to utilize this 500MW out of 1500MW quantity approval accorded by the Commission vide dated 24.04.2018 in M.P.No.9/2018 for this tender under PM KUSUM (Component-A) for purchase of solar power from individual farmers/ group of farmers / cooperatives / Panchayats /Farmer producer organizations (FPO)/ Water user associations (WUA) /Developers on behalf of the farmers under PradhanMantriKisanUrjaSurakshaevamUtthanMahabhiyan (PM-KUSUM) Scheme Component-A.

## **12. Deviations from MNRE guidelines:**

1. In the MNRE guidelines, project has to be commissioned by constructing a new 11kV transmission line. In tender specification provision has been made for interconnection through new 11kV/22kV/33kV line as well as interconnecting in the existing 11kV/22kV/33kV lines so as to invite more bids from the farmers.
2. Since the solar power plant shall also be interconnected to existing 11kV/22kV/33kV lines, metering provision has to be done at the HT side of Solar power plants and losses would be to the account of the developer and the payment would be made for the net generation after

deducting losses as fixed by the Commission. Hence the losses in % shall be fixed by the Commission TNERC.

3. In the MNRE guidelines capacity proposed was from 500kW to 2MW but in tender specification it is proposed for a capacity from 1MW to 2MW.

4. In the guidelines the late payment surcharge was kept as 1.5% but in tender specification, the late payment surcharge is 1% is proposed.

5. MNRE guidelines has recommended LC mechanism for payment security, however considering the present financial condition of TANGEDCO, it is proposed not to adopt payment of 60+30 days.

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

5.1 TANGEDCO has filed the instant petition for seeking approval for procurement of power from decentralized solar power plants having capacity of 1 MW to 2MW to be set up under Component-A of PM-KUSUM Scheme of MNRE through competitive bidding with a ceiling tariff of Rs.3 per unit. Approval is also sought by TANGEDCO for the draft tender specification which is generally in line with the MNRE's Guidelines for the KUSUM scheme and draft Power Purchase Agreement and the deviations from MNRE's guidelines, deduction of line losses and also for ratification of the action in having floated the tender in Tamil and English dailies on 21.1.2021 with tender specification no. CE/NCES/OT.No.01/2020-21 in view of urgency. TANGEDCO has provided the capacities of sub stations of each Electricity Distribution Circle.

5.2 The petition filed by TANGEDCO has been examined in detail with respect to the provisions of MNRE's guidelines for the KUSUM scheme issued vide notifications dt.22.7.2019 and other amendments, provisions of the Electricity Act 2003, Commission's regulations on Procurement of power from New and Renewable Energy Sources, other relevant regulations.

5.3 The petitioner has mentioned in detail about the contracted solar capacity and the need to procure additional solar power to comply with RPO. The KUSUM A scheme is a beneficial scheme which can help the distribution licensee to avoid high cost of sub transmission lines, reduce transmission losses, and provide opportunity to earn additional income to farmers.

5.4 Since the tender specification has already been floated, the Commission has to decide the approval and ratification of the action of TANGEDCO in regard to the bid specification and floating of the tender on 21.01.2021.

5.5 With respect to the ceiling tariff, Commission in its Order No.9 of 2020 for solar power has ordered that for small capacity plants not covered in the bidding guidelines, the licensee may conduct a separate competitive bidding seeking prior approval of the Commission. The instant proposal is for purchase of power under the Kusum scheme based on guidelines issued by MNRE. Many other State ERCs have fixed a pre levelised tariff of around Rs.3.per unit for purchase of power under the Kusum Component A scheme(Telengana ERC

order dt.2.1.2021- Rs.3.13, UPERC order dt.23.3.2021-Rs.3.10, Jharkhand ERC order dt.8.12021- Rs.3.09, Punjab ERC Order dt.9.10.2020 – Rs.2.748,KSERC order dt.4.10.2021 –Rs.3.66,Odisha ERC order dt.20.12.2019 – Rs.3.08). MNREs benchmark cost per unit is in descending order for ascending order of capacities(>10 KW and upto 100 KW Rs.41.64 per watt, >100 and upto 500KW benchmark cost Rs.39.08 per watt and in the case of grid connected agricultural pumps below Rs.41 per Watt).Considering lesser rates for capacities of 1 MW and above upto 2 MW, the ceiling tariff of Rs.3 proposed of the purpose of bidding is reasonable and therefore Commission hereby approves the same. TANGEDCO may obtain the procurement based incentive for the approved quantum from MNRE.

5.6Petitioner has sought approval for the following deviations:

5.6.1Provision made for interconnection through new 11kV/22kV/33kV line as well as interconnecting in the existing 11kV/22kV/33kV lines so as to invite more bids from the farmers& for fixing losses on account of developer .

For the definition of delivery point, the draft PPA provisions of MNRE guidelines specify that 'All charges and losses related to Transmission of power from project up to Delivery Point as notified by the Appropriate Commission shall be borne by the RPG.The request of the petitioner is also to account the losses upto the interconnection with the grid to the RPG/developer. The State and the Central Commission's regulations define interconnection point for wind and solar as the

'line isolator on outgoing feeder on HV side of the pooling sub station' . In the case of interconnection in the existing line, though it is stated that the SPD has to abide by the CERC/SERC regulations, the exact position of the metering point may be made clear i.e whether at the end of the sub station where the interconnecting line is connected to. The losses upto the point of interconnection to existing 11kV/22kV/33kV lines may be determined based on the line losses notified in the Commission's Tariff order.

Since interconnection to existing 11kV/22kV/33 kV lines has been permitted to invite more bids, the same is approved. Payment may be made for the net generation after accounting for the line losses.

5.6.2 MNRE has notified Component A scheme for renewable energy power plants of capacities from 500 KW to 2 MW. TANGEDCO in the bid specification has called for capacities ranging from 1 MW to 2 MW. Commission approves this deviation as better tariffs could be obtained due to economies of scale.

5.6.3 The other deviations of (i) payment of late payment surcharge at 1% instead of the specified 1.5% in the MNRE guidelines and (ii) waiver of the LC mechanism of payment security and timelines for payment of monthly bills are approved considering the financial condition of the petitioner.

5.6.4 In the draft Power Purchase Agreement, the clause on 'Change in Law' is omitted. Due to the omission, in many places in the draft PPA, the article nos. do not correlate. Wherever the words state 'fifteen', the numeral entered is '13'. In Article 4.3.1, no mention is made of purchase of energy in the first year of operation on pro rata basis though it appears in the petition. In Article 6.4, the word 'Commission's orders' may be included. In Article 12.4.4, the per cent denoted for adjusted equity may be corrected as 150%.

5.7 The proposal of the petitioner to purchase solar power from solar power plants of capacity 1 MW to 2 MW capacity under PM KUSUM scheme Component A by bidding with a ceiling tariff of Rs.3 per unit, the bid specification subject to the deviations approved herein is approved. The petitioner's action of having floated the tender under specification number CE/NCES/OT.No.01/ 2020-21 is approved and ratified. TANGEDCO is directed to make all necessary corrections in the draft PPA and submit the PPA while filing the petition for tariff approval on completion of the bidding process furnishing complete details of the bidding process. TANGEDCO shall obtain the procurement based incentive for the approved quantum from MNRE.

5.8 The KUSUM component A scheme is applicable for capacities from 500 KW to 2 MW as per MNRE guidelines dt.22.7.2019. As per the instructions of MNRE in the Office Memorandum 32/645/2017 SPV Division Dt.13.11.2020, solar power projects less than 500 KW may also be allowed under KUSUM

Component A based on techno-commercial feasibility. Depending on the quantum contracted in the approved bid process tendered in January 2021 for KUSUM A, the solar power plants developed under the Gross metering concept under the Commission's GISS regulations/Tariff order for GISS in the capacity range of 151 KW to 999 KW may be considered under Component A scheme for the purpose of obtaining Procurement Based Incentive from MNRE.If the capacity under Component A exceeds the sanction of MNRE, approval from MNRE may be obtained for additional capacities. Since the component A scheme is beneficial to both the distribution licensee and the farmers, TANGEDCO shall make adequate publicity through print and electronic media.

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

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

/True Copy /

**Secretary**  
**Tamil Nadu Electricity**  
**Regulatory Commission**