

**TAMIL NADU ELECTRICITY REGULATORY COMMISSION**

**Order of the Commission dated this the 13<sup>th</sup> day of February, 2025**

**Present:**

<b>Thiru R.Manivannan</b>	...	<b>Chairman</b>
<b>Thiru K.Venkatesan</b>	...	<b>Member</b>
<b>Thiru B.Mohan</b>	...	<b>Member (Legal)</b>

**P.P.A.P.No.1 of 2025**

Tamil Nadu Green Energy Corporation Ltd. (TNGECL),  
Represented by the Chief Engineer/  
Non-Conventional Energy Sources,  
144 Anna Salai,  
Chennai – 600 002.

.... **Petitioner**

The above Power Purchase Approval Petition (PPAP) preferred by the petitioner, M/s. Tamil Nadu Green Energy Corporation Ltd. (TNGECL), coming up for final hearing on 23-01-2025 in presence of Tvl.N.Kumanan and A.P.Venkatachalapathy, Standing Counsel for the petitioner and the officials of TNGECL, upon hearing the submissions made by the counsel for the petitioner & the officials of TNGECL and on perusal of the material records and relevant provisions of law and having stood up for consideration till this date, this Commission passes the following:

## ORDER

### 1. Facts of the Case:-

1.1. PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) scheme is aimed at ensuring energy security for farmers in the country, along with honouring the Country's commitment to increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030. The PM-KUSUM scheme was launched in 2019 with 3 components.

1.2. As per the comprehensive guidelines dated 17.01.2024 issued by the MNRE, Component A of PM-KUSUM includes following key provisions / salient features:

a) Allows farmers to set up Decentralized Ground/ Stilt Mounted Grid Connected Solar or other Renewable Energy based Power Plants on their land.

B) Renewable Power Generator (RPG) to set up Solar or other Renewable Energy based Power Plants (REPP) of capacity of 500 kW to 2 MW.

c) CFA (Central Financial Assistance) release applicable for such Agriculture feeder solarisation projects.

d) 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. Whereas, as per the Commission's simplified procedure issued in this regard allows installing solar projects beyond 5 kMs radius from the Sub-Stations.

- e) The total energy purchased from these RE plants to be accounted for Renewable Purchase Obligation (RPO) under Decentralized Renewable Energy (DRE) category by the DISCOM.
- f) DISCOMs should prefix the levelized tariff before inviting applications for setting of Solar Plants.
- g) DISCOM to invite applications from interested beneficiaries for setting up the renewable energy plants and renewable power generated will be purchased by DISCOMs at the pre-fixed levelized tariff.
- h) In case the aggregate capacity offered by Applicants is more than notified capacity for a particular sub-station, bidding route will be followed by DISCOMs to select Renewable Power generator and in such cases the pre-fixed levelized tariff will be the ceiling tariff for bidding.
- i) The Power Purchase Agreement (PPA) to be executed between RPG and DISCOMs for duration of 25 years Commercial Operation Date (COD) of the project.
- j) The RPG to be responsible for laying of dedicated 11 or 33 kV, 66/11 kV or 110/11 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 (This has been simplified by TNERC).

k) DISCOM will be eligible to get Procurement Based Incentive (PBI) @ Rs. 0.40 per unit purchased or Rs. 6.6 lakh per MW of capacity installed, whichever is less, for a period of five years from the COD.

l) For setting up of plant, land will be required. To facilitate farmers willing to lease out their land for development of RE plants near the notified substation(s), DISCOMs may make a list of such farmers and place that list on their website.

m) The leasing of land of any farmers will be a bi-partite agreement between the farmer and the developer, and the DISCOM will not be held responsible for failure in getting the land leased out to a developer.

1.3. The Commission in its order dated 28-12-2021 in M.P.No. 9 of 2021 has ordered that the TANGEDCO 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 as per the bid specification accorded by the Commission.

1.4. The Commission in its order dated 29-12-2023 in respect of R.P.No. 2 of 2023 in M.P.No. 42 of 2022 has ordered the following:

*“1. The Review petition is allowed with approval to purchase solar power to the quantum of 420 MW established under Component A of PM-KUSUM scheme through competitive reverse bidding mechanism with upper ceiling limit of Rs.3.30 per unit for a period of 25 years, executing necessary PPA.*

*2. It is approved to adopt the tariff of Rs.3.28 per unit offered by the two bidders under section 63 of the Electricity Act 2003, for a total capacity of*

*3MW and to issue LOA to the bidders with technical and commercial terms as approved by the Commission in the order dated 28.12.21 for M.P. No.9 of 2022.*

*3. The simplified guidelines outlined supra shall be followed for hassle free and timely processing of the solar plant applications to encourage developers/ farmers and maximise the distributed generation in the process.”*

1.5. Based on the above order of the Commission, LoA was issued by the TANGEDCO to 2 Nos. successful bidders totaling 3 MW on 16-12-2023 for purchase of solar power at Rs.3.28 per kWh under PM KUSUM (Component A) scheme through long term power purchase agreement for a period of 25 years. Based on this PPA, one farmer has commissioned the plant of 1 MW capacity on 16.07.2024.

1.6. Meanwhile, the Commission vide Lr.No.TNERC/DE/DDE2/F.Direction to TANGEDCO/D-111/2024, dated 24-01-2024 had directed the TANGEDCO to promote distributed generation so as to overcome the perennial bottleneck faced by the promoters of solar power in land acquisition, connectivity to grid and right of way issue for erecting the power evacuation lines, etc. The Distribution Utility was suggested by the Commission to go for distributed generation, i.e. below 10 MW capacity preferably for each distribution feeder of 11 kV with 1 to 2 MW solar plants and for 22 kV feeder with 4 MW solar plants. If 20% of total 10,250 feeders are connected with 2 MW of solar plant in every year, the target set by the GoTN can be practically achieved within a period of 6 years i.e. even before 2030. In summary, the availability of solar plants in every feeder across all villages which is

imminently tenable throughout the State offers much needed farmer-centric yet fiscally prudent pathway for the TANGEDCO.

1.7. Subsequently, the TNGECL has floated tender vide Specification No. CE/NCES/OT No.01/2023-24 on 14-02-2024 for procurement of solar power without prescribing any upper ceiling tariff so as to invite more competitive bids and the tender was floated on 27-02-2024. Under the above circumstances, the TNGECL has filed this present petition before the Commission with the following prayers:

- a) To ratify the action for having floated tender for procurement of 420 MW of solar under (PM-KUSUM) Scheme Component – A as specification CE/NCES/OT No.1/2023-2024, dt 03.02.2024 by adopting the specification and quantity approval accorded by Hon'ble TNERC in its order dated 28.12.21 for M.P. No.9 of 2021
- b) To ratify the action for having floated tender without prescribing any upper ceiling tariff and also to pass on the PBI given to DISCOMs by the Centre Govt under this Component to the REPP owner to get more competitive tariff of RE power , based on the MNRE guidelines dt 17.01.2024 for PM-KUSUM scheme.
- c) To enter into a long term PPA for a period of 25 years with 4 farmers totaling 5 MW @ Rs 3.28 per unit, without passing on the PBI benefits

given to DISCOMS to them to get more competitive tariff of RE power may be ratified.

- d) To approve for adopting the tariff of Rs.3.28 per unit offered by the following 4 bidders who are farmers, arrived through reverse bidding process (e-tender) in respect of their proposed solar power plants of combined capacity of 5 MW against solar tender specification CE/NCES/OT.No.1/2023-24 under Component “A” of PM-KUSUM scheme.

## **2. Contention of the petitioner:-**

2.1. The petitioner TNGECL has stated the following in their petition:

- a) As against the MNRE sanction of 424 MW communicated through MNRE e-mail dt 20.11.2023 previous tender was floated for 420 MW. However as PPA could be executed with only two farmers totaling 3 MW, another tender as Spec No.CE/NCES/O.T No.1/23-24 was floated with due date of opening as 27.02.2024, based on the quantity approval already accorded by Hon'ble TNERC in its order dt 29.12.2023 for the procurement of 420 MW of solar power under Component –A of PM-KUSUM scheme for establishing solar power plants in Tamil Nadu.

- b) The MNRE through its Office Memorandum dt 17.01.2024 has issued comprehensive guidelines for implementation of all the three components of PM-KUSUM scheme in supersession to its earlier order dt 22.07.2019 and following are the modifications in respect of Component "A" :
- i) While the timeline was 12 months in the earlier guidelines now it has been revised as 15 months from the date of issuance of LOA.
  - ii) As per the MNRE guidelines dt 22.07.2019, DISCOM would be eligible to get PBI @ Rs. 0.40 per unit purchased or Rs. 6.6 lakh per MW per year of capacity installed, whichever is less, for a period of five years from the COD. This PBI shall be availed by the DISCOMS alone. In the revised guidelines dt 17.1.2024, MNRE has stated that DISCOMS can, if they desire so, pass on the PBI given to DISCOMS by the Centre Govt under this Component to the REPP owner to get more competitive tariff of RE power.
- c) A proposal was placed before the BOARD of TANGEDCO for adoption of the revised guidelines dt 17.1.2024 issued by MNRE in respect of Component "A" of PM-KUSUM scheme in TANGEDCO. Further approval of the BOARD of TANGEDCO was also sought for to float tender without prescribing any upper ceiling tariff so as to invite more competitive bids. The BOARD of TANGEDCO in its 122<sup>nd</sup> meeting held on 6/2/2024 has approved the above proposal.

- d) In view of urgency and as Hon'ble Commission has already accorded approval for a quantum of 420 MW of solar power under Component "A" of PM –KUSUM scheme, through its order dt 29.12.2023 for RP no 2 of 2023 in MP No.42, based on the approval of BOARD of TANGEDCO in its 122<sup>nd</sup> meeting held on 06.02.2024, Corrigendum was issued in tender floated against CE/NCES /OT No.1/ 23-24 on 14.02.2024. The action of having floated the tender based on the MNRE's comprehensive guidelines dt 17.01.2024 and without prescribing any upper ceiling limit which has been approved by the BOARD of TANGEDCO in its 122<sup>nd</sup> meeting held 06.02.2024 shall be approved and ratified.
- e) The Techno-commercial bids for the Specification No CE/NCES/OT.No.01/ 2023-24 was opened on 27.02.2024 and seven offers were received against the above tender from the following bidders:
1. Thiru S.Kathikeyan, East Tambaram, Chennai.
  2. Thiru M.L.Sivapragasam, Onnupuram Arni Taluk, Tiruvannamalai.
  3. Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur.
  4. Thiru K.R.Dhanasekaran, Gobichettipalayam
  5. Tmt Valarmathi Govindaswamy, Erode
  6. Thiru. Vijayabaskaran, Chennai.
  7. Thiru. Sathishkumar, Chennai

f) All the bidders have participated under the farmer category and on evaluation, the following 4 bidders have satisfied all BQR conditions :

1. Thiru S.Kathikeyan, East Tambaram, Chennai.
2. Thiru M.L.Sivapragasam, Onnupuram Arni Taluk, Tiruvannamalai.
3. Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur.
4. Thiru K.R.Dhanasekaran, Gobichettipalayam

g) The bids of three farmers had the following deficiency :

1. Tmt Valarmathi Govindaswamy, Erode – EMD condition not satisfied ie., BG validity less than 180 days.
2. Thiru. Vijayabaskaran, Chennai - EMD condition not satisfied ie., BG validity less than 180 days and price bid uploaded along with techno-commercial bid.
3. Thiru. Sathishkumar, Chennai- EMD condition not satisfied ie., BG validity less than 180 days and price bid uploaded along with techno-commercial bid.

h) A proposal was placed before the BLTC seeking approval for the following :

1. to open the price bids of the following 4 nos bidders who have satisfied all BQR conditions -

<b>Sl. No</b>	<b>Name of the bidders</b>	<b>Capacity</b>
1	Thiru S.Kathikeyan, East Tambaram, Chennai	1 MW
2	Thiru M.L.Sivapragasam, Onnupuram, Arni Taluk	1MW
3.	Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur	2 MW
4.	Thiru K.R.Dhanasekaran, Gobichettipalayam	1 MW

2. to **reject** the following bids -

<b>Sl.No</b>	<b>Name of the bidders</b>	<b>Capacity</b>	<b>Reason for rejection</b>
1.	Tmt. Valarmathi Govindaswamy, Erode	2 MW	i) not satisfied the EMD condition ie., validity of B.G is less than 180 days but satisfied all other BQR conditions.
2.	Thiru. Vijayabaskaran, Chennai	2 MW	not satisfied the EMD conditions ie., validity of B.G is less than 180 days and also as price bid has been uploaded along with techno – commercial bid.
3.	Thiru. Sathishkumar Chennai	2 MW	not satisfied the EMD conditions ie., validity of B.G is less than 180 days and also as price bid has been uploaded along with techno – commercial bid

- i) The BLTC in its 443<sup>th</sup> meeting held on 27/06/2024 has directed to “extend the time limit to submit their EMD and to enable to get more participation & competitive rates”.
- j) Based on the direction of BLTC, Tmt. Valarmathi, Erode who have satisfied all other conditions, except validity of Bank Guarantee, was requested to extend validity of Bank Guarantee and the bidder subsequently extended the validity of the Bank Guarantee in lieu of EMD upto 18.02.2025.
- k) Based on the directions of BLTC in its meeting held on 27/06/24 , the price bid of the following bidders were opened on 25.07.2024
1. Thiru S.Kathikeyan, East Tambaram, Chennai -1 MW
  2. Thiru M.L.Sivapragasam, Onnupuram,Arni Taluk – 1MW

3. Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur- 2MW

4. Thiru K.R.Dhanasekaran, Gobichettipalayam – 1 MW

5. Tmt Valarmathi Govindaswamy, Erode – 2MW

l) The rate quoted by the above five eligible bidders along with evaluation is furnished as below. Thiru Rameshkumaran Duraisamy who has quoted Rs 3.74 /- per unit stands L1.

