KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

Present	:	**Sri. T K Jose, Chairman** **Sri. B Pradeep, Member**
In the matter of	:	Petition filed by M/s INKEL Limited and others seeking directions to KSEB Ltd. for grant of connectivity at 33 kV voltage level for Renewable Energy projects at Palakkad and Malappuram by overriding the voltage-capacity criteria under the Kerala Electricity Supply Code, 2014.
Petitioners	:	(1) M/s INKEL Limited (2) INKEL Renewable Energy Private Limited (3) INKEL Green Energy Private Limited
Petitioners represented by	:	List of participants attached as Annexure
Respondents	:	Kerala State Electricity Board Limited
Respondents represented by	:	List of participants attached as Annexure
Dates of hearing	:	(1) 19.08.2026, 11:00 AM (2) 13.10.2026, 11:00 AM
Venue of hearing	:	Court Hall of the Commission, Thiruvananthapuram

Order dated 18.11.2026 in OP No. 35/2026

1. M/s INKEL Limited, M/s INKEL Renewable Energy Private Limited and M/s INKEL Green Energy Private Limited (hereinafter collectively referred to as “the petitioners”) have filed a petition before the Commission under Section 86 of the Electricity Act, 2003 read with the KSERC (Connectivity and Intra-State Open Access) Regulations, 2013 (hereinafter referred to as "the Connectivity Regulations"), seeking appropriate directions regarding grant of connectivity at 33 kV voltage level for their renewable energy projects proposed at Vadakarapathy in Palakkad district and Panakkad in Malappuram district. The prayers of the petitioners are as follows:

   (1) Declare that the connected load and contract demand specified in the Kerala Electricity Supply Code, 2014 regulate supply to consumers and do not constitute the maximum permissible capacity for grid connectivity of renewable energy generating stations;

   (2) Declare that Regulation 13(4) of the KSERC (Renewable Energy & Net Metering) Regulations, 2020 is applicable only to grid interactive

renewable energy systems under Chapter III of the Regulations and not to renewable energy systems above 1 MW, captive generating plants and independent power producers governed under Chapter IV;

(3) Direct KSEB Ltd. to provide connectivity to the petitioners' projects based on load flow studies, CEA Regulations, feeder capability and right of way considerations;

(4) Direct KSEB Ltd. to provide connectivity to the 36 MW Solar-Wind Hybrid Project at Palakkad and the balance capacity of the Malappuram Solar Project through two parallel 33 kV feeders; and

(5) Pass such other orders as the Commission may deem fit.

Brief history of the issue

2. The petitioners are companies under the INKEL Group and are engaged in the implementation of renewable energy projects. Petitioner No.1, INKEL Limited, is a Public Private Partnership infrastructure company promoted by the Government of Kerala, while Petitioner No.2 and Petitioner No.3 are its wholly owned/subsidiary companies formed for implementing renewable energy projects, including the proposed Group Captive Solar Project at Malappuram. The grievance of the petitioners in the present proceedings is against the stand of KSEB Ltd. restricting connectivity of their renewable energy projects at the 33 kV voltage level to 14.4 MW/14.4 MVA.

3. The brief facts of the case, project-wise, as stated in the petition are as follows:

(1) **18 MW Wind Project (part of the 36 MW Solar-Wind Hybrid Project at Vadakarapathy, Palakkad):**

During the year 2021, KSEB Ltd. invited bids for selection of wind power developers for setting up of 100 MW Grid Connected Wind Power Projects in Kerala under tariff based competitive bidding. Petitioner No. 1, INKEL Limited, participated in the bidding process and was selected for setting up a 14 MW wind power project. Accordingly, KSEB Ltd. issued Letter of Award (W.O. No. 19/2022-23) dated 07.02.2023, subsequently amended on 02.03.2023, at a fixed tariff of Rs.3.96/kWh for a period of 25 years, with the delivery point specified as the 110 kV Substation, Walayar, which was subsequently changed to 110 kV Substation, Kozhinjampara, vide the amendment to the Letter of Award issued on 02.03.2023. Petitioner No. 2, INKEL Renewable Energy Private Limited, was formed as a Special Purpose Vehicle (SPV) for implementation of the project and execution of the Power Purchase Agreement (PPA). As per the Letter of Award, the generator is responsible for establishing the dedicated transmission network up to the interconnection/delivery point at its own cost. The petitioners also secured approximately 59.63 hectares (147.34 acres) of land in Chittur Taluk, Palakkad, for implementation of the project.

Subsequently, based on reassessment of wind potential, INKEL proposed to develop a 36 MW Solar-Wind Hybrid Project comprising 18 MW wind and 18 MW solar capacity on the same land. Of this, 14 MW wind capacity is contracted to KSEB Ltd., while the balance is proposed to be utilised through open access or green power exchanges. The maximum simultaneous injection is estimated at about 25 MW.

For evacuation of power, KSEB Ltd., vide Board Order dated 26.03.2025, accorded sanction for establishing a 110 kV Substation at Vadakarapathy, along with an 8 km 110 kV double-circuit LILO line, on a 50:50 cost-sharing basis, pursuant to INKEL's request for evacuation at 110 kV. In this regard, it is noted that KSEB Ltd. had initially proposed evacuation of the 14 MW wind power through a 33 kV line to the 110 kV Substation, Kozhinjampara, and the 18 MW solar power through a separate 33 kV line to the 110 kV Substation, Walayar. However, considering INKEL's request, KSEB Ltd. accorded sanction for the establishment of the 110 kV Substation at Vadakarapathy and the associated transmission facilities.

Subsequently, the Deputy Chief Engineer, Transmission Circle, Palakkad, vide letter dated 15.06.2026, raised a revised demand of Rs.18.45 crore as INKEL's share, including the entire cost of two 33/110 kV transformers and 50% of the cost of the; 110 kV Substation, two 110 kV feeders and bus. KSEB Ltd. also proposed certain additional transformers and a 33 kV feeder at its own cost. INKEL contends that these additional facilities increase the cost of the common infrastructure and are contrary to the cost-sharing arrangement approved in the Board Order.

(2) **18 MW Solar Project (Part of the project at Vadakarapathy, Palakkad):**

In respect of the 18 MW solar component of the hybrid project, the Deputy Chief Engineer, Transmission Circle, Palakkad, vide letter No. TCP/DB40.18/Vadakarapathy/2025-26/2026 dated 26.02.2026, informed that a single 33 kV feeder could accommodate a maximum evacuation of 14.4 MW only and, therefore, the 18 MW solar project would require evacuation at 110 kV level, with the 110 kV Substation to be maintained by the petitioners. Alternatively, it was suggested that approval of the Commission may be obtained for providing two 33 kV feeders to the same premises. The petitioners have stated that their proposal for evacuation through two parallel 33 kV feeders were orally rejected by KSEB Ltd, which insisted on metering at the 110 kV level. According to the petitioners, evacuation at 110 kV would entail substantial capital expenditure, thereby affecting the financial viability of the project.

(3) **23.2 MWp Group Captive Solar Project (Panakkad, Malappuram):**

M/s INKEL Green Energy Private Limited (Petitioner No. 3) proposed to establish a 23.2 MWp Group Captive Solar Power Project at INKEL Green

Industrial Park, Panakkad Village, Ernad Taluk, Malappuram District, for supplying renewable energy to HT commercial consumers in the Industrial Park, in accordance with Rule 3 of the Electricity Rules, 2005. Accordingly, the petitioner applied to KSEB Ltd. on 20.05.2025 for grant of grid connectivity at 33 kV for the entire project capacity.

KSEB Ltd., after conducting load flow studies, vide letter No. CE/TRN/AE3/D890/INKEL Green Energy/2025-26/1709 dated 28.10.2025, informed that connectivity for the entire 23.2 MWp capacity was technically feasible subject to completion of the 33 kV interlinking line between the Othukkungal Substation and the INKEL Substation. However, since the interlinking work was then at an initial stage, only one 33 kV feeder could be accommodated under the existing network configuration, through which either the 10.2 MW or the 13 MW segment could be evacuated. KSEB Ltd. also referred to the maximum contract demand admissible at the 33 kV voltage level under the Kerala Electricity Supply Code, 2014, and indicated that construction of independent 110 kV lines to the nearby Malappuram or Edarikode Substations was not feasible due to right-of-way constraints.

Subsequently, Petitioner No. 3 submitted a revised application dated 13.11.2025, restricting the connectivity requirement to 14.4 MWp, comprising three segments of 6.4 MW, 5.6 MW and 2.4 MW. Based on the revised application, KSEB Ltd. issued 'Format C3 – Intimation for Grant of Connectivity No. 06/2025-26 dated 08.12.2025', for evacuation of 14.4 MWp through the 33 kV Malappuram–INKEL line, subject to completion of the works relating to the 33 kV INKEL Substation and payment of the cost of additional works. Thereafter, the petitioners submitted a representation dated 05.03.2026 to the Director (Transmission & System Operation), KSEB Ltd., seeking intervention in the matter. However, in the meeting held on 11.06.2026, the Deputy Chief Engineer, Transmission Circle, Malappuram, informed that 14.4 MW would be the maximum capacity that could presently be evacuated through the 33 kV INKEL Substation, even after commissioning of the 33kV INKEL–Othukkungal interlinking line, citing the existing network configuration and the requirement for additional 33 kV switchgear panels. The petitioners contend that the restriction is contrary to the earlier indication that connectivity for the balance capacity would be considered upon commissioning of the interlinking line.

4. The petitioners have contended that, as per the CEA (Electricity Distribution Network Planning Criteria), 2023, the loading capability of a feeder is governed by the thermal capacity of the conductor and permissible voltage regulation. In support of their contention, they have cited the instance of KSEB Ltd. having sanctioned evacuation of 50 MW from Paivalikae Solar Park to the 110 kV Kubanoor Substation through two 33 kV feeders, with metering at 33 kV, vide

B.O. (FTD) No. 698/2019 dated 19.09.2019. They have further submitted that energy injected through multiple feeders can be accurately aggregated using GPS time-synchronised ABT meters. The petitioners have also stated that they have invested over Rs.11 crore in the Malappuram project and propose to invest over Rs.200 crore in the Palakkad hybrid project, and that the delay in finalising the evacuation arrangements is affecting project implementation and compliance with the time-bound milestones of the wind project.

First hearing on the petition

5. The first hearing on the petition was conducted on 19.08.2026 at 11:00 AM at the Court Hall of the Commission. The petitioners, through their learned counsel and representatives, reiterated the contentions in the petition and prayed that KSEB Ltd. be directed to grant connectivity at 33 kV voltage level for the balance capacity of the projects, including evacuation through two parallel 33 kV feeders.

6. Sri. Shine Raj, Assistant Executive Engineer, TRAC, representing KSEB Ltd., relied upon Regulations 4(1) and 57 of the KSERC (Connectivity and Intra-State Open Access) Regulations, 2013, and Regulation 8A of the Kerala Electricity Supply Code, 2014, and submitted that the maximum limit for each voltage level is linked to the provisions of the State Grid Code and the Supply Code, and that the limit specified for a particular voltage level may be exceeded only up to twenty per cent where supply at the appropriate higher voltage level is not feasible. KSEB Ltd. submitted that a detailed counter affidavit in the matter would be filed within two weeks. The field officials of KSEB Ltd. present during the hearing were not in a position to furnish complete remarks on the technical aspects raised in the petition. Accordingly, the Commission directed KSEB Ltd. to furnish the reasons for the delay in providing connectivity to the projects.

7. The Commission observed that wind energy, being capable of providing generation support during peak hours, ought to be given priority for early connectivity, and that the solar generation from the projects would augment renewable energy availability during the day. Further, INKEL being a Public Private Partnership initiative of the Government of Kerala, the issues are required to be addressed in a time-bound manner so as to enable timely implementation of the projects and avoid escalation of project cost.

8. Accordingly, vide Daily Order dated 20.08.2026, the Commission directed as follows:

   (1) The petitioners shall submit a detailed PERT chart in respect of each of the projects, namely the 18 MW Wind Project and the 18 MW Solar Project at Vadakarapathy, Palakkad and the 23.2 MWp Group Captive Solar Project at Panakkad, Malappuram, setting out the date-wise activities and

time period of completion, the project cost along with its break-up, injection points and the current status of each project;

(2) KSEB Ltd. shall file its counter affidavit within two weeks from the date of the Order, with a copy to the petitioners;

(3) The petitioners shall submit their remarks on the counter affidavit within one week from the date of its receipt;

(4) On receipt of the counter affidavit and the remarks thereon, the Commission shall decide the date for the next hearing; and

(5) The concerned Chief Engineers of KSEB Ltd. shall be present during the next hearing with all sufficient details.

9. In compliance with the Daily Order dated 20.08.2026, the petitioners, vide letter No. INKEL/RE/KSERC/26-27/160 dated 12.10.2026, submitted the project execution schedules for the 14 MW Wind Power Project at Palakkad and the 20.5 MWp Solar Power Project at INKEL Greens, Malappuram. The details furnished are summarised below:

(1) **14 MW Wind Power Project, Palakkad:**

The petitioners have submitted that the project execution schedule has been prepared on the assumption that the power evacuation arrangement will be finalised and the PPA executed by 31.01.2027. The major activities involved in the implementation of the project and the corresponding start and completion dates, as indicated by the petitioners, are shown in the Table below:

Sl. No.	Major activities	Schedule	
		Start Date	Completion Date
1	Sanctions, approvals and clearances from the State Nodal Agency, Chief Electrical Inspector, Aviation and Defence authorities, wherever applicable	01.02.2027	30.06.2027
2	Micrositing	01.07.2027	13.09.2027
3	Development of approach and internal roads	01.06.2027	29.10.2027
4	Supply of wind turbine towers, nacelles, blades and balance equipment	15.04.2027	11.11.2027
5	Construction of WEG tower foundations	15.06.2027	12.12.2027
6	Erection of WEGs	15.07.2027	12.12.2027
7	Installation of unit substations, internal and external overhead lines, and common substation/metering station	15.06.2027	11.01.2028
8	Grid interconnection	11.01.2028	11.04.2028
9	Commissioning of the wind farm	11.04.2028	31.05.2028

The petitioners have further stated that, despite discussions being ongoing since the issuance of the Letter of Award dated 07.02.2023, the power evacuation arrangement has not yet been finalised and, consequently, the PPA remains unexecuted. They have therefore indicated that timely finalisation of the evacuation arrangement is essential for implementation of the project as per the schedule furnished.

(2) **20.5 MWp Group Captive Solar Power Project, INKEL Greens, Malappuram:**

The project is being executed across three plots, with the following schedule of commissioning:

(i) **3 MWp at Plot No. 54A:** Supply of modules, inverters and LT items, and installation of modules have been completed. The balance materials are scheduled to be supplied by 01.11.2026, followed by HT installation from 12.10.2026 to 12.11.2026, test charging from 18.11.2026 to 25.11.2026, and commissioning by 30.11.2026.

(ii) **3 MWp at Plot Nos. 55F, 45 and 53D**: Supply of modules, inverters and LT items has been completed. The balance materials are scheduled to be supplied by 01.12.2026, followed by HT installation from 12.11.2026 to 12.12.2026, test charging from 18.12.2026 to 25.12.2026, and commissioning by 31.12.2026; and

(iii) **14.5 MWp at Plot No. 57**: Supply of modules, inverters and LT items has been completed. The balance materials are scheduled to be supplied by 01.03.2027, followed by HT installation from 05.02.2027 to 12.03.2027, test charging from 18.03.2027 to 26.03.2027, and commissioning by 31.03.2027.

The petitioners have also stated that, as per MNRE Office Memorandum No. 283/53/2026-Grid Solar dated 18.07.2026, the deadline for commissioning projects using non-DCR solar modules is 31.12.2026. However, they have reported that the project has encountered site-related difficulties due to torrential rains and consequent landslides in the adjacent area, resulting in public protests and the issuance of a Stop Memo by the local Revenue Authorities. In this regard, the petitioners have stated that they have requested MNRE, vide letter No. INKEL/MD-RE/2026/59 dated 05.10.2026, to extend the commissioning deadline from 31.12.2026 to March 2027.

Second hearing on the petition

10. The second hearing on the petition was conducted on 13.10.2026 at 11:00 AM at the Court Hall of the Commission. Adv. Aditya Venugopalan, learned counsel, and the representatives of the petitioners appeared on behalf of the petitioners, and Sri. Shaju M.A, Chief Engineer (Commercial and Tariff),

Smt. Shaji Sudhakaran, Chief Engineer (Transmission North) and other officers appeared on behalf of KSEB Ltd. The list of participants is given in the Annexure. The deliberations during the hearing are summarised in the subsequent paragraphs.

11. At the outset, the Commission noted that the Letter of Award dated 07.02.2023 issued by KSEB Ltd. for the 14 MW wind project has not been brought before the Commission for regulatory approval, and that the Power Purchase Agreement has not been executed so far. The Commission clarified that the present proceedings are confined to the issue of connectivity, and that nothing in these proceedings shall be construed as an approval of the said Letter of Award.

12. The petitioners referred to the project schedules submitted vide letter dated 12.10.2026, the details of which are stated in paragraph 9 above. In respect of the Malappuram solar project, the petitioners submitted that, in addition to the site-related difficulties mentioned therein, land conversion issues have also arisen, and that the agreements with the captive consumers require commencement of supply before 30.11.2026, extendable by six months. In respect of the wind project, the petitioners reiterated that the schedule of 16 months is subject to execution of the PPA and finalisation of the evacuation arrangement by January 2027.

13. On the capacity of the Malappuram project, the petitioners submitted that, upon finalisation of the project layout, the capacity has been revised to 20.5 MWp (DC), as against the 23.2 MWp stated in the petition, corresponding to 16.4 MW (AC), and that the entire capacity has been contracted with the captive consumers. Out of this, connectivity for 14.4 MW has already been granted, as stated in paragraph 3(3) above, and connectivity is sought for the balance 2 MW. On a specific query, the petitioners admitted that no formal application for connectivity for the revised capacity of 16.4 MW had been submitted under the Connectivity Regulations and that the revised requirement was communicated to KSEB Ltd. only through letter dated 05.09.2026. The petitioners further submitted that a Battery Energy Storage System (BESS) of 4 MW/16 MWh is being implemented at Panakkad and that the maximum injection into the grid would be 16.4 MW under contingency conditions..

14. In respect of the Vadakarapathy hybrid project (18 MW wind and 18 MW solar), the petitioners reiterated that the maximum simultaneous injection would be about 25 MW as stated in paragraph 3(1) above, and admitted that no formal application for connectivity has been filed before KSEB Ltd., the requirement having been conveyed only through correspondence. The petitioners clarified that, in terms of the Board Order referred to in paragraph 3(1) above, they had agreed to the construction of the 110 kV Substation at Vadakarapathy by

providing 1.5 acres of land and bearing 50% of its cost under deposit work, but that the power from their projects is to be evacuated at the 33 kV level, and that KSEB Ltd. is insisting on evacuation at 110 kV based on its interpretation of the capacity ceiling. With reference to the revised demand of Rs.18.45 crore mentioned in paragraph 3(1) above, the petitioners stated that only 25 MVA of transformation capacity is required for their evacuation as against the two 25 MVA 110/33 kV transformers considered therein. However, on a specific query, the petitioners confirmed that they are not seeking adjudication on the cost aspect, and agreed that the issues on which adjudication is sought are confined to connectivity at the 33 kV level for the two projects.

On the implementation of the wind project, the petitioners submitted that the earlier tender for the project was not finalised, that the RFP has been prepared and would be floated once the evacuation arrangement is finalised, and that, owing to site constraints, the project is planned with seven 2 MW machines, which are presently available only with two manufacturers in the ALMM list.

15. Smt. Shaji Sudhakaran, Chief Engineer (Transmission North), KSEB Ltd., submitted that, after the last hearing, a meeting was held with the petitioners on 31.08.2026 to arrive at an amicable solution in respect of both projects, and made a presentation before the Commission.

16. In respect of the Malappuram project, KSEB Ltd. submitted that the 33 kV INKEL Substation was commissioned on 26.05.2025 as an outdoor substation, since 33 kV indoor panels were not then available, and that only one of the two 5 MVA transformers has been commissioned so far. The INKEL Industrial Park is presently fed through a dedicated 11 kV feeder from the 110 kV Substation, Malappuram, about 7.5 km away. The proposal of KSEB Ltd. is to connect the solar plant to the 33 kV bus of the INKEL Substation through an indoor panel, with the balance power evacuated through the existing 33 kV Malappuram–INKEL line, and the 33 kV INKEL–Othukkungal line (8.5 km) referred to in paragraph 3(3) above, which is under construction, would provide an alternate source. KSEB Ltd. submitted that evacuation of the capacity is technically feasible. A set of seven 33 kV indoor panels, including one panel for the petitioners, has been tendered, and the supply of the panels is expected to take six to eight months. Pending the same, KSEB Ltd. proposed a temporary arrangement for evacuation through the existing outdoor 33 kV substation with the concurrence of the Electrical Inspectorate. KSEB Ltd. also submitted that a separate 33 kV underground cable to Malappuram had been suggested for improving reliability, but the petitioners were not willing for the same.

17. KSEB Ltd. further submitted that the cost of the feeder panel for the petitioners is to be borne by them under deposit work, for which the demand was raised on 15.09.2026, and that the same has not been remitted so far. The petitioners

submitted that the demand is exorbitant compared to the market price of the panel and objected to the levy of centage charges, but stated that the amount would be remitted under protest within two days. KSEB Ltd. submitted that, being a deposit work, the amount would be adjusted based on the actual expenditure and any excess refunded.

18. In respect of the Vadakarapathy project, KSEB Ltd. submitted that the initial estimate was Rs.29.33 crore, comprising Rs.10.10 crore for the 8 km 110 kV LILO line and Rs.19.22 crore for the substation with two 25 MVA 110/33 kV transformers and two 12.5 MVA 110/11 kV transformers, and that the share of the petitioners at 50% as per the Board Order was Rs.14.66 crore. The petitioners proposed a share of Rs.12.51 crore on a per MVA basis, which was not accepted by KSEB Ltd. Subsequently, on excluding the 110/11 kV portion meant for KSEB Ltd., the revised share of the petitioners was worked out as Rs.18.45 crore, as demanded vide letter dated 15.06.2026 referred to in paragraph 3(1) above, comprising Rs.8.85 crore towards 50% of the common facilities (110 kV line, feeder bays and control room) and Rs.9.60 crore towards the two 25 MVA 110/33 kV transformers. KSEB Ltd. submitted that the estimates were revised from time to time based on the changing requirements of the petitioners, and that no formal application for connectivity has been made. It was also submitted that, in the meeting referred to in paragraph 15 above, the petitioners requested KSEB Ltd. to explore evacuation at 33 kV directly to the 110 kV Substation, Kozhinjampara, which is the delivery point under the amended Letter of Award, in place of the Vadakarapathy Substation, and that the load flow study for the same is yet to be conducted.

19. On the handing over of the 1.5 acres of land for the Vadakarapathy Substation referred to in paragraph 14 above, the learned counsel for the petitioners submitted that, the same being a Board decision, the matter would be placed before the Board of INKEL and the response furnished to the Commission.

20. The Commission directed KSEB Ltd. to file its counter affidavit on or before 26.10.2026, with a copy served on the petitioners, and the petitioners to file their remarks, if any, by 28.10.2026. KSEB Ltd. filed its counter affidavit on 26.10.2026, and the petitioners subsequently filed their rejoinder on 11.11.2026. The submissions of KSEB Ltd. and the petitioners are summarised in paragraphs 21 and 22 below.

Counter remarks of KSEB Ltd.

21. In compliance with the directions issued during the hearing, KSEB Ltd. filed its counter remarks vide letter No. KSEBL/TRAC/CG/INKEL/2026-27/593 dated 26.10.2026. KSEB Ltd. denied the allegation that it has imposed arbitrary technical barriers or discouraged renewable energy investment, and submitted that the connectivity proposals were examined at various stages considering the

network configuration, technical feasibility, system security, availability of transmission capacity and the applicable regulatory provisions. The main submissions of KSEB Ltd. are summarised below, without repeating the submissions already made during the hearing and recorded in paragraphs 15 to 18 above:

(1) **Vadakarapathy Hybrid Project, Palakkad:**

KSEB Ltd. stated that INKEL, being the L2 bidder for 14 MW, agreed to match the L1 tariff of Rs.3.96/kWh adopted by the Commission vide common order dated 19.10.2022 in OP No.47/2022, following which the Letter of Award referred to in paragraph 3(1) above was issued, and that the delivery point was changed from the 110 kV Substation, Walayar to the 110 kV Substation, Kozhinjampara vide the amendment dated 02.03.2023. The earlier proposal of INKEL dated 12.07.2022 to evacuate the 14 MW wind power through the Kozhinjampara system, offering 50 cents of land for a 33 kV substation at Vadakarapathy, was not considered beneficial, since the land was within the right of way of the 320 kV HVDC Pugalur–Madakkathara line and there was no requirement of a substation at that location.

On the subsequent proposal of INKEL for the hybrid project, KSEB Ltd. had, on 27.01.2024, informed INKEL that, being the sole beneficiary, it should bear the entire cost of the substation and lines, and the Board Order dated 26.03.2025 for 50:50 cost sharing was issued thereafter on the request of INKEL, subject to changing the delivery point to the proposed substation. In addition to the cost details stated in paragraph 18 above, KSEB Ltd. submitted that the claim of INKEL to limit its share to Rs.12.51 crore is unsustainable, since an alternative configuration with two 16 MVA 110/33 kV transformers, estimated at Rs.20.51 crore, would be exclusively attributable to INKEL, and the cost of dedicated evacuation assets is to be borne by the developer under the Connectivity Regulations. The estimate was revised to Rs.37.55 crore on the request of INKEL dated 05.12.2025 for adopting two 5 MVA 33/11 kV transformers in place of the 110/11 kV transformers, of which Rs.10.25 crore is to be borne by KSEB Ltd., and that the amount of Rs.18.45 crore intimated to INKEL as its share has been arrived at by segregating the cost of the assets dedicated to the project from that of the shared infrastructure.

KSEB Ltd. further submitted that the 14 MW wind component can be evacuated through a single 33 kV feeder, and that in the meeting held on 11.03.2026, INKEL had proposed to evacuate the 18 MW solar and 18 MW wind components through separate single circuit 33 kV feeders, along with a 10 MW/4-hour BESS and three pooling stations in a single building within 500 m of the proposed substation, though the network arrangement and plant locations are yet to be finalised.

As regards the maximum simultaneous injection of about 25 MW referred to in paragraph 14 above, KSEB Ltd. submitted that, if a formal application is made for 36 MW, the network capacity would have to be reserved for 36 MW, and that, on formal confirmation by INKEL that the injection would be limited to 25 MW, it is willing to undertake a fresh load flow study, for which INKEL is required to furnish the maximum AC injection capacity, the BESS operating arrangement and the export-limiting mechanism. KSEB Ltd. also expressed willingness to examine the evacuation through the 110 kV Substation, Kozhinjampara, referred to in paragraph 18 above, subject to capacity enhancement and line strengthening, if INKEL does not require the Vadakarapathy Substation, and to submit the load flow study report before the Commission. The cost of dedicated facilities and network augmentation would be governed by Regulation 6(6) of the Connectivity Regulations.

(2) **Group Captive Solar Project, Malappuram:**

KSEB Ltd. submitted that the load flow study approved on 26.06.2025 for the application dated 20.05.2025 referred to in paragraph 3(3) above had assumed 50 MVA (2x25 MVA) of 110/33 kV transformer capacity at the 110 kV Substation, Malappuram and a proposed 33 kV Substation at Civil Station, Malappuram, whereas only 41 MVA (16+25 MVA) is presently available and the Civil Station Substation has not materialised. Further, the 33 kV INKEL Substation referred to in paragraph 16 above was conceived primarily for the distribution network of the Oorakam area and is operating with limited functionality. Considering these field conditions and Regulations 8 and 8A of the Supply Code, connectivity was restricted to 14.4 MW, as stated in paragraph 3(3) above.

On the feeder panel referred to in paragraphs 16 and 17 above, KSEB Ltd. submitted that INKEL had, on 16.03.2026, expressed willingness to procure the 33 kV panel at its own cost, which was consented to by the Director (T&SO), but subsequently, vide letter dated 27.04.2026, requested KSEB Ltd. to arrange the panel. The tenders for 33 kV indoor VCB panels invited on 15.10.2024, 07.02.2025 and 26.02.2026 were cancelled for want of adequate or valid bids or deviations in specifications, a difficulty not specific to INKEL, and a fresh tender has been invited vide Bid No. KSEB/CESCM/2026-27/00028 dated 24.09.2026 with revised specifications. KSEB Ltd. reiterated that, if the panel is not ready by the time the solar plant is commissioned, the temporary evacuation arrangement would be examined, subject to the approval of the Electrical Inspectorate.

In respect of the additional capacity, KSEB Ltd. submitted that a fresh load flow study, conducted on receipt of the letter of INKEL dated 05.09.2026 limiting the evacuation to 16.4 MW, found connectivity for 16.4 MW

feasible under the present network configuration, subject to formal confirmation of the revised requirement by the petitioners, and that the observation made in the meeting held on 11.06.2026, referred to in paragraph 3(3) above, was based on changed network assumptions and is not a contradictory stand. KSEB Ltd. reiterated that the additional underground cable feeder to the 110 kV Substation, Malappuram suggested by it, as stated in paragraph 16 above, would be the most suitable arrangement for complete evacuation, since the existing 33 kV overhead lines run along with 11 kV and LT lines and are subject to shutdowns.

(3) KSEB Ltd., further reiterated its reliance on Regulations 8 and 8A of the Supply Code as stated in paragraph 6 above, submitted that Regulation 4 of the Connectivity Regulations specifies the eligibility for connectivity without prescribing the voltage level, and that the approval of the Commission for providing supply through two independent 33 kV feeders to the same premises may therefore be considered for regulatory clarity. On the arrangement for the Paivalikae Solar Park referred to in paragraph 4 above, KSEB Ltd. submitted that the same cannot be directly compared, as feasibility depends on the network conditions, but that it has no objection in principle to evacuation through multiple 33 kV feeders if established as technically feasible through system studies. Conductor ampacity alone cannot determine the permissible injection, as transformer capacity, upstream network loading, voltage profile, contingency conditions and protection are also relevant, and the metering arrangement can be examined along with the final evacuation scheme. KSEB Ltd. submitted that the interpretation of the Regulations, including the permissibility of connectivity at 33 kV, may be determined by the Commission, and that it would comply with the directions of the Commission.

(4) Further KSEB Ltd. denied the allegation of arbitrary delay and submitted that the delay is attributable to the non-availability of the feeder panel and the network constraints at Malappuram, and, in respect of the Palakkad project, to the lack of timely response from INKEL on remittance of the amount and its repeated requests for revision of the cost-sharing methodology. KSEB Ltd. prayed that the Commission may issue appropriate directions regarding the connectivity arrangements, the applicable technical requirements and the responsibility for the cost of the evacuation infrastructure.

Rejoinder of the petitioners

22. The petitioners filed their rejoinder to the counter remarks of KSEB Ltd. vide letter No. INKEL/RE/KSERC/26-27/184 dated 11.11.2026. The petitioners contended that Regulations 8 and 8A of the Supply Code, which prescribe limits

on connected load and contract demand for consumers, cannot be applied as a ceiling on the capacity of generating stations seeking connectivity at 33 kV. They further submitted that Regulation 4 of the Connectivity Regulations does not prescribe any specific voltage level for connectivity and that the restriction of 14.4 MW imposed by KSEB Ltd. was based solely on the provisions of the Supply Code and not on any technical constraint. In this regard, the petitioners referred to three load flow studies. The first, conducted by KSEB Ltd. for the Malappuram project vide report dated 26.06.2025, found that the entire 23.2 MW could be evacuated through two 33 kV feeders. The study also indicated that this arrangement would reduce the loading of the 110/33 kV transformers at the 110 kV Substation, Malappuram, from 93% to 44.5%, and the loading of the 33 kV Malappuram–INKEL feeder from 112% to 11.2%. The second study, conducted on 25.12.2024 for the proposed 110 kV Vadakarapathy Substation, found that evacuation of 45.2 MW of renewable energy was feasible. The petitioners also referred to the subsequent load flow study conducted by KSEB Ltd. based on the revised injection limit of 16.4 MW, which found the proposed connectivity technically feasible. The other submissions of the petitioners are provided below.

(1) **Group Captive Solar Project, Malappuram:**

The petitioners submitted that the Malappuram project was proposed with a solar capacity of 20.5 MWp (16.4 MW AC), along with an integrated BESS of 4 MW/16 MWh. The same was communicated to KSEB Ltd. vide the D.O. letter of the Managing Director of Petitioner No.1 dated 16.03.2026 and subsequently confirmed vide letter dated 05.09.2026. They clarified that their claim in respect of the project was limited to connectivity for 16.4 MW, inclusive of the BESS, and that the relief sought in the petition may be read accordingly. A formal application for connectivity for the revised capacity of 16.4 MW, representing an additional 2 MW over the 14.4 MW already granted, was submitted on 15.10.2026. They further submitted that the BESS would be charged only from the solar plant and not from the grid, and that the combined injection of the solar plant and the BESS through the single point of interconnection would not exceed 16.4 MW at any time.

The petitioners further submitted that 3 MWp of the solar plant had been installed and the electrical scheme for the same had been approved by the Chief Electrical Inspector vide letter No.1467/2026-B3 dated 28.07.2026, while approval for the balance 17.5 MWp was awaited. The demand dated 15.09.2026 for Rs.60 lakh towards the feeder panel had been paid in full, as acknowledged by KSEB Ltd. vide receipt dated 23.10.2026. Accordingly, they contended that the statement of KSEB Ltd. in its counter remarks that the amount was yet to be deposited was incorrect. Subsequently, Connection Agreement No.01/2026-27 dated 05.11.2026

was executed between KSEB Ltd. and Petitioner No.3 for the 18 MWp/14.4 MW group captive solar plant, with the connection point at the 33 kV Substation, Oorakam (INKEL). The petitioners also submitted that non-DCR modules, using solar PV cells not included in ALMM List-II, had been delivered at the site and that any further delay in providing connectivity would expose the project to the consequences of the MNRE Office Memorandum dated 18.07.2026.

Regarding the feeder panel, the petitioners submitted that Petitioner No.3, vide letter dated 26.03.2026, had agreed to execute the Connection Agreement, comply with the applicable Regulations and CEA standards, pay the connectivity charges and provide two 33 kV VCB panels at its cost as a temporary arrangement. However, the Chief Engineer (Transmission North), vide letter dated 10.04.2026, mentioned the petitioners to procure the entire 33 kV indoor seven-panel set at their cost, including the switchgear required for the substation of KSEB Ltd. itself. The letter also reiterated that the solar plant could be commissioned only after the commissioning of the substation. The petitioners submitted that their subsequent communication did not refuse to procure the panel required for their connection, but only sought to limit their obligation to the feeder panel required for the project, while renewing their offer to provide temporary panels. They further contended that the failure of the tenders invited by KSEB Ltd., reportedly due to issues with the technical specifications, was attributable to KSEB Ltd. and that the resulting cost burden had been passed on to the petitioners. They also questioned the reasonableness of the demand of Rs.60 lakh towards the feeder panel. The petitioners pointed out that the last date for submission of bids under the latest tender had been extended to 10.11.2026 and that the procurement process remained incomplete.

The petitioners also submitted that the revised application dated 13.11.2025 for 14.4 MW had been submitted only to comply with the limit communicated by KSEB Ltd. with reference to the Supply Code, based on the assurance that the balance capacity would be connected after commissioning of the INKEL–Othukkungal line. They clarified that the submission of the revised application did not amount to acceptance of 14.4 MW as the lawful maximum capacity for connectivity. They further contended that the changes in network assumptions relied upon by KSEB Ltd. related to its own network conditions and were not attributable to any action on the part of the petitioners. Since the fresh load flow study had found evacuation of 16.4 MW feasible through the existing arrangement, the additional 7.5 km underground cable feeder to the 110 kV Substation, Malappuram, proposed by KSEB Ltd., was not necessary for the project. According to the petitioners, the proposed feeder would only increase the cost without providing any additional reliability benefit over the originally

planned extension of the 33 kV network to Othukkungal and the 110 kV Substation, Edarikode.

(2) **Solar-Wind Hybrid Project, Vadakarapathy, Palakkad:**

The petitioners submitted that the maximum power export from the Palakkad project, comprising 18 MW wind (of which 14 MW is covered by the Letter of Award), 18 MWp solar and a BESS, shall not exceed 25 MW at the point of interconnection. This limit would be ensured through operational control of the wind, solar and BESS units. The BESS would be charged only from surplus wind or solar generation and not from the grid, with priority given to the 14 MW contracted with KSEB Ltd. The petitioners sought connectivity for a maximum export of 25 MW at the 33 kV bus of the proposed 110 kV Vadakarapathy Substation, approximately 500 m from the pooling station, through a single 33 kV feeder of adequate capacity as determined by the system study. The petitioners also expressed no objection to KSEB Ltd. examining the feasibility of evacuation through the 110 kV Substation, Kozhinjampara. They requested that the load flow study proposed by KSEB Ltd. be completed within a fixed time and undertook to submit the formal application in Format C1 subject to the completion of the load flow study.

Regarding the proposed substation, the petitioners submitted that KSEB Ltd., vide letter dated 09.08.2023, had identified a renewable energy potential of 51 MW in the area, stated that the existing 33 kV network was inadequate, proposed a new 110 kV substation at Vadakarapathy and sought 2 acres of land free of cost. In response, the petitioners offered 1.5 acres on 15.09.2023. They contended that the substation was therefore not originally proposed by them and that the load flow study dated 25.12.2024 had considered evacuation of 45.2 MW of renewable energy, including 13.2 MW from two other developers, along with future load growth in the area. Hence, they were not the sole beneficiaries of the substation. KSEB Ltd., vide letter dated 30.08.2025 of the Director (T&SO), declined their request for pro-rata apportionment, stating that the sanctioned scope also catered to anticipated load growth, renewable energy integration and long-term network strengthening requirements, and demanded remittance of Rs.14.66 crore. The petitioners submitted that the comparison with an alternative arrangement costing Rs.20.51 crore had not been communicated to them.

The petitioners further submitted that the revised provisional demand dated 15.06.2026 increased their share from Rs.14.66 crore to Rs.18.45 crore by allocating the entire cost of the two 25 MVA, 110/33 kV transformers to them, although these works were to be shared equally under the Board Order, while including a 16 MVA transformer and other works at the cost of KSEB Ltd. They contended that this increase was

made without any decision of the Full-Time Directors modifying the Board Order dated 26.03.2025. They also submitted that the 110/33 kV transformers and 110 kV work at KSEB Ltd substation were not dedicated assets of the petitioners and that the apportionment of their costs fell within the Commission's jurisdiction.

With regard to the letter dated 26.02.2026, the petitioners submitted that the requirement to connect the 18 MW solar project at 110 kV and maintain the 110 kV substation was contrary to KSEB Ltd.'s sanctioned design, which provided for evacuation of the solar power through a 33 kV feeder panel. They also referred to the recital in the Board Order that KSEB Ltd. had considered evacuation of the 18 MW solar power through a 33 kV line to the 110 kV Substation, Walayar, as the most technically feasible and cost-effective solution. The substation, being constructed on land handed over to and owned by KSEB Ltd., cannot be required to be maintained by the petitioners.

(3) The petitioners submitted that KSEB Ltd. had not identified any technical distinction between the Paivalikae arrangement and their proposals. They pointed out that KSEB Ltd. permits injection of 50 MW at 33 kV through multiple feeders, with metering at 33 kV, without approval of the Commission. They agreed that the feasibility of the proposed injection should be determined through a load flow study based on CEA technical standards, taking into account conductor and transformer capacity, voltage profile, contingency conditions and protection, as sought in prayer (3). They further submitted that the energy injected through multiple feeders could be metered using ABT-compliant Special Energy Meters and undertook to comply with the protection, isolation, switching and fault-level requirements specified by KSEB Ltd. The petitioners denied that the delay was attributable to them and submitted that, in respect of Malappuram, the impediments were the non-availability of the feeder panel from KSEB Ltd. and its insistence on the 14.4 MW limit, while, in respect of Palakkad, they were the requirement of connectivity at 110 kV and the unilateral revision of cost apportionment by KSEB Ltd.

Analysis and decision of the Commission

23. The Commission has carefully considered the petition, the submissions made by the petitioners and KSEB Ltd. during the hearings held on 19.08.2026 and 13.10.2026, the project schedules submitted by the petitioners vide letter dated 12.10.2026, and the counter remarks of KSEB Ltd. dated 26.10.2026. The Commission has examined the matter in the light of the provisions of the Electricity Act, 2003, the Connectivity Regulations, the Kerala Electricity Supply Code, 2014 (hereinafter referred to as "the Supply Code"), the KSERC (Renewable Energy and Net Metering) Regulations, 2020 and the relevant

technical standards issued by CEA. The analysis of the Commission is detailed in the subsequent paragraphs.

24. The Commission notes that the 14 MW wind project of the petitioner's, rests only on the Letter of Award dated 07.02.2023 issued by KSEB Ltd. The Commission, vide common order dated 19.10.2022 in OP Nos.47/2022 and 48/2022, adopted the L1 tariff of Rs.3.96/kWh discovered through the competitive bidding conducted by KSEB Ltd. for wind power. INKEL Limited, which was the L2 bidder, subsequently agreed to match the L1 tariff vide letter dated 14.12.2022, as stated in paragraph 21(1) above, and the Letter of Award was issued thereafter. As per Clause 8 of the Letter of Award, the PPA was to be initialled and submitted before the Commission by the developer for approval along with a petition. However, even after more than three and a half years from the date of the Letter of Award, the petitioners have neither executed the PPA with KSEB Ltd. nor approached the Commission for adoption of the tariff and approval of the PPA in respect of the 14 MW capacity. Accordingly, as clarified during the hearing and stated in paragraph 11 above, the present proceedings are confined to the issue of connectivity, and nothing contained in this Order shall be construed as an approval of the Letter of Award, the tariff or the PPA in respect of the said project.

25. The Commission observed that the petitioners have not demonstrated the requisite diligence and urgency in pursuing the implementation of the projects, particularly considering that they are a Public Private Partnership company promoted by the Government of Kerala, involving public funds as well as investments made by a large number of shareholders. In this regard, the following aspects are noted:

    (1) In respect of the Vadakarapathy project, no formal application for connectivity has been made under the Connectivity Regulations till date, and the capacity and evacuation requirement have been revised from time to time, from 14 MW wind to a 32 MW hybrid and thereafter to a 36 MW hybrid with a maximum injection of 25 MW, as stated in paragraphs 14 and 21(1) above. The proposals on the evacuation arrangement have also shifted between the 110 kV Substation at Vadakarapathy and direct evacuation at 33 kV to the 110 kV Substation, Kozhinjampara. Though the petitioners have, in their rejoinder, declared the maximum export from the project as 25 MW, the same is yet to be brought before KSEB Ltd. through a formal application;

    (2) In respect of the Malappuram project, the petition was filed for a capacity of 23.2 MWp, whereas the petitioners have now stated that, upon finalisation of the project layout, the capacity has been revised to 20.5 MWp (16.4 MW AC), as stated in paragraph 13 above, and the formal

application for the revised requirement of 16.4 MW was submitted only on 15.10.2026, after the second hearing, as stated in paragraph 22(1) above;

(3) The project schedules submitted in compliance with the Daily Order dated 20.08.2026, as stated in paragraph 9 above, do not cover the 18 MW solar project at Vadakarapathy. Further, the schedules do not specify the project cost along with its break-up or the injection points, as directed by the Commission. The schedule submitted for the wind project is vague and generic and does not indicate the various stages of the procurement process, such as invitation of RFQ/RFP, technical and financial evaluation, and award of work. Further, commencement of the works has been made contingent upon finalisation of the evacuation arrangement and execution of the PPA. It is also noted that wind projects of similar capacity are being completed within 24 months elsewhere in the country and that no logistical constraints have been identified at the project location;

(4) With regard to the procurement for the wind project stated in paragraph 14 above, INKEL, being a public limited company with a large number of shareholders, is required to follow a competitive and transparent procurement process. No sense of urgency is visible in the implementation of the project, even though the Letter of Award was issued more than three and a half years ago;

(5) The 1.5 acres of land agreed to be provided for the Vadakarapathy Substation, which is independent of the finalisation of the cost, has not been handed over to KSEB Ltd. so far, as stated in paragraph 19 above, even though, according to the petitioners themselves, the substation was proposed by KSEB Ltd. to meet the requirements of the area as stated in paragraph 22(2) above;

(6) In respect of the feeder panel at Malappuram, the petitioners, after expressing willingness on 16.03.2026 to procure the panel at their cost, withdrew from the same on 27.04.2026, stating that the seven-panel set demanded included the switchgear of the substation of KSEB Ltd. itself, and the estimated cost of the feeder panel intimated on 15.09.2026, which is to be borne by the applicant under Regulation 6(6) of the Connectivity Regulations, had not been remitted till the date of the hearing, as stated in paragraphs 17 and 21 above, and was remitted only thereafter, as acknowledged by KSEB Ltd. vide receipt dated 23.10.2026, as stated in paragraph 22(1) above.

26. At the same time, the question that arises is whether any application for connectivity made by the petitioners has been dealt with by KSEB Ltd. in a manner not in accordance with the Connectivity Regulations. In this regard, the Commission notes that the applications for connectivity made by the petitioners under the Connectivity Regulations are the application dated 20.05.2025 for the Malappuram project, revised on 13.11.2025, as stated in paragraph 3(3) above,

and the application dated 15.10.2026 for the revised requirement of 16.4 MW, as stated in paragraph 22(1) above, and that no such application has been made for the Vadakarapathy project, as noted in paragraph 25(1) above. In processing the application dated 20.05.2025, KSEB Ltd. relied upon the maximum contract demand admissible at 33 kV under Regulations 8 and 8A of the Supply Code, which, as discussed under prayers (1) and (3) below, is not applicable to the connectivity of generating projects. Further, KSEB Ltd. intimated the estimated cost of the feeder panel only about sixteen months after the application, and the procurement of 33 kV panels has failed on three occasions, while the offer of Petitioner No.3 dated 26.03.2026 to provide 33 kV VCB panels at its own cost for temporary energisation was not acted upon. KSEB Ltd. is required to process the applications for connectivity and complete the associated works within the timelines specified in Regulation 6 of the Connectivity Regulations and the procedure issued thereunder. The Commission also notes that the timeline for the works would commence only on payment of the estimated cost by the petitioners. KSEB Ltd. may review its procedures and the delegation of powers so that timely decisions are taken and the connectivity/ evacuation of renewable energy projects are not delayed for want of procedural formalities.

27. The adjudication authority of the Commission is confined only to matters arising under the Electricity Act, 2003 and the Regulations/ Orders issued by the Commission as per the provisions of the Act. During the hearing on 13.10.2026, the petitioners and their learned counsel agreed that the issues on which adjudication is sought are confined to the following, and that the other aspects raised in the petition are not pressed:

    (1) whether connectivity can be granted at the 33 kV voltage level up to 25 MW for the Solar-Wind Hybrid Project at Vadakarapathy, Palakkad; and

    (2) whether connectivity can be granted at the 33 kV voltage level up to 16.4 MW for the Group Captive Solar Project at Panakkad, Malappuram.

28. The Commission notes that the cost apportionment for the Vadakarapathy Substation does not form part of the prayers in the present petition. Further, the petitioners, during the hearing on 13.10.2026, specifically confirmed that they were not seeking adjudication on the cost aspect, as recorded in paragraph 14 above. Accordingly, the Commission does not propose to examine the cost apportionment in the present proceedings. Though the petitioners have contended in their rejoinder that the apportionment of the cost of the said works falls within the jurisdiction of the Commission under Section 86(1)(f) of the Electricity Act, 2003, they are at liberty to raise the matter, if aggrieved, through appropriate proceedings in accordance with law. The cost apportionment may be mutually agreed upon by the parties, taking into account the technical requirements specified by CEA and the applicable provisions of the Connectivity

Regulations. The prayers of the petitioners are considered in the subsequent paragraphs in the light of the above.

Prayer (1): Declare that the connected load and contract demand specified in the Kerala Electricity Supply Code, 2014 regulate supply to consumers and do not constitute the maximum permissible capacity for grid connectivity of renewable energy generating stations.

29. The Kerala Electricity Supply Code, 2014 was notified by the Commission on 31.01.2014 under Section 50 of the Electricity Act, 2003, and has been amended from time to time. The Supply Code operationalises the statutory provisions relating to the recovery of electricity charges, intervals for billing, disconnection of supply for non-payment and restoration of supply, measures for preventing tampering, distress or damage to electrical plants, lines and meters, and the entry of the distribution licensee or authorised persons into the premises of consumers for disconnecting supply, removing meters, or replacing, altering and maintaining electric lines, plants and meters. The provisions of the Supply Code, including the connected load and contract demand specified for different supply voltages under Regulation 8 thereof, thus relate to the supply of electricity by the distribution licensee to its consumers.

30. In view of the above, the Commission is of the view that the limits of connected load and contract demand specified in Regulations 8 and 8A of the Supply Code govern the connectivity and supply of electricity to consumers, and need not be applied to generating stations seeking connectivity to the grid. The said limits need not, by themselves, operate as a ceiling on the capacity of a generating station for grant of connectivity at a particular voltage level. The connectivity of generating stations, including the voltage level and the capacity that can be evacuated at a connection point, shall be determined in accordance with the Connectivity Regulations, the State Grid Code and the applicable CEA standards, based on load flow studies and the technical feasibility of the network. In view of the above, the alternative plea of the petitioners in the rejoinder for the approval of the Commission under Regulation 8A(2) of the Supply Code to exceed the said limits does not arise for consideration.

Prayer (2): Declare that Regulation 13(4) of the KSERC (Renewable Energy & Net Metering) Regulations, 2020 is applicable only to grid interactive renewable energy systems under Chapter III of the Regulations and not to renewable energy systems above 1 MW, captive generating plants and independent power producers governed under Chapter IV.

31. The control period of the KSERC (Renewable Energy and Net Metering) Regulations, 2020 was up to FY 2024-25. Thereafter, the Commission notified the KSERC (Renewable Energy and Related Matters) Regulations, 2025 on 05.11.2025, the operation of which has been stayed by the Hon'ble High Court

of Kerala vide interim order dated 10.11.2025 in WP(C) No.39797 of 2025, and the stay is continuing. The applicability of the Renewable Energy Regulations is therefore subject to the final judgment of the Hon'ble High Court in the said matter. Hence, the Commission does not find it necessary to consider this prayer of the petitioner. In view of the above, the prayer of the petitioners in this regard has to be rejected.

Prayer (3): Direct KSEB Ltd. to provide connectivity to the petitioners' projects based on load flow studies, CEA Regulations, feeder capability and right of way considerations.

32. KSEB Ltd. has restricted the connectivity of the projects of the petitioners at the 33 kV level to 14.4 MW, relying on Regulations 8 and 8A of the Supply Code, as stated in paragraphs 3(2) and 21(2) above. Regulation 8 of the Supply Code specifies the supply voltage for different connected loads or contract demands of consumers, under which the maximum connected load or contract demand at 33 kV is 12000 kVA. Regulation 8A(1) of the Supply Code provides as follows:

"8A. Special conditions for availing supply at different voltage levels. — (1) The limit of connected load or contract demand specified for different supply voltage levels specified in Regulation 8 above may be exceeded up to a maximum of twenty percent, if supply at the appropriate higher voltage level is not feasible due to non-availability of distribution line at such higher voltage level in that area."

33. The figure of 14.4 MW/14.4 MVA adopted by KSEB Ltd. is thus arrived at by applying the margin of twenty per cent under Regulation 8A over the limit of 12000 kVA under Regulation 8. As held under prayer (1) above, these provisions relate to the connected load and contract demand of consumers availing supply from the licensee. Connectivity of generating stations injecting power into the grid is governed by the Connectivity Regulations, Regulation 4 of which reads as follows:

"4. Eligibility for connectivity.- (1) A consumer having contracted load above 12 MVA or a generating station having capacity above 12 MW shall be eligible to obtain connectivity to the intra-state transmission system and shall apply for connectivity in accordance with the provisions in the State Grid Code, unless already connected at the appropriate voltage level as specified in the State Supply Code. (2) A consumer having contracted load of and below 12 MVA or a generating station having installed capacity of and below 12 MW shall be eligible to obtain connectivity to the distribution system and shall apply for connectivity as per the provisions of the State Supply Code or the State Distribution Code, unless already connected at appropriate voltage level as specified in the said Codes: Provided that in case where connectivity cannot be given at the voltage level specified in the State Grid Code or the State

Supply Code or the State Distribution Code due to non availability of requisite system or on account of system or technical constraints, then connectivity shall be given at an appropriate higher voltage level irrespective of the load of the consumer or the installed capacity of a generating station seeking the connectivity: …"

34. Regulation 4 determines whether an applicant is to be connected to the intra-state transmission system or to the distribution system based on its contracted load or installed capacity, and does not by itself prescribe any voltage level or maximum capacity for connectivity at a particular voltage level. The reference therein to the voltage level specified in the State Supply Code relates to consumers, since, as held under prayer (1) above, the Supply Code specifies the supply voltage only with reference to the connected load or contract demand of consumers. Further, the first proviso to Regulation 4(2) provides that, where connectivity cannot be given at the specified voltage level due to system or technical constraints, connectivity shall be given at an appropriate higher voltage level, which also indicates that the voltage level for connectivity is to be decided on technical considerations. KSEB Ltd. has also conceded in its counter remarks, as stated in paragraph 21(3) above, that the Connectivity Regulations do not specify the voltage level for such connectivity. The capacity that can be evacuated at a particular voltage level is therefore a technical matter to be determined in accordance with the CEA technical and safety standards. The projects of the petitioners, each having a capacity above 12 MW, are eligible for connectivity to the intra-state transmission system under Regulation 4(1), and the applications for connectivity are to be processed by KSEB Ltd., as the State Transmission Utility, in accordance with Regulation 6 of the Connectivity Regulations.

35. The Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 (hereinafter referred to as "the CEA Connectivity Regulations"), specify the technical standards and conditions for connectivity to the grid, with the aim of ensuring the safe operation, integrity and reliability of the grid. The said Regulations are applicable to every entity seeking connection to the grid at the voltage level of 33 kV and above, including solar and wind generating stations, wind-solar hybrid systems and energy storage systems. The Schedule thereto specifies the general standards relating to equipment, protection and metering, and the specific standards applicable to wind and solar generating stations and wind-solar hybrid systems with regard to harmonics, reactive power capability, voltage ride through, active power control and the short circuit ratio at the interconnection point. Regulation 6(3) of the Connectivity Regulations requires the State Transmission Utility to carry out the feasibility study for grant of connectivity in accordance with the CEA

Connectivity Regulations and the State Grid Code, and Regulation 6(8) thereof requires the applicant and the licensees to comply with the CEA Connectivity Regulations.

36. Further, with regard to the technical aspects, the CEA (Electricity Distribution Network Planning Criteria), 2023 (hereinafter referred to as "the CEA Criteria"), specifies that the loading capability of a 33 kV feeder is governed by the permissible voltage regulation at the farthest end and the thermal capacity of the conductor selected. Clause 17 of the CEA Criteria provides as follows:

"17. The voltage regulation in 33 kV, 22 kV, 11 kV and LT feeders should not exceed the following limits at the farthest end under peak load conditions and normal system operation regime. — 11 kV, 22 kV & 33 kV: (–) 9.0% to (+) 6.0% … The action should be initiated if the voltage regulation reaches (–) 8% or (+) 5% for 11 kV, 22 kV and 33 kV …"

37. On the selection of conductors, Clause 22 of the CEA Criteria indicates the standard conductors and cables for the 33 kV level and provides as follows:

"33 kV/22 kV: ACSR Wolf, Dog, Racoon, Rabbit or equivalent AAAC, covered conductors, 3 core XLPE cables of sizes 150, 185, 240, 300 and 400 sq.mm. etc. … In the choice of conductor size, the parameters to be considered are thermal limit of conductors to meet the expected loads, voltage regulation and economic loading of the lines along with related spare requirement. The choice of OH line or UG cable may be made based on the actual field conditions/ requirement of regulations …"

38. The maximum loading of the commonly used 33 kV conductors and cables is set out in Tables 4.4 and 4.5 of the CEA Criteria, which are reproduced below:

Conductor	Nominal Area (sq. mm)	Ampacity (Amps.) at 45°C
ACSR Panther	200	560
ACSR Wolf	150	470
ACSR Dog	100	360
ACSR Racoon	80	300
ACSR Rabbit	50	240

Table 4.4 Max loading of ACSR Conductors (as per IS 398 part 2)

(Note: The equivalent AAAC conductors can also be used)

Cable Size	Direct in Ground at 30°C (Al Conductor)	In Air at 40°C (Al Conductor)
3Cx120 XLPE	215 A	262 A
3Cx150 XLPE	240 A	294 A
3Cx185 XLPE	270 A	336 A
3Cx240 XLPE	315 A	393 A

3Cx300 XLPE	355 A	450 A
3Cx400 XLPE	405 A	519 A

Table 4.5 Typical Current Rating of XLPE Cables (Based on IS 7098 Part 2)

** The above typical Cable ratings may be in somewhat (+-) variance as per the manufacturers GTP.*

Note: 33 kV Single Core Cables in place of 3 Core Cables may also be used as per requirement. The current ratings of the cables would be subject to de-rating factors applicable for local conditions such as grouping, cable depth, soil type, temperature, etc. as per relevant IS.

39. At 33 kV, these ratings correspond to a power transfer capability of about 32 MVA for ACSR Panther (560 A), 26.9 MVA for ACSR Wolf (470 A) and 29.7 MVA for a 3Cx400 sq.mm XLPE cable laid in air (519 A). It is therefore evident that 14.4 MW/MVA is not a technical limit for evacuation at 33 kV. This is also borne out by the practice of KSEB Ltd. itself in evacuating 50 MW from the Paivalikae Solar Park through two 33 kV feeders vide B.O.(FTD) No.698/2019 dated 19.09.2019.

40. At the same time, the evacuation arrangement for a generating station is to be designed with reference to the maximum power that would actually be injected into the grid, and not merely the aggregate installed capacity. In the case of the Vadakarapathy project, the aggregate capacity of 36 MW comprises 18 MW of wind and 18 MW of solar generation. Since the peak generation from the wind and solar components would not occur simultaneously, the petitioners have indicated, as stated in paragraphs 3(1) and 14 above, that the maximum simultaneous injection would be about 25 MW, and the same can be further limited through the BESS proposed to be installed at the project. The petitioners have, in their rejoinder, declared that the export from the project at the point of interconnection shall not exceed 25 MW at any time, which will be ensured through operational control of the wind, solar and BESS units, with the BESS charged only from the surplus wind or solar generation and not from the grid. The connectivity requirement of the project is therefore to be assessed with reference to such maximum export. The injection of about 25 MW at Vadakarapathy and of 16.4 MW at Malappuram can therefore be considered for evacuation at the 33 kV level, through one or more circuits with suitable conductors as found feasible in the system studies, considering the ratings stated in paragraph 39 above and the de-rating and loading considerations stated hereunder. It is also noted that the load flow study dated 25.12.2024 conducted by KSEB Ltd. for the proposed 110 kV Vadakarapathy Substation considered evacuation of 45.2 MW of renewable energy through the 2x25 MVA, 110/33 kV transformers, and that the load flow study approved on 26.06.2025 for the Malappuram project found evacuation of the entire 23.2 MW feasible at 33 kV, as stated in paragraph 22 above.

The evacuation arrangement, including the number of circuits, conductor size and the choice between overhead lines and underground cables, shall accordingly be determined in accordance with the CEA Criteria, taking into consideration, inter alia, the thermal capacity of the conductors after applying appropriate de-rating factors for local conditions, permissible voltage regulation, technical losses, short-circuit levels and right-of-way constraints. Further, the generating stations and the associated interconnection facilities shall comply with the technical standards specified in the CEA Connectivity Regulations referred to in paragraph 35 above, as amended from time to time.

41. The Commission further observes that the ampacity of the conductor, by itself, cannot be the sole criterion for determining the permissible injection capacity at a connection point. The capacity of the transformers and the upstream network, voltage profile, contingency conditions, protection requirements and overall system security are also required to be duly considered. Accordingly, the Commission is of the view that there is no restriction on providing connectivity at the 33 kV level to a generating station having a capacity exceeding 14.4 MW, provided that such connectivity is technically feasible based on the load flow and interconnection studies undertaken under Regulation 6(6) of the CEA Connectivity Regulations. Such assessment shall take into account the feeder capability, right-of-way constraints and other technical considerations specified in paragraph 40 above. The generating station and the associated interconnection facilities shall also comply with the requirements of the CEA Connectivity Regulations, as stated in paragraph 35 above.

    Accordingly, KSEB Ltd. shall consider the applications for connectivity of the petitioners on the said basis, and shall not decline connectivity at the 33 kV level merely on the ground that the capacity exceeds 14.4 MW. **Hence, as stated in paragraphs 35 and 40 above, the connectivity to the generating stations of the petitioners is to be provided in accordance with the Connectivity Regulations, based on the load flow studies, conforming to the CEA Connectivity Regulations and the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023, and with the approval of the Kerala State Electrical Inspectorate.**

42. The Commission further notes that the CEA Criteria require the shared network elements, including substation transformers and incoming lines, to satisfy the N-1 contingency criterion. KSEB Ltd. shall take this requirement into account while conducting the load flow and system studies and ensure that the network remains within the permissible loading and voltage limits under such contingencies.

Prayer (4): Direct KSEB Ltd. to provide connectivity to the 36 MW Solar-Wind Hybrid Project at Palakkad and the balance capacity of the Malappuram Solar Project through two parallel 33 kV feeders

43. As stated in prayer (3) above, grant of connectivity is subject to an application being made in accordance with the Connectivity Regulations and the assessment of the feasibility of such connectivity based on the load flow and interconnection studies. The Commission notes that the petitioners have submitted an application for connectivity only in respect of the Malappuram project. No such application has been submitted in respect of the Vadakarapathy project, as observed in paragraph 25(1) above. Accordingly, the prayer is examined separately in respect of the two projects in the succeeding paragraphs.

44. KSEB Ltd., vide letter dated 26.02.2026 and in its counter remarks, has sought the approval of the Commission for providing two 33 kV feeders to the same premises, in order to ensure regulatory clarity. In this regard, the Commission observes that, as discussed under Prayer (1) above, the provisions of the Supply Code are applicable to the supply of electricity to consumers and not to generating stations injecting power into the grid. Further, the Connectivity Regulations do not prescribe any restriction on the number of feeders through which a generating station may be connected to the grid. Accordingly, no separate approval of the Commission is required for evacuating power from a generating station through more than one 33 kV feeder. KSEB Ltd. may permit such an arrangement, wherever found technically feasible based on the load flow and system studies, taking into consideration the technical aspects specified in paragraph 40 above. Such an additional arrangement may be provided by the generator, at its option and cost, for redundancy in the evacuation of its power. It is also noted that the petitioners, in their rejoinder, have sought connectivity for the Vadakarapathy project through a single 33 kV feeder of adequate capacity as may be determined by the system study, and for the Malappuram project through the existing arrangement, as stated in paragraph 22 above. The prayer for evacuation through two parallel 33 kV feeders therefore does not survive for consideration at present.

45. **Malappuram project:** Connectivity for 14.4 MW has already been granted vide Format C3 dated 08.12.2025, and KSEB Ltd. has submitted that the fresh load flow study conducted based on the present network configuration has found connectivity for 16.4 MW to be technically feasible, subject to formal confirmation by the petitioners. In view of the same, the Commission finds no impediment to the grant of connectivity at the 33 kV level for 16.4 MW for the Malappuram project. Since the revised requirement of 16.4 MW exceeds the capacity of 14.4 MW for which connectivity has been granted by more than ten per cent, Petitioner No.3 has, as per Regulation 6(2) of the Connectivity

Regulations, submitted a fresh application dated 15.10.2026 for the revised requirement of 16.4 MW, inclusive of the BESS, as stated in paragraph 22(1) above. KSEB Ltd., considering the load flow study already conducted, shall process the said application and issue the intimation for grant of connectivity as per the timelines specified in the Connectivity Regulations, and the Connection Agreement No.01/2026-27 dated 05.11.2026 executed for 14.4 MW shall be modified accordingly. The Commission notes that the 33 kV INKEL Substation is presently connected to the 110 kV Substation, Malappuram, through a single-circuit 33 kV line. The N-1 condition for the INKEL Substation can be achieved only after commissioning of the 33 kV INKEL–Othukkungal line, as stated in paragraphs 3(3) and 16 above. Until then, evacuation of power from the project will depend on the availability of the existing single-circuit line. KSEB Ltd. shall therefore expedite the commissioning of the INKEL–Othukkungal line. Further, while issuing the intimation for grant of connectivity for 16.4 MW, KSEB Ltd. shall ensure that the 110/33 kV transformers at the 110 kV Substation, Malappuram, and the 33 kV lines feeding the INKEL Substation are capable of meeting the applicable loading and voltage limits under N-1 contingency conditions, in accordance with paragraph 42 above. Since the evacuation of 16.4 MW through the existing arrangement has been found feasible, a parallel feeder is not necessary at present, and the separate 33 kV underground cable feeder to the 110 kV Substation, Malappuram suggested by KSEB Ltd. for improving reliability may be adopted at the option of the petitioners.

46. The Commission further notes that the MNRE, vide Office Memorandum No.283/53/2026-GRID SOLAR dated 18.07.2026 referred to in paragraph 9(2) above, has stipulated as follows:

" 3. … it has been decided that while there will be no blanket extension in applicability of ALMM List-II for solar power projects, however, a limited window is being provided for Net-metering projects and Open Access RE power projects, whereby such projects can now commission with exemption of ALMM List-II (for solar PV cells), till 31st December 2026. Earlier this dispensation for Net-metering projects and Open Access renewable power projects was available till 31st May 2026. Net-metering projects and Open Access renewable power projects commissioned after 31st December, 2026, will be required to comply with the ALMM List-II provisions. …"

The MNRE Office Memorandum provides exemption from the ALMM List-II requirement for solar PV cells for Net-Metering and Open Access RE projects commissioned up to 31.12.2026. The Malappuram project, being a group captive project supplying power to captive consumers through open access, is covered by the said exemption. The petitioners have procured the modules, and the first two plots, each of 3 MWp, are scheduled for commissioning by 30.11.2026 and 31.12.2026, respectively. However, as stated in paragraph 16

above, the 33 kV indoor panels are expected to be available only after six to eight months. In these circumstances, delay in providing connectivity may deprive the project of the benefit of the exemption. As submitted by the petitioners in their rejoinder, 3 MWp of the plant has already been installed, its electrical scheme has been approved by the Chief Electrical Inspector on 28.07.2026 and the Connection Agreement has been executed on 05.11.2026, but the installed capacity cannot be energised for want of the 33 kV feeder panel, the tender for which is yet to be finalised, the last date for submission of bids having been extended to 10.11.2026. KSEB Ltd. has proposed a temporary evacuation arrangement through the existing outdoor 33 kV INKEL Substation, and Petitioner No.3 had offered, vide letter dated 26.03.2026, to provide 33 kV VCB panels at its own cost for temporary energisation.

Accordingly, the Commission directs KSEB Ltd that connectivity shall be provided through such temporary arrangement before 31.12.2026, subject to compliance with the applicable CEA safety and connectivity standards and approval of the Kerala State Electrical Inspectorate. The 33 kV VCB panels offered by Petitioner No.3 may also be utilised for the temporary arrangement, if found suitable by KSEB Ltd. The amount of Rs.60 lakh demanded on 15.09.2026 towards the feeder panel, which has since been remitted by Petitioner No.3, shall be adjusted against the actual cost, and the contention of the petitioners on the reasonableness of the said amount shall be considered by KSEB Ltd. while finalising the actual cost. KSEB Ltd. shall expedite procurement and installation of the indoor panels and shift the connectivity to the permanent arrangement immediately thereafter. The petitioners shall take all necessary steps to commission the maximum possible capacity by 31.12.2026. Commissioning of the balance capacity at Plot No.57 beyond that date shall be subject to MNRE's decision on their request for extension. KSEB Ltd. and Petitioner No.3 shall report the completion of the temporary arrangement and the capacity commissioned and connected to the grid to the Commission on or before 31.12.2026.

47. **Vadakarapathy project:** Since no application for connectivity has been submitted for the Vadakarapathy project, the connectivity of the said project has not come under the purview of the Connectivity Regulations, and no direction can be issued to KSEB Ltd. for grant of connectivity to the said project at this stage. Further, as noted in paragraph 25(1) above, the capacity and the evacuation arrangement of the project are yet to be finalised, and in the absence of a load flow study, the Commission cannot decide on the evacuation through two parallel 33 kV feeders.

In view of the above, prayers (3) and (4) of the petitioners can be considered only partially for the time being, to the extent of the Malappuram project, and the connectivity of the Vadakarapathy project shall be considered on submission of

the application as directed below. In view of the deficiencies in the project schedule noted in paragraph 25(3) above, the petitioners are directed to submit, within thirty days from the date of this Order, a revised and detailed PERT chart for the project, covering both the wind and solar components and setting out the procurement milestones, the project cost with its break-up and the injection points.

48. The petitioners shall submit the application for connectivity of the Vadakarapathy project to KSEB Ltd. in accordance with the Connectivity Regulations for the maximum export of 25 MW declared in their rejoinder, as stated in paragraph 22(2) above, with the BESS being used to store the surplus generation during the simultaneous peaks of wind and solar generation and thereby limit the injection into the grid, so that the evacuation infrastructure is optimally sized and the cost of evacuation is minimised. The application shall specify the maximum AC injection capacity, the configuration and operating arrangement of the BESS, the export-limiting mechanism, if any, the proposed evacuation arrangement and the distances between the generation point, the point of connectivity and the metering point. Since the timely implementation of the project is essential for meeting the renewable energy requirements of the State, the petitioners shall submit the application within thirty days from the date of this Order, along with copies of the PERT chart, to KSEB Ltd., which shall process the application in accordance with the Connectivity Regulations, including conducting the load flow studies, which shall also examine the alternative of evacuation to the 110 kV Substation, Kozhinjampara and the N-1 contingency criterion in respect of the shared network elements, including the substation transformers and incoming lines, as stated in paragraph 42 above, and submit its decision along with the load flow study report before the Commission within thirty days from the date of receipt of the complete application, as specified in Regulations 6(4) and 6(5) of the Connectivity Regulations.

49. Since KSEB Ltd. is procuring only 14 MW of the wind capacity, separate metering for the contracted capacity shall be provided at a pooling station or otherwise, in accordance with Regulation 36 of the Connectivity Regulations and the CEA (Installation and Operation of Meters) Regulations, 2006, as amended from time to time. If the petitioners opt for the arrangement through the 110 kV Substation at Vadakarapathy, the 1.5 acres of land referred to in paragraph 25(5) above shall be handed over to KSEB Ltd. within thirty days from the date of such decision, without linking the same to the finalisation of the cost. The said substation, being constructed by KSEB Ltd. on the land handed over to it and to be owned by KSEB Ltd., shall be operated and maintained by KSEB Ltd., and the requirement in the letter dated 26.02.2026 that the petitioners shall maintain the substation is not in order. As observed in

paragraph 7 above, wind energy, unlike solar energy, is available during the peak hours as well as the off-peak hours, and such generation can support the grid during the hours when solar generation is not available. Timely implementation of the wind project is therefore essential for meeting the demand of the State with renewable energy. The petitioners are therefore directed to initiate the procurement process for the wind project forthwith, in the manner stated in paragraph 25(4) above, and to complete the project in a time-bound manner as per the revised PERT chart. The petitioners shall also take necessary steps along with KSEB Ltd. for execution of the PPA in respect of the 14 MW wind project and approach the Commission for adoption of the tariff and approval of the PPA in accordance with the applicable regulations, as stated in paragraph 24 above.

50. In view of the above, the Commission is of the considered view that the limits of connected load and contract demand under the Supply Code cannot be applied to restrict the connectivity of the generating stations of the petitioners at the 33 kV level; that connectivity for 16.4 MW is to be granted to the Malappuram project without further delay, with evacuation through a temporary arrangement before 31.12.2026 pending installation of the feeder panel; and that the connectivity of the Vadakarapathy project is to be decided by KSEB Ltd. on receipt of a formal application from the petitioners, based on the load flow and system studies.

Order of the Commission

51. The Commission, having considered the petition, the submissions of the petitioners and KSEB Ltd., the documents placed on record and the provisions of the Electricity Act, 2003, the Connectivity Regulations and the technical standards specified by CEA, hereby orders as follows:

(1) The limits of connected load and contract demand specified in Regulations 8 and 8A of the Kerala Electricity Supply Code, 2014 apply to the supply of electricity to consumers, and shall not be applied as a ceiling on the capacity of generating stations seeking connectivity, as held in paragraph 30 above.

(2) KSEB Ltd. shall grant connectivity at the 33 kV level to a generating station having a capacity exceeding 14.4 MW, where the same is found technically feasible through load flow and system studies conducted in accordance with the Connectivity Regulations and the technical standards specified by CEA, subject to the conditions stated in paragraphs 41 and 42 above.

(3) KSEB Ltd. shall provide connectivity to the Group Captive Solar Power Plant of Petitioner No.3 at INKEL Greens, Malappuram, to the extent of the capacity commissioned, before 31.12.2026, through the temporary

arrangement at the existing 33 kV INKEL Substation, subject to the conditions stated in paragraph 46 above, and the completion of the same shall be reported to the Commission on or before 31.12.2026.

(4) Petitioner No.3 and KSEB Ltd. shall comply with the directions in respect of the Malappuram project specified in paragraphs 45 and 46 above within the time limits specified therein.

(5) The petitioners and KSEB Ltd. shall comply with the directions in respect of the Solar-Wind Hybrid Project at Vadakarapathy specified in paragraphs 47 to 49 above, including the submission of the application for the declared maximum export of 25 MW, the processing thereof by KSEB Ltd. along with the load flow study and the timely completion of the wind project, within the time limits specified therein.

The petition is disposed of accordingly.

Sd/-
T. K Jose
Chairman

Sd/-
B Pradeep
Member

Approved for issue

Sd/-
Rajendran K. V
Secretary

ANNEXURE

List of participants in the hearing held on 13.10.2026

Petitioners:

(1) Adv. Aditya Venugopalan, Advocate, INKEL Ltd

(2) Sri. Jayasankar D, Deputy General Manager, INKEL Ltd

(3) Smt. Nimmy John, Dy. Manager - Renewable Energy, INKEL Ltd

Respondent (KSEB Ltd.):

(1) Sri. Shaju M.A, Chief Engineer (Commercial & Tariff), KSEB Ltd

(2) Sri. Shaji Sudhakaran, Chief Engineer (Transmission North), Kozhikode, KSEB Ltd

(3) Sri. Bruchin John, Chief Engineer (SCM), KSEB Ltd

(4) Sri. Suresh Kumar S, Deputy Chief Engineer, TRAC, KSEB Ltd

(5) Smt. Mini Francis, Deputy Chief Engineer, Transmission Circle, Malappuram, KSEB Ltd

(6) Smt. Sheeba Evans, Deputy Chief Engineer, Transmission Circle, Palakkad, KSEB Ltd

(7) Smt. Bindhu T. Wilson, Deputy Chief Engineer, KSEB Ltd

(8) Sri. Sreejith U, Executive Engineer, Transmission Division, Chittur, KSEB Ltd

(9) Sri. Shine Raj, Assistant Executive Engineer, TRAC, KSEB Ltd

(10) Sri. Murali K.S, Assistant Executive Engineer, Transmission Division, Malappuram, KSEB Ltd

(11) Sri. Shimithlal R.M, Assistant Executive Engineer, O/o the Chief Engineer (Transmission North), KSEB Ltd

(12) Sri. Jayakrishnan S.R, Assistant Engineer, O/o the Chief Engineer (REES & PED), KSEB Ltd

(13) Sri. Dhaneesh S. Rajan, Assistant Engineer, O/o the Chief Engineer (REES & PED), KSEB Ltd

(14) Sri. Sabari Girish N, KSEB Ltd Consumer