# BEFORE THE KERALA STATE ELECTRICITY REGULATORY COMMISSION, THIRUVANANTHAPURAM

#### PETITION NO O.P of

of 2021

#### IN THE MATTER OF

Petition under Section 67 of the Kerala State Electricity Regulatory Commission (Connectivity and Intra-State Open Access) Regulations, 2013. Removing the difficulties due to Licensee taking the underutilized Energy Scheduled by Embedded Open Access consumers through Day Ahead Inter-State Short Term Open Access (Collective transaction).

## Petitioner:-

The Kerala High Tension and Extra High Tension
 Industrial Electricity Consumers' Association,
 Productivity House, Jawaharlal Nehru Road,
 Kalamassery – 683102, Ernakulam District, Kerala.

#### Respondents:-

- The Chief Engineer (Transmission System Operation),
   L.D. Centre, HMT Colony P.O.,
   Kalamassery, Ernakulam District 683 503.
- The Kerala State Electricity Board Ltd.,
   Represented by the Chairman and Managing Director,
   Vydyuthi Bhavanam, Pattom,
   Thiruvananthapuram 695 001.

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<u>Petition Filed Under Section 67 Of The Kerala State Electricity Regulatory Commission (Connectivity and Intra-State Open Access) Regulations, 2013 for Removal of Difficulties</u>

# **STATEMENT OF FACTS**

The petitioner before is a registered Association of High Tension and Extra High Tension Industrial Consumers of Electricity in Kerala. The petitioner before the Hon'ble commission is in a capacity as the representative of High Tension and Extra High Tension Industrial Consumers of Electricity in Kerala.

- 1. The Kerala State Electricity Regulatory Commission notified KSERC (Connectivity and Intra-State Open Access) Regulations, 2013 in accordance with the provisions under Sections 39, 40, 42 and 181 of Electricity Act, 2003 for providing Open Access for generating companies, licensees and different classes of consumers in the State. The said regulation is intended to apply the connectivity and Open Access for use of intrastate transmission system and distribution system in the State of Kerala including when such system is used in conjunction with interstate transmission system.
- 2. A detailed procedure was framed as per provisions under chapter-X of the KSERC (Connectivity and Intra-state Open Access) Regulations, 2013 with the objective of enabling optimal utilization of capacity available in the State Transmission and Distribution System by various users while ensuring safety, security, stability and integrated operation of the power system in the State.
- 3. The above detailed procedure deals with details for the grant of connectivity, short term, medium-term and long-term Open Access to any user or Open Access customer in the Intra-State Transmission and Distribution network.
- 4. Embedded Open Access consumers are availing Open Access as per the provisions of KSERC (Connectivity and Intra-state Open Access) Regulations, 2013 and the detailed procedure approved by The Honorable Commission.
- 5. Energy accounting of the Embedded Open Access Consumers are as per section31.8 to 31.10 of the detailed procedure which is reproduced below

"Energy accounting of Inter State Open Access (Collective, Bilateral etc.) customers, Limited Short Term Open Access consumers, Generators and Traders.

31.8 As per the daily obligation report of IEX/PXIL in 15 min. block or SRLDC STOA approval, implemented schedule will be prepared by SLDC. Withdrawal of each Open Access consumers will be computed after deducting approved losses and intimated to STU/Distribution licensee by e-mail. Based on above information, Distribution Licensee shall compute actual MD & EC bills for every month.

- 31.9 Maximum demand (MD) and Energy charge (EC) of an Open Access consumer shall be computed by the Distribution Licensee (in the control area), considering approved losses.
- 31.10 The Energy (kWh) at withdrawal point shall be calculated for each time block from the scheduled capacity (kW) (after deducting losses in each block) by multiplying with period of time block in hours.

Let 'X' (in MW) be the scheduled capacity for a 15 minute time block and say 'a' in % be loss for the system, then the energy drawn at withdrawal point =  $(X \times (1-a/100)) \times (15/60) = 0.25 \times (1-a/100) \times (1-a/100) \times (15/60) = 0.25 \times (1-a/100) \times (15/60) = 0.25 \times (1-a/100) \times (15/60) = 0.25 \times (1-a/100) \times (1-a/100) \times (1-a/100) = 0.25 \times (1-a/100) \times (1-a/100) \times (1-a/100) \times (1-a/100) = 0.25 \times (1-a/100) \times (1-a/100)$ 

- 6. M/s. Hindalco Industries Ltd, filed a petition before the Honorable Commission on 23.09.2020 vide OP No.29 of 2020 with the following prayers:
- (a) Pass an Order / direction/ clarification interalia, that the petitioner's newly installed 2 MW solar power plant at Kalamassery is a separate unit and do not interfere with the existing 1 MW Solar Power Plant.
- (b) Allow banking facility exclusively for the 2 MW solar power plant.
- (c) Pass any other Order / direction as it deems fit and appropriate in the facts and circumstances of the case.

- 7. The summary of the petition filed by M/s. Hindalco Industries Ltd is given below:
- (1) M/s Hindalco Industries Ltd is having an industrial unit at Kalamassery. The petitioner is an EHT consumer of KSEBL.
- (2) The petitioner installed and commissioned 1MW Solar Plant in March 2016 at their premises in Kalamassery for self-consumption. The said plant was registered as 'Eligible Entity' for RE Generation w.e.f. 29.06.2016 with National Load Despatch Center (NLDC). Further the generation from the plant is fully used for self-consumption till date. The petitioner also availed the benefit of Renewable Energy Certificate Schemes as per the provisions in Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (hereinafter referred to as REC Regulations), and so far the petitioner had not availed banking facility for the 1 MW solar plant.
- (3) The Petitioner, during the year 2020, set up another 2 MW Solar Power Plant at the same premises for self-consumption, and intended to avail banking facility as permitted under Kerala State Electricity Regulatory Commission (Renewable Energy and Net Metering) Regulations, 2020 (hereinafter referred as RE Regulations, 2020). The Petitioner approached KSEBL for retaining the REC facility for the existing 1 MW Solar Power Plant and to avail banking facility for the newly installed 2 MW plant, both situated at the same premises. KSEBL intimated the petitioner that availing both REC facility and banking facility in a single premise is the first of its kind and hence, status quo shall be maintained subject to the approval of the Commission. KSEBL further requested the petitioner to approach the KSERC on the clarification on 'whether 1 MW and 2 MW Solar plant on the same premise can be treated as two separate Power Plants or a Single unit."
- 8. Honorable Commission had a detailed hearing and made the following order in this matter.
- 29. The Commission, after careful examination of the petition by M/s Hindalco Industries Limited, the arguments of the respondent KSEBL, the remarks of the SLDC, Chief Electrical Inspectorate and ANERT, as per the provisions of the Electricity Act,

2003 and the various Regulations notified by the State and Central Commission related to renewable energy, hereby order the following.

- (1) Allow the petitioner HINDALCO Industries Ltd, to maintain the 1 MW Solar plant with REC benefits and 2 MW Solar plant with banking facilities in the same premises as two separate Solar plants, subject to the safe and reliable working of the Programmable Logic Controller (PLC) based interlocking system installed by the petitioner, and also subjected to the other conditions specified under paragraph 22 of this order.
- (2) As suggested by the petitioner HINDALCO Industries Ltd, and also as agreed by the SLDC Kerala, the SLDC shall adopt the 15minute energy accounting for the petitioner and similar open access consumers. However, the monthly bills of the petitioner and open access consumers shall be prepared for the accounted energy based on the TOD tariff on monthly basis as per the Tariff orders issued by the Commission from time to time.
- 9. In virtue of the above order KSEBL started adopting the 15 minutes energy accounting for all the Embedded Open Access consumers and arbitrarily taken the underutilized energy within the 15 minutes time slot.
- 10. KSEBL has not even compensated the under drawal of scheduled energy on account of non-availability of Transmission and Distribution system of the Licensee. This imprudent decision taken by the nodal agency and licensee clearly indicates the gravity of gross violation of the regulations and procedures laid down by the Honorable Commission.
- 11. In the light of the arbitrary and illegal decision of the nodal agency and Licensee the members of the Petitioner (The Kerala High Tension and Extra High Tension Industrial Electricity Consumers' Association) are constrained to plead before the Honorable Commission.



## **GROUNDS:-**

- A. The Honorable Commission has made the above order on a specific issue of accounting energy for an Embedded Open Access consumer, who is also a Prosumer with two Solar Energy Generating unit intended for Renewable Energy Certification (REC) and Energy banking provision. On a plane reading of the above order, it is ample clear that the order is applicable to similar Open Access consumers having Captive Solar Generating unit on their premise and managing with a single net metering facility.
- **B.** Any of the regulations or procedures prevailing in the State approved by the Honorable Commission does not empower a distribution licensee to enjoy the underutilized energy scheduled by an Embedded Open Access consumer.
- **C.** KSEBL has not even compensated the embedded Open Access consumers for the under drawal happened due to supply interruption. This is a clear violation of the section 31.22 of the detailed procedure and Section 45.49-C of the regulation, which are reproduced below.
  - "31.22 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"
  - "(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."
- **D.** The very purpose of special energy meter is to monitor the energy drawal against the schedule on each time block and facilitate the energy accounting and billing with deviation settlement mechanism. Deviation settlement mechanism is an essential

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element to put an effective energy accounting and grid discipline. Clearly defined deviation settlement mechanism is an integral part of energy accounting process with real time deviation.

- **E.** As there is no clear Deviation Settlement Mechanism for under drawal of Embedded Open Access consumers, implementing energy accounting on 15 minutes time block is not appropriate in this stage. As an alternative, the State can follow the CERC regulation in this regard as specified in Section 31.12 of the detailed procedure for Open Access which is reproduced below.
- "31.12 Excess drawal over and above the applicable sanctioned Open Access capacity as well as actual drawal in excess of actual injection in anytime block due to short fall in generation shall be accounted on daily basis in 15 minute block. Such excess will be billed at the rate of grid support charge determined by the Commission, from time to time (if state commission order is not available to address an issue, central commission order shall be considered in all cases)."
- **F.** Section 31 of the Detailed procedure for Open Access is clearly define the procedure of energy accounting and Section 31.5 reproduced below is very specific on the accounting and Deviation Settlement Mechanism of customers, which is applicable after implementation of the UI/DSM by the commission. As there is no Deviation Settlement Mechanism in place, the nodal agency or licensee cannot arbitrarily take undue benefit of the energy procured by an Open Access consumer. "31.5 UI/Deviation Settlement Mechanism (DSM) of customers shall be prepared by
- SLDC based on interface meter data, in line with state Grid code requirement, applicable UI/DSM regulation of the state Commission (after implementation) and daily schedule as released by NLDC/SRLDC or obligation reports issued by the concerned power exchange, after taking into account the losses approved by the commission".
- **G.** The approach taken by the Nodal Agency and the licensee is imprudent and arbitrary as they have no right to do so without any regulatory or legal back up.

- H. Most of the Open Access consumers of the State are with process industry, even a small supply interruption of voltage flickering may disturb the process and required several minutes to stabilize the process. Naturally this will offset the drawal of the scheduled energy, ultimately the consumer will be loser and the licensee becoming unfair beneficiary out of poor performance and power quality of the system. This will have an effect of encouraging inefficiency of the licensee.
- **I.** There is no justification in denying the unused energy sourced by a consumer and the licensee enjoying the benefit of such energy.

#### PRAYER

Therefore for the reasons and averments made above it is most respectfully prayed to the Honorable Commission to:-

- Issue a direction clarifying the applicability of the order vide OP No.29/2020 to non-similar Open Access consumers
- ii. Enact a Deviation Settlement Mechanism (DSM) Regulation for the State of Kerala in line with DSM Regulation of CERC.
- Regulations, 2013 and the detailed procedure for Open Access incorporating Deviation Settlement Mechanism for under drawal of Embedded Open Access consumers.

### **INTERIM RELIEF**

For the reasons stated above it is most respectfully prayed to Honorable Commission be pleased to pass an order to either follow CERC DSM regulation 2014 for settling the under drawn energy or continue the status quo until state DSM Regulation is enacted.

Petitioner