Sl.No	Bidder Name	Rate quoted in Rs.	Bid Rank
1	Rameshkumaran Duraisamy	3.74	L1
2	Valarmathi Govindasamy	3.79	L2
3	S.Kathikeyan	3.92	L3
4	K.R.Dhanasekar	4.22	L4
5	M.L.Sivapragasam (Girisiva Enterprises)	4.51	L5

m) The L1 bidder, Thiru Rameshkumaran Duraiswamy, Palladam who had quoted the rate as Rs. 3.74/per unit was called for negotiation meeting on 28.7.2024 and was requested to reduce the rate to the maximum possible extent. Thiru Rameshkumaran Duraiswamy, Palladam agreed to reduce the rate, and offered Rs 3.28/ unit and further confirmed that this rate is without passing on the PBI benefits to him.

n) Hence, all the other four bidders were requested through letter dt 06.08.2024 to match their rate with that of the negotiated L1 rate ie., Rs 3.28/- per unit (without PBI benefits). Out of the four bidders Tmt Valarmathi Govindaswamy, Erode did not agree to match the rate with that

of the negotiated rate of L1 while the other three bidders have agreed to match their rate with that of Rs. 3.28/ unit (without PBI) .

o) Further, Thiru K.R.Dhanasekaran has agreed to match the rate of Rs. 3.28/ unit also requested for additional 1 MW capacity in the adjacent land which is in the name of his company. As Kusum -Component A is farmer based scheme and the land must be in the name of the farmer, the request of Thiru K.R.Dhanasekaran was not taken into consideration.

p) With regard to the reasonableness of the rate offered by the four bidders the following facts are put forth :

a. Previous rate under PM-KUSUM Component “A” scheme:

TANGEDCO has executed PPA on 29.12.2023 with two farmers under Component “A” of PM-KUSUM scheme totaling 3 MW @ Rs 3.28/- per unit and one farmer has commissioned the plant under this scheme on 16.07.2024.

b. Comparison with the rates offered by M/s SECI:

TANGEDCO has entered into PSA with M/s SECI on 13.10.2023 for supply of 200 MW solar power @ Rs 2.72 /- per unit and 300 MW solar power @ Rs.2.73/- per unit include trade margin of (Rs 0.07/- per unit).

- |                                      |            |
|--------------------------------------|------------|
| i) Cost of solar power from M/s SECI | : Rs.2.66  |
| ii) Transmission losses @ 4%         | : Rs.0.106 |
| iii) Cost at state periphery         | : Rs.2.77  |
| iv) Distribution losses @13.5%       | : Rs.0.37  |

v) Trade margin of M/s SECI : Rs. 0.07

vi) Cost of solar power supply : Rs.3.22

after distribution losses

- q) As per the comprehensive guidelines of MNRE dt 17.01.2024, it is stated that DISCOMS can, if they desire so, pass on the PBI given to DISCOMs by the Centre Govt under this Component to the REPP owner to get more competitive tariff. DISCOM would be eligible to get PBI @ Rs. 0.40 per unit purchased or Rs. 6.6 lakh per MW of capacity installed, whichever is less, for a period of five years from the COD.
- r) The negotiated rate now offered by the five farmers is Rs 3.28/- per unit. (Without passing on the PBI benefits to them). Hence DISCOM will get the PBI.
- s) The rates offered by the bidders after negotiation is Rs 3.28 per unit. As per the MNRE guidelines, DISCOM would be eligible to get PBI @ Rs. 0.40 per unit purchased or Rs. 6.6 lakhs per MW of capacity installed, whichever is less, for a period of five years from the COD. Hence the tariff rate narrows down to Rs. 2.88 (Rs 3.28-Rs.0.40= Rs2.88) for the first five years from the COD which results in substantial savings to TANGEDCO.
- t) Hence the rate offered by the farmers @ Rs 3.28 per unit which is to be produced at the load centre is quite reasonable. Further this scheme is

- aimed to improve the livelihood of the farmers through a regular income from their unutilised land and further the entire feeder is also solarised.
- u) The MNRE in its order dt 13.1.2021 has allocated 75 MW for implementation of KUSUM-Component A scheme in the State of Tamil Nadu. MNRE has further sanctioned 349 MW for Tamil Nadu under Component A of PM-KUSUM scheme for the year 2022-23. Further MNRE has confirmed in its order dated 25.10.2024 that a cumulative sanction of 424 is valid upto December 2025 for Tamil Nadu. Out of the above sanction so far only 2 PPA totaling 3 MW has been executed. Now under the present tender, PPA can be executed for 5 MW.
  - v) The BOARD of TNGECL in its 5<sup>th</sup> meeting held on 06.12.2024 has accorded approval for the proposal placed seeking approval for issuance of LOA , filing of petition before Hon'ble TNERC and subsequent signing of PPA with the four successful bidders for purchase of solar power totaling 5 MW @ Rs 3.28 per unit for a period of 25 years.
  - w) The rate quoted by the four bidders is reasonable, it is prayed that the Hon'ble Commission may please approve for adopting the tariff of Rs.3.28 per unit offered by the following four bidders, arrived through bidding process (e-tender) in respect of their proposed solar power plants of combined capacity of 5 MW to be commissioned under Component "A" of

PM-KUSUM scheme against solar tender specification  
CE/NCES/OT.No.1/2023-24.

