

**KERALA STATE ELECTRICITY REGULATORY COMMISSION**  
**THIRUVANANTHAPURAM**

Present : **Shri Preman Dinaraj, Chairman**

**Petition No. OP 18/2020**

In the matter of       Petition submitted by Cochin International Airport Limited, seeking final order based on the order dated 27.4.2017 in OP 3/2017 in the matter of refund of the registration fee paid and execution of banking agreement for the solar PV plants owned by it and connected to the KSEB Ltd grid.

Petitioner               -       Cochin International Airport Limited  
Nedumbassery, Kochi

Respondent             -       Kerala State Electricity Board Limited  
VydyuthiBhavanam, Pattom

Petitioner represented by :       Sri. ACK Nair, Airport Director, CIAL, India.  
Sri. Satheesh Kumar Pai, CIAL

KSEB Ltd represented by :       Sri. Prem Kumar P K, Deputy CE, TRAC  
Sri. K G P Nampoothiri, EE, TRAC  
Smt. Latha S V, AEE, TRAC

**Daily Order dated 14.08.2020**

1.     M/s Cochin International Airport Limited (hereinafter referred to as CIAL or the petitioner) on 26.5.2020, filed a petition before the Commission with following prayers.

- (1)    Issue a Final Order on the petition No. 03/2017, taking appropriate decision on the balance 20% of the registration fee collected for the 12MWp solar plant.

(2) Permit the petitioner to present the case in person and submit other details / information as may be necessary before the Commission to enable to take a final decision on the matter.

2. The Commission admitted the petition as OP 18/2020 and conducted hearing on 17.7.2020 and issued Daily Order dated 24.7.2020, in which it was directed as follows:

“ Based on the deliberations during the hearing and other documents, Commission hereby direct the petitioner M/s CIAL and the respondent KSEB Ltd submit the clarifications on the following, latest by 03.08.2020.

(1) CIAL shall submit the following details.

- (a) Present 'contract demand' of CIAL with KSEB Ltd.
- (b) Year wise details of the Solar PV plants installed and connected to the Grid.
- (c) Details of the pending applications for connectivity with KSEB Ltd with documentary evidence, and communications if any received from KSEB Ltd in this regard.
- (d) Details of the substations and other evacuation facilities constructed, and presently maintained by CIAL.
- (e) Details of the permission and approvals obtained from Chief Engineer (Transmission- North) and other offices of KSEB Ltd for constructing the separate substations for the Solar Plants installed by CIAL.
- (f) Documentary evidence to show that, CIAL comply with the Regulations notified by CEA and KSERC (including CEA Safety Regulations and KSERC (Intra State Open Access & Connectivity) Regulations, 2013 while installing the Solar plants and the substations.
- (g) Copy of the guidelines issued by 'International Civil Aviation Organization (ICAO)' regarding maintaining redundancy in power supply and other measures to be followed for availing power supply. How, the ICAO guidelines affects in providing LILO arrangements for the connectivity of the 40 MWp Solar plant with the State Grid.
- (h) Details of the SCADA visibility and communications provided by CIAL, with documentary evidence on whether these are in functional and commutation with SLDC of Kerala.
- (i) Any other relevant details.

(2) KSEB Ltd shall submit the following details,

- (i) Details of the pending applications submitted by CIAL with KSEB Ltd for connecting of the Solar plants with Grid.

KSEB Ltd may submit the reasons for delay, if any, in granting connectivity, and also submit the copies of the communications with CIAL in this regard.

- (ii) Details of the SCADA visibility installed by CIAL, and the documentary evidence on the statement that, SCADA visibility installed by CIAL is not functional.
- (iii) Written comments on the petition filed CIAL.
- (iv) Any other relevant details”

(3) Both parties shall share their comments on either side and may submit additional comments, if any, by return.

(4) Commission propose to schedule final hearing on the subject petition on 13.08.2020 at 11.00 AM.

3. M/s CIAL submitted the details vide letter dated 30.7.2020 and has shared the same with K S E B Ltd. K S E B Ltd., vide letter dated 12.8.2020 submitted its comments. The summary of the two submissions are as follows;

- (i) CIAL is having 9 MVA contract demand with K S E B Ltd. The total installed capacity of solar plant at CIAL is 38.419 MWp. The pending applications for connectivity of solar plant with K S E B Ltd. are application dated 18-03-2019 for 7.478MWp and that dated 30-09-2019 for 1.929MWp of solar plant.
- (ii) CIAL is having two substations, out of which one is constructed for evacuation of solar generation. The connectivity to CIAL is taken through two independent 110kV feeders, tapped from Kalamassery – Carborandum and Chalakkudy- Angalmaly, 110kV lines.
- (iii) In the case of data visibility through SCADA, CIAL submitted that they are properly communicating with SLDC, which is agreed to by SLDC also. According to K S E B Ltd., the SCADA visibility of CIAL is intermittent.
- (iv) K S E B Ltd. and CIAL entered into connectivity and banking agreement for 29.029MWp against the installed capacity of 38.419MWp. The connectivity and banking agreement for the balance 9.39 MWp is yet to be executed. This is in view of the dispute in transmission arrangement required for connecting the plant. CIAL submitted that the solar substation was constructed during 2019 and that too with the approval of Chief Engineer (Transmission – North). CIAL further submitted that it had complied with all the CEA Regulation also. K S E B Ltd. submitted as follows:

*“ For enabling proper functioning of distance relay, the existing tap arrangement at CIAL need to be replaced with LILO(Line IN Line Out) configuration. Moreover as per CEA (Measures relating to Safety and Electric supply)Regulations, 2020, (Regulation 44(6)) there shall be no tapping of another transmission line from the main line for 66KV and above class of lines. CIAL was requested to change the existing double tap line to Line in Line out configuration as per Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2010 vide letter dated 12-7-2019 and subsequently on 28-4-2020 and 16-6-2020.”*

CIAL submitted that Regulation 44(6) of CEA ( Measures relating to safety and Electric Supply) Regulations, 2010 specifies that “there shall not be tapping from another transmission line from the main line for 66kV and above class of lines”. However, CIAL prayed that the 110kV line to CIAL is only a service connection and may not to be considered as another transmission line. Further, CIAL stated that it had complied with all safety requirements and submitted copy of report of KSEBL relay team.

4. The Commission conducted a second hearing on 13.8.2020 through video conference. Sri K G P Nampoothiri presented the views of KSEB Ltd. in line with the submission made on 12.8.2020. Sri. Prem Kumar P K, Sri K G P Nampoothiri and Smt Latha S.V, during discussion have clarified the queries of the Commission and CIAL. Sri. ACK Nair and Sri Satheesh Kumar Pai, explained their position and also answered to the queries raised by the Commission.
5. K S E B Ltd. clarified that the balance registration fee of 20% can be refunded after complying with all the directions issued by the Commission vide Order dated 27.4.2017 in OP 3/2017. K S E B Ltd. further clarified that the total capacity is already connected and the energy is being injected into the grid and accounted for. Further, K S E B Ltd. reiterated their stand that SCADA visibility is not fully operational and intermittent disconnection of data occurs. CIAL clarified that during construction and commissioning of the solar substation, SCADA visibility was disrupted, but now it is under smooth operation.
6. During hearing, CIAL submitted that CIAL will provide all the necessary documents on the energisation approval obtained from the Electrical Inspector to the Commission. The Commission directed CIAL to provide additional communication, if any, from K S E B Ltd., on the construction of the additional substation for the solar plant, carried out during the year 2019.
7. From the above discussion, it can be observed that, the major issue remaining to be sorted out is the connectivity of the remaining part of the solar plant, to which according to K S E B Ltd., LILO arrangement, is necessary as per the CEA

Regulation. CIAL expressed their concern that the redundancy to airport will be affected with the proposed LILO arrangement, since at present CIAL avail supply from two independent tap feeders at 110kV. Further, two LILO arrangements as proposed by K S E B Ltd. requires construction of additional transmission line. Construction of towers and drawing transmission line will not be practical in that area since it will involve land acquisition and may lead to long-term litigations resulting in regularization of solar connectivity getting delayed indefinitely. As per the opinion of K S E B Ltd. there cannot be much issues in materializing the proposed rearrangement. K S E B Ltd. also added that K S E B Ltd. has been continuously intimating CIAL about the requirement of LILO arrangement.

8. After listening to the submission of both the parties, the Commission advised K S E B Ltd. to hold a meeting with CIAL so that the current divergence of opinion on the proposed LILO arrangement could be sorted out. The Commission proposed to include Chief Electrical Inspector, Kerala also to the meeting.
9. After detailed deliberations, the Commission ordered both CIAL and K S E B Ltd. as follows;
  - (i) Chief Electrical Inspector, CIAL along with its consultant and K S E B Ltd. Transmission wing may hold a meeting on the connectivity of the solar plant and arrive at a workable solution. K S E B Ltd. should initiate action on this without delay.
  - (ii) M/s CIAL and KSEB Ltd shall submit the final opinion latest by 27-08-2020 along with the minutes of the meeting.
  - (iii) CIAL may, in the mean time, submit all relevant documents as discussed in the paragraph 6 of this order, with copy to K S E B Ltd.
  - (iv) Copy of this order is to be served to Chief Electrical Inspector for compliance.

**Sd/-**  
**Preman Dinaraj**  
**Chairman**

Approved for issue,

C.R.Satheesh Chandran,  
**Secretary-in-charge**