

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

**Present : Shri T K Jose, Chairman
Shri B Pradeep, Member
Adv. A.J Wilson, Member**

OP No 70/2022

In the matter of : Petition under Regulation 67 of the Kerala State Electricity Regulatory Commission (Connectivity and Intra State Open Access) Regulations, 2013 seeking notification of Intra State Deviation Settlement Mechanism regulations in the State.

Petitioner : Kerala State Electricity Board Ltd (KSEB Ltd)

Date of hearing : 12.01.2023, 11.00 Noon
Venue : e-hearing through video conferencing

Order dated 23.03.2023

1. M/s KSEB Ltd, filed a petition before the Commission on 26.04.2022 with the prayer to notify the “*intra state Deviation Settlement Mechanism Regulations considering the increasing number of open access consumers in the State.*”
2. Summary of the issues raised in the Petition is given below.
 - (1) The Commission vide the notification No. 1824/CT/KSERC/2012 dated 10th September 2013 has notified the KSERC (Connectivity and Intra-State Open Access) Regulations, 2013 (herein after referred as Open Access Regulations) in the State of Kerala. Subsequently, as per the provision of the Open Access Regulations, 2013, the Commission has approved the 'Detailed procedure for grant of connectivity and open access in intra-state transmission system (herein after referred as 'Detailed Procedure').
 - (2) As per the Regulation 35(2) of the Open Access Regulations, 2013, the scheduling of the intra-state open access shall be done by SLDC in accordance with the detailed procedure approved by the Commission. The paragraph 23 of the detailed procedure deals with the schedule of power by Open Access consumers. The relevant paragraph is extracted below.

“23. Scheduling

23.1 Each open Access customer (generating company, trader, etc.) shall provide the schedule to SLDC for each 15 minutes time block for a day, on a day ahead- basis by 10.00Hrs with intimation to STU & Distribution Licensee. If it is requiring to wheel electricity from more

than one generating station with the interface points located at different locations, they shall submit separate schedule for the injection from each generators.

- 23.2 SLDC will intimate the above schedule, station wise MW / 15 minute block entitlements to the respective beneficiaries by 11.00Hrs. Beneficiaries shall communicate the station-wise requisitions and details of bilateral exchanges to SLDC by 14.00Hrs.*
- 23.3 SLDC shall convey the ex-power plant despatch schedule to each station and net drawal schedule to each beneficiary by 17.00Hrs.*
- 23.4 Generating Stations / Beneficiaries shall inform the modifications, if any, for incorporating in the final schedule by 21.00Hrs.*
- 23.5 SLDC shall issue the final despatch and drawal schedule by 23.00Hrs to the respective open access customers.*
- 23.6 Wind generators under RRF mechanism shall declare their schedule up to 70% of the capacity, as above.*
- 23.7 In the event of failure to submit the schedule in accordance with above clause, latest wheeling schedule available with SLDC shall be treated as effective schedule.*
- 23.8 The sum total of the capacity allocation by an open access Generator for any time block to the entire schedule shall not exceed the available capacity from the generating plant being not higher than the installed capacity or contracted open access capacity, whichever is lower.*
- 23.9 The embedded open access consumers and limited open access consumers shall in advance provide the 15 minutes time-block wise drawal schedules from KSEB Ltd., after accounting for the power availed on open access, before 10:00 Hrs of the previous day. Any deviation from schedule and gaming would be penalized as specified by the Commission.*
- 23.10 The customer's coordinator, shall coordinate with each of the other Utilities involved, and furnish the transaction details to each of the licensees and STU involved, on a daily basis, so as to enable the SLDC to incorporate the transaction in the day-ahead schedules and revisions thereof for the 96 time blocks. In case mismatches are found in the transaction details it will not be possible for SLDC to schedule the same and the customer shall be intimated accordingly.*
- 23.11 The ramp-up/ramp-down, if required, in the daily schedules on account of such transactions, shall commence at the time of commencement of the transaction and shall end at the time of termination of the transaction.*
- 23.12 Rescheduling of transactions, if any, required would be as per provisions in the state grid code.”*

- (3) KSEB Ltd further submitted that, as per the 'Detailed Procedure for Scheduling Intra-state Open Access', the open access consumers have to provide 15 minutes time block wise drawal schedule from KSEB Ltd and the power proposed to be availed by 10:00 hrs of the previous day.
- (4) The Regulation 45 of the Open Access Regulations 2013 deals with the 'deviation from the schedule' by Open Access consumers. The relevant Regulations is extracted below.

