#### Before the

## MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

World Trade Centre, Centre No.1, 13th Floor, Cuffe Parade, Mumbai 400005 Tel. 022 22163964/65/69 Fax 22163976

Email: mercindia@merc.gov.in

Website: www.mercindia.org.in / www.merc.gov.in

## Case No. 172 of 2017

#### In the matter of

Petition of Maharashtra State Power Generation Co. Ltd. for removal of difficulties in the matter of implementation of "Mukhyamantri Solar Agricultural Feeder Scheme" and approval of draft Power Purchase Agreement (PPA) & draft Power Sale Agreement (PSA) being executed by MSPGCL with the developer and Maharashtra State Electricity Distribution Co. Ltd., respectively for Agriculture (AG) Feeder Solar Power Projects in Maharashtra.

#### **Coram**

# Shri. Anand B. Kulkarni, Chairperson Shri. Mukesh Khullar, Member

Maharashtra State Power Generation Co. Ltd. (MSPGCL) ....Petitioner

- 1. Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL)
- 2. Maharashtra Energy Development Agency (MEDA) .....Impleaded Parties

#### Appearance

For MSPGCL : Shri. S. B. Soni, (Rep.)
For MSEDCL : Shri. Satish Chavan, (Rep.)
For MEDA : Shri. Manoj Pise (Rep.)
For Consumer Representatives : Dr. Ashok Pendse, TBIA

: Shri. Shantanu Dixit, Prayas Energy Group

#### **ORDER**

Date: 16 October, 2018

1. Maharashtra State Power Generation Co. Ltd. (MSPGCL), Regulatory and Commercial Department (RCD), Prakashgad, 3<sup>rd</sup> Floor, Plot No. G-9, Anant Kanekar Marg, Bandra (East), Mumbai-400 051, has filed a Petition on 27 November, 2017 for removal of difficulties in the matter of implementation of "Mukhyamantri Solar Agricultural Feeder Scheme" and approval of draft Power Purchase Agreement (PPA) & draft Power Sale Agreement (PSA) being executed by MSPGCL with the developer

and Maharashtra State Electricity Distribution Co. Ltd., respectively for Agriculture (AG) Feeder Solar Power Projects in Maharashtra. MSPGCL has filed its Petition under Section 86 (1) clause (a), (b), (i), (j) and (k) of the Electricity Act, 2003 (EA, 2003) and Regulation 102 of MERC MYT Regulation, 2015(MYT Regulations) and Regulation 82 of MERC RE Tariff Regulation, 2015 ('RE Tariff Regulations').

# **2.** MSPGCL's prayers are as follows:

"

- a. Admit this Petition;
- b. Grant an expeditious hearing of this petition;
- c. Approve the modalities proposed for Power Purchase Agreement and Power Sale Agreement for all the solar projects being installed under "Mukhyamantri Solar Agricultural Feeder Scheme" including the Pilot projects at RaleganSiddhi and Kolambi;
- d. Approve the draft Power Purchase Agreement and Power Sale Agreements so that these PPA and PSA documents will form a basis for all future Solar Power Projects being developed by MSPGCL under this scheme;
- e. Approve the modalities proposed for administrative charges to MSPGCL;
- f. Condone any shortcomings/ deficiencies in the petition and allow MSPGCL to submit additional information/data at a later stage as may be required."

#### **3.** The Petition states as follows:

- (1) MSPGCL, a Company incorporated under the provisions of the Companies Act, 1956 is filing this miscellaneous Petition seeking removal of difficulties in the matter of implementation of "Mukhyamantri Solar Agricultural Feeder Scheme".
- (2) MSPGCL has a conventional power generation capacity of 13427 MW comprising of various coal based and gas based thermal units and hydro generation units spread across Maharashtra. MSPGCL has also installed solar generation capacity of 180 MW. (5 MW at Chandrapur, 125 MW at Sakri, Dhule and 50 MW at Shirsufal near Baramati, Dist. Pune).
- (3) Government Of Maharashtra (GoM) has approved the Comprehensive Solar Policy-2015 for Grid connected new and Renewable Power generation projects in the State, vide Government resolution dated 20 July, 2015. As per this policy, the targeted solar capacity addition till 2022 is 7500 MW. At that time it was decided that MSPGCL, being State Generation Company, will undertake solar capacity addition of 2500 MW, through Public Private Partnership (PPP) method.
- (4) Meanwhile there was an innovative suggestion that considering the 30 % usage of power for Agricultural (AG) sector and considering the difficulties faced by MSEDCL in revenue recovery from the AG consumers due to various reasons, if the

agricultural feeders are supplied power from localized Solar plants, this will not only help to improve the revenue recovery but also minimize the cross-subsidy burden as well as will supply power to the agriculture sector during day time.

- (5) Accordingly, GoM has approved "Mukhyamantri Solar Agricultural Feeder Scheme" vide GR dated 14 June, 2017. The salient features of the scheme are as below.
  - a) Implementing Agency: MSPGCL is to implement the scheme on PPP basis with necessary participation from MEDA and MSEDCL at relevant stages.
  - b) Land for the project: MSPGCL to identify the Government land within the periphery of 5kM to 10kM of 11kV to 132kV substations in Maharashtra. MSPGCL to finalize the solar projects considering the availability of the land, Separated AG feeder load, nos. of AG consumers. MSEDCL & MSETCL will also study the Detailed Project Report (DPR) of the project and offer their comments on the feasibility of the project prior to finalization. Required Government land will be made available to MSPGCL on the lease rent of Rs.1/- for 30 year period. MSPGCL further will provide this land to Private Solar Developer on lease rent basis. Lands from private land owner may also offer their land to MSPGCL on lease rent basis. It is also proposed that the Private Investors / Solar Power Developers may come forward for project development on their own land and factor the costs in tariff bids.
  - c) Permits & permissions: MEDA will register such Solar projects free of cost. Change of status of the land from Agriculture to Non-Agricultural will not be mandatory. There will be relief for 30 years in all taxes/fees which are imposed by Revenue or Local Body / Government Departments.
  - d) Method of implementation: MSPGCL will implement this scheme on PPP mode. The Private investor will be selected through the competitive Bidding Process with tariff rate as bidding parameter. After selection of lowest tariff offered bidder a reverse auction bidding will be carried out and lowest tariff offered bidder will be considered as successful bidder.
  - e) Power Purchase Agreement: MSPGCL to enter into appropriate agreement / contract with the Private Investor / Solar Power Developer for a particular period. The contract should also comprise of the Power Purchase related terms and conditions. Also MSPGCL has to seek approval of the Commission for the rate arrived through the competitive bidding process.
  - f) Evacuation & distribution of power: The expenditure required for power evacuation system from Solar project to AG feeder along with transmission lines will be reimbursed by MEDA from the Green Cess Funds.

