

# KERALA STATE ELECTRICITY REGULATORY COMMISSION

## THIRUVANANTHAPURAM

### Petition No: OP 05/ 2022

- Present** : **Shri. Preman Dinaraj, Chairman.**  
: **Adv. A. J. Wilson, Member (Law).**
- In the matter of** : **Petition filed by M/s Rajiv Gandhi Co-operative Society and M/s Solgen Energy Pvt. Ltd for the permission for the Grid Connectivity of 100 kWp solar panel in the premises of Rajiv Gandhi Co-operative Hospital, Palakkad**
- Petitioner** : (1) M/s Rajiv Gandhi Co-operative Hospital and Research Centre, Kallekkad, Palakkad -687 004  
(2) M/s Solgen Energy Pvt. Ltd. 22/314-B, Kuttanallur P.O Thrissur, Kerala- 680 014
- Petitioner Represented by** : (1) Sri. Manikandan K, Managing Director, RGCH & Sri. Bijo Jose, Consultant (Solar), RGCH  
(2) Sri. Lajo Davis, Manager, Solgen Energy Pvt. Ltd.
- Respondent** : Kerala State Electricity Board Ltd. Vidyuthi Bhavanam, Pattom Thiruvananthapuram- 695004
- Respondent represented by** : Smt. Latha. S.V, AEE, TRAC, Sri. Rajeev, DyCE, KSEB Ltd, Palakkad
- Date of E- Hearing** : **22.02.2022, 11.00 AM**

### Order dated 28.02.2022 in OP No 05/2022

1. M/s Rajiv Gandhi Co-operative Hospital and Research Centre, Palakkad and M/s Solgan Energy Pvt. Ltd, Thrissur, together have filed this petition before the Commission, praying to give directions to KSEBL to provide grid connectivity for their Solar Plant of capacity 400 kWp. The Commission admitted the petition as OP No. 05/2022 and Form 3A notice was issued to the respondents.

## Brief History of the issue

2. M/s Rajiv Gandhi Co-operative Society is a registered society, consists of 1104 members and was established on 01.06.1984. The Rajiv Gandhi Co-operative hospital, registered under this society provides facilities like Cooperative dialysis centre, Cooperative heart centre, blood bank, Ayurveda department, Paediatric care, Cooperative IVF centre, Physiotherapy clinic, Scan centre, Silver Jubilee Hall, Mahatma Gandhi Educational Society, P. Balan Co-operative Hospital, Balan Pain and Palliative Care Society etc. The hospital is working on 24x7 hours. It is also providing reduction in treatment fees to deserving patients, amounting to around eight to ten lakh every year. Rajiv Gandhi Cooperative Hospital is a HT Consumer of KSEB Ltd. under HT II (B) Tariff with **a connected load of 321.554 kW and 164 kVA contract demand**. The average monthly consumption of the consumer is 50,000 units.
3. For encouraging solar power and to bring down the escalating power tariff, a feasibility study was conducted and a report for implementing 400 kWp solar plant was obtained, based on the concept that the average per day consumption was 1670 units. The total solar requirement calculated is 420 kWp.
4. During 2018, the management decided to establish a Grid connected solar plant of 300 kWp capacity and applied for feasibility before KSEB Ltd on 28.05.2018. The grid connectivity feasibility for the 300 kWp solar plant was issued by KSEB Ltd on 04.06.2018 and directed to complete the registration process by remitting the registration fee within a period of 30 days. The petitioner remitted the registration fee of Rs.3.00 lakhs on 26.07.2018 to KSEB Ltd and the proposal was registered by KSEBL for implementation.
5. Further the management during 2018, decided to enhance the capacity of the Solar plant to 400 kWp considering the future requirements and the total solar requirement of 420 kWp calculated based on the average per day consumption of 1670 units. The work was awarded to EPC contractors named Solgen Energy Pvt. Limited for the 400 kWp solar plant with an advance payment of Rs.5.00 lakhs on 17.03.2020.
6. Thereafter, Rajiv Gandhi Co-operative Society revised the proposal to install 400 kWp solar plant and submitted the same to the Electrical Inspectorate for approval. They also approached KSEB Ltd on 22.05.2020, for feasibility of the additional 100 kWp (with 1no 60kW and 2 nos. 20kW inverter) solar plant, in addition to the already registered 300 kWp solar plant. The solar grid feasibility

for the additional 100 kWp was issued by KSEB Ltd on 22.05.2020 with a validity of 30 days for registration. The registration fees of Rs.1.00 lakhs was paid by the consumer on 17.06.2020. Solgen Energy Pvt. Ltd carried out the work for the 400 kWp solar plant by installing six nos. 60kW inverters and two nos. 20kW inverters and the work was completed on 24.12.2020. The stated total cost of the project is Rs.1.96 Crores.

7. After completion of the work, the inspection from the Electrical Inspectorate was conducted on 07.01.2021. The sanction for energising the Solar plant with inverter capacity of 6 nos. 60 kW and 2 nos. 20 kW (total 400 kW) and 400 kWp solar panel was obtained from Electrical Inspectorate on 30.01.2021. After obtaining sanction, the completion report was submitted to KSEB Ltd for testing and execution of the agreement.
8. KSEB Ltd conducted site inspection and directed to disconnect the 100 kWp solar plant from the Grid, stating that the above Solar plant is in excess of the connected load, and cannot be permitted in view of the Regulation 13(2) of KSERC (Renewable Energy and Net Metering) Regulations, 2020. The relevant portion of the Regulation is quoted below:

*“13(2) The Grid Interactive Renewable Energy Systems, installed by a prosumer at his premise under this chapter shall be:*

- (a) ***“of not less than one kW and not exceeding 1000 kW capacity on AC side of the inverter connected to the net meter of the distribution system, limited to the sanctioned connected load or contract demand as applicable to the prosumer, with the distribution licensee.***

*Provided that the domestic consumers with connected load up to 20 kW is permitted to install ‘Renewable Energy System’ of capacity up to 20 kW, irrespective of their connected load.*

*Provided further that the above limit of 20 kW connected load shall not apply in the case of group housing societies and residential flats, for common services such as lift, common lighting, club house, car parking, common areas etc.*

*Provided also that, prosumers including those prosumers mentioned above are also permitted to install Renewable Energy System in excess of their connected load or contract demand as applicable. However, the benefit of net metering shall not be allowed to such prosumers and such*

*prosumers shall be treated at par with the prosumers having RE capacity more than 1 MW, as detailed in Chapter IV of these Regulations.*

*Provided also that, the Renewable Energy Systems installed by the prosumers under net metering as on the date of notification of these Regulations shall be allowed to continue irrespective of their contract demand or connected load.”*

9. The Grid Connectivity and Metering Agreement was made between Rajiv Gandhi Co-operative hospital and KSEB Ltd, for 300 kWp solar plant only, after disconnecting the additional 100 kWp solar plant, on 22.02.2021 with the following clauses:

“

1. *The net metering connection shall be governed by the provisions contained in the Kerala State Electricity Regulatory Commission (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014 as amended from time to time and also subject to the condition that the solar energy system meets the requirements as per the provisions contained in Central Electricity Authority (Technical Standard for Connectivity of the Distributed Resources) Regulations, 2013.*
2. *KSEB Ltd shall have the sole authority to decide based on the results of necessary studies, the interface/ interconnection point to the solar system.”*

The Commission also noted that, the additional 100 kWp solar plant, which Rajiv Gandhi Co-operative Hospital installed, is idle after the energization of the 300 kWp solar plant.

10. M/s RGCH stated that the KSERC (Renewable Energy and Net Metering) Regulations, 2020 came into force from the date of publication in the Official Gazette, i.e., 6<sup>th</sup> June 2020. At the time when RGCH approached KSEB Ltd on 22.05.2020, for the additional 100 kWp solar plant, the existing Regulation was the KSERC (Grid Interactive Distributed Solar Energy System) Regulation, 2014 and they had obtained the feasibility for the additional 100 kWp solar plant based on this Regulation. The KSERC (Grid Interactive Distributed Solar Energy System) Regulation, 2014 has not limited the capacity of the solar plant installed by a prosumer at his premise connected to the net meter of the distribution system, to its sanctioned connected load or contract demand.
11. Solgen Energy Pvt. Ltd, the co-petitioner, submitted that the total value of the project is Rs.1.96 Cr. They received the work order for 400 kWp solar plant on

17.03.2020 and completed the installation on 24.12.2020. Since KSEB Ltd has not allowed to connect the 100 kWp solar plant out of the total 400 kWp solar plant, Rajiv Gandhi Cooperative hospital, the client refused to settle the outstanding amount of Rs.31.00 lakhs out of the total Rs.1.96 Cr. Solgen Energy Pvt. Ltd further submitted that KSEB Ltd could have made or taken a stand at the time of submission of the request for feasibility for the additional 100 kWp solar plant. But instead, KSEB Ltd has given the feasibility for the additional 100 kWp on 22.05.2020 and denial for energising after due completion of the installation is improper and illegal.

12.The prayers of M/s Rajiv Gandhi Co-operative Hospital and M/s Solgen Energy Pvt. Ltd. in the petition are:

- a) Direct KSEB Ltd to give permission for the addition of 100 kWp solar plant to the grid, along with the existing 300 kWp solar plant;
- b) Direct KSEB Ltd to execute a supplementary agreement for the addition of 100 kWp solar plant;
- c) Hon'ble Commission may kindly approve the 400 kWp Net Meter project;
- d) Provide an interim relief by directing KSEB Ltd to give temporary sanction, so as to have full-fledged production of the 400 kWp Solar plant till the adjudication of this complaint, thereby avoiding unnecessary wastage of energy and financial damage.

### **Hearing on the petition**

13.The Commission conducted hearing on the petition through Video Conference on 22.02.2022 at 11:00 AM. The deliberations and the arguments during the hearing are detailed below:

14.The petitioner M/s Rajiv Gandhi Co-operative Hospital (RGCH) was represented by Sri. Manikandan K (Managing Director) and Sri. Bijo Jose (Consultant Solar). The co-petitioner M/s Solgen Energy Pvt. Ltd was represented by Sri. Lajo Davis (Manager Design & Technical). The respondent M/s KSEB Ltd was represented by Sri. Rajeev (Deputy Chief Engineer, Palakkad) and Smt. Latha. S.V (AEE, TRAC).

15.Sri. Bijo Jose (Consultant Solar) RGCH mentioned that the management had decided to go for the grid connected solar plant for 300 kWp and applied for feasibility from KSEB Ltd on 28.05.2018. The solar grid feasibility was obtained from KSEB Ltd on 04.06.2018. Further, the management in 2018

decided to enhance the capacity of solar plant to 400 kWp considering the future requirements and accordingly revised the scheme and submitted the same to the Electrical Inspectorate.

16. The work was awarded to Solgen Energy Pvt. Limited for 400 kWp solar plant with an advance payment of Rs.5.00 lakhs on 17.03.2020. The sanction for solar grid feasibility for the additional 100 kWp (with 1no 60 kW and 2 nos. 20 kW inverter) from KSEB Ltd was carried out through Solgen Energy Pvt. Ltd. The feasibility for the 100 kWp was obtained from KSEB Ltd on 22.05.2020 and the registration fees of Rs.1.00 lakhs was paid on 17.06.2020.
17. Sri. Manikandan. K (Managing Director), RGCH mentioned that there was a delay in completion of the 300 kWp solar plant within the time limit, as they had initially allotted the work to a different firm on 01.06.2018, but they neither did any installation and nor even signed the agreement with RGCH. Thereafter, the work was allotted to Solgen Energy Pvt. Ltd on 17.03.2020. The Work Order for 400 kWp solar plant was provided to them, considering future requirements. Solgen Energy Pvt. Ltd completed the solar power plant installation of 400 kWp, on 24.12.2020.
18. Sri. Rajeev (Deputy Chief Engineer, KSEB Ltd. Palakkad) mentioned that KSEB Ltd has provided sanction for energising the 300 kWp solar plant on 06.03.2021. Based on the KSERC (Renewable Energy and Net Metering) Regulations, 2020, the grid interactive renewable energy systems, installed by a prosumer at his premise shall not be less than one kW and not exceeding 1000 kW capacity on AC side of the inverter connected to the net meter of the distribution system, and be limited to the sanctioned connected load or contract demand as applicable to the prosumer with the distribution licensee. Hence, the solar energy plants installed of capacities above the contract demand or connected load can be treated as that of an open access consumer as stipulated under Regulation 25 of KSERC (Renewable Energy and Net Metering) Regulations, 2020. The relevant portion is below:

**“ 25. Open Access.-**

- (1) *Any person generating electricity from renewable sources of energy, shall have the right for open access to the distribution system/ transmission system of the licensee/ STU in the State, for transmitting and/or wheeling the renewable energy, subject to the terms and conditions specified as follows,-*

*(i) Open Access shall be granted as per the provisions under KSERC (Connectivity and Intra State Open Access) Regulations, 2013.*

*(ii) Open Access charges such as application fee, SLDC/ NLDC charges, Transmission/ distribution losