

KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM

Present: **Shri. S. Venugopal, Member**
 Shri. K. Vikraman Nair, Member

OP No 32 / 19

In the matter of : Petition for granting approval for the modification in the approved Standard Bid Documents in respect of clauses relating to the Capacity Utilisation Factor (CUF), Metering Point and Project Land for the procurement of 200 MW from solar PV plants.

Petitioner : Kerala State Electricity Board Limited

Order dated 27.02.2019

1. KSEB Ltd, filed a petition on 31.01.2019, for granting approval for the modification in the 'approved standard bidding documents; in respect of the clause relating to (a) Capacity Utilisation Factor (CUF), (b) interconnection point or metering point and (c) Project land, for the procurement of 200MW Power from Solar PV Plants within the State. The Commission admitted the petition as OP No. 32/19 and conducted the hearing on the petition on 26.02.2019 at the court hall of the Commission. Sri. K.G.P. Namboothiri, Executive Engineer, KSEB Ltd, presented the matter on behalf of the petitioner. The summary of the issues raised by the petitioner is given below.
 - (i) KSEBL filed a petition on 17.08.2018, before the Commission for the approval for inviting bids on reverse e-bidding route with e-reverse auction for procuring 200 MW solar power from Solar PV Plants to be established in Kerala on IPP Mode. KSEBL also sought approval for the deviation made in the standard bidding documents from the guidelines notified by Ministry of Power (MoP), GoI dated 03.08.2017. The Commission vide the order dated 19.11.2018 granted approval for the same.
 - (ii) As per the order of the Commission dated 19.11.2018, KSEBL had floated a tender through tariff based competitive bidding in DEEP portal of MSTC on 14.12.2018 for the procurement of 200 MW solar power. The pre-bid meeting with prospective bidders was convened on 15.01.2019. During

the meeting, the prospective bidders sought modifications in clauses relating to:

- (1) Capacity Utilisation Factor (CUF),
- (2) Interconnection point or metering point and
- (3) Land documents in the standard bidding documents/ changes in location.

2. The details of the provisions in the standard bidding documents approved by the Commission vide the order dated 19.11.2018, the suggestion of the prospective bidders during the pre-bid meeting and the modification suggested by KSEB Ltd on the above issues are given below.

(1) Capacity Utilisation Factor (CUF):

As per the approved standard bidding documents (Clause 1.4 of the RFS), the CUF specified is between a minimum of 16% and a maximum of 19%. If the actual CUF is more than 19%, KSEBL has the first right to purchase the excess energy generated at the CUF above 19% @ 75% of the PPA tariff.

KSEBL submitted that during the pre-bidding meetings, the prospective bidders opined that, limiting the maximum CUF at 19% may discourage the bidders from utilizing the solar radiation in optimum manner by installing most efficient solar panels, and it may result in inefficient use of capital deployed. This may eventually lead to higher tariff being quoted by the bidders. The prospective bidders also pointed out that, the tender notified by SECI and other nodal agencies, and also by other DISCOMS, provides for purchase of entire power generated at PPA Tariff and there is no upper cap on CUF. Hence the bidders sought for removing the upper cap on CUF or to allow them to specify CUF above 19% as a part of bidding.

KSEBL submitted that the CUF in the range of 16% to 19% was proposed based on the experience in the existing solar projects of KSEBL. KSEBL further submitted that the facility for maximum CUF, more than 19%, may likely to bring down the per unit expense of the bidder and thus reduction in the Tariff offered to KSEBL. Accordingly KSEBL proposed the following modifications regarding CUF in the Standard Bidding Documents.

	Clause in the approved standard bidding documents	Amendments proposed by KSEBL
Clause 1.4.2 of RFS	All the calculations of energy availability from the plant shall be based on the CUF. The range of	All the calculations of energy availability from the plant shall be based on the CUF. The

	<p>CUF of the plant proposed by any bidder shall be between a minimum of 16% and a maximum of 19%. After 15 years from the COD of the Project, the minimum specified CUF may be brought down upto 14.80% to 17.58% to take care of panel degradation</p>	<p>range of CUF of the plant proposed by any bidder shall be between a minimum of 16% and a maximum of 19%. After 15 years from the COD of the Project, the range of CUF, at the option of the selected bidder, shall be 14.8% to 17.58% to take care of the panel degradation. However, the bidder is free to declare the maximum CUF, not below 19%, at the time of bidding. In such cases the minimum CUF shall be 3% below the maximum declared CUF. Prorata reduction in the maximum and minimum limits of CUF will be available at the option of the selected bidder to take care of panel degradation after 15 years from COD.</p>
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(2) Interconnection points:

As per the approved standard bidding documents (definition clause 22 of the RFS) the interconnection point is defined as follows.

“Interconnection point or injection point: shall mean

- a) the line isolator, if voltage transformation is not required for connecting to KSEBL Substation/Switchyard; or
- b) It shall be the bus isolator at the voltage of injection, if voltage transformation is required between connection of KSEBL Substation/Switchyard;”

KSEBL submitted that NTPC has enquired whether the existing point of interconnection at NTPC 245kV Kayamkulam GIS could be used for evacuation and metering of solar power. KSEBL further submitted that since 245kV Substation is available for evacuation of power from solar plant of NTPC of Kayamkulam, it is not technically advisable to insist for evacuation of power to another distant substation of KSEBL (STU) that too at a lower voltage. KSEB Ltd, further submitted that, at the time of bid preparation, the prospects of utilizing transmission system other than that owned by KSEBL has not come to notice. KSEBL proposed following changes in definition clause 22 of RFS of the standard bidding documents.

	Clause in the approved standard bidding documents	Amendments proposed by KSEBL
22	<p>Interconnection point or Injection Point: Shall mean</p> <p>a) The line isolator, if voltage transformation is not required for connecting to KSEBL Substation/Switchyard;</p> <p>or</p> <p>b) It shall be the bus isolator at the voltage of injection, if voltage transformation is required before connecting to KSEBL Substation/Switchyard;</p>	<p>Interconnection point or Injection Point: Shall mean</p> <p>a) The line isolator, if voltage transformation is not required for connecting to the Substation/Switchyard of the Intra State Transmission Network in the State of Kerala;</p> <p>or</p> <p>b) It shall be the bus isolator at the voltage of injection, if voltage transformation is required before connecting to Substation/Switchyard of the Intra State Transmission Network in the State of Kerala;</p>

(3) **Changes in location:**

KSEBL submitted that as per the approved standard bidding documents (clause 1.8.1 of the RFS and 3.1.1 of the PPA) bidder has to submit the documents/lease agreements to establish possession/right of use of 100% of required land in the name of the Solar power generator or its affiliate within 12 months from the date of execution of PPA. KSEB Ltd submitted that, some of the bidders during the pre-bidding meeting have requested to allow changes in the location of the project till the time of financial closure mostly due to uncertainties in land related within the State. Hence KSEBL proposed to change the Clause 1.8 of the PSA as follows.

	Clause in the approved standard bidding documents	Amendments proposed by KSEBL
	<p>Clause 1.8.1</p> <p>The land for the project shall be arranged by the Bidder at the location proposed by Bidder, within the State of Kerala. Within 12(Twelve) months from the date of execution of PPA, the bidder shall submit documents/Lease Agreement to establish possession/right to use 100% (hundred per cent) of the required land in the name of Solar Power Generator or its Affiliate.</p>	<p>Clause 1.8.1</p> <p>The land for the project shall be arranged by the Bidder at the location proposed by Bidder, within the State of Kerala. Within 12(Twelve) months from the date of execution of PPA, the bidder shall submit documents/Lease Agreement to establish possession/right to use 100% (hundred per cent) of the required land in the name of Solar Power Generator or its Affiliate. Any change in location from that provided at the time of bidding will be at the risk and cost of the bidder and will be subject to concurrence from KSEBL and KSERC.</p>

