

Kerala State Electricity Regulatory Commission
Thiruvananthapuram

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

OP 9/2017

In the matter of : Petition filed IREDA for the approval of Power Sale Agreement for 50 MW Solar PV project at Kasargod Solar Park, Kerala

Petitioner: (1) Indian Renewable Energy Development Agency Limited (IREDA)
(2) Solar Energy Corporation of India Ltd.

Respondent: Kerala State Electricity Board Limited
Vydyuthi Bhavanam, Pattom

Petitioner represented by: Sri. Abhinav Kumar, Manager, SECI
Sri. Abhilash Singh, General Manager, IREDA

Respondent represented by: Sri Joseph V K, Chief Engineer, K S E B Ltd.
Sri. Bipin Sankar P, Deputy CE, K S E B Ltd.
Sri KGP Nampoothiri, EE, TRAC, K S E B Ltd.
Sri. Alex Varghese, EE, REES, K S E B Ltd.
Smt. Cini John, AEE, REES, K S E B Ltd.
Smt. Latha S V AEE, K S E B Ltd.
Sri. Baby John, AEE, K S E B Ltd.

Daily Order dated 05.10.2018

1. M/s Indian Renewable Energy Development Agency Ltd (herein after referred to as the petitioner or IREDA) has filed a petition on 16th June 2017, for the approval of Power Sale Agreement for 50 MW Solar PV project at Kasargode Solar Park, Kerala, under a tripartite agreement executed among KSEB Ltd, IREDA and Solar Energy Corporation of India Ltd (SECI). A power sale agreement was also signed between IREDA and KSEB Ltd on 31st March 2017, and as per the Article 7 of the PPA, 'The tariff will be at a Levelised tariff of Rs 4.95/kWh or the rate as approved by Kerala State Electricity Regulatory Commission, whichever is lower.

2. The petition was admitted as OP No.9/2017. The first hearing on the petition held on 29.08.2017, and based on the deliberations the Commission vide the daily order dated 30.08.2017 directed the petitioner to file a revised petition with complete details including the technical and financial parameters to determine the project specific tariff for the electricity generated from the project. The petitioner submitted the details on 11.02.2018.
3. The second hearing of the petition was held on 06.02.2018. The Commission vide the daily order dated 14.02.2018 approved interim tariff @ Rs 3.90/unit and directed the petitioners and respondent to submit the clarifications and additional documents sought by the Commission. The petitioners submitted the additional details on 27.03.2018.
4. The third hearing on the petition held on 11.06.2018. The Commission directed the petitioners and respondent K S E B Ltd. to submit the additional clarifications. KSEB Ltd submitted the details on 28.06.2018 and the petitioners submitted the additional details on 01.09.2018.
5. The Commission conducted the fourth hearing on the petition on 26.09.2018. During the deliberations of the subject matter, Sri. Abhinav Kumar, representing the petitioners submitted the following.
 - (i) The Renewable Power Corporation of Kerala Limited (RPCKL) is the Solar Power Park Developer (SPPD) of the 200MW solar plant proposed by the State Government at Kasaragod. Due to the uncertainty in allotment for land for the project, it is decided to develop 50 MW through IREDA.
 - (ii) IREDA has not yet signed the O&M contract with the EPC contractor, due to the delay in taking over of the project. As per the bid document, the EPC contractor has to operate the plant for 10 years from CoD.
 - (iii) MNRE has released Central Financial Assistance (CFA) of 2.0 Cr to SECI and SECI transferred the amount to RPCKL, the SPPD.
 - (iv) As documentary evidence on the prudence of the capital cost incurred for the project, the petitioners has produced a certificate of the Chartered Accountants.

However, the Commission has clarified that, the actual cost expended by the petitioner along with tax invoices and other supporting documents shall be produced before the Commission.

- (v) The petitioners reiterated its claim that, to achieve the CUF of 19% in Kerala, the petitioners has to install more number of solar panels compared to the same required in Gujarat or Rajasthan. Accordingly, the petitioners have installed solar panels for 55 MW solar capacity in the state of Kerala to achieve the 50 MW capacity in the State of Kerala. Hence the EPC cost is slightly higher than the bench mark capital cost fixed by CERC.
- (vi) The total capital cost claimed is 310.88 Cr, which includes the service charges of SECI and cost for constructing the evacuation facilities. The petitioner further submitted that, though the other charges including IDC, project management charges etc incurred was Rs 36.60 crore, the same was capped at Rs 16.21 crore, limited to 5.5% of the total project cost claimed.
- (vii) The capacity commissioned upto 31st March 2017, 36 MW, may be considered as Part 1 and the remaining capacity of 14 MW as part 2, as per the Power Sale Agreement (PSA) between KSEB Ltd and IREDA.
- (viii) The scheduled date of Commissioning was extended by the Commissioning committee and therefore no delay on the part of IREDA. However, the commissioning of the entire project was delayed on account of delay in handing over of the land for the project and delaying in commissioning of the evacuation facilities.

6. Sri Bipin Sankar, Deputy Chief Engineer, K S E B Ltd., submitted that,

- (i) Generally the commissioning dates specified by IREDA is in order. However, the date of commissioning of the last unit (14 MW) on 14.09.2017 may be taken as the date of commercial operation of the 50MW project as a whole. As per the Article 7 of the PPA which provides for only one tariff, for the energy injected from the part capacity of 36 MW upto 31.03.2017 and the balance capacity as on 14.09.2017. Hence, the Commission may determine the project specific tariff for the project as a whole, considering the CoD as 14.09.2017, i.e., the date of commissioning of the last unit. Since the CoD for the whole project falls in the financial year 2017-18, the Commission may adopt the technical and financial parameters for the year 2017-18 for determining the project specific tariff for the project. Once the Commission determines the project specific tariff, the same may be made applicable for the energy generated from project as a whole.

- (ii) Regarding the issue raised by the petitioners that, one of the reason for delay in commissioning of the project was due to the non availability of the transmission system, KSEB Ltd submitted the following.
- a) The evacuation system for evacuating 26MW from the solar park were ready through two 33KV feeders from 110KV Substation, Kanhangad on **5-12-2016**, even before the commissioning of the 1st unit of Kasargode solar project. The 1st block of solar panels (Block C – 14MW) were energized only on **15-12-2016**, nearly two weeks after the readiness of evacuation facility. Even with the commissioning of 14MW unit, the maximum generation that could be achieved was only 3.78MW.
 - b) Further, on 31-5-2017, KSEBL had commissioned 220KV Substation, Ambalathara with one 220/33KV 100MVA Transformer and 5 numbers of 33KV feeder bays for evacuating 100MW from the project, but the maximum generation from the plant as on 31-5-2017 was only 22.19MW. The project was commissioned in full capacity only on 14-9-2017, i.e. four months later.
- (iii) Though the contract agreement signed by the petitioner SECI with the EPC contractor M/s Jackson Engineers Limited specify that, the detailed breakup of the contract price is given as appendices, the same was not attached in the submission along with the copy of the agreement submitted before the Commission with a copy to KSEB Ltd. The detailed break up is necessary to carry out prudence check on the capital cost.
- (iv) KSEB Ltd also submitted that, the capital cost claimed for the solar plant was comparatively high, when compared to the normative capital cost for solar PV plants approved by CERC

7. The Commission noted that, there is disagreement between the petitioner and KSEB Ltd regarding the CoD of the project as a whole to be considered for tariff determination. Further, there is a considerable delay in commissioning of the project when compared to the schedule of commissioning in the EPC contract. However, the petitioners had not taken any steps for recovering the liquidated damages from the EPC contractor. The petitioners claimed that, there is delay in handing over land for the project and also delay in commissioning of the evacuation system.

The Commission also noted that, for the date of commercial operation, the petitioner has produced a minutes of the meeting between the representatives of the petitioners and respondent KSEB Ltd. The Commission clarifies that the

developer of the project shall declare the COD based on the prudent utility practices.

8. Based on the deliberations, the Commission directed the petitioners and KSEB Ltd to clarify the following.
 - (1) Date of Commercial operation of the project: As per the details submitted before the Commission, part of the plant capacity 36 MW was commissioned before 31.03.2017 and the balance capacity 14 MW on 14.09.2017. What is the CoD of the project as a whole?. Both the parties may reach a consensus and clarify the same.
 - (2) The PSA provides for a 'single tariff' for the energy injected into the grid from the part capacity as well as the energy injected after the commissioning of the full capacity. Parties to clarify whether, the tariff of the project may be determined considering the project as a whole and the tariff so determined may be made applicable to the electricity generated and injected to the grid from first unit.
 - (3) What is the scheduled date of commissioning of the project as per the EPC contract agreement signed by the petitioners with M/s Jackson Engineers Limited. Clarify with supporting documents.
 - (4) When was the land for the project handed over to the petitioner SECI and when the construction of the project was started? Provide documentary evidence in support of the claim.
 - (5) What are the provisions for recovering the liquidated damages from the EPC contractor for delay in commissioning of the project?

The above details may be submitted before the Commission at the earliest, latest by 15.10.2018.

Sd/-
K.Vikraman Nair
Member

Sd/-
S.Venugopal
Member

Sd/-
Preman Dinaraj.
Chairman

Approved for issue

K B Santhosh Kumar
Secretary