Sl.No.	Name of the bidder	Capacity in MW	Rate per unit in Rs	Connectivity SS
1	Thiru S.Kathikeyan, East Tambaram, Chennai	1	3.28	110/22KV Samayapuram SS
2	Thiru M.L.Sivapragasam, Onnupuram,Arni Taluk	1	3.28	33/11KV Onnupruam SS
3	Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur	2	3.28	110/22-11KV Ranganathapuram SS
4	Thiru.K.R.Dhanasekaran, Gobichettipalayam	1	3.28	110/11KV Kolappalur SS

x) This tender has been floated based on the guidelines issued by MNRE for implementation of PM-KUSUM guideline dt 17.01.2024, and MNRE 's Memorandum No.283/54/2018-Grid Solar –part (2) dt 13.1.2022 wherein it is clarified that “Projects under Government schemes & Programmes’ includes project set up under Component “A” of PM-KUSUM scheme. The Ministry of new & Renewable Energy in its Order No.283/54/2018- GRID Solar dt 02/01/2019 has decided to enlist the eligible models and manufacturers of solar PV cells and modules complying with the BIS Standards and publish the same in a list called the “Approved list of models and manufacturers” (ALMM). Only the models and manufacturers included in this list will be eligible for use in Government/Government assisted

projects/projects under government schemes & programmes, in stalled in the country, including Projects set-up for sale of electricity to government under “Guidelines for tariff based Competitive Bidding Process for Procurement of power from Grid Connected solar PV power Projects dt 03/08/2017 and the amendments thereof. The word “Government “ shall include Central Government, State Governments, Central Public Sector Enterprises, State Public Sector Enterprises and Central and State organizations / Autonomous bodies. Further MNRE, GOI, Office Memorandum, No. 283/54/2018- Grid Solar – Part(1), dt 02.02.2021 has directed that Bidding Agencies shall take an explicit declaration from the Bidders that they are aware of binding provisions of ALMM Order and the List(s) there under while quoting tariff in that bid.

- y) Further, MNRE through its Order No. 283/54/2018-GRID Solar Part (2) dt 13/01/2022 has clarified that “Projects under Government Schemes & Programmes “ referred above, includes projects set up under Component ‘A’ of PM-KUSUM scheme and only the models and manufacturers included in the ALMM will be eligible for use in this project.
- z) Based on the sanction accorded by MNRE , it is requested that approval may be accorded for issue of Letter of Acceptance to the following eligible bidders, with clauses as per the specification approved by the Hon’ble Commission.

Sl. No.	Name of the bidder	Capacity in MW	Rate per unit in Rs
1	Thiru S.Karthikeyan, East Tambaram, Chennai	1	3.28
2	Thiru M.L.Sivapragasam, Onnupuram,Arni Taluk	1	3.28
3	Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur	2	3.28
4	Thiru K.R.Dhanasekaran, Gobichettipalayam	1	3.28

The main clauses to be adopted in the LOA are as follows :

- i) Price : Firm price of Rs 3.28 per unit for 25 years from the date of COD.
- ii) Performance guarantee: The EMD furnished in the form of Bank guarantee shall be converted into performance guarantee subject to extending the validity of BG.
- iii) Execution of PPA: Within two months from the date of issue of LOA.
- iv) Commissioning period: 15 months from the date of issue of LOA.

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

- (a) Delay up to six 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 six months, the PPA capacity shall stand reduced / amended to the Project capacity commissioned at the end of six month from scheduled Commissioning Date.

v) CUF: A minimum CUF of 15 % is required on annual basis and for the first year of operation, it shall be on pro-rate basis. However no penalty to be imposed for non –maintenance of CUF.

2.2. The petitioner also submitted that the Hon'ble TNERC has approved in its order dt 26.04.2022 in PPAP.No. 2 of 2022 the PPA format and addendum PPA dated 27.03.2024 to be adopted. It is proposed to adopt the approved PPA for this tender also.

2.3. The Hon'ble Commission in its order dated 26.4.2022 in PPAP No.2 of 2022 has issued the following directions to TANGEDCO:

*.....” 4.5 In regard to the approval sought to make payment for the net generation to the bidders, since generation from the plant will be consumed by nearby loads which aids in reducing line losses of the Licensee, in accordance to the principles adopted in the Generic Tariff Order for Grid Interactive PV Solar Energy Generating System (GISS) where it has been observed that ‘agricultural feeders are ideally suited to effectively utilize the potential of solar energy through the gross metering mechanism. The segment of agricultural network has been the perennial loss pocket with lengthy lines and wide LT network. The continuing bad performing trend of agricultural feeders plagued by inefficiency over the decades, could be reversed if the feeders are taken over by GISS through gross metering by establishing a service line of power evacuation as an interface between the GISS of open area and the nearby agricultural HT feeder concerned. the load will be very much nearer to the generation point and hence the very meager line loss component is not considered’, the petitioner is directed to make payment for the gross generation of the solar power plants of the bidders. The solar power*

*procured from these power plants may be accounted for RPO. If the generation is connected directly to the nearby SS then the meter may be provided at SS end and the gross generation paid.”*

Based on the directions of the Hon'ble TNERC energy accounting shall be done and payment made accordingly.