3. During the hearing KSEB Ltd also submitted that, it had intended to procure power from the 'Ground Mounted Grid Connected Solar Photovoltaic Power Projects within the State' only, though in the original Standard Bidding Documents KSEB Ltd specified the bid documents for "Procurement of 200 MW solar power from Grid Connected Solar Photovoltaic Power Projects within the State of Kerala. Accordingly, in the revised bid documents, KSEB Ltd proposed to change the title as 'Procurement of 200M solar power from Ground Mounted Grid Connected Solar Photovoltaic Power Projects within the State of Kerala on Long Term Basis'. KSEB Ltd requested before the Commission to approve this change also, though it had not included this change for approval in the petition dated 30.01.2019.
4. KSEB Ltd further submitted that, it had cancelled the tender already floated and decided to invite fresh bids, incorporating the modifications after obtaining the approval of the Commission, and also submitted that, by compressing the time gap allowed for various events, the entire bidding process can be completed without much time delay.

Analysis and Decision of the Commission

5. The Commission has examined the petition in details as per the provisions of the Electricity Act, 2003, the Tariff Policy 2016 notified by the Central Government, the Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV projects and other documents placed before the Commission.
6. The Commission vide the order dated 19.11.2018 granted approval for inviting bids on reverse e-bidding for procurement of 200MW solar power from Solar PV Plants to be established within the State of Kerala on IPP Mode. The Commission also approved to adopt the deviation in the bidding documents from the guidelines for tariff based competitive bidding process for procurement of power from grid connected solar PV Plants notified by Ministry of Power, Gol dated 03.08.2018. KSEB Ltd has floated tender through tariff based competitive bidding in DEEP portal of MSTC on 14.12.2018. The pre-bid meeting with prospective bidders was convened on 15.01.2019. The present petition for amending certain clauses in the Standard Bid Documents is based on the deliberations in the pre-bid meeting conducted with the prospective bidders, w.r.t the following items in the standard bidding documents.
 - (1) Capacity Utilisation Factor (CUF)
 - (2) Interconnection points or metering points and,
 - (3) Changes in Location.
7. The decision of the Commission on the above issues are discussed below.

(1) Capacity Utilisation Factor

As per the standard bid documents approved by the Commission, the CUF specified is between a minimum of 16% and a maximum of 19%. The prospective bidders during the pre-bid meeting suggested that, the bidders may be allowed to declare a CUF above 19% at the time of bidding. Accordingly, KSEB Ltd recommended the amendments as detailed under paragraph 2(1) above.

The Commission has noted that, by allowing the bidders to specify the CUF above 19% may results in quoting a lower tariff for the electricity offered to KSEB Ltd, and the bidders may get the PPA tariff for the entire generated upto the CUF specified in the bid documents. Thus the proposed amendment may be beneficial for the bidders, as they get the tariff quoted for the entire energy generated upto to the CUF specified by them. KSEB Ltd also benefited by way of getting a lower tariff by allowing the bidders to specify a higher CUF. Thus the bidders as well as the KSEB Ltd is benefited through the proposed amendments. Hence, the Commission approves the proposal.

Decision of the Commission

The Commission approves the proposed amendments in the Standard Bidding Documents, for allowing the bidders to specify a higher CUF above 19%, as per the table under paragraph 2(1) above.

(2) Inter connection point/ metering point

As per the standard bid documents approved by the Commission, the interconnection point or injection point shall mean 'the line isolator/ the bus isolator, as the case may be' connected to the substation/ switchyard of KSEB Ltd.

However, in the petition dated 30.01.2019, based on the suggestions of some of the prospective bidders, KSEB Ltd proposed that, the interconnection point or injection point shall mean 'the line isolator/ the bus isolator, as the case may be' connected to the substation/ switchyard of the Intra-State Transmission Network in the State of Kerala.

The Commission examined the proposal in detail. If the prospective bidders has the facility for connecting the generating plant to the Intra-State Transmission network in the State of Kerala, this can be allowed since it may avoid the cost of construction of evacuation facilities upto the substation/ switchyard of the KSEB Ltd and thus such bidders can offer

much more competitive tariff in the bid process. Further, the Commission is of the view that, if any of the prospective bidders desires to connect the solar system to the existing intra state transmission system, this may be allowed and consider line isolator of the substation of the developer as interconnection point. The interconnection point/ injection point is modified accordingly.

Decision of the Commission

The definition of the 'interconnection point or injection point' (definition clause 22 of the RFS of the SBD) is approved as follows:

“Interconnection point or Injection Point: Shall mean

(a) *The line isolator, if voltage transformation is not required for connecting to the Intra State Transmission Network in the State of Kerala;*

or

(b) *The bus isolator at the voltage of injection, if voltage transformation is required before connecting to Substation/Switchyard of the Intra State Transmission Network in the State of Kerala;*

(3) Changes in location

As per the approved standard bidding documents, the bidder has to submit the documents/lease agreements to establish possession/right of use of 100% of required land in the name of the Solar power generator or its affiliate within 12 months from the date of execution of PPA. It is submitted that, some of the bidders during the pre-bidding meeting have requested to allow changes in the location of the project till the time of financial closure due to uncertainties in land related within the State. Hence KSEBL proposed to insert under clause 1.8.1 of the RFS as follows:

“ Any change in location from that provided at the time of bidding will be at the risk and cost of the bidder and will be subject to concurrence from KSEB Ltd and KSERC”.

Commission examined the proposal. Considering the difficulty in getting land at reasonable cost, the proposed changes may give some leverages to the bidders to identify the land after the bid submission. However, it is not practical to get the concurrence from the Commission for the change in location by each bidder. Further, the bid evaluation and to address the other issues related to bid, is the responsibility of the KSEB Ltd.

Decision of the Commission

The Commission, approve to insert the following lines under clause 1.8.1 of the RFS of the Standard Bidding Documents.

“ Any change in location from that provided at the time of bidding will be at the risk and cost of the bidder and will be subject to concurrence from KSEB Ltd ”.

- (4) The Commission has also noted the submission of the KSEB Ltd during the hearing that, it had intended to procure power from the ‘Ground Mounted Grid Connected Solar Photovoltaic Power Projects within the State only’ through the proposed bid for procuring 200 MW. Accordingly, in the revised bid documents, KSEB Ltd proposed to change the title of the bidding documents as ‘*Procurement of 200M solar power from Ground Mounted Grid Connected Solar Photovoltaic Power Projects within the State of Kerala on Long Term Basis*’, instead of the title in the approved SBD as ‘Procurement of 200 MW solar power from Grid Connected Solar Photovoltaic Power Projects within the State of Kerala’.

KSEB Ltd further submitted that, the proposed change is for giving clarity on the bidding documents among the prospective bidders. The Commission noted the proposal, and hereby clarify that, any change in the ‘approved standard bidding documents’ shall be done only with the approval of the Commission. Since, KSEB Ltd as the power procurer has the freedom to specify the scope of the bid in the bidding documents, the Commission allows to proceed with the SBD as proposed by them.

Order of the Commission

8. The Commission after examining the petition filed by KSEB Ltd on 30.01.2019, and also based on the deliberations during the hearing conducted on 26.02.2019, hereby grant approval for the modifications in the Standard Bidding Documents (earlier approved by the Commission vide the order dated 19.11.2018), as detailed in paragraph-7 above.

The petition disposed of accordingly.

**Sd/-
K.Vikraman Nair
Member**

**Sd/-
S.Venugopal
Member**

Approved for issue

Sd/-

**G Jyothichudan
Secretary**