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- g) Project Development: Private investor will construct, erect and commission the Solar power project and will carry out Operation & Maintenance of Solar power project for 25 years.
- h) Distribution of power: Selected AG feeder will be separated from the other feeders and MSEDCL will distribute the Solar power to AG consumers. MSEDCL will also carry out the Operation & Maintenance of AG feeder & concern distribution network. MSEDCL will install the Energy meters at those consumers which are presently un-metered.
- i) Tariff recovery & revenue arrangement: MSPGCL will pay the amount to Private Investor against the power generated from the Solar power project at the PPA tariff rate whereas MSPGCL will sell the power to MSEDCL at a tariff equal to PPA tariff plus administrative charges as decided. MSEDCL will collect bills from the AG consumers and will pay to MSPGCL along with the per unit subsidy to AG consumers provided by Government of Maharashtra and per unit cross-subsidy received from commercial & Industrial consumers plus any possible grants/subsides which are offered from GoI for this scheme.
- j) Implementation Committee: A committee to be formed under chairmanship of Principal Secretary (Energy) and comprising members from MSPGCL, MSEDCL & MEDA for effective implementation of the scheme and resolving the issues arising during implementation of the scheme. This committee will have rights to modify or change the terms and conditions of the scheme.
- k) Others: The places where Government land is available in abundant quantity and nearby AG feeders on which the adequate AG load is also available, then in such case the scheme will be implemented through Cluster AG Solar Feeder project manner by combining two or more AG feeders. This scheme can be implemented through private or Co-operative organizations.
- l) The Lift Irrigation Scheme (LIS) which is used to provide the irrigation water for agriculture purpose will also be powered with the help of this scheme. A farmer or group of farmers can submit their proposals to MSPGCL for development of AG feeder Solar Scheme by forming a cooperative organization. These Co-operative organizations can sign an Agreement with MSPGCL for supply of Solar power with the tariff rate as determined through competitive bidding.
- m) Pilot projects: Initially pilot projects are to be implemented at RaleganSiddhi Dist. Ahamadnagar and Kolambi, Dist. Yavatmal.

- n) Benefits: Following are some of the main benefits
  - i. Improvement in the revenue recovery and minimizing the cross-subsidy burden
  - ii. Reduction in T & D losses as the Solar Plant will be located near to the selected feeder
  - iii. Supply to the agriculture sector in day time
- o) Thus under the scheme the power generated by the Solar Power Developer / Private Investor on behalf of MSPGCL is being sold and supplied to MSEDCL for further distribution to the agricultural consumers connected to the selected Agricultural feeder.
- (6) For implementation of the scheme as per GoM directives, MSPGCL had completed the competitive bidding process for 2MW project each at RaleganSiddhi, Dist. Ahamadnagar and Kolambi, Dist. Yavatmal. The levelised rates arrived in competitive bidding process are Rs. 2.94 per unit for Ralegan Siddhi and Rs. 2.97 per unit for Kolambi for 25 years which are much lower than the generic tariff of Rs. 5.13 per unit approved by the Commission vide its Generic RE Tariff Order dated 28 April, 2017 for FY 2017-18.
- (7) MSPGCL has also identified further agricultural feeders aggregating a capacity of 500 MW. Of these the competitive bidding process for 200 MW capacity (50 MW cumulative capacity each in Vidarbha , Marathwada, Western Maharashtra and North Maharashtra) is completed. The levelised rate arrived at is Rs. 3.15 per unit for 25 years and MSPGCL has placed LOAs on the successful bidders. The tender process for the remaining 300 MW capacity is being undertaken by MSPGCL.
- (8) As per GoM scheme, MSPGCL is implementing the scheme through PPP mode and has to enter into contract with the Private Investor / Solar Power Developer for a particular period. The contract shall also comprise of the Power Purchase related terms and conditions. Also MSPGCL has to seek approval of the Commission for the rate arrived through the competitive bidding process.
- (9) Currently MNRE is implementing the RE capacity addition through Solar Energy Corporation of India Ltd.(SECI). As per modalities adopted by SECI there is an agency to buy RE power from Private Investors / Power Developers which then sells it to the Discoms. The proposed modalities for the Mukhyamantri Solar Agricultural Feeder Scheme are similar to the modalities adopted by SECI. As per SECI scheme an allowance of up to 7 paise is allowed to the intermediary. MSPGCL has presently proposed for allowance of 5 paise per unit as Administrative charges for the administrative expenses being incurred by MSPGCL for implementation of the scheme i.e. capacity addition and then further contractual obligation for 25 years.
- (10) As per the GoM directives, MSPGCL will get the power generated through the Solar Power Developer / Private Investor and in-turn will be supplied to MSEDCL for

further distribution to the agricultural consumers connected to the selected Agricultural feeder.

- (11) Thus MSPGCL needs to enter into a PPA with the Solar Power Developer / Private Investor, at a rate equal to the rate arrived through competitive bidding process. Also MSPGCL is required to enter into PSA with MSEDCL at a rate equal to rate arrived through competitive bidding process *plus* administrative charges as approved by MSEB Holding Company Limited.
- (12) It is to submit that in this case the Solar Power Developer / Private Investor is actually generating on behalf of MSPGCL. However for contractual purposes and for the sake of smooth implementation of the scheme, MSPGCL has to enter into Power Purchase agreement.
- (13) Regarding the 'Approval of long-term/medium-term power purchase agreement/arrangement ', the Regulation 20.1 of the MERC MYT Regulations, 2015, states following;

"Every long-term/medium-term agreement or arrangement for power procurement, including on a Standby basis, by a Distribution Licensee from a Generating Company or Licensee or from another source of supply, and any change to an existing agreement or arrangement shall come into effect only with the prior approval of the Commission:

Provided that the prior approval of the Commission shall not be required for purchase of power from Renewable Energy sources at the generic/preferential tariff determined by the Commission for meeting its Renewable Purchase Obligation (RPO)."

- (14) However, in the present case the PPA is being entered into Solar Power Developer / Private Investor and MSPGCL, whereas there is a PSA being entered into MSPGCL and MSEDCL. The rate arrived through competitive bidding process is the rate applicable for above PPA and rate applicable for above PSA is competitive bidding rate plus administrative charges to MSPGCL. As per data available for FY 15-16, MSEDCL had a shortfall of @ 210 MUs Solar purchase obligation. Considering the rising demand trend, MSPGCL expects that the proposed Solar capacity addition under this scheme will be within the overall Solar RPO for MSEDCL.
- (15) Thus the modalities being adopted for this Solar Agricultural Feeder Scheme is different than the normal Power Purchase related modalities adopted. Presently MSPGCL is not in a position to execute the PPA/ PSA as directed by GoM as the prevailing regulations, either MERC MYT Regulations, 2015 or MERC RE Tariff Regulations, 2015 do not cover the proposed modalities. Therefore, MSPGCL requests the Commission to approve the proposed modalities regarding Power Purchase Agreement / Power Sale Agreement for all the solar projects being installed

under "Mukhyamantri Solar Agricultural Feeder Scheme" including the Pilot projects at RaleganSiddhi and Kolambi.

