

Before the  
**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION**  
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**Case No. 10 of 2020**

**Joint Petition filed by Maharashtra State Power Generation Company Ltd. and Maharashtra State Electricity Distribution Company Ltd. seeking approval for tariff rate of Rs 3.11/kwh for long term procurement of power for 100 MW AC cumulative capacity of solar PV power projects in Western and Northern regions of Maharashtra under “Mukhyamantri Saur Krushi Vahini Yojana”.**

Maharashtra State Power Generation Company Limited	..... Petitioner
Maharashtra State Electricity Distribution Company Ltd.	..... Petitioner
 M/s. Energy Efficiency Services Ltd.	 ..... Respondent

**Coram**  
**I.M. Bohari, Member**  
**Mukesh Khullar, Member**

**Appearance**

For the Petitioner	: Sh. Vijay Rathod (Rep.) : Smt. Kavita Gharat (Rep.)
For the Respondent	: Sh. Dipak Kokate (Rep.)

**ORDER**

**Date: 21 May, 2020**

1. Maharashtra State Power Generation Company Ltd. (**MSPGCL**) and Maharashtra State Electricity Distribution Company Ltd. (**MSEDCL**) have jointly filed the present case on 20 January 2020 seeking approval for tariff rate of Rs 3.11/kWh for long term procurement of power through MSPGCL for 100 MWAC cumulative capacity grid interactive solar PV power projects at Western and Northern region of Maharashtra under “Mukhyamantri Saur

Krushni Vahini Yojana”. They have also requested approval for utilizing such Solar Power to meet the MSEDCL's Solar Renewable Purchase Obligations (**RPO**).

2. Further, MSPGCL & MSEDCL have sought approval to the Deviations in the Draft Power Purchase Agreement (**PPA**) and Power Sale Agreement (**PSA**) with respect to the Standard Bidding Guidelines, issued by Ministry of New & Renewable Energy (**MNRE**).

3. **MSPGCL & MSEDCL’s main prayers are as follows:**

- a) To approve the adoption of Tariff rate of Rs. 3.11/kWh for 100 MWac Cumulative Capacity Grid Interactive Solar PV Power Projects to be developed by M/s. Energy Efficiency Services Ltd (EESL) at various locations in Western and North Maharashtra;*
- b) Approve the proposed deviation with respect to the Deemed Generation Clause and to approve the Draft PPA and PSA ;*
- c) To accord approval that the energy purchased by MSEDCL is entitled for fulfillment of solar RPO target of MSEDCL.*

4. **MSPGCL & MSEDCL in their Case have stated as follows:**

4.1. The Compliance status of MSEDCL's existing Solar RPO is as under:

<b>Period</b>	<b>Shortfall in MUs</b>
FY 2016-17	671
FY 2017-18	1476
FY 2018-19 (provisional)	1321
<b>Total</b>	<b>3468</b>

4.2. MSEDCL is fulfilling Non-Solar and Solar RPO target by way of purchase of Non - Solar and Solar Renewable Energy Certificates (RECs). However, considering the future RPO targets, MSEDCL needs to procure additional RE power for fulfillment of RPO targets so as to accommodate the actual power in the system rather than to rely on REC.

4.3. The Government of Maharashtra (**GoM**) has undertaken ‘Mukhyamantri Saur Krishi Vaahini Yojana’ vide GR dated 14 June, 2017 and 17 March, 2018 for supplying power to the agriculture sector during day time, reduction in line losses and also reduction in subsidy burden for GoM.

- 4.4. As per the scheme, MSPGCL had filed a petition with the Commission dated 27 November, 2017 in Case No. 172 of 2017 for removal of difficulties in the matter of implementation of ‘Mukhyamantri Saur Krishi Vaahini Yojana’ and approval of Power Purchase Agreement (PPA) and Power Sale Agreement (PSA) being executed by MSPGCL and MSEDCL for the implementation of the scheme. In the said Petition, MSPGCL had also mentioned that apart from the two pilot projects it has also identified agricultural feeders aggregating a capacity of 500 MW for which the same PPA / PSA methodology was proposed.
- 4.5. The Commission vide Order dated 16 October, 2018 in Case No. 172 of 2017 has approved the modalities proposed by MSPGCL for PPA and PSA for all the solar projects being installed under “Mukhyamantri Saur Krishi Vaahini Yojana’ and had also directed that MSPGCL and MSEDCL should approach the Commission jointly with deviations if any in the PPA and PSA. The relevant extract from the Order is as below:
- “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.”*
- 4.6. As implementing agency for “Mukhyamantri Saur Krishi Vaahini Yojana”, MSPGCL published 6 tenders of cumulative capacity 300 MW (50 MW each) under Ph-II of the scheme on 11 December 2017. MSEDCL gave consent for 150 MW capacity for tariff ranging from Rs 3.00 per unit to Rs 3.08 for projects in Vidarbha A, Vidarbha B and Marathwada regions, which were further adopted by the Commission vide its Order dated 29 November 2018 under Case no. 308 of 2018. However, for remaining three tenders for projects in Western region A, B and C received the tariff rate of Rs.3.18/kWh for which MSEDCL did not give its consent.
- 4.7. Retendering was done in case of two of the three Western region projects, namely Western- A & C region. Despite extensions to these tenders, the tender for Western A region did not receive any bid and was hence cancelled. The tender for Northern Region in Ph-III was already cancelled by MSPGCL earlier.
- 4.8. M/s. Energy Efficiency Services Ltd. (EESL), a JV of PSUs under Ministry of Power, Govt. of India, is already developing Solar PV projects in Maharashtra for MSEDCL on the spare land of MSEDCL substations. To avoid the retendering process for Solar Power Projects which involved time and cost, and to avoid further delays due to non-

receipt of bids in implementation of these projects, MSPGCL approached EESL and requested to submit proposal for development of 100 MW projects in Ph-II Western A region and Ph-III Northern region.

- 4.9. In response to the request from MSPGCL, EESL sent a proposal to develop the said projects with a tariff rate of Rs. 3.11/kWh. Further, EESL reply dated 30 July, 2019 confirmed the following:

*“M/s EESL is the joint venture company of 4 PSU’s under Ministry of Power, hence, it follows all CVC guidelines related to public procurement and further, for this project under “Mukhyamantri Saur Krushi Vahini Yojana”, M/s EESL shall carryout the Competitive Bidding process for establishing and maintaining the solar power plants.”*

- 4.10. MSPGCL further submits that for these projects, the land required for development of projects at Northern and Western region is being provided by MSPGCL to EESL at nominal annual lease rent of Rs.1 per land parcel. The rest of the developments including the Infrastructure and Evacuation arrangement will be done by EESL along with the Solar Project implementation at each land Parcel.

- 4.11. The necessary land development, evacuation facility development, fencing & security arrangements and control room are also in the scope of work of EESL. Tariff offered by EESL is (considering land on lease with no cost) Rs. 3.11/kWh. In case of the projects being developed by EESL for MSEDCL, the projects are on spare land in possession of MSEDCL at the various substations, resulting in minimum additional requirements for evacuation facility developments and other security facilities etc.

- 4.12. EESL has further clarified vide e-mail dated 8 November, 2019 that *“EESL offered the tariff Rs.3.11/kWh is applicable as on date and is of all inclusive i.e. taxes, cess etc. (As of now, taxes are not applicable on sale of electricity). However EESL would like to submit that in future (tenure of 25 Yrs of PPA) any taxes / duties/ levies/Cess comes in force will be considered separately.”*

- 4.13. MSEDCL, vide letter dated 27 September, 2019 has provided consent to MSPGCL’s proposal for tariff rate of Rs. 3.11/kWh received for 100 MWac Cumulative Capacity for Grid Interactive Solar PV Power Projects at Western (A) and Northern region of Maharashtra under “Mukhyamantri Saur Krishi Vaahini Yojana”

- 4.14. EESL has offered to provide the power at a rate which is competitive in prevailing scenario, and based on such tariff the intermediary procurer i.e. MSPGCL has received

in-principle acceptance from the end procurer i.e. MSEDCL for procurement of power from the proposed solar PV projects

4.15. The Commission by its Order dated 27 November, 2018 in Case No 277 of 2018, has adopted rate of Rs 3.15 per unit for similar projects of 235 MW proposed under “Mukhyamantri Saur Krishi Vaahini Yojana”.

4.16. Hence, MSPGCL & MSEDCL jointly submit to the Commission for adoption of tariff of Rs. 3.11/kWh for the 100 MWac Cumulative Capacity Grid Interactive Solar PV Power Projects being developed at Western (A) and Northern region of Maharashtra under Section 63 of Electricity Act, 2003 (EA) at the rate offered by EESL.

4.17. MSPGCL further submits that the terms and conditions of the draft PPA and PSA will be same as per the Standard Bidding Guidelines, except for the deemed generation clause.

4.18. The Standard Bidding Document does not specify the evacuation voltage level but provide for compensation to generator for the loss of generation due to any off -take constraint mainly on account of transmission constraints or non- availability of grid for evacuation. The relevant Clause 5.5.1 (b) is reproduced below:

“5.5.1

*b) Generation Compensation in off-take constraints due to Grid Unavailability: During the operation of the plant, there can be some periods where the plant can generate power but due to temporary transmission unavailability the power is not evacuated, for reasons not attributable to the Solar Power Generator. In such cases the generation compensation shall be addressed by the Procurer in following manner:*

<b><i>Duration of Grid unavailability</i></b>	<b><i>Provision for Generation Compensation</i></b>
<i>Grid unavailability in a contract year as defined in the PPA:(only period from 8am to 6 pm to be counted):</i>	$\text{Generation Loss} = [(\text{Average Generation per hour during the contract year}) \times (\text{number of hours of grid unavailability during the contract year})]$ <p><i>Where,</i></p> $\text{Average Generation per hour during the contract year (kWh)} = \frac{\text{Total generation in the contract year (kWh)}}{\text{Total hours of generation in the contract year}}$ <p><i>The excess generation by the SPD equal to this generation loss shall be procured by the Procurer at the PPA tariff so as to offset this loss in the succeeding 3 (three) Contract Years. Contract Year, shall be as defined in PPA.</i></p>

*Provided that as an alternative to the mechanism provided above in Clause 5.5.1, the Procurer may choose to provide Generation Compensation, in terms of PPA tariff, for the Generation loss as defined in Clause 5.5.1, and for Grid unavailability beyond 50 hours in a Contract Year as defined in the PPA.”*

- 4.19. However, as the proposed projects are to be connected at 11kV/22kV bus-bar level of MSEDCL and there is possibility of less availability compared to EHV level, the said Clause has been amended and provided as below in the Draft PPA and PSA.

***“Generation Compensation in off-take constraint due to transmission/Distribution network:***

*In any given year during the contract, if the availability of the distribution line/transmission line after inter-connection point for evacuation of power (during 8 am to 6 pm) falls below 98% i.e. the line unavailability is more than 175.2 hours (2% x 365 days x 24 hours), and the power is not evacuated, for reasons not attributable to the Solar Power Generator, then the generation loss shall be compensated by MSPGCL at the 75% PPA tariff so as to offset this loss as given below*

<b><i>Duration of Grid unavailability</i></b>	<b><i>Provision for Generation Compensation</i></b>
<b><i>Grid unavailability in a contract year as defined in the PPA: (only period from 8 am to 6 pm to be counted):</i></b>	<b><i>Generation Loss = [(Average Generation per hour during the contract year) × (number of hours of grid unavailability beyond 175.2 hours i.e. 2% during the contract year)]</i></b>  <b><i>Where, Average Generation per hour during the contract year (kWh) = Total generation in the contract year (kWh) ÷ Total hours of generation in the contract year</i></b>

- 4.20. MSPGCL & MSEDCL are jointly seeking approval for the above mentioned modifications/ deviations in the Draft PPA and PSA for 100 MWac Cumulative Capacity Grid Interactive Solar PV Power Projects and also seek approval to the Draft PPA and Draft PSA documents.

5. EESL in its reply dated 27 April, 2020 has conveyed its confirmation to develop the said projects at Rs. 3.11/kWh across various locations of Maharashtra.
6. At the e-hearing through video conferencing held on 14 May 2020, the representative of MSPGCL and MSEDCL reiterated their submission in the Petition. The representative of

EESL confirmed that they have consented to develop the Solar projects at Rs. 3.11/kWh across various locations of Maharashtra under “Mukhyamantri Saur Krishi Vaahini Yojana”.

7. In reply to queries relating to Status of bids for Western Region B & C, and reasons for seeking deviation in PPA at the time of tariff adoption, MSPGCL vide its email dated 18 May, 2020 has submitted as follows:

- 7.1. MSPGCL had initiated bidding process for Western Region B & C along with other areas in the State in year 2018. However, MSEDCL did not file its consent for discovered rate and hence PSA/PPA could not be signed.

- 7.2. After re-tendering and repeated extension of time for bid submission, MSPGCL received response only to the Bid for Western Region - C at rate of Rs. 2.99/kWh from M/s SPPPH Solar India Projects Private Limited. The Commission vide Order dated 23 December, 2019 in Case No. 310 of 2019 adopted such rate discovered through competitive bidding. However, MSPGCL is in process of cancelling said tender as selected Bidder i.e. M/s SPPPH Solar India Projects Private Limited is not responding to repeated request of extending validity of Bank Guarantee against EMD and also not submitting Performance Bank Guarantee.

- 7.3. Thus, in effect bids for cumulative capacity of 150 MW for Western Region A, B and C remain without a project developer. Out of this, 50 MW from Western Region-A is allotted to M/S EESL. From remaining 100 MW capacity for Western Region B & C, 72 MW is considered for participation in MSEDCL tender in which MSPGCL has won the bid for 179 MW including other areas. MSEDCL has already approached the Commission in Case No. 80 of 2020 for adoption of tariff. For balance 28 MW, MSPGCL will bid whenever MSEDCL calls bid for that region.

- 7.4. Similarly, for 50 MW bid of Northern Maharashtra lowest, rate of Rs. 2.99/kWh was discovered through competitive bidding. However, selected bidder i.e. M/s Waaneep Solar India Pvt. Ltd did not accept the condition of changing evacuation level from 33 kV to 11 kV. Hence, said tender was also cancelled and said 50 MW is now allocated to M/s EESL.

- 7.5. Regarding deviation in PSA/PPA, it is submitted that bidding in initial phases was carried out as per the Standard Bidding Guidelines with the assumption that evacuation will be carried out at 33kV level. Hence no need was felt to seek approval to deviations. As the evacuation level was subsequently changed to 11 kV as insisted by MSEDCL, it was felt necessary to accept the demand for deviation in generation compensation clause with respect to clause under standard bidding guidelines. Hence MSPGCL has sought approval to this deviation. MSPGCL requests the Commission to approve the deviation



as similar generation compensation clause is approved for other Solar PV projects being implemented under MSKVY with evacuation at 11kV.

### **Commission's Analysis and Rulings**

8. The Commission by its Order in Case No. 172 of 2017 dated 16 October, 2018 approved the modalities proposed by MSPGCL for PPA and PSA for all the solar projects being installed under '*Mukhyamantri Saur Krishi Vaahini Yojana*' and also directed that MSPGCL and MSEDCL should approach the Commission jointly with deviations if any in the PPA and PSA.
9. The Commission notes that MSPGCL being an implementing agency for '*Mukhyamantri Saur Krishi Vaahini Yojana*', had undertaken the development of solar projects by publishing 6 tenders of cumulative capacity 300 MW (50 MW each) under Phase-II of the scheme on 11 December, 2017. The Commission, in its Order dated 29 November 2018 under Case no. 308 of 2018, adopted tariff for 150 MW for Vidarbha A, Vidarbha B and Marathwada regions at tariff ranging from Rs. 3.00 – 3.08/kWh, which was to be procured by MSEDCL.
10. The Commission notes that for the three tenders for projects in Western region A, B and C, cumulative capacity of 150 MW, the tariff rate received was Rs.3.18/kWh for which MSEDCL had not given its consent. Further, Commission notes that MSPGCL did re-tendering for Western A & C region and due to non/poor response, the tender for Western region A was cancelled. Although, Western Region -C has received lowest rate of Rs. 2.99/kWh from M/s SPPPH Solar India Projects Private Limited and same has been adopted by the Commission, subsequently selected bidder has refused to extend validity of EMD and submit performance Bank Guarantee and hence MSPGCL has cancelled the Bid. In effect after following due process of competitive bidding and repeated extension of bid deadline, cumulative capacity of 150 MW for Western Region A, B and C remains without a project developer. Similarly, MSPGCL has cancelled 50 MW bid for Northern Region as selected bidder refused to agree for change in evacuation level from 33 kV to 11 kV.
11. Out of these 200 MW bids (150 MW for Western Region A, B & C and 50 MW Northern Region), to avoid any further delay in project execution, MSPGCL approached EESL for setting-up 100 MW (50 MW Western Region A and 50 MW Northern Region) project. For balance 100 MW of Western Region B & C, MSPGCL is participating in Bids called by MSEDCL for these regions and is also able to win some of the projects.
12. Present Petition is for adoption of 100 MW solar contract for which MSPGCL approached EESL, which is a JV of PSUs of Ministry of Power, to submit its proposal for development