45. Deviations and grid support charges.- (1) Scheduling of all transactions pursuant to grant of long-term open access or medium-term open access or short-term open access shall be carried out on day-ahead basis in accordance with the relevant provisions of IEGC, regulations on inter-State open access issued by the Central Commission, State Grid Code and / or orders of the Commission on intra-state transactions.

(2) Deviations between the scheduled and the actual injection/drawal in respect of an open access customer (other than embedded consumer) and the generating stations, shall be regulated as given below:

a) The excess drawal over and above the applicable sanctioned open access load shall be accounted on a daily basis in 15 minutes time blocks, where ever applicable, and the excess drawal will be billed at the rate of the grid support charge as determined by the Commission from time to time.

b) The grid support charges will also be payable for the actual drawal in excess of the actual injection during any time block consequent to short fall in generation due to any reasons whatsoever.

c) The accounts shall be settled on a monthly basis.

d) In the case of under drawal as a result of non availability of the distribution system or unscheduled load shedding, the open access customer shall be compensated by the distribution licensee at the average pooled power purchase cost (APPC) of the distribution licensee.

e) In the case a generating station participating exclusively in intra-state open access transactions, injects energy in excess of schedule, or the net actual energy drawal by intra-state customers is less than the injection during any time blocks, such excess injection shall be compensated by the distribution licensee at the unscheduled interchange rates applicable for the time block and quantum of such excess injections.

(3) The procedure under sub-regulation (2) shall be applicable to limited short-term open access customer also, subject to the condition that if the demand imposed by these customers on the distribution system exceeds the contract demand of the customers during the periods of load shedding such excess demand will be penalised at twice the applicable tariff on a monthly basis.

(4) In the case of deviation by open access customer who is also an embedded open access consumer of distribution licensee, the difference between the applicable scheduled open access energy and actual drawal shall be accounted and settled in accordance with the following:

(a) In case actual energy drawal is more than the scheduled drawal and the recorded maximum demand is within the contract demand, customer shall be liable to pay for such over drawal at the applicable tariff rates as determined by the Commission from time to time.

(b) In case the actual drawal of energy is more than the scheduled energy drawal and the total recorded maximum demand is more than the contracted demand, payment for the capacity over and above the contract demand, shall have to be made at the penal rate as specified by the Commission for such categories of customers in the tariff schedule from time to time.

(c) In the case of under drawal as a result of non-availability of the distribution system or unscheduled load shedding, the open access customer (who is also embedded consumer) shall be compensated by the distribution licensee by an equal quantum of energy injected by the participating generator in the same time block and the generator will not be eligible for any compensatory payments for that quantum of energy.

[Explanation.- For the purpose of this regulation, unscheduled load shedding means, load shedding during hours other than the hours for which load shedding has been announced by the distribution licensee after obtaining approval from the Commission and will also include unscheduled shutdowns of lines.]

(5) If a generator happens to be an open access customer, partly or fully in third party sale of power and he desires to avail start up power from the grid, the generator shall be permitted to do so at a charge to be determined by the Commission for the start up power:

Provided that if the generator who has availed open access, happens to be a captive power producer or a renewable energy generator or independent power producer (IPP) and desires to avail start up power from the Grid, the transaction shall be governed by the respective Captive Power Policy or Renewable Energy Policy of the Government or of the Commission or as per the power purchase agreement as approved by the Commission in the case of an IPP.

- (5) KSEB Ltd further submitted that, the pricing of the Unscheduled Interchange is specified under Regulation 43 of the Open Access Regulations, 2013, which is extracted below.

“43. Unscheduled interchange (UI) pricing.-

The Commission may, from time to time, as the occasion may require, by separate order, and in accordance with tariff policy issued under section 3 of the Act, determine the unscheduled interchange charges payable by the generators, licensees and consumers:

Provided that the actual payment of such unscheduled interchange charges may be deferred by the Commission till such period which may be determined by the Commission having regard to the extent of demand for open access and the extent of involvement of private operators in power generation and distribution:

Provided further that this regulation is applicable only when intra-state availability based tariff system is introduced in the State.”