2.4. The Hon'ble TNERC in its order for RP No 2 of 2023 in MP No 42 of 2022, dt 29.12.2023 while permitting the solar power plants to be connected in the existing 11/22 KV feeders has directed that the following are to be assured before commissioning of the solar power plant:

1. Remote metering with AMR facility.
2. Remote closing and tripping through motorized switching system for remote operation from the concerned substation.

Metering with AMR facility is being provided by RE generators. As more farmers are opting to commission the solar power plant under Component “A” of PM – KUSUM scheme through the existing network, in order to adopt a uniform procedure it is requested that the guidelines/safety aspects to be insisted to the farmers and also a single line diagram for the remote closing and tripping arrangement shall be provided for adoption in TNPDC.

2.5. Under the above circumstances, the petitioner has prayed the following:

- a) To ratify the action for having floated tender for procurement of 420 MW of solar under (PM-KUSUM) Scheme Component – A as specification CE/NCES/OT No.1/2023-2024, dt 03.02.2024 by adopting the

specification and quantity approval accorded by Hon'ble TNERC in its order dated 28.12.21 for M.P. No.9 of 2021

- b) To ratify the action for having floated tender without prescribing any upper ceiling tariff and also to pass on the PBI given to DISCOMs by the Centre Govt under this Component to the REPP owner to get more competitive tariff of RE power, based on the MNRE guidelines dt 17.01.2024 for PM-KUSUM scheme.
- c) To enter into a long term PPA for a period of 25 years with 4 farmers totaling 5 MW @ Rs 3.28 per unit, without passing on the PBI benefits given to DISCOMS to them to get more competitive tariff of RE power may be ratified.
- d) To approve for adopting the tariff of Rs.3.28 per unit offered by the following 4 bidders who are farmers, arrived through reverse bidding process (e-tender) in respect of their proposed solar power plants of combined capacity of 5 MW against solar tender specification CE/NCES/OT.No.1/2023-24 under Component "A" of PM-KUSUM scheme.

Sl.No.	Name of the bidder	Capacity in MW	Rate per unit in Rs	Connectivity SS
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2	Thiru.M.L.Sivapragasam, Onnupuram,Arni Taluk	1	3.28	33/11KV Onnupruam SS
3	Thiru Rameshkumaran Duraiswamy, Palladam, Tiruppur	2	3.28	110/22-11KV Ranganathapuram SS

4	Thiru.K.R.Dhanasekaran, Gobichettipalayam	1	3.28	110/11KV Kolappalur SS
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- e) To issue Letter of Award to the above four bidders with the technical and commercial clauses as approved by the Hon'ble Commission in the order dt 28.12.2021 for MP. No.9 of 2021 and which has been adopted in the tender floated as CE/NCES/OT.No.1/2023-24.
- f) To execute PPA with the above four bidders in the format already approved by Hon'ble TNERC in its order dt 26.04.2022 in PPAP.No. 2 of 2022 and addendum PPA dated 27.03.2024.
- g) To pass such further or other orders as this Hon'ble Commission may deem fit and proper in the facts and circumstances of the case and thus render justice.

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

3.1. The Commission in its order dated 29-12-2023 in R.P.No. 2 of 2023 in M.P.No. 42 of 2022 had approved to purchase solar power to the quantum of 420 MW established under Component A of PM-KUSUM scheme through competitive reverse bidding mechanism with upper ceiling limit of Rs.3.30 per unit for a period of 25 years, executing necessary PPA.

3.2. As per the MNRE guidelines dated 17-01-2024, the DISCOM has to invite applications from interested beneficiaries for setting up the renewable energy plants

and renewable power generated will be purchased by DISCOMs at the pre-fixed levelized tariff. In case the aggregate capacity offered by Applicants is more than notified capacity for a particular sub-station, bidding route will be followed by DISCOMs to select Renewable Power generator and in such cases the pre-fixed levelized tariff will be the ceiling tariff for bidding.

3.3. From the above, it is very clear that if the DISCOM wants to go for bidding, it is mandatory that the bidding should have the upper ceiling limit of the solar tariff. Further, the petitioner has relied upon the SECI rate of Rs.2.66 per unit along with the other charges such as Transmission and Distribution losses, trading margin, etc. which totally comes around Rs.3.22 per unit and the TANGEDCO has entered into PSA on 13-10-2023 with the above rate.

3.4. The MPERC in its order dated 20-06-2024 in Petition No. 13 of 2024 has determined the pre-fixed levelized tariff of Rs.3.25/kWh for sale of electricity from Solar PV projects set up under Component-A of KUSUM Scheme for entire life of the projects commissioned till 31st March 2027. The UPERC in its order dated 20-02-2024 in Petition No. 2033 of 2023 has adopted the tariff of Rs.3.10 per unit under PM-KUSUM scheme component-A. Further, the Odisha ERC in its order dated 09-06-2023 in Case No. 100/2022 has dismissed the request of the OREDA to review the rate of Rs.3.08/kWh since the competitive bidding price for solar is still less than Rs.3/kWh. It is to be noted that the potential of solar irradiation of the

above states are lesser than in Tamil Nadu and hence the tariff for Tamil Nadu should be lesser than those States.

3.5. Further, it is noted that the tariff rates quoted by the various developers ranges from Rs.3.06/kWh to 3.15/kWh in respect of SECI tender for selection of 1000 MW ISTS connected Solar PV power projects (SECI-ISTS-XVIII). Further, solar power is available with SECI even at the rate of Rs.2.42/kWh for sale to the utilities. The SECI projects are at utility level scale and there are some economies of scale in the larger project and the tariff rate will be naturally lesser than the small scale projects. However, there is a wider gap between the SECI rates and the rates quoted in this present bid, which seems to be at higher side when compared to the SECI rates. In this connection, it is observed that the solar power rates are coming down on day to day basis and therefore, Commission feels that the rate offered by the bidders of Rs.3.28 per unit seems to be at higher side.

3.6. The TNGECL in their prayer has stated that the PBI given to the DISCOM by the Central Government is to be passed on the REPP, whereas, in para 17 of the petition, the TNGECL has stated that the rate of Rs.3.28/kWh offered by the farmers is exclusive of PBI and the DISCOM will get the benefit of the PBI. The stand of the petitioner on PBI is contradicting and not substantiated with proper documentation.

3.7. The tender document of the petitioner says that the RPGs shall submit non-refundable processing fee of Rs.5000/- per MW or part thereof plus applicable GST @ 18%. The above charges go into the accounts of TNGECL. Apart from this, the guidelines issued by the MNRE say that the SIA will be eligible to get service charge of Rs.0.25 Lakh per MW after commissioning the projects. Both the amount realized as above will be for the service rendered by TNGECL and the service charge will be released by MNRE after the commissioning of the project. Hence TNGECL needs to be more vigilant in adopting the MNRE guidelines. Further, the role of TNGECL has not been clearly explained in this petition.

3.8. The TNGECL has stated that the tender was floated without prescribing any upper ceiling tariff in order to invite more competitive bids. Whereas, the Commission order dated 29-12-2023 in R.P.No. 2 of 2023 in M.P.No. 42 of 2022 has ordered to purchase solar power to the quantum of 420MW established under Component A of PM-KUSUM scheme through competitive reverse bidding mechanism with upper ceiling limit of Rs.3.30 per unit for a period of 25 years, executing necessary PPA. Further, the MNRE guidelines also says that the pre-fixed levelized tariff will be the ceiling tariff for bidding. This is clear violation of the Commission's direction as well as the MNRE guidelines.

3.9. The comprehensive guidelines for implementation of PM-KUSUM scheme issued by the MNRE on 17-01-2024 has defined the Roles of State Implementing Agency (SIA), which are as below:

*“4.12.3. State Implementing Agency (SIA)*

- i. SIA will coordinate with State/UT, DISCOM and farmers for implementation of the scheme.*
- ii. SIA will assist the farmers in project development activities including formulation of DPR, PPA/EPC contracts, getting funds from financial institutions, etc.*
- iii. SIAs will provide the handholding support required by farmers/developers, like availing financing from banks, etc. It will also coordinate with District Authorities for ease of implementation.*
- iv. A State level Committee under the chairmanship of Principal Secretary (Renewable Energy/Energy) will be setup by the participating SIA of that State. The committee will be responsible for settlement of any issues arising during selection of solar/ other renewable energy-based power plants and their implementation.*
- v. SIA will be responsible for coordinating/organizing the quarterly meetings of the State Level Committee.*
- vi. SIAs shall ensure publicity of the scheme and create awareness through advertisements etc, and monitor the implementation of the scheme.*
- vii. The SIA will be eligible to get service charge of Rs. 0.25 Lakh per MW after commissioning of the projects.”*

3.10. The above guidelines also stipulates “Solar or other Renewable Energy based Power Plants (REPP) of capacity of 500 kW to 2 MW will be setup by Renewable Power Generator (RPG)”.The tender was called for capacity of 1MW to 2 MW, thereby restrained many bidders who would have come forward to participate for lesser capacity due to availability of land.

3.11. The guidelines also suggests “For setting up of plant, land will be required. To facilitate farmers willing to lease out their land for development of RE plants

near the notified substation(s), DISCOMs may make a list of such farmers and place that list on their website”. The Commission has further reiterated the same and issued very detailed guidelines dated 24-01-2024 with even more simplification of the procedures / conditions that were in vogue previously. The petitioner has not implemented the above guidelines, had it been, the tender would have received better response.