- (16) MSPGCL is also submitting the draft Power Purchase Agreement and Power Sale Agreement prepared by MSPGCL. It is requested to approve the draft agreements so that these PPA and PSA documents will form a basis for all future Solar Power Projects being developed by MSPGCL under this scheme.
- (17) It is also requested to approve the modalities proposed for administrative charges to MSPGCL as even with the presently proposed administrative charges, the total tariff to MSEDCL is in the range of Rs. 2.99 per unit to Rs. 3.20 per unit (Rs. 2.99 per unit for RaleganSiddhi project, Rs. 3.02 per unit for Kolambi project and Rs. 3.20 per unit for the 200 MW projects for which LOAs are issued) which is much less than the generic tariff for Solar PV projects for FY 2017-18. It is also less than the present Average Power Purchase Cost (APPC) for MSEDCL which is Rs. 3.73 per unit for FY 2017-18 as per MYT Order dated 3 November, 2017 in Case No. 48 of 2016.
- **4.** MSPGCL in its letter dated 28 December, 2017 has stated that:
  - (a) The Solar power plants are being developed on PPP model basis hence MSPGCL is a Generator for these plants. MSPGCL will be claiming additional tariff of Rs. 0.05 per unit above the discovered tariff through Competitive bid for administrative expenses.
  - (b) If trading License is required MSPGCL will process for acquiring a Trading License.
  - (c) Both MSEDCL and MEDA are impleaded parties to the Petition thus they will submit their respective say before the Commission regarding various consents and acceptance.
  - (d) Tariff of Rs. 3.15 per unit was discovered after following due diligent competitive bidding process, thus it is legit and far less than the generic levellised tariff of Rs. 5.13 per unit approved by the Commission for the projects commissioned in FY 2017-18. The tariff of Rs. 3.15 per unit cannot be matched with some other process, can be less or higher as the case may be.
- 5. MEDA in its reply dated 29 December, 2017 has stated that the proposed MSPGCL's scheme is as per GoM's GR dated 14 June, 2017.
- **6.** The proceedings of the hearing held on 2 January, 2018 are summarized as follows:

The Commission heard the Representatives of the Petitioner, Respondents and Authorized Consumer Representatives.

(a) MSPGCL made a presentation wherein it has essentially reiterated its issues as made out in its Petition. MSPGCL has stated that the proposed modalities for the "Mukhyamantri Solar Agricultural Feeder Scheme" are similar to the modalities

adopted by MNRE in case of projects implemented through Solar Energy Corporation of India (SECI). Presently upto 7 paise per unit is allowed to SECI as a trading margin as an intermediary whereas MSPGCL under the present Case has proposed five (5) paise per unit as an Administrative charge. If required, MSPGCL may apply for Trading License before the Commission for implementation of the scheme. Even after considering the Administrative charges of MSPGCL, the power purchase cost of the power from the proposed scheme works out to Rs. 3.20 per unit which is much lower than the Commission's approved Generic Tariff of Rs. 5.13 per unit for FY 2017-18 and lower than that of the approved APPC of MSEDCL of Rs. 3.73 per unit for FY2017-18.

- (b) The Commission observed that MSPGCL under this Case has proposed to enter into a PPA with Solar developer and a PSA with MSEDCL separately. The Administrative charge of Rs. 0.05 per unit proposed by MSPGCL is akin to trading margin on account of sale of electricity to MSEDCL through this trading activity. However, MSPGCL does not hold any Trading License per se u/s 12, 14 of the EA, 2003. The arrangement proposed by MSPGCL in this Case is based on the MoP"s "Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects" notified on 3 August, 2017. These Guidelines have introduced three different terms;
  - (i) Procurer (Distribution Licensee or the Authorized Representative or an Intermediary Procurer),
  - (ii) Authorized Representative of the Procurer,
  - (iii)Intermediary Procurer and End Procurer. (Trader shall be the intermediary procurer)

These Guidelines are prepared u/s 63 of the EA, 2003 and envisages competitive procurement of electricity by Distribution Licensees to protect consumers interest.

- (c) Dr. Ashok Pendse, on behalf of Thane Belapur Industries Association (TBIA), an authorized Consumer Representative, stated that it supports the present scheme which will be beneficial to the Agriculture consumers. Further a Special Purpose Vehicle may be formed for implementation of the present Scheme. In reply MSPGCL has stated that such a formation of SPV is not possible since there are large nos. of developers involved under this Scheme.
- (d) Shri. Shantanu Dixit, on behalf of Prayas Energy Group, Pune, an authorized Consumer Representative, stated that it supports the present scheme which will be beneficial to the Agriculture consumers. Prayas further stated that 5th proviso to Section 14 of the EA, 2003 provides that the Government company or the company referred to in sub-section (2) of section 131 of EA, 2003 and the company or companies created in pursuance of the EA,2003 specified in the Schedule, shall be deemed to be a licensee under this Act. The Commission may provide a ceiling rate for such Bidding as carried out by MSPGCL in this Case.
- (e) The Commission directs MSPGCL to file its written submissions within a week on all the above points as set out at para 2, 3 and 4 as raised by the Commission as well as TBIA and Prayas Energy Group.
- (f) The Commission also directs MSEDCL to file its written submissions within a week on the specific issue of the modality as proposed by MSPGCL under this Case and the proposed Administrative charge of 5 paise per unit there under.

7. MSPGCL in its additional submission dated 10 January, 2018 has replied following replies / clarifications to the queries raised during the hearing held on 2 January, 2018:

## A. Modalities adopted by MSPGCL/GoM:

- a) As per GoM GR dated 14 June,2017, MSPGCL is implementing the scheme as it is currently the largest solar power producer in the State with 180MW solar PV installed capacity in its portfolio and can execute such solar power projects.
- b) MSPGCL has planned to implement this on PPP basis with necessary participation from MEDA and MSEDCL at relevant stages. The implementation modalities are similar to the one adopted by MNRE for implementation of Solar projects through SECI.
- c) As per the GR, MSPGCL is carrying out competitive bidding process for the selection of the Solar Power Developer/Private Investor. The Bidding process is being carried out as per MoP's Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects.
- d) MSPGCL will buy the total power from the Solar Power Developer / Private Investor at the PPA tariff rate and sell this power to MSEDCL.

#### B. Rationale for Administrative Charges:

e) For implementation of these projects, MSPGCL will incur some expenses of administrative & general in nature. Also post completion of project, there are routine expenses necessary for billing and related monitoring works. These expenses are elaborated below.

#### i) Project execution related expenses:

- 1. Manpower deployed for identification of suitable substations with AG load, necessary land identification nearby these stations to setup solar projects and further land acquisition related activities like payment towards land marking, land measurement, registration / stamp duty etc. is also being carried out. The expenses for registration and stamp duty for these land & relevant taxes etc. are to be borne by MSPGCL.
- 2. Tenderization of individual projects, contracting and monitoring of execution of the projects. Being specialized activities, these activities require involvement of specialized staff as well as consultancy services.

3. MSPGCL is needed to infuse funds for abovementioned execution expenses. So related financial costs. e.g. interest on loan are also to be borne by MSPGCL. The above project execution expenses will be one-time expenses and for recovery purpose they will be required to be spread over the project life.

## ii) Post COD routine annual expenses:

- 1. Manpower involved in monthly billing, reconciliations and accounting. These processes will continue till the life of the projects.
- 2. Apart from these expenses, there are expenses related to risk mitigation for execution of PPA/PSA. e.g. providing Letter of Credit. Expenses related to such risk mitigation activities will also need to be factored.
- f) As per broad estimates by MSPGCL the abovementioned expenses translate into @ Rs. 1.22 Lakh / MW per year for 500 MW. Therefore, MSPGCL requests the Commission to approve recovery of the proposed Administrative charges from MSEDCL over and above the discovered tariff, in appropriate manner as the Commission may find suitable.