- (6) Based on the above provisions of the Open Access Regulations, 2013, KSEB Ltd has submitted the following;
- (i) The embedded open access consumers and limited open access consumers shall in advance provide the 15 minutes time-block wise drawal schedules from KSEB Ltd., after accounting for the power availed on open access, before 10:00 Hrs of the previous day.
 - (ii) In case actual energy drawal is more than the scheduled drawal and the recorded maximum demand is within the contract demand, customer shall be liable to pay for such over drawal at the applicable tariff rates for each time zone as determined by the Commission from time to time.
 - (iii) In case the actual drawal of energy is more than the scheduled energy drawal and the total recorded maximum demand is more than the contracted demand in any time block, payment for the capacity over and above the contract demand, shall have to be made at the penal rate as specified by the Commission for such categories of customers in the tariff schedule from time to time.
 - (iv) In the case of under drawal as a result of non-availability of the distribution system or unscheduled load shedding, the embedded open access customer shall be compensated by the distribution licensee by an equal quantum of energy injected by the participating generator in the same time block and the generator will not be eligible for any compensatory payments for that quantum of energy.
 - (v) Actual payment of such unscheduled interchange charges may be deferred by the Commission till such period which may be determined by the Commission having regard to the extent of demand for open access and the extent of involvement of private operators in power generation and distribution.
 - (vi) Also pricing of unscheduled interchange charges is applicable only when intrastate availability-based tariff system is introduced in the State.
 - (vii) At present there are about 56 numbers of short-term Open Access consumers registered with SLDC. The short-term open access power purchase by embedded consumers is purely based on the 15 minutes block wise cost of power in the power market i.e., from IEX through collective transactions.
 - (viii) The energy bought under Open access is seen varying according to the trend of prices in Power Exchange. Drawal/actual

schedules in respective blocks by consumers were significantly different from the power sourced from power exchange.

- (ix) The State Utility had to rework its LGB (Load Generation Balance) as per the finalized Open Access schedules in the Exchange. KSEB Ltd prepare and plan its deviation based on such a fine-tuned LGB.
- (x) Drastic variations of open access schedules in real time make the DSM compliance including sign change difficult and sometimes impossible leading to penalties.
- (xi) KSEB Ltd further submitted that, in addition to the above, there are few numbers of captive renewable energy generators in the State who have availed open access in the intra state transmission system for drawing power from their generation point to their consumption point.
- (xii) Regulation 67 of the KSERC (Connectivity and Intrastate Open Access) Regulations, 2013 stipulates that if any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these regulations or the Act, do or undertake to do things or direct to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

3. The Commission admitted the petition as OP No. 70/2022. Public hearing on the petition was held through video conference on 12.01.2023. List of participants attended the public hearing is given as Annexure-1. Summary of the deliberations during the hearing is given below.

- (1) KSEB Ltd submitted during the hearing the following;
 - (i) The number consumers availing the open access has increased from 15 to 55 during the period from 2015-16 to 2022-23.

The request for open access quantum is also increased from 88.85MW in the year 2015-16 to 224.68MW in the year 2022-23.
 - (ii) Further, at present the total captive generation capacity connected to the State grid is about 120 MW. Further the generator M/s PCBL has been selling power to outside the State.
 - (iii) Open access schedules in real time is varying according to the trend of price in power exchanges. Most often the actual drawls varies from the schedules. Drastic variation in open access schedules in real time make difficult for KSEB Ltd to comply with the CERC DSM Regulations leading to penalties and such penalties are borne by KSEB Ltd. The DSM charges for inter-state transactions is linked to 'ancillary service rate'.

KSEB Ltd requested that, 'Intra State Deviation Settlement Mechanism Regulations may be notified considering the increase in the number of open access consumers in the State.

- (2) Sri Jacob Cherian, Malayala Manorama submitted the following;
- (i) M/s Malayala Manorama had installed 10 MW Wind power plant at Palakkad for their captive use. KSEB Ltd has been charging 5% of net energy generated from the plant as Grid support charges to compensate the Grid variations due to unstable power. Any further compensation in the form of deviation settlement shall not be allowed.
 - (ii) Wind power is highly intermittent in nature, hence the day ahead forecasting and scheduling wind power is difficult. Hence, penalizing captive generators through DSM will be an added burden to the RE generators.
 - (iii) KSEB Ltd is getting the benefit of RPO from captive RE plants.