of projects. Accordingly, EESL submitted its proposal to develop said capacity at Rs. 3.11/kWh. Further, MSPGCL has submitted that it has identified the land at various sites and proposed that land will be provided by MSPGCL at a lease rent of Rs. 1 per land parcel.

13. The Commission notes that MSPGCL has taken efforts to discover tariff through transparent process of competitive bidding for procurement of Solar power. However, even after re-tendering and repeated extension of bid deadlines, it had to cancel the tender for two regions as there was no response. To avoid any further delays, it approached EESL for the development of solar projects in these regions.
14. The Commission also takes note of EESL's Email dated 30 July 2019 written to MSPGCL wherein it has said that being a Joint Venture of 4 PSU's under Ministry of Power, it follows all CVC guidelines related to public procurement and will follow the same for development of these projects. The relevant excerpts from the letter are as below:

*"M/s EESL is the joint venture company of 4 PSU's under Ministry of Power, hence, it follows all CVC guidelines related to public procurement and further, for this project under 'Mukhyamantri Saur Krushi Vahini Yojana', M/s EESL shall carryout the Competitive Bidding process for establishing and maintaining the solar power plants."*

15. The Commission also notes that vide its earlier Orders dated 9 January 2018 and Order dated 3 September 2019, the Commission has approved MSEDCL's procurement of 200 MW and 300 MW cumulative solar power from EESL at rate of Rs. 3.00/kWh. Said rate was based on MoU signed between MSEDCL and EESL. While approving such power procurement in earlier orders, the Commission has verified then prevailing market rates and observed that rate of Rs. 3.00 /kWh is competitive and hence adopted the same.
16. As against such approved rate of Rs. 3.00/kWh, in the present Petition the proposed rate is Rs. 3.11/kWh. As stated in the Petition, said increase in rate is on account of land development, evacuation facility, fencing & security arrangements and control room work being added in scope of EESL as compared to MSEDCL's scope under 300 MW procurement. Such increased scope of work may have led to such increased rate. Further, such rate of Rs 3.11/kWh is lower than Rs. 3.15/kWh which has already been adopted by the Commission under 'Mukhyamantri Saur Krishi Vaahini Yojana' and it is much lower than recently discovered and adopted rate of Rs. 3.30/kWh for MSEDCL.
17. The Commission notes that MSPGCL has taken several efforts to discover tariff through competitive bidding process for developing solar projects under the 'Mukhyamantri Saur Krishi Vaahini Yojana'. However, poor/no response to such repeated bids has caused MSPGCL to approach EESL seeking their proposal on the same basis as that approved by

the Commission for MSEDCL. As stated by MSPGCL, this is done for avoiding any further delay in setting-up of the project for which tendering process is initiated in 2018.

18. As stated above, tariff of Rs. 3.11/kWh as offered by the EESL is as per the existing market conditions for similar projects. Accordingly, as per principles adopted by the Commission in its earlier Orders dated 9 January 2018 and 3 September 2019 for approving PPA between MSEDCL and EESL, the Commission deems it fit to adopt and approve tariff of Rs. 3.11/kWh for 100 MW on long term basis (for the period of 25 years) from grid connected Solar projects, to be developed by EESL, for meeting the Solar RPO of MSEDCL.
19. Further, MSPGCL and MSEDCL in their Petition have sought deviation in the Deemed Generation Clause. They have contended that proposed projects are to be connected at 11kV/22kV bus-bar level of MSEDCL and there is possibility of lower availability compared to EHV level. Accordingly, the below Clause have been provided in the Draft PPA & PSA:

***“Generation Compensation in off-take constraint due to transmission/Distribution network:***

*In any given year during the contract, if the availability of the distribution line/transmission line after inter-connection point for evacuation of power (during 8 am to 6 pm) falls below 98% i.e. the line unavailability is more than 175.2 hours (2% x 365 days x 24 hours), and the power is not evacuated, for reasons not attributable to the Solar Power Generator, then the generation loss shall be compensated by MSPGCL at the 75% PPA tariff so as to offset this loss as given below:*

<b><i>Duration of Grid unavailability</i></b>	<b><i>Provision for Generation Compensation</i></b>
<b><i>Grid unavailability in a contract year as defined in the PPA: (only period from 8 am to 6 pm to be counted):</i></b>	<b><i>Generation Loss = [(Average Generation per hour during the contract year) × (number of hours of grid unavailability beyond 175.2 hours i.e. 2% during the contract year)]</i></b>  <b><i>Where, Average Generation per hour during the contract year (kWh) = Total generation in the contract year (kWh) ÷ Total hours of generation in the contract year</i></b>

20. The Commission notes that it has approved identical deviations in various other Petition for the similar category of projects. Accordingly, the Commission is inclined to approve the deviations sought by MSPGCL & MSEDCL in the Draft PPA & PSA document.
21. Having ruled as above, the Commission would like to take on record the submission of MSPGCL about its participation in the bids called by MSEDCL. This is positive step towards

discovery of tariff through competitive bidding process. Having lauded the initiative of MSPGCL, it would not be prudent to continue in future, the practice of adopting tariff based on MoU between two parties. As stated in the above paragraphs, as MSPGCL had initiated the bidding process two years back and even after re-tendering and repeated extension of bid submission dates, it could not get any bidder for developing the project and hence in order to break the logjam and to avoid any further delay after scrutiny of rates, the Commission has adopted the rate decided through MoU between MSPGCL and EESL. It is clarified that the Order shall not be treated as precedent.

22. The Commission also notes that Solar Energy Corporation of India (SECI), which is also a Government Company, is conducting competitive bidding under Section 63 of the EA, 2003 and after discovery of Tariff, offers such competitively discovered tariffs to the Distribution Licensee which in turns approaches the Commission for adoption of such discovered tariff. MERC in the past has adopted such Tariff discovered by SECI for 2000 MW of Wind power in its Order dated 11 June 2018 in Case No. 185 of 2017. Therefore, in future if EESL or any other agency wishes to sign PPA with Distribution Licensee in the State, it should be based on Tariff discovered under Section 63 of the EA, 2003, unless there is a strong justification otherwise.
23. Hence, the following Order:

### **ORDER**

- 1. The Case No. 10 of 2020 is allowed.**
- 2. The Commission adopts the Tariff rate of Rs. 3.11/kWh for 100 MWac Cumulative Capacity Grid Interactive Solar PV Power Projects on long term basis for 25 years to be developed by M/s. Energy Efficiency Services Limited EESL at various locations in Western and North Maharashtra under ‘Mukhyamantri Saur Krushi Vahini Yojana’.**
- 3. The Commission accords its approval to the proposed deviations sought in the Deemed Generation Clause and also approves the Draft Power Purchase Agreement and Power Sale Agreement.**
- 4. The Solar Power procured from these projects shall be eligible towards fulfillment of Maharashtra State Electricity Distribution Co. Ltd.’s Solar RPO for the respective periods.**

Sd/-  
(Mukesh Khullar)  
Member

Sd/-  
(I.M. Bohari)  
Member

