

**TAMIL NADU ELECTRICITY REGULATORY COMMISSION**

**Order of the Commission dated this the 29<sup>th</sup> Day of December 2023**

**PRESENT:**

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

**R.P.No.2 of 2023**  
**in**  
**M.P.No.42 of 2022**

1. Tamil Nadu Generation and Distribution Corporation Ltd.  
Represented through,  
The Chairman & Managing Director,  
(TANGEDCO & TANTRANSOCO)  
NPKRR Malligai, No.144, Anna Salai  
Chennai-600002.

2. Chief Engineer / NCES,  
TANGEDCO,  
2<sup>nd</sup> Floor, Eastern Wing,  
NPKRR Maaligai,  
No.144, Anna Salai,  
Chennai- 600 002.

..... Petitioner  
Thiru N.Kumanan and  
Thiru A.P.Venkatachalapathy,  
Standing Counsel for Petitioners

**P.P.A.No.5 of 2023**

Tamil Nadu Generation and Distribution  
Corporation Ltd,  
Represented by the Chief Engineer /  
Non-Conventional Energy Sources  
No. 144 Anna Salai, Chennai 600 002.

..... Petitioner  
Thiru N.Kumanan and  
Thiru A.P.Venkatachalapathy,  
Standing Counsel for Petitioner

These above Petitions stand preferred by the Petitioner TANGEDCO, TANTRANSCO and NCES coming up for final hearing on 07-12-2023 in the presence of Tvl. N.Kumanan and A.P.Venkatachalapathy, Standing Counsel for the Petitioners and on consideration of the submission made by the Counsel for the Petitioner and Respondent, this Commission passes the following:

**COMMON ORDER**

**1. Prayer of the petitioner in R.P. No.2 of 2023:-**

The prayer of the Petitioner in R.P. No.2 of 2023 is to-

- i) To review the order dated 4.7.2023 issued for M.P.No.42 of 2022.
- ii) To approve the prayer under M.P.No.42 of 2022 i.e.,
  - a) To approve the proposal of the TANGEDCO to purchase solar power of 420 MW capacity from the developers/farmers establishing solar power plant under Component A of PM-KUSUM scheme

through tender with the specification as stated in Sl.No.9 with an upper ceiling limit of Rs.3.30 per unit and to execute Power Purchase Agreement (PPA) for a period of 25 years.

b) To approve the draft PPA and to pass such other or orders as the Commission may consider deem fit and proper.

**2. Prayer of the petitioner in P.P.A.P. No. 5 of 2023:-**

The prayer of the petitioner in P.P.A.P. No. 5 of 2023 is-

a) To approve for adopting the tariff of Rs.3.28 per unit offered by the following 2 bidders who are farmers, arrived through reverse bidding process (e-tender) in respect of their proposed solar power plants of combined capacity of 3 MW against solar tender specification CE/NCES/OT.No.2/2022-23 under Component "A" of PM-KUSUM scheme.

Sl. No.	Name of the bidder	Capacity in MW	Rate per unit Rs.	Connectivity SS
1.	Thiru.T..Palani, Ladavaram, Arcot District	2	Rs.3.28	33/11KV Pudupadi SS
2.	Tmtty.S.Suganya, Chennai	1	Rs.3.28	110/11KV Mambakkam SS

b) To issue Letter of Award to the above two bidders with the technical and commercial clauses as approved by the Commission in the order dated

28.12.2021 for MP. No.19 of 2021 and which has been adopted in the tender floated as CE/NCES/OT.No.2/2022-23.

- c) To execute PPA with the above two bidders in the format already approved by the Commission in its order dated 26.4.2022 for PPAP.No.2 of 2022 and to pass such further or other orders as the Commission may deem fit and proper in the facts and circumstances of the case and thus render justice.

### **3. Submission of the Petitioner R.P. No. 2 of 2023 in M.P. No. 42 of 2022:-**

3.1. The Commission while admitting the petition and hearing brief arguments in its daily order dated 23.01.2023 has stated the following:-

*"TANGEDCO is directed to go ahead with the tender process. The case is adjourned to 31.01.2023 for further hearing"....*

3.2. Based on the direction of the Commission in its daily order dated 23.01.2023 tender was floated for the procurement of 420 MW of solar power under Component -A of PM-KUSUM scheme for establishing solar power plants in Tamil Nadu under reverse bidding process, considering the bench mark tariff of Rs.3.30 per unit. Notice Inviting tenders was published in "The Hindu" and "Thina Thanthi" on 9.2.2023 with due date of opening as 9.3.2023.

3.3. The above petition came up for hearing on 31.1.2023 and the Commission was intimated of

the fact that TANGEDCO is in the process of issuing Notice inviting tenders and the Commission in its daily order has directed as below:-

*"TV.N.Kumanan and A.P. Venkatachalapathy, Standing Counsel for the petitioner appeared and sought short adjournment. The case is adjourned to 09.03.2023 for further hearing. Meanwhile, TANGEDCO is at liberty to go ahead with the proposal."*

3.4. Based on the representation received from prospective bidders requesting extension of time, the due date of opening was postponed to 24.3.2023.

3.5. The M.P.No.42 of 2022 came up for further hearing on 9.3.2023. TANGEDCO intimated that based on the representation received from prospective bidders, the due date has been postponed to 24.3.2023. Hence Commission adjourned the matter to 06.04.2023 for reporting status.

3.6. Based on the Commission's directions in its daily order dt 23.1.2023 and 31.1.2023, to go ahead with the tender process, the Techno-commercial bids for the Specification No CE/NCES/OT.No.02/2022-23 was opened on 24.03.2023. Two offers were received against the above tender from the following:

1. Thiru. T. Palani, No.3/61, Mettu Street, Ladavaram, Arcot – 632503
2. Tmt.Y.S.Suganya, Chennai.

3.7. The above petition came up for hearing on 06.04.2023 and the Standing Counsel appeared on behalf of TANGEDCO and sought for further adjournment. At the request of the Counsel, the case was adjourned at a later date for further hearing.

3.8. The above petition came up for hearing on 06.06.2023, and the Commission was apprised of the fact that though the tendered quantity was for 420 MW, bids have been received from only two bidders totaling 3 MW.

3.9. Based on the daily order dt 23.1.2023 and 31.1.2023, TANGEDCO started evaluating the techno-commercial conditions of the two bidders and the two bidders have satisfied all BQR conditions.

3.10. The BOARD of TANGEDCO in its 118<sup>th</sup> meeting held on 18.11.2023 has approved the proposal seeking approval for issue of LOA and filing of petition before the Commission for signing PPA with two eligible bidders totaling 3MW for purchase of solar power @ Rs.3.28 per unit for purchase of solar power under Component "A" of PM-KUSUM scheme.

3.11. In the TNERC order dated 4.7.2023 for M.P.No.42 of 2022 it is stated as follows:

*It is submitted by the petitioner that the response to the tender was not good. In view of the same, TANGEDCO is directed to float a fresh tender. The petition is closed."*

3.12. The BOARD of TANGEDCO in its 118<sup>th</sup> meeting held on 18.11.2023 has also directed the following.

*"Approved. The Scheme to be popularised with funding tie-up with the banks."*

3.13. The Ministry of Power has also fixed the RPO for distributed renewable energy wherein the RPO for distributed renewable energy for 2024-25 is 1.5%. In order to meet out the RPO, TANGEDCO needs to improve the solar capacity addition under KUSUM scheme.

3.14. Considering the merits of the Component "A" of PM-KUSUM scheme wherein solar generation is made available at distribution level, the entire feeder gets solarised, livelihood of the farmers is improved through a regular income from their unutilized land, the order dated 4.7.2023 may be reviewed.

3.15. As per TNERC Conduct of Business regulation Clause 43 (1)

*“43 (1) The Commission may on its own or on the application of any of the persons or parties Concerned within 30 days of the making of any decision, direction or order, review such decision, directions or orders on the ground that such decision, direction or order was made under a mistake of fact, ignorance of any material fact or any error apparent on the face of the record.”*

3.16. In respect of M.P.No.42 of 2022, during the hearing on 06.06.2022, TANGEDCO has apprised to the Commission about the fact that though the tendered quantity was for 420 MW, bids have been received from only two bidders totaling 3 MW.

3.17. Due to ignorance of the material fact that 2 bidders totaling 3 MW have participated in the above tender, order dated 04.07.2023 has been issued with the direction to float fresh tender. Hence the Commission is requested to review the order dated 04.07.2023 issued for M.P.No.42 of 2022 based on the ignorance of material fact.

#### **4. Submissions of the Petitioner in P.P.A.P. No.5 of 2023:-**

4.1. This petition is being filed seeking approval for adoption of tariff of Rs.3.28 per unit offered by the 2 (two) successful bidders of the solar e-tender obtained through reverse bidding process in respect solar tender specification CE/NCES/OT No.2/2022-2023 floated for procurement of 420 MW 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 by establishing solar power plants in Tamil Nadu of capacity 1 MW and upto 2 MW under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme Component - A for an agreement period of 25 years.

4.2. A petition in M.P.No. 42 of 2022 was filed before the Commission with the following prayer:

- (i) To approve the proposal of the TANGEDCO to purchase solar power of 420 MW capacity from the developers/farmers establishing solar power plants under Component A of PM-KUSUM scheme through tender with the specification and with a upper ceiling limit of Rs 3.30 per unit for a period of 25 years
- (ii) To approve the draft Power Purchase Agreement and pass such other order or orders as the Commission may consider deem fit and proper.



4.3 The Commission while admitting petition and hearing brief arguments in its daily order dt 23.1.2023 has stated the following: "

*"TANGEDCO is directed to go ahead with the tender process. The case is adjourned to 31.01.2023 for further hearing."...*

4.4. Based on the direction of the Commission in its daily order dated 23.1.2023 tender was floated for the procurement of 420 MW of solar power under Component - A of PM-KUSUM scheme for establishing solar power plants in Tamil Nadu under reverse bidding process, consider the bench mark tariff of Rs.3.30 per unit, Notice Inviting tenders was published in "The Hindu" and "Thina Thanthi on 9.2.2023 with due date of opening as 9.3.2023.

4.5. The M.P.No.42 of 2022 came up for hearing on 31.1.2023 and the Commission was intimated of the fact TANGEDCO is in the process of issuing Notice inviting tenders. The Commission adjourned the case to 09.03.2023 for further hearing and also directed that TANGEDCO is at liberty to go ahead with the proposal.

4.6. Based on the representation received prospective bidders requesting extension of time, the due date of opening postponed to 24.3.2023.

4.7. The M.P.No.42 of 2022 came up for fur hearing on 9.3.2023. TANGEDCO intimated that based on the representation received from prospective bidders, the

due date has been postponed to 24.3.2023. Hence Commission adjourned the matter to 06.04.2023 for reporting status.

4.8. The based on the Commission directions in its daily order dt 23.1.2023 and 31.1.2023, to go ahead with the tender process the Techno-commercial bids for the Specification No CE/NCES/OT.No.02/2022-23 was opened on 24.03.2023. Two offers were received against the above tender from the following:

1. Mr.T.Palani. No.3/61. Mettu Street. Ladavaram, Arcot – 632 503
2. Tmt S.Suganya, Chennai.

The land documents furnished by the bidders were sent to field NCES wing and distribution wing to furnish the field feasibility report.

Both the bidders have participated under the farmer category and have satisfied all BQR conditions.

4.9. Thiru T.Palani who has participated in this bid had also participated in the earlier tender floated for purchase of 500 MV of solar power against Spec No.CE/NCES/O.T No.01/20-21 with an upper ceiling limit of Rs 3 per unit.

4.10. Thiru T.Palani had quoted Rs.2.99 per unit for establishment of 2 MW SPV plant and being a successful bidder, based on the approval of BOARD of TANGEDCO in it's 106th meeting held on 19.03.2022 and the Commission order

dated 26.04.2022 for P.P.A.P.No. 2 of 2022, Letter of Award was issued on 30.4.2022.

4.11. As per the terms and conditions of the LOA, Thiru T.Palani has to execute PPA with TANGEDCO within two months from the date of issue of LOA on or before 30.06.2022. However Thiru T.Palani through letter dt 23.5.2023 represented to MNRE, seeking exemption from "Basic Custom Duty" (BCD) for modules to make the project viable and also to reconsider the increase in GST imposed.

4.12. In this regard, the MNRE through its e-mail dt 11.6.2022 stated that *"Your request for exemption for BCD for procurement of modules cannot be acceded to. In this regard, it may be mentioned that Ministry issued notification on 9.3.2021 for imposition of BCD on solar cells and modules. During price negotiations on 11.8.2021, you have agreed to establish the plant at quoted price of Rs 2.99 per kWh. Regarding increase in GST, the matter may be taken up with State agencies under change in law provision of PPA."*

4.13. Subsequently Thiru T.Palani through e-mail dt 29.6.2022 sought for extension of time for execution of PPA as they have proposed to file a petition in Commission with regard to BCD and GST dues.

4.14. As this scheme involves CFA to DISCOMS @ Rs 0.40 per unit for a period of five years, clarification was sought for from MNRE whether time extension can be

permitted .In this regard MNRE through its e-mail dt 8.8.2022 stated that "Please follow the PM-KUSUM guidelines". Hence time extension was not permitted to Thiru T.Palani and the bank guarantee in lieu of EMD for Rs.2,00,000/- was invoked and proceeds received n 24.3.2023.

4.15. The facts relating to Thiru T.Palani was put forth before the BLTC in the proposal placed seeking approval for opening of the price bids of the eligible bidders. Further the BLTC of TANGEDCO was appraised of the fact that this tender has been floated based on the MNRE Notification dt 22.7.2019 and as per the guidelines and is mainly intended to encourage farmers into solar generation, only encashment of EMD has been specified as penalty and there is no clause banning them for participating in future tenders.

4.16. The BLTC in its 421<sup>st</sup> Meeting held on 20-07-2023 directed "to open the price bid of the present tender, if the price quoted is more than the previous rate, the same may be placed before the Board for further approval".

4.17. The price bids of the following 2 bidders were opened on 16.08.2023, as they have satisfied all the terms and conditions of tender specification. Both the bidders have quoted Rs.3.29 per unit for supply of solar power to TANGEDCO.

Sl. No.	Name of the bidder	Connectivity SS	Rate quoted	Order of ranking	Capacity
1.	Thiru.T..Palani, Ladavaram, Arcot District	33/11KV Pudupadi SS	3.29 per unit	L1	2MW
2.	Tmtty.S.Suganya, Chennai	110/11KV Mambakkam SS	3.29 per unit	L1	1MW

4.18. Both the bidders were called for negotiation on 21.8.2023 for reducing the rate quoted by them. During negotiation Thiru T.Palani stated that due to imposition of Basic Customs Duty and imposition of GST for solar projects, they are not in a position to reduce the rates. However Thiru T.Palani in his letter dt 21.8.2023 has agreed for supplying solar power under Component "A" of PM-KUSUM scheme @ 3.28 per unit. Tmtty S.Suganya in her letter dt 21.8.2023 has also agreed to supply solar power under this scheme @ Rs.3.28 per unit.

4.19. With regard to the reasonableness of the offered by the two bidders the following facts are put forth:

i) TANGEDCO has signed PPA on 13.10.2023 for purchase of 500 MW of solar power @ the rate of Rs. 2.73 per unit (Tentative cost as likely to vary with imposition of BCD).

The landed cost for this power at the point of supply ie, to farmer is a follows:

- Transmission losses @ 4% : Rs.0.11

- Cost at State periphery : Rs.2.84
- Distribution losses @13.5% : Rs.0.44
- Cost of solar power supply at field after distribution losses : **Rs.3.28**

4.20. 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 = Rs.2.88) for the first five years from the COD which results in substantial savings to TANGEDCO.

4.21. Financial commitment when procured from M/s SECI and through this tender:

Sl. No.	Scheme	Probable generation @ 19 % CUF for 25 years	Rate	Total financial commitment
1.	SECI	124830000	3.28	409442400
2.	Now discovered rate through KUSUM tender		3.28 for 25 years (Rs 0.40 subsidy for first five years)	399456000

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.

4.22. 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 communicated that a cumulative sanction of 424 MW (75 MW + 349 MW) is available for Tamil Nadu as on 30.08.2022. MNRE through E-mail dated 20.11.2023 has confirmed that the allocation of 424 MW is available under Component A of PM-KUSUM scheme for Tamil Nadu.

4.23. The BOARD of TANGEDCO in its 118<sup>th</sup> meeting held on 18.11.2023 has accorded approval for the proposal placed seeking approval for issuance of LOA and subsequent signing of PPA with the two successful bidders for purchase of solar power totaling 3 MW @ Rs.3.28 per unit for a period of 25 years.

4.24. The Commission has directed in its daily order dt. 31.1.2023 for M.P.No. 42 of 2022 that TANGEDCO is at liberty to go ahead with the proposal for procurement of 420 MW of solar power from individual farmers/group of farmers/cooperatives/ Panchayats/Far producer organizations (FPO)/Water user associations (WUA)/

Developer behalf of the farmers by establishing solar power plants in Tamil Nadu Capacity 1 MW and upto 2 MW under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM-KUSUM) Scheme Component - A an agreement period of 25 years.

4.25. Based on the Commission daily order 31.1.2023 TANGEDCO issued notice inviting tenders in newspapers and subsequently the tender has been opened on 24.3.2023. The above fact has also been apprised to the Commission during the hearing held 24.3.2023 and also on 6.6.2023. TANGEDCO started processing the tenders based on the above daily orders. Further TANGEDCO has apprised the fact that two bids have been received and orders were reserved.

4.26. The Commission in its order dated 04.07.2023 has issued the following directions to TANGEDCO:-

*....."It is submitted by the petitioner that the response to the tender was not good. In view of the same, TANGEDCO is directed to float a fresh tender."*

4.27. Based on the daily order dt 23.1.2023 and 31.1.2023 and 24.3.2023, TANGEDCO has floated this tender and has processed the tender. Though the response of the tender was not good, the two bidders who have participated in this tender has satisfied all BQR conditions. Under the above circumstances, the order dt



4.7.2023 in M.P.No.42 of 2022 may be reviewed and the action taken by TANGEDCO in having processed the tender based on the daily order may be accepted.

4.28. As the rate quoted by the two bidders is of reasonable, Commission may approve for adopting the tariff of Rs.3.28 per unit offered by the two bidders, arrived a through a reverse bidding process (e-tender) in respect of their proposed solar power plants of combined capacity of 3 MW to be commissioned under Component A of PM-KUSUM scheme against solar tender specification CE/NCES/OT.No.2/2022-23.

<b>Sl. No.</b>	<b>Name of the bidder</b>	<b>Capacity in MW</b>	<b>Rate per unit Rs</b>	<b>Connectivity SS</b>
1.	Thiru.T..Palani, Ladavaram, Arcot District	2	Rs.3.28	33/11KV Pudupadi SS
2.	Tmt.y.S.Suganya, Chennai	1	Rs.2 99	110/11KV Mambakkam SS

4.29. This tender has been floated based on the guidelines issued by MNRE for implementation of PM-KUSUM guideline dt 22.07.2019, 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.

4.30. The MNRE through its Office memorandum No.283/16/2023-Grid Solar dt 10.03.2023 that the subject order is held in abeyance for one financial year ie., FY 2023-24 and thus projects commissioned by 31.03.2024 will be exempted from the requirement of procuring Solar PV modules from ALMM.

4.31. 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 Commission. Further specific approval is requested for issue of LOA to Thiru T.Palani, Ladavarm, Arcot District based on details submitted in para 9 to 13 above.

Sl. No.	Name of the bidder	Capacity in MW	Rate per unit Rs
1.	Thiru.T..Palani, Ladavaram, Arcot District	2	Rs.3.28
2.	Tmt.y.S.Suganya, Chennai	1	Rs.3.28

4.32. 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 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 LOA.

- iv) Commissioning period: 12 months from the date of issue of LOA. For delay upto two months, the PBG shall be encashed on per day basis and for any further delay, the PPA capacity shall stand reduced/amended to the project capacity commissioned at the end of 14<sup>th</sup> month.
- 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.

4.33. The Commission has approved in its order dated 26.04.2022 in P.P.A.P.No. 2 of 2022 the PPA format to be adopted. It is proposed to adopt the approved PPA for this tender also.

4.34. The 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."*

4.35. Based on the directions of the Commission, energy accounting shall be done and payment made accordingly.

**5. Common findings of the Commission in R.P. No.2 of 2023 in M.P. No. 42 of 2022 and P.P.A.P. No.5 of 2023:-**

5.1. We have examined both the records and submissions of the Petitioner relating to R.P.No 2 of 2023 in M.P.no 42 of 2023 and associated P.P.A.P No.5 of 2023.

5.2. The petitioner Licensee has prayed (i) to review the order passed in M.P.No.42 of 2022 in regard to the tender to be processed for procurement of 420MW solar power Under PM-KUSUM scheme with condonation of delay in filing the Review Petition (ii) to approve the tariff of Rs.3.28 per unit discovered through competitive bidding and (iii) to approve the format of PPA to be executed between the petitioner and the solar power generator.

5.3. The petitioner originally had filed M.P.No.42 of 2022 seeking approval to purchase solar power to a quantum of 420MW from developers under component A of PM-KUSUM scheme through reverse bidding tender mechanism with an upper ceiling of Rs.3.30 per unit with execution of PPA for 25 years.

5.4. The petitioner has submitted that MNRE in its order dated 13.01.21 had accorded capacity sanction of 75MW for de-centralized grid connected solar power plants under component A of PM-KUSUM scheme for TANGEDCO for FY 2020-21 and further sanctioned vide its order dt 15.05.22 an additional capacity of 349 MW totaling to 424MW for FY 2020-21; MNRE in its communication dt 31.08.22 confirmed that this cumulative sanction of 424MW is available as on 30.08.22 for Tamil Nadu.

5.5. The petitioner had proposed to purchase 420MW by transparent competitive reverse bidding mechanism with a ceiling limit of Rs.3.30 per unit for 25 years. The petitioner had justified this ceiling limit, taking in to consideration of the upper ceiling limit of Rs.3.00 per unit fixed for the tender floated during 2020-21 that yielded very poor response to the minimal extent of only 3 bids for 4 MW, subsequent price escalation of solar components and in comparison of the tariff determined by the Commission in the Generic Tariff Order vide Order No.8 of 2021 dated 22.10.21.

5.6. Conceding the proposal of the petitioner for the said quantum of 420MW solar power to be purchased through transparent competitive bidding with aforesaid upper

ceiling limit, the Commission had directed the petitioner to proceed further with the tender process in the daily order dated 23.01.23. Accordingly the petitioner proceeded. However it was subsequently submitted by the petitioner during further hearing of the case that only two bidders with 2MW and 1MW totaling to 3MW responded to the tender, against the total tendered quantum of 420MW. As the renewable solar power is essentially required to supplement generation to keep pace with the growing grid demand besides complying with the KUSUM scheme and the response to the tender was too low to meet the requirement, it was directed by the Commission to float fresh tender in continuation to the original tender to further generate the response of the developers in order to augment more solar power, disposing the petition in the process. Thus, the intension of Commission's order to continue the mission with fresh tender was to generate adequate response from more number of developers in addition to the two developers who had already responded to the initial tender, in order to see the possibility of generating additional response towards anywhere near the ambitious scheme target of 420MW.

5.7. Given the above backdrop, the submission of the petitions to review and re-open the petition in M/P.No.42 to entail the processing of the initial tender to avail the offer of the two bidders who had come forward to respond to the initial tender, stands acceptable in view of the very purpose of the whole exercise being to fulfil

objective of the KUSUM scheme that aims to leverage solar power to the extent of 420MW. Feeder solarisation as formulated in KUSUM scheme not only promotes the solar generation but also contributes to bolster the implementation of distributed generation in a significant way. Distributed generation while easing the power management by narrowing the supply-demand gap and reducing the system loss by virtue of its geographical locations at load pockets itself, also contributes to comply with the mandate of Renewable Power Obligation. Considering the need to exploit the potential of solar generation to such requirements and fulfil the objective of the KUSUM scheme, the review petition is allowed with associated approval as already granted by the Commission to purchase solar power to the quantum of 420MW through competitive bidding with an upper ceiling limit of Rs.3.30 per unit for a period of 25 years with execution of necessary PPA. The delay in filing the petition is condoned in view of the acceptable reasons explained by the petitioner in the process.

5.8. In furtherance, the petitioner has sought for approval of **Rs.3.28 per unit** for a **period of 25 years** offered by following two bidders of the tender for 2MW and 1MW by each and to issue the letter of award with technical and commercial clauses as approved in order dated 28.12.21 in M.P No.19 of 2021:

1. Thiru.T.Palani,Ladavaram,Arcot Dist - **2 MW** connected to 33/11 kV  
Pudupadi SS

2 .Tmty.S.Suganya, Chennai

- **1MW** connected to 110/11 kV  
Mambakkam SS

5.9. The rate of Rs.3.28 per unit discovered is through the transparent process of bidding that stands statutorily adoptable as specified by section 63 of the electricity Act 2003, reproduced as under:

*“Section 63. (Determination of tariff by bidding process): Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government.”*

5.10. Petitioner has further justified the reasonableness of this cost by comparing the purchase price of solar power through the PPA signed on 13.10.23. Further the petitioner has submitted that as per MNRE guidelines, DISCOM would be eligible to get PBI @ Rs.40 per unit purchased or Rs.6.6 lakhs per MW of capacity installed whichever is less for a period of five years from COD resulting in substantial saving to TANGEDCO; hence the rate offered by bidders @ Rs.3.28 per unit of power which is to be generated at load centre, solarising the entire feeder is quite reasonable.

5.11. In view the above, the Commission approves adoption of tariff of Rs.3.28 per unit, issue of letter of award to the two bidders mentioned above and execution of PPA for a period of 25 years. The approved PPA format with necessary corrections



shall be communicated separately. The solar power procured from these power plants may be accounted for RPO.

5.12. The Commission having seized of the growing demand and to achieve sustainable energy further issues the following guidelines to simplify and streamline the process of solar power application to eliminate bottlenecks and encourage the developers:

- (i) Load flow study need not be included in the process chain of granting approval for feeder solarisation for contracted demand up to 2kW in 11kV and 4kW in 22kV in the Distribution sub-stations. It is enough to ensure the adequacy of thermal rating of feeder and capacity of connected equipment and switchgears like breaker, CT, power transformer etc., as being done for normal HT services as both are similar in terms of technical parameters and requirements.
- (ii) The cumulative capacities of solar plants that can be connected to a power transformer shall not exceed the total limit of power transformer capacity plus its average minimum sustained load from 6AM to 6PM during the previous one year. For example if a 16 MVA power transformer has 5 MVA as average minimum sustained load from 6AM to 6PM during the previous one year, the cumulative solar plant capacity that can be connected to

that power transformer shall be  $16\text{MVA}+5\text{MVA}=21\text{MVA}$  with appropriate protection scheme. Necessary amendment in Regulation shall be issued in this regard.

- (iii) The RE plant can be set up in any suitable place / barren land in the vicinity of 11kV/22kV feeder and connected to the nearest feasible point of that feeder with appropriate metering arrangement at the outgoing HT side of the plant, equipped with AMR facility.
- (iv) The switchgear at such outgoing end to isolate their plant from the Licensee network shall have the facility of being operated remotely by the Licensee from the concerned sub-station.
- (v) The cost of erection and maintenance of the interface line between the plant and Licensee network shall be borne by the developer/generator.

In overview, we order the following:

1. The Review petition is allowed with approval 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.

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.19 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.

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

(Sd.....)  
Member

(Sd.....)  
Chairman

/True Copy /

**Secretary  
Tamil Nadu Electricity  
Regulatory Commission**