Sri. Jacob Cherian requested that, the DSM Regulations may not be notified in the State.

- (3) Sri Renjith Jacob, Apollo tyres submitted that DSM Regulations are coined to promote Open Access as well as ensure grid discipline. It should neither favour the consumer nor the licensee. It was further pointed out that it was not feasible to schedule with zero percentage tolerance level for an industry like Apollo Tyres as there is wide variation in load. He requested to consider these aspects while framing the DSM Regulations.
- (4) Shri Saji Mathew, MRF Tyres, Kottayam submitted that even though, there are 56 registered short-term Open Access consumers in the State, at present 30 consumers only have a valid NOC. The energy sourced through open access in the State is less than 2 % of total energy sales in the State and it is showing a declining trend from 2021-22 onwards. Considering the low volume of open access transactions, there is no urgent necessity for notifying the DSM Regulations in the State.
- (5) Shri Rajesh Kuruvilla, HT/EHT Association submitted the following on behalf of the Association.
- (i) HT/EHT industries account for about 23% of the total energy consumption of Kerala State Electricity Board Limited (KSEBL). They also contribute about 31% to the total revenue from tariffs. There are 56 registered short-term Open Access

consumers in the State. However only 30 consumers have a valid NOC as on today. The energy sourced through open access in the State is Less than 2 % of total energy sales in the state and it is showing a declining trend from 2021-22.

- (ii) The schedule of power planned to be sourced through Open Access route is informed to SLDC by 10.00 hours on previous day and actual Open Access power allotment is directly shared to consumer and SLDC by the concerned Energy Exchange before 17.00 hours on the previous day. For Under-drawal of scheduled OA power, the consumer is not compensated except in cases when the under-drawal is due to a power outage of KSEBL. The over-drawal of power does not happen as long as the consumer is within the contracted Demand with KSEBL.
 - (iii) The DSM should be made applicable only for the power sourced through Open Access route. The DSM should not be made applicable to the KSEBL portion of power drawn by Embedded Open Access consumers.
 - (iv) The DSM Regulations may be notified with the purpose of promoting open access in the State while ensuring grid discipline.
 - (v) At present, open access is availed through Day Ahead Market (DAM) and also from Real-Time Market (RTM). The Association requested before the Commission to ensure that the DSM Regulations are framed to promote Open Access Power sourcing in Kerala with the flexibility to source through RTM also.
 - (vi) The Generators of Renewable Energy – Solar, Wind and Small Hydro may be exempted from the purview of DSM requirements as prediction & scheduling of the generation from these sources are difficult. The Grid Support Charges are levied on Renewable power generators including Captive primarily for this reason. Energy settlement mechanism for Captive Renewable Energy Generators is guided by the wheeling /banking agreement and RE Regulations 2020.
 - (vii) The DSM charges for the State may be framed in line with CERC Regulation No L-1/260/2021/CERC dated 14 March 2022. DSM may incorporate provisions to address the Time drift in ABT meters.
- (6) Shri Pradeep, Hindalco submitted that, there is a preconception that open access consumers are responsible for the system instability but the energy sourced through open access in the State is less than 2 % of total energy sales in the State. Hence, a system stability study shall be

conducted prior to reaching such conclusions. Due to the unpredictability of the RE sources including Solar, 100% forecasting is not feasible even in case of solar consumers. Hence, he requested that, penalty may not be imposed on RE sources including solar consumers in the State

- (7) Shri Suji Paul, DGM, BPCL expressed concern on whether time is right to come up with a DSM Regulation in the State of Kerala as the number of Open Access Consumers in the state only 2% and the total variation is only less than 0.2%.
- (8) Shri Shibu Kurian, M/s TTPL, submitted that they are using open access from November 2022 and are bidding for 1 & 1.2 MW of power through open access on daily basis till date. M/s TTPL, is a chemical factory operating in both continuous & batch process methodology. Since this plant was commissioned 30 years back, chances of breakdown are more which may lead to fluctuation in consumption of electricity. Moreover, the production planning (operation of major power consuming machines) also changes depends upon instant plant scheduling & conditions every day, which will also result in fluctuations in usage of power. Hence, it is impossible to predict the power consumption of the whole plant in a day ahead basis. Hence, if DSM Regulations are come into force, they cannot further proceed with open access power. Hence, it was requested not to implement the points no:23.9, 6 & 12 mentioned in the petition filed by KSEB for a sustained industrial growth in Kerala.
- (9) The Commission during the hearing noted that, KSEB Ltd has failed to submit proper justification for introduction of the 'Intra State Deviation Settlement Regulations' in the State. KSEB Ltd also not submitted the financial loss, if any, on account of deviations in drawal of power by embedded open access consumers with respect to their cleared quantum through power exchanges under DAM & RTM. Commission also noted that, the State LDC is responsible for the implementation of the provisions of the KSERC (Connectivity and Open Access) Regulations, 2013, has also not submitted the difficulty, if any, faced in operating the grid in a secure and stable manner due to availing power through open access by consumers and also the injection of RE power by prosumers and captive consumers. The Commission hereby direct KSEB Ltd, in matters involving intra-State transmission, SLDC shall also present before the Commission during the deliberations of such petition.

Analysis and Decision of the Commission

4. The Commission having examined in detail the petition filed by KSEB Ltd for seeking notifications of Intra State Deviation Settlement Mechanism Regulations in the State, the deliberations of the subject petitions during the public hearing held on 12.01.2023, the provisions of the Electricity Act, 2003, and other relevant Rules and Regulations in force, hereby decide as follows;

5. The only prayer of the KSEB Ltd is to notify the ' Intra State Deviation Settlement Mechanism Regulations in the State'. The Commission has examined the prayer in detail, and observed the following;

- (1) KSEB Ltd is the successor entity to erstwhile KSEB is the incumbent licensee in the State of Kerala. In terms of the Section 39 of the Electricity Act, 2003 (EA-2003), presently the SBU-T of KSEB Ltd is the State Transmission Utility (STU) of the State. Further, in terms of the Section 31 of the EA-2003, the State Load Despatch Centre (SLDC) has been operated by the STU in the State.
- (2) The Commission, in exercise of its powers conferred on it under Section 181 of the EA-2003 had notified the KSERC (Connectivity and Intra-State Open Access) Regulations, 2013 (herein after Open Access Regulations 2013) in the State of Kerala. All the intra-state Open Access transactions in the State is governed by the provisions of the Open Access Regulations, 2013.
- (3) As per the provisions of the EA-2003 and also as mandated in the Open Access Regulations, 2013, HT & EHT consumers of the State having contract demand above 1 MW (embedded open access consumers, having supply agreement with distribution licensees) has been availing open access through collective transactions in the power exchanges. Initially these transactions were in the Day Ahead Market only where the cleared transactions would be made known as one day in advance. With the introduction of Real Time Market the quantum cleared in the exchanges would be known to all participants prior to two time blocks only, putting more pressure in the real time operations.
- (4) The Regulation 23 of the Open Access Regulations, 2013 specifies the procedure for schedule of power by Open Access consumers of the State, which is extracted under paragraph 2(2) of this Order.

The Regulation 45 of the Open Access Regulations, 2013, deals with handling the 'deviation from the schedule by Open Access Consumers', which is extracted under paragraph 2(4) of this Order.

Further Regulation 43 of the Open Access Regulations deals with UI pricing and related matters, which is extracted under paragraph 2(5) of this Order. It is specified there in that, Regulation 43 of the Open Access Regulations, 2013 is made applicable only when the intra-state availability based tariff is introduced in the State.

- (5) The Commission vide the Orders dated 23.03.2021 in petition OP No. 29/2020 and 28.08.2021 in OP No. 28/2021 has ordered to implement 15 minute time block wise energy accounting of all open access transactions in the State . In the said Orders, the Commission further ordered that, till the Commission introduce intra-State Deviation Settlement Mechanism in the State, no payment shall be made for the

under drawal of the open access consumers from the schedule of open access (difference between schedule from power exchanges through collective transactions and actual drawal by the consumer by open access), unless the under drawal is due to non-availability of distribution system or unscheduled load shedding, which shall be dealt by the Regulation 45(2)(e) of the Open Access Regulations, 2013. During the hearing the stake holders pointed out their difficulties due to lack of compensation in the event of under drawal as a result of behind the meter events.

- (6) Since only embedded open access consumers are availing open access through collective transactions, instances of over drawal are presently addressed by way of applying retail tariff for such over drawals. None of the parties have any grievance in this arrangement.
- (7) KSEB Ltd during the hearing submitted that, at present ten number of RE based captative consumers/ prosumers are in the State and the numbers may likely to increase in coming years.

| Sl.No. | Generator | Installed capacity (MW) |
|--------|----------------------|-------------------------|
| 1 | Malayala Manorama | 10.00 |
| 2 | HINDALCO | 3.00 |
| 3 | MES | 3.00 |
| 4 | Bharat Hospital | 1.10 |
| 5 | Pyarelal foams | 1.00 |
| 6 | K K Plastics | 0.25 |
| 7 | KIK Plastics | 0.25 |
| 8 | Malayakam Associates | 0.25 |
| 9 | EHT Prosumers | 53.48 |
| 10 | HT prosumers | 47.14 |
| | Total | 120MW |

From the submissions, it appears that KSEB Ltd is approaching the matter in a very narrow prism and perceives that intra-State DSM would be applicable only to few embedded open access and captive consumers. Such an approach is against the basic intent and purpose of the mechanism. The mechanism can serve its purpose only in case all major grid connected entities viz, generators above a threshold level (irrespective of ownerships and nature of PPAs), Discoms and Open Access consumers participate in the scheme and provide grid support in a manner that aids secure operation of the grid, without waiting for the intervention of the system operator.

- (8) In that view of the matter, generating stations of KSEB Ltd, IPPs and CPPs within the State etc, above a threshold capacity has to be brought under the DSM regime in a phased manner. Also the different DISCOMS in the State has to participate, again the applicability being decided based on the load being served above a threshold level, to be

determined by the Commission. The incentive/ disincentive mechanism is to be designed to suit the peculiarities of the State Grid and the electricity industry structure of the State. The factors to be considered includes, inter alia, predominance of non-fossil generation in the State which follows a single part tariff structure, ownership of generating stations by DISCOM, status of metering and communication systems, requirements of capacity building at SLDC and for other grid connected entities etc. Also, in the absence of a proper ancillary services market, the deviation from schedule by generating stations based on real time ramp up or ramp down instructions of SLDC to limit the area control error has to be kept out of the incentive/disincentive regime.

6. The Commission in the earlier Orders dated 09.08.2019 in petition OP No. 48/2019 and 07.12.2020 in petition OP No. 32/2020 had explained the reasons for not notifying the 'Regulations on Deviation Settlement and related matters' in the State of Kerala'. The relevant portion of the Orders is extracted below.

"In the State of Kerala, KSEB Ltd, the State Government owned incumbent distribution licensee has been generating and purchasing electricity for meeting the electricity demand of the entire State. Accordingly, any deviation from the schedule within the State has been addressing by KSEB Ltd itself by re-scheduling its own hydro generation or by restricting the consumption within the State. So far, the embedded consumers of KSEB Ltd only are availing open access from the day ahead markets and the deviations in schedule by such consumers is borne by KSEB Ltd by allowing them to draw power from grid to compensate the deviations. Further, as of now, the Renewable Energy plants including wind and solar generators are treated as must run units and as on date, there is no mandatory provisions for forecasting and scheduling of electricity from such renewable sources in the State. Hence the Commission is yet to notify the 'Regulations on Deviation Settlement and related matters' in the State of Kerala."

7. The Commission has been continuously watching the development of power market within and outside the State. The infirm renewable generation capacity within the State is aggregating to about 1,000 MW, which includes solar, wind and SHP under IPP and Discom ownership as well as the capacity added by prosumers and captive generators. Along with the infirm nature of RE power, the unpredictable drawal of power from power exchanges by embedded Open Access consumers, whose aggregated demand crossing 200 MW, results in more uncertainties in the operation of the grid.

The infirm capacity to the tune of 1,000 MW on supply side and unpredictable sourcing pattern for around 200 MW load are significant capacities in a system with a peak demand under 4,500 MW and the minimum demand often going below 2,500MW. With the ambitious targets under the Kerala State Action Plan on Climate change (2023-2030) and the aggressive RPO targets put forth by Government of India, the share of infirm renewable

energy is bound to increase rapidly. This throws up many challenges which are sought to be addressed through assessment of long term and operational level assessment of resource adequacy (draft regulations published by CEA), putting in place forecasting and scheduling mechanism for renewable energy etc. A properly designed deviation settlement mechanism has to be integrated with this emerging regulatory regime for grid operations. At present SLDC Kerala is singularly responsible to maintain grid frequency and for maintaining area control error of the State within reasonable limits. In the emerging scenario, all major grid connected entities has to act more responsibly and contribute towards the secure operation of the grid through a transparent and well defined mechanism that induces the desired response from the generators and load serving entities, reducing the need for frequent interventions by the system operator.

8. **As noted above, the Commission is aware of the fact that there is an emerging requirement of notifying the Regulations on Intra State Deviation Settlement Mechanism and the Regulations for forecasting and scheduling of renewable energy in the State of Kerala. The Kerala State Grid Code, 2005 and the KSERC (Connectivity and Intra State Open Access) Regulations, 2013 also require a close scrutiny to assess the need for amendments in the wake of fast paced changes in the sector**
9. However, for framing regulations and to amend existing regulations due procedure including previous publication, proper and adequate stake holder consultation etc. has to take place. It cannot be amended based on petitions filed by any of the interested parties. Also the petition now filed by KSEB Ltd is bereft of sufficient details and lacks a proper understanding of the issues at hand. Accordingly, the prayer of the petitioner is rejected and the petition is disposed.
10. At the same time, the Commission clarifies that the process of notifying the Regulations on 'Intra State Deviation Settlement Mechanisms in the State of Kerala' and also the 'Forecasting, Scheduling, Deviation Settlement and Related matters of Solar, Wind and other RE sources', will be initiated separately as per the provisions of the EA-2003 and Clause-3 of the Electricity (Procedure for Previous Publications) Rules 2005, and other Rules and Regulations in force. The Commission expects SLDC Kerala to assist the Commission in the process and shall provide all the details and data for designing an appropriate deviation settlement mechanism suitable for the Kerala system. The details shall contain the status of all interface maters, communication systems, visibility of various generators and major prosumers/CPPs at SLDC , present procedures for adhering to CERC(Deviation Settlement Mechanism and related matters) Regulations, 2022, difficulties, if any, encountered due to unpredictable drawal from ISTS by embedded Open Access consumers etc. The SLDC shall include all relevant factors and details that it considers appropriate for designing the deviation settlement mechanism and for the forecasting and scheduling of RE sources, in the detailed report. The detailed report including suggestions, if any, shall be filed within 30 days of this Order.

Orders of the Commission

11. The Commission after detailed examination of the petition filed by KSEB Ltd, comments and suggestions of various stakeholders during the public hearing held on 12.01.2023, the provisions of the EA-2003, the Regulations and Rules in force, hereby Orders the following;
- (1) Reject the instant petition due to the reasons given in the preceding paragraphs of this Order.
 - (2) The SLDC Kerala shall assist the Commission in the design of a proper deviation settlement mechanism and the forecasting and scheduling process for RE sources and shall provide all the details and data required for the same. The details shall contain the status of all interface maters, communication systems, visibility of various generators and major prosumers/CPPs at SLDC , present procedures for adhering to CERC(Deviation Settlement Mechanism and related matters) Regulations, 2022, difficulties, if any, encountered due to unpredictable drawal from ISTS by embedded Open Access consumers etc. The detailed report including suggestions, if any, shall be filed within 30 days of this Order.

Petition disposed of Ordered Accordingly.

Sd/-
Adv. A J Wilson
Member

Sd/-
B Pradeep
Member

Sd/-
T K Jose
Chairman

Approved for issue

Sd/-
C R Satheeshchandran
Secretary

Annexure 1

List of stakeholders participated in the public hearing held on 12.01.2023

1. Shri. Rajan.M.P, DY CE, TRAC,KSEB Ltd
2. Smt Latha.S.V, AEE, TRAC, KSEB Ltd
3. Sri Jacob Cherian, Malayala Manorama
4. Sri Renjith Jacob, Apollo tyres
5. Shri Saji Mathew, MRF Tyres, Kottayam
6. Shri Rajesh Kuruvilla, HT/EHT Association
7. Shri Pradeep, Hindalco
8. Shri Suji Paul, DGM, BPCL
9. Shri Shibu Kurian, M/s TTPL
10. Sri. Prabhakaran K.V, HT & EHT Association
11. Shri. Jiju.R., Patspin India Ltd
12. Shri. Arun, PTC India Ltd