3.12. Similarly, guidelines states that “In case RPG has taken land from a farmer/group of farmers on lease for the project, the amount of monthly lease rent would be paid by the DISCOMs to the lessor directly in his/her bank account before 5th day of the month following the month for which the lease rent is due. In such a case, the lease rent paid by the DISCOM will be deducted from monthly payment due to the RPG”. But in the specification of the tender it has been stated that TANGEDCO will not be held responsible for lease rent. If the guidelines have been adopted it would have increased the confidence of farmers to come forward to lease their land to the developers. Thereby more bids would have been received which could have resulted in a lesser tariff.

3.13. Commission is of the opinion that the TNGECL plays the role of SIA as per the G.O (Ms) No. 7, dated 24-01-2024. It is noticed that only four bidders to the tune of 5 MW were eligible under the PM-KUSUM scheme though the Commission accorded quantity approval for 420 MW solar power in its order dated 28-12-2021

in M.P.No. 9 of 2021. To avoid such poor responses, the TNEGCL should have adhered the above roles of the SIA so as to get competitive rates as well as huge response from the farmers/developers, which will be a win-win situation.

4. To summarize, the Commission observed the following:
  1. The tender was floated without an upper ceiling tariff, contrary to the Commission's order and MNRE guidelines.
  2. The negotiated tariff of **Rs.3.28 per unit** appears high compared to rates in other states.
  3. The petitioner's stance on PBI benefits is inconsistent and lacks proper documentation.
  4. The role of TNGECL as the State Implementing Agency (SIA) was not adequately explained.

The Commission noted that the tender received a poor response, with only **4 bidders** qualifying for **5 MW**, despite approval for **420 MW due to non adherence of MNRE guidelines**. In the light of the above facts and patent shortcomings in processing the tender, this Commission decides that the prayer of the petitioner cannot be acceded to.

#### **5. Suggestions of the Commission.-**

In the result, this Commission orders as hereunder.-

1. TNGECL shall issue a **revised tender**, adhering to MNRE guidelines and the Commission's directions, to ensure competitive tariffs and better participation.

2. TNGECL shall seek TNPDCCL's concurrence before initiating any tender process involving DISCOM as potential buyer.
3. TNGECL shall assess and notify RE generation capacity for rural substations and publish the details on its website.
4. To develop a dedicated online portal for land aggregation as outlined in the MNRE guidelines to identify farmers willing to lease out their land for development of RE plants, make a list of such farmers and place that list on their websites. (TNGECL & TNPDCCL)
5. To comply with the direction of the Commission dated 24-01-2024 to achieve feeder solarisation.

#### **6. Commission's directives to the TNGECL:-**

Further, this Commission issues the following directives in order to have better response from the stakeholders and to have installations of more solar power plants under PM-KUSUM component-A and C schemes:

1. Advertise tenders in Tamil and English newspapers to ensure wider participation.
2. Call for expression of interest from willing farmers as per Commission's guidelines dated 24-01-2024.
3. The TNGECL shall seek the concurrence of TNPDCCL for the RE projects contemplated by them before initiating any tender process involving DISCOM as a potential buyer.
4. The TNGECL in coordination with the TNPDCCL shall assess and notify RE generation capacity that can be injected into the sub-station with rural feeders and place such notifications on their respective website for information of all stakeholders as outlined in MNRE guidelines.

5. TNGECL shall seek the approval of TNERC for any deviations from the stipulated guidelines if proposed, to ensure that PBI to the DISCOM from MNRE is not affected.
6. In case of development of solar PV projects by the developer on the farmer's land, the possibilities of direct payment of land lease from the DISCOM to the farmers account as prescribed by the MNRE may be analyzed so as to instill confidence among the farmers on assured regular land lease payment to encourage more response from the farmers.
7. TNGECL is directed to apply for trading license with the appropriate Commission so as to have some sort of trading margin for its future projects in line with the G.O (Ms) No. 7, dated 24-01-2024 issued by the Government of Tamil Nadu for formation of TNGECL which contemplates regulatory compliance as per the Electricity Act, 2003.
8. Provisions to be made in the LOA if none of the part capacity of the project is commissioned within 6 months from the date of issue of LOA.
9. The TNGECL should consider promotion of component-C of PM-KUSUM scheme under Agriculture feeder solarisation to avail CFA benefits.
10. The TNGECL may moot a proposal to mandate the installation of battery storage capacity (0.25 C Rate) in the upcoming solar projects at least for 15% of the installed capacity of the solar plants.

7. **Order of the Commission :-**

In the result the petition is dismissed.

(Sd....)  
Member (Legal)

(Sd....)  
Member

(Sd....)  
Chairman

/True Copy /

**Secretary  
Tamil Nadu Electricity  
Regulatory Commission**