Project execution expenses (Rs. Crs.)	Project execution related expenses including interest charges for 500 MW (a)	34.59	
	Project execution related expenses for 500 MW loaded annually (A = a /25)	1.384	
	Expected LC charges for the power purchase	0.011	
Routine expenses	Expected annual employee expenses for PPA/PSA execution (monitoring/billing/reconciliation/accounting etc.)	4.2	
(Rs. Crs.)	Annual establishment/stationery & general expenses	0.5	
	Routine annual expenses for 500 MW (B)	4.711	
Total estimated administrative expenses per year for 500 MW (C = A+B) (Rs.Crs.)			
Estimated Administrative expenses Rs. Lakh / MW / year (D = C X 100 /500)			

- **8.** Prayas (Energy Group), Pune, in its submission dated 19 January, 2018 has stated that:
  - a) Firstly, Prayas (Energy Group) would like to submit that we strongly support the Chief Minister's Solar Agriculture Feeder Scheme under whose aegis this petition is proposed. If implemented appropriately, we believe that it will be really beneficial not only to the farmers and agriculture sector broadly, but will also save the DISCOM and the state govt. significant amounts of cross subsidy and direct subsidy costs.

- b) The tariff discovered under the pilot projects, Rs. 2.94/kWh and Rs. 2.97/kWh as well as the subsequent first batch of larger scale competitive bids for 200 MW for which discovered tariff is Rs 3.15/kWh are highly competitive. While these do not include the evacuation costs, one would also have to factor in the avoided transmission losses of ~5% or Rs. 0.15/kWh.
- c) Considering that, MSPGCL would like to do similar bidding for the remaining 1300 MW (out of the total 1500 proposed), we strongly suggest that Rs 3.15/kWh should be the ceiling rate for further projects under this scheme and they should undertake reverse bidding. Further any additional subsidies/incentives by GoM / GoI or any other entity should be used to bring down this ceiling rate appropriately.
- d) Additionally, the distributed nature of these projects would marginally ease grid integration of these projects.
- e) Considering all these aspects, Prayas (Energy Group) would like to strongly endorse the proposal under this petition since it is strongly in the interest of the agriculture sector as well as for MSEDCL, its non-agriculture consumers and broadly for the state of Maharashtra.
- **9.** MSEDCL in its submission dated 2 June, 2018 has stated that:
  - a) MSEDCL vide letter dated 24 November, 2017 and 12 January, 2018 to the Principal Secretary requested to amend / modify the GoM G.R. dated 14 June, 2017.
  - b) Government of Maharashtra vide G.R. dated 17 March,2018 issued modifications to the "Mukhyamantri Solar Agricultural feeder Scheme" i.e. GR dated 14 June, 2017. The salient features of the modified provisions are as under:
    - (i) MSEDCL is also appointed as implementation agency along with MSPGCL for flexibility and speedy implementation of "Mukhyamantri Solar Agricultural feeder Scheme".
    - (ii) If the implementation agency is MSPGCL, MSPGCL will sell the power by including administrative/management expenses of MSPGCL to MSEDCL by execution of Power Sale agreement (PSA) between MSPGCL and MSEDCL.
    - (iii) The approval for PPA/PSA and such administrative/ management expenses of MSPGCL will be sought from Maharashtra Electricity Regulatory Commission (MERC) by MSPGCL/MSEDCL.
    - (iv) Also, the approval for PPA will be sought by MSEDCL for the projects implemented by MSEDCL.
    - (v) While selecting the project, the land acquisition expenses, Development charges, Evacuation Expenses and tariff rate of private investor will be considered as a whole for calculation of final tariff rate. After concurrence of MSEDCL for the same the project viability will be decided.

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- c) In view of above developments and provisions of Modified GR dated 17 March, 2018, the modalities/arrangement proposed by MSPGCL regarding execution of PPA between SPD and MSPGCL and PSA between MSEDCL and MSPGCL is acceptable to MSEDCL. Also, as per modified GR dated 17 March, 2018, administrative charges as approved by Commission for sale of Power by MSPGCL to MSEDCL is acceptable.
- d) The administrative expenses incurred by MSPGCL towards implementation of the scheme as an intermediary procurer may be claimed by MSPGCL in their Aggregate Revenue Requirement (ARR) and no administrative charges be added to the PPA tariff. However, in case the Commission is of the view that the administrative expenses be recovered by means of an administrative charge that is to be added to the PPA tariff, then the Hon'ble Commission may review and decide the administrative charges proposed by MSPGCL in transparent manner as such charges shall have long term impact.
- e) The solar power purchased from MSPGCL under this "Mukhyamantri Solar Agricultural feeder Scheme" should be considered towards the Solar Renewable Purchase Obligation of MSEDCL.
- f) As of now, MSEDCL is in receipt of proposals from MSPGCL for power evacuation arrangements for installation of cumulative 200 MW and 300 MW solar power projects in Vidarbha, Marathwada, Northern Maharashtra and Western Maharashtra regions apart from above pilot projects (2 MW Ralegansiddhi and 2 MW Kolambi) for which the bidding is completed.
- g) Apart from above mentioned solar capacity, MSEDCL hereby gives inprinciple consent to procure solar power as per the modalities of GR issued by GoM in the matter from time to time, if the rates discovered through Competitive bidding process are reasonable and in line with the rates derived in MSEDCL's tendering process are acceptable to MSEDCL.
- **10.** MSPGCL in its Rejoinder dated 8 June, 2018 has stated that:
  - a) MSEDCL in its reply dated 2 June, 2018 has indicated acceptability to the PPPA/PSA modalities proposed by MSPGCL and also has given acceptance to the administrative charges for sale of power from MSPGCL to MSEDCL.
  - b) However regarding the administrative expenses, MSEDCL has further submitted the following;
    - "...the administrative expenses incurred by MSPGCL towards implementation of the scheme as an intermediary procurer may be claimed by MSPGCL in their Aggregate Revenue Requirement (ARR) and no administrative charges be added to the PPA tariff. However, in case the Commission is of the view that the administrative expenses be recovered by means of an administrative charge that is to be added to the PPA tariff, then the Hon'ble Commission may

- review and decide the administrative charges proposed by MSPGCL in transparent manner as such charges shall has long term impact."
- c) MSPGCL files Petition for ARR under the provisions in MERC MYT Regulations only for the conventional power generation units and no such Petitions are filed for the solar power generations plants. AS per these Regulations the income as well as expenses considered under ARR are towards incurred in the business of conventional power generation and any income/expenditure from other non-regulated business are not expected to be included. Therefore the submissions of MSEDCL about claiming the administrative expenses through ARR are against the Regulatory provisions.
- d) Hence, MSPGCL requests the Commission to approve administrative expenses as a part of tariff over and above the competitive bidding rate arrived in tender process for the "Mukhyamantri Solar Agricultural feeder Scheme".
- 11. At the hearing held on 9 June, 2018, the Parties were informed of the Commission's decision to constitute a two Member Bench to re-hear and decide this case. Parties gave their consent to further hearing of the matter as being in continuance of the earlier proceedings. The proceedings of this hearing are summarized as follows:
  - a) The Commission heard the Representatives of the Petitioner, Respondents and Authorized Consumer Representatives.
  - b) MSPGCL made a presentation wherein it has essentially reiterated its issues as made out in its Petition. MSPGCL has stated that the proposed modalities for the "Mukhyamantri Solar Agricultural Feeder Scheme" are similar to the modalities adopted by MNRE in case of projects implemented through Solar Energy Corporation of India (SECI). Presently upto 7 paise per unit is allowed to SECI as a trading margin as an intermediary whereas MSPGCL under the present Case has proposed 5 paise per unit as an Administrative charge. Even after considering the Administrative charges of MSPGCL, the power purchase cost of the power from the proposed scheme works out to Rs. 3.20 per unit which is much lower than the Commission's approved Generic Tariff of Rs. 5.13 per unit for FY 2017-18 and lower than that of the approved Average Power Purchase Cost (APPC) of MSEDCL of Rs. 3.73 per unit for FY2017-18.
  - c) Dr. Ashok Pendse, on behalf of Thane Belapur Industries Association (TBIA), an authorized Consumer Representative, stated that it supports the present scheme of MSPGCL which will be beneficial to the Agriculture Consumers. He further stated that MSPGCL has filed this Petition on 27 November, 2017 whereas the solar prices are further reduced down over the period. Therefore, MSPGCL should review the current solar rates and further ensure that the ceiling rate under these Schemes should not exceed beyond Rs. 3 per unit.
  - d) Shri. Shantanu Dixit, on behalf of Prayas Energy Group, Pune, an authorized Consumer Representative, stated that it supports the present scheme of MSPGCL which will be beneficial to the Agriculture (Ag) consumers. He also supported the points raised by Dr. Ashok Pendse regarding ceiling rates. He further stated that

MSPGCL should ensure that the solar power shall be available to the Ag. Consumers for 8 hours in a day time & the respective data of generation and load connected on these Ag. feeders to be uploaded on its websites.

- e) The Commission observed that MSPGCL under this Case has proposed to enter into a PPA with Solar developer and a PSA with MSEDCL separately. The arrangement proposed by MSPGCL in this Case is based on the MoP's 'Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects' notified on 3 August, 2017. The Administrative charge proposed by MSPGCL is akin to trading margin on account of sale of electricity to MSEDCL through this trading activity. In this regard, MSPGCL has also filed a Petition dated 20 March, 2018 under Case No. 104 of 2018 before the Commission in accordance with Section 15 and 86(1)(d) of the EA, 2003 read with the MERC (Trading Licence Conditions) Regulations, 2004 with their amendments. MSPGCL has sought a grant of Intra-State trading license for undertaking trading of electricity within the State of Maharashtra. This matter is under consideration of the Commission.
- f) In the meantime, the Commission, till the finalization of above proceedings under Case No. 104 of 2018, provisionally approves the modalities of the two Pilot Schemes viz. at (1) Ralegansiddhi (2MW), Dist.-Ahemadanagr (2) Kolambi (2MW), Dist.- Yavatmal, except the issue of trading margin therein, as initiated by MSPGCL as per GoM GR dated 14 June, 2017 and revised GR dated 17 March, 2018. The Commission reserved the matter for final Orders.

#### **12.** MSPGCL in its submission dated 9 October, 2018 has stated that;

- a) Initially MSPGCL has done tenderization for 2 MW pilots project each at Ralegansiddhi and Kolambi, before publication of MNRE's guidelines as above. It is worth to note that the Commission has issued daily Order for the approval of the above mentioned pilot projects. (dated 3 January, 2018)
- b) Subsequently MSPGCL has done tenderization of 150 MW capacity through three tenders (each of 50MW) in the month of July 2017, which was well before the publication of MNRE's guidelines (dated 3 August, 2017) for 50MW project which are in the range of 2MW to 10 MW (Except 20MW at Gavankund) solar installations, depending on the availability of the agriculture feeder load, land availability and substation capacity.
- c) The fourth tender for 50MW was published on 12 August, 2017 (which was after the publication of the guidelines), and it has no deviation from the MNRE's guidelines. Hence there is no deviation from the said guidelines, as such.
- d) Three tenders for Vidarbha, Marathwada and Northern Region of phase-I were published on 13 July, 2017 and fourth for western Region, the tender was published on 12 August, 2017. The price bids for these tenders were opened as per details in the following table which were in the range of Rs. 3.38 per unit to Rs. 3.75 per unit.

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Sr. No.	Region &Tender No	Opening of price bid	Name of bidder	Price bid rates (In Rs per unit)
1	Western		M/s. Waaree Energies Ltd	3.70
	Maharashtra (55743)	06.10.2017	M/s. Sangam Advisors Ltd.	3.75
2	Northern		M/s. Sangam Advisors Ltd.	3.39
	Maharashtra (53929)	12.10.2017	M/s. Puja Entertainment India Ltd.	3.45
3	Marathwada	12.10.2017	M/s. Sangam Advisors Ltd.	3.40
	Region (53926)	12.10.2017	M/s. Puja Entertainment India Ltd.	3.39
4	Vidarbha		M/s. Sangam Advisors Ltd.	3.38
	Region (53930)	12.10.2017	M/s. Pooja Entertainment & Films Ltd.	3.42

- e) As per the Commission's RE Tariff Order for FY2017-18, prevailing at the time of bidding process, the levelized tariff determined for the Solar PV power projects commissioned in FY 2017-18 was Rs.5.13 per unit, which was without considering the impact of GST (Goods & Service Tax) on the Project cost.. Subsequently, MNRE has published a circular on 18 July, 2017 has estimated 5% to 10% of the Project Cost due to impact of GST on PV modules. Considering the impact of GST, the levelized tariff determined by the Commission for FY 2017-18 can be estimated at Rs. 5.38 per unit to 5.64 unit.
- f) It is further to submit that the Average Power Purchase Cost (APPC) approved to MSEDCL vide its MYT Order for the period from FY 2016-17 to FY 2019-20 has approved for as under.

Year	2016-17	2017-18	2018-19	2019-20
APPC (Rs per unit)	3.79	4.01	4.09	4.13

- g) Thus it can be seen that the tariff bids received were well below the then approved Feed-In-Tariff as well as MSEDCL's APPC. However, to further bring down the tariff rates in the competitive environment, it was decided to conduct the reverse bidding process for all the four tenders at rates even lower than the minimum of the bid rates available.
- h) MSPGCL decided the base price for tender of Western region at Rs. 3.25per unit and accordingly the Reverse Bidding process was conducted. The lowest tariff rate received was Rs. 3.15 per unit for Western Maharashtra region.
- i) Subsequently, the base price for the remaining three tenders (namely Northern Maharashtra, Marathwada & Vidarbha regions) was set by MSPGCL as Rs. 3.15 per unit. However, none of the bidder participated in the reverse bidding process. Therefore, for these three tenders the new base price was set as Rs. 3.20 per unit and the Reverse Bidding process was re-conducted on 18 October, 2017, in which lowest tariff of Rs. 3.15 per unit was offered by L1 bidder.
- j) The details of tariff rates received in Reverse Bidding process for all four tenders are as tabulated below:

Sr. No.	Region &Tender No	Name of bidder	Base price for Reverse bidding (Rs/kWh)	Reverse bidding date	Rates received in R. B. (In Rs/kWh)
1 Mahara	Western	M/s. Waaree Energies Ltd	2.25	07.10.2017	3.17
	Maharashtra (55743)	M/s. Sangam Advisors Ltd.	3.25		3.15 (L1)
2 Maharasl	Northern	M/s. Sangam Advisors Ltd.			3.15 (L1)
	Maharashtra (53929)	IVI/S. Puja	3.2	18.10.2017	3.16
3 I	Marathwada	M/s. Sangam Advisors Ltd.	3.2	18.10.2017	3.16
	Region (53926)	M/s. Puja Entertainment India Ltd.			3.15 (L1)
4	Vidarbha Region (53930)	M/s. Sangam Advisors Ltd.	Advisors Ltd.  M/s. Pooja  3.2	18.10.2017	3.15 (L1)
		Entertainment &			3.16

The auction statements for the reverse bidding process for all the four tenders of phase-I projects are also enclosed herewith.

- k) Considering the above points, it is found that the Rs.3.15 per unit tariff quoted by L1 bidder is less than the then prevailing Commission approved Feed-In-Tariff (by @ 38%) and also less than the Commission approved APPC price for MSEDCL. Hence as per MSPGCL the quoted tariff of Rs. 3.15 per unit for the 200 MW projects is competitive, reasonable and acceptable.
- 1) Till now, in many places the agricultural feeders are supplying electricity in night hours. However, it is inconvenient for the farmers to work in fields, farms & orchids in night hours and also there are dangers in working due to fear of snake, scorpios etc. Therefore, the farmers are regularly demanding for availability of electricity in the day-time. In this regard it is further to submit that Maharashtra is the first state which framed the policy for supporting the farmers working in the field regarding provision of electricity in day time. Accordingly GoM has framed solar policy, wherein first preference was given to the *Mukhyamantri Saur Krushi Vahini Yojna*. The advantages have been already elaborated to the Commission as below:
  - (i) If electricity is available in day time, farmers can work safely in their fields and farms.
  - (ii) If electricity is available near to the consumption point it reduces the T&D loss.

- (iii) As the solar power generation is much cheaper than the thermal energy, it will help to reduce the cross subsidy amount.
- (iv) Development of solar plants at different grass-root levels throughout Maharashtra will also contribute to increase in GDP for the State as well as National GDP.
- m) Therefore, MSPGCL has taken the lead for implementation of this project. The first tender under this scheme was floated in the year July 2017. MSPGCL wants to put certain important facts regarding the rates obtained in the first tender.
  - (i) These rates were discovered in the month of October 2017, however, MSEDCL has signed PSA with SECI for Rs. 4.50 per unit in the year 2016-17 i.e. in Nov/Dec. 2016, which needs to be considered. Also MSEDCL fixed such rates on nomination basis. In the span of 10 months (Dec 16 to Oct 17) MSPGCL rates are less by @ Rs 1.35 paise. There is also provision for 'change in law'.
  - (ii) These are the plants where minimum capacity is 50 MW, however the plants under Chief Minister Solar Agriculture feeder are distributed with capacity ranging from 2MW to 10MW (Except 20MW at Gavankund).
  - (iii) Recently in the year 18-19 the Tariff discovered through Competitive Bidding in the State of Maharashtra for Solar photovoltaic projects commissioned in FY 2018-19 is Rs. 2.72 per unit, which is approved by the Commission in its Order in Case No. 164 of 2018 dated 29 June, 2018. However these rates are for mega solar parks, with capacity more than 100MW at single location, anywhere in the country. Most of these plants are in Rajasthan where radiation level is very high and benefit of increase in CUF by 2 to 3 % approx. Beside the advantages of high radiation following points are needs to considered while comparing projects under Chief Minister Solar Agriculture feeder.
  - No. of sites: In mega projects it is a single site, whereas in case of this scheme there are many locations e.g. 47 numbers of sites in 200 MW.
  - These no. of sites impacts on the cost of the project. Due to such distributed structure and more no. of sites, the expenditure on O&M, security and transportation etc. increases significantly.
- n) MSPGCL's first tender in the year 17-18 for this prestigious project was published only due to hard work and sincere efforts. The efforts were from acquisition of the land to final commissioning of the project. MSPGCL has invested lot of time and money for successful start of this project. The fruits of these efforts were ready in the form of commissioning of first two pilot projects of 2MW capacity each at Ralegansiddhi, Dist-Ahmednagar & Kolambi, Dist-Yayatmal.
- o) Considering the capital cost for the year 17-18 which was in the range of Rs. 4.5 Crores/MW to Rs. 5.5 Crores/MW and the rates of interest charged by Financial Institution of India, the tariff determined with the help of financial model is in the range of Rs. 4 to Rs. 4.5 per unit. Therefore, the rates obtained through bidding process for distributed projects from 2 MW to maximum 10 MW capacity and even after conducting the reverse bidding process are definitely reasonable and justified.

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- p) Further insolation level in Maharashtra is less than Rajasthan. So even after adding further the impact of trading margin to MSPGCL and also the impact of costs for land and evacuation facility then the rate for the 200 MW tenders will be @ Rs. 3.4 per unit which is less than feed in tariff for FY 17-18 i.e. Rs.4.74 per unit, APPC for FY 17-18 i.e. Rs. 4.01per unit, tariff rate as per PSA signed by MSEDCL with SECI (in FY 16-17) i.e. Rs. 4.50 per unit.
- q) MSPGCL submits that the land pertains to Govt. of Maharashtra and it will be given to MSPGCL for developing the solar project on payment of nominal lease rent of Rs.1 per project, the same land will be handed over to the SPD. As such, the impact of cost of land will be very negligible.
- r) Further as per the GR dated 14 June, 2017, evacuation arrangement shall be made by MSEDCL and the expenditure of this arrangement will be reimbursed by MEDA through Green Cess.
- s) As per the RFP the location of the energy meter is situated in switch yard of the solar power project. Metering system is part of evacuation arrangement as mentioned in (r) above, which will be borne by MSEDCL.

## Commission's Analysis and Rulings

### 13. MSPGCL has sought approval to;

- a) The two Pilot projects at Ralegan Siddhi and Kolambi;
- b) The modalities proposed for PPA and PSA for all the solar projects being installed under "Mukhyamantri Solar Agricultural Feeder Scheme";
- c) The draft PPA and PSAs with deviation;
- d) The Bidding process completed in October, 2017 and the discovered rate of Rs. 3.15 per unit for 25 years;
- e) The modalities proposed for administrative charges to MSPGCL.

The Petition was heard on 2 January and 9 June, 2018 and the Commission dealt with the above issues. Based on the submissions, facts and material placed on records the Commission's observations and ruling are set out below.

## **Approval to the two Pilot Projects:**

14. The Commission notes MSPGCL's submission that it had completed the competitive bidding process for 2 MW Solar project each at Ralegan Siddhi, Dist. Ahamadnagar and Kolambi, Dist. Yavatmal. The levelised rates arrived in that competitive bidding process is Rs. 2.94/ unit for Ralegan Siddhi and Rs. 2.97/ unit for Kolambi for 25 years are also very competitive to the current rate of Rs. 2.72 per unit. Based on MSPGCL's submissions /facts, the Commission in its Daily Order dated 9 June, 2018 has already provisionally approved the modalities of the above two Pilot Schemes (till the finalisation of the proceedings in Case No. 104 of 2018), except on the issue of trading margin therein. The Commission notes that as on today the proceedings of the Case No 104 of 2018 has been concluded and MSPGCL has been granted the Intra-State Trading

Licence for Trading of electricity in the State of Maharashtra. The Commission in light of these developments gives its final approval for the two pilot projects for modalities and rates. While the issue of trading margin involved therein is dealt with by the Commission in following paras of this Order.

## Approval to the modalities/arrangement proposed by MSPGCL:

- 15. Recently the Commission by its Order dated 25 September, 2018 in Case No 104 of 2018 has granted the Intra-State Trading Licence to MSPGCL for undertaking Intra-State Trading of electricity upto 100 MU's under Category 'A' in the State of Maharashtra for a period of Twenty Five (25) years as specified under sub-section (8) of Section 15 of the Electricity Act, 2003. As regards to MSPGCL's that Petition for seeking Intra-State Trading of electricity the Commission in that Order has also noted as follows;
  - "19. The circumstances under present case are different. There is no bar on the Generating Company to engage in the business of Trading as it is there for the Transmission Licensee. Also, in present Case Managing Directors of all the Companies i.e. MSEB Holding Co., MSETCL and MSPGCL are different. Although there exists a common director in all these companies, it is not unusual considering the fact all the Companies are owned by the State Government and therefore common representative of the Government in all these Companies is quite understandable. Similar situation exists in other States also such as Gujarat and Madhya Pradesh. The Commission further notes that MSPGCL's main objective of seeking the Trading Licence is for implementation of "Mukhyamantri Solar Agriculture Feeder Scheme" which would be implemented at distribution level and therefore, there may not be requirement of obtaining Transmission open access. Hence, the Commission accepts the MSPGCL's reply on this issue." (Emphasis added)
- 16. The Commission notes that MSPGCL in its Petition has proposed to implement the "Mukhyamantri Solar Agricultural Feeder Scheme" by following the modalities similar to those followed by MNRE in case of projects implemented through Solar Energy Corporation of India (SECI). The arrangement/modality (i.e. PPA between Solar Power Developer and MSPGCL and the PSA between MSEDCL and MSPGCL) proposed by MSPGCL in this Case is based on the MoPs "Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects" notified on 3 August, 2017. These Guidelines have introduced three different terms;
  - (i) Procurer (Distribution Licensee or the Authorized Representative or an Intermediary Procurer),
  - (ii) Authorized Representative of the Procurer,
  - (iii) Intermediary Procurer and End Procurer. (Trader shall be the intermediary procurer)

The Commission notes that these Guidelines are prepared by MoP u/s 63 of the EA, 2003 and envisages competitive procurement of electricity by Distribution Licensees or the Authorized Representative or an Intermediary Procurer to protect the consumer's interest. Trader has also been identified as an intermediary procurer. Further, the Commission also notes that MSPGCL now

holds a Trading Licence for undertaking Intra-State Trading of electricity under Category 'A' in the State of Maharashtra for a period of Twenty Five (25) years as specified under sub-section (8) of Section 15 of the Electricity Act, 2003.

The Commission also notes MSEDCL's submission dated 2 June, 2018 that the modalities/arrangements proposed by MSPGCL under this Petition regarding execution of PPA between Solar Power Developer and MSPGCL and the PSA between MSEDCL and MSPGCL are acceptable to MSEDCL.

In light of above discussions the Commission accords its approval to the modalities proposed by MSPGCL (now being an Electricity Trader or Intermediary Procurer in line with the above said MoP guidelines ) for PPA and PSA for all the solar projects being installed under "Mukhyamantri Solar Agricultural Feeder Scheme".

However the said approval for modalities and arrangement is as approved by this Commission in Case No. 164 of 2017 (procurement of Solar power by MSEDCL through EESL) wherein the procurer is required to approach the Commission. Similar process shall be followed by MSEDCL and MSPGCL in this Case also.

#### Approval to the draft PPA and PSA with deviation:

17. MSPGCL has sought approval to the draft PPA and PSA prepared under the above said modality. The Commission notes that the clause 2.1.2 of these MoP Guidelines provides that the provisions of these guidelines shall be binding on the procurer/Intermediary procurer/End procurer and the Authorised representative of the procurer. The process to be adopted in the event of any deviation from these guidelines is specified in Clause 18 of these guidelines. Further Clause 18 of these Guidelines provides that in case there is any deviation from these Guidelines and/or the SBDs, the same shall be subject to approval by the Appropriate Commission.

The Commission further observes that MSPGCL in its Petition has not expressly sought any approval for deviations in these draft PPA and PSA vis-à-vis the stipulations of the MoP's Solar PV Guidelines for Tariff Based Competitive Bidding Process as notified on 3 August, 2017 and the associated Bid Documents. However, the Commission notes that MSPGCL in its submission dated 9 October, 2018 mentioned about the sole change of minimum project capacity of 2 MW at single location instated of '5 MW and above', as stipulated in those MoP's Guidelines. The Commission notes this recent development and accepts the deviation/change of minimum project capacity of 2 MW at single location considering that reducing the minimum project capacity from 5 to 2 MW would result in more bidders to participate in the bidding process thereby discovering a more competitive tariff.

The Commission notes that MSEDCL's in its reply dated 2 June, 2018 has accepted the modality of execution of PPA between Solar Power Developer and MSPGCL and the PSA between MSEDCL and MSPGCL. However MSEDCL further in its above reply to the MSPGCL's Petition, has no-where specifically negated/objected/denied to the various clauses as mentioned in the draft PPA as

well as to the draft PSA. Nor has MSEDCL filed any additional submission or has commented on the various tariff related cost components of land acquisition expenses, evacuation cost and associated cost burden and proposed metering arrangement with associated distribution loss as proposed in the draft PPA as well as in the draft PSA.

In view of foregoing circumstances and considering the nature, purpose, mass benefits and features (as cited earlier in this Order) of the "Mukhyamantri Solar Agricultural Feeder Scheme" to the Agriculture consumers the Commission directs MSEDCL/MSPGCL to jointly resubmit the documents (PPA and PSA).

Bidding process completed by MSPGCL in October, 2017 and approval to the rate of Rs. 3.15 per unit for 25 years:

- 18. MSPGCL's in its Petition has stated that it has identified agricultural feeders aggregating a capacity of 500 MW. Out of these for 200 MW of capacity (i.e. 50 MW cumulative capacities each in Vidarbha, Marathwada, Western Maharashtra and North Maharashtra) the Competitive bidding process is completed. Further the levellised tariff rate arrived/discovered at is Rs. 3.15 per unit for 25 years and MSPGCL has placed LOAs on the successful bidders. The details of tariff rates discovered by MSPGCL in Reverse bidding process for all four tenders are as cited earlier in this Order.
- 19. The Commission notes that recently, MSEDCL has also floated tenders in April, 2018 for procurement of 1000 MW solar power with ceiling rate of Rs. 3.30 per unit under "Mukhyamantri Solar Agricultural Feeder Scheme" from 2 to 10 MW capacity projects connected to distribution network in 20 Circles(218 Taluka) out of 44 circles having day time predominant Agriculture load. MSEDCL has conducted a Competitive Bidding process as per MoP Solar PV Guidelines dated 3 August, 2017 u/s 63 of the EA, 2003. It is observed that the rates discovered during this tendering process were in the range of Rs. 3.09 to 3.30 per unit therefore a series of negotiations were carried out with bidders/participants for further reduction in the per unit rates. Finally MSEDCL sought approval for the total capacity discovered of 235 MW with the following discovered tariff rate:

(As on date this matter is under the Commissions consideration under Petition in Case No. 277 of 2018)

Sr. No.	Name of Bidder	Capacity (MW)	Taluka	Rate(Rs. Per unit)
1	Shapoorji Pallonji Infrastructure Capital Co. Pvt. Ltd	80(10x8)	Kinwat,	3.12
			Mantha	3.15
			Dharur,	3.09
			Kannad	3.09
			Madha	3.15
			Akkalkot	3.11
			Parner	3.15
			Jamkhed	3.10

Sr. No.	Name of Bidder	Capacity (MW)	Taluka	Rate(Rs. Per unit)
	TPSOL RESCO THREE Pvt. Ltd	50(10x5)	Kalamb	3.13
			Babhulgaon	3.13
2			Tiosa	3.13
	THREE I VI. LIU		Dhamangaon	3.13
			Chandurbazar	3.13
3	Kintech Synergy (P) Ltd	5(5x1)	Chandur	3.15
		100 (10x10)	Yeola	3.15
			Nandgaon	3.15
			Malegaon	3.15
4			Deola	3.15
	AT Capital		Baglan(Satana)	3.15
	Advisory India Pvt. Ltd		Parola	3.15
			Sindkheda	3.15
			Shirpur	3.15
			Sakri	3.15
			Dhule	3.15
	Total	235 MW		

The Commission notes that the above discovered rates by MSEDCL are in the range of Rs. 3.09 to 3.15 per unit and its weighted average rate is worked out to be Rs. 3.14 per unit. The Commission further notes that as per MSEDCL's bidding conditions these discovered tariff rates are inclusive of various cost components viz. the land acquisition expenses, evacuation cost, metering and associated cost/Distribution loss; which would be borne by the Solar developer. On similar lines under the present Case as regards to the above cost components MSPGCL in its submission dated 9 October, 2018 has stated as follows;

- (i) The land pertains to Govt. of Maharashtra and it will be given to MSPGCL for developing the solar project on payment of nominal lease rent of Rs.1 per project, the same land will be handed over to the Solar Power Developer (SPD). As such, the impact of cost of land will be very negligible.
- (ii) As per the GR dated 14<sup>th</sup> June 2017, evacuation arrangement shall be made by <u>MSEDCL</u> and the expenditure of this arrangement will be reimbursed by <u>MEDA through Green Cess.</u>
- (iii)It is to submit that as per the RFP the location of the energy meter is situated in switch yard of the solar power project. Metering system is part of evacuation arrangement as mentioned in (ii) above, which will be borne by MSEDCL.

The Commission however notes that to compare these rates with the rates discovered by MSEDCL, there is a need to factor in additional cost burden over and above the discovered rate of Rs. 3.15 per unit due to land acquisition, evacuation arrangement, proposed metering arrangement & associated cost. This is relevant in the background of the fact that MSPGCL in its reply dated 9 October, 2018 has mentioned that considering the impact of costs for land and evacuation facility then the rate for the 200 MW tenders will be @ Rs. 3.4 per unit.

This prayer is for adoption of tariff since the rates discovered through bidding process have been submitted in this Petition. The Commission notes following discrepancies which are unaddressed by MSPGCL;

- (i) The procurer has not given consent for this tariff;
- (ii) There is a large variation in the rates submitted by MSPGCL compared to the rates discovered by MSEDCL. MSPGCL have indicated that the final rate may work out to Rs. 3.4 per unit but detailed breakup of the same is not submitted.

In view of the above observations the Commission is not inclined to allow the rate of Rs. 3.15 per unit and hence directs MSPGCL to consider the impact of availability of land at lease rent of Re.1 per annum, evacuation cost being borne by the Govt. through Green Cess and the metering cost which is not required to be borne by the bidder. Further the placement of meters in the tender of MSPGCL absolves the bidder from bearing the Distribution Losses. Thus the rates shall be reduced after taking into account the associated costs relating to Land, Evacuation of energy and metering arrangement. It is expected that the rates so reworked out would be in the vicinity of the rates discovered by MSEDCL on the similar terms and conditions.

#### Issue of administrative charges (Trading margin) (5 Paise per unit):

- 20. The Commission notes that the Intra-State Trading margin has not yet determined by the Commission. On this issue the Commission in its Order dated 25 September, 2018 in Case No. 104 of 2018 has directed MSPGCL as follows;
  - "23. <u>MSPGCL shall abide by such trading margin, as and when same is decided by the Commission</u> to fix under Section 86(1)(j) of the Electricity Act, 2003 for Intra-State Trading transactions in the State of Maharashtra." (Emphasis added)

The Commission notes that presently upto seven paise per unit is allowed to SECI as a trading margin as an intermediary whereas MSPGCL under the present Case has proposed five paise per unit as an Administrative charge. After considering the Administrative charges of MSPGCL, the power purchase cost of the power from the proposed scheme works out to Rs. 3.20 per unit. Considering the decreasing trend of Solar tariffs, such an additional trading margin of 5 paise per unit over and above the discovered tariif/rate will add more burden on the end consumers.

Moreover, MSEDCL in its submission dated 2 June, 2018 on this issue of MSPGCL's Administrative charge, has stated that; the administrative expenses incurred by MSPGCL towards implementation of the scheme as an intermediary procurer may be claimed by MSPGCL in their Aggregate Revenue Requirement (ARR) and no administrative charges be added to the PPA tariff. MSEDCL further stated that the Commission may review and decide the administrative charges proposed by MSPGCL in transparent manner as such charges shall has long term impact.

In light of above submissions and circumstances the Commission rejects MSPGCL's prayers regarding approval of the administrative charges (Trading margin) of 5 Paise per unit. Until the trading margin is duly determined, MSPGCL can claim prudent administrative expenses as an intermediary procurer as part of its ARR.

### Hence the following Order:

The Commission approves the modalities, arrangement and the rates for the two pilot projects at Ralegan Siddhi and Kolambi of 2 MW each. The said approval would be without any trading margin.

The Commission provisionally approves the modalities proposed by MSPGCL for PPA and PSA for all the solar projects being installed under "Mukhyamantri Solar Agricultural Feeder Scheme" subject to the following conditions;

- (i) MSPGCL and MSEDCL should approach the Commission jointly with deviations if any in the PPA and PSA.
- (ii) The Commission does not approve the rate of Rs. 3.15 per unit and directs MSPGCL to reduce the same after taking into account the associated costs relating to land, evacuation of energy and metering arrangement. It is expected that the rates so worked out would be in the vicinity of the rates discovered by MSEDCL on the similar terms and conditions.
- (iii) The Commission rejects MSPGCL's prayers regarding approval of the administrative charges (Trading margin) of 5 Paise per unit. MSPGCL can claim prudent administrative expenses as Intermediary procurer of solar energy as part of its ARR.

With the above rulings the Petition of Maharashtra State Power Generation Co. Ltd. in Case No.172 of 2017 stands disposed of.

Sd/-(Mukesh Khullar) Member Sd/-(Anand B. Kulkarni) Chairperson

(Abhijit Deshpande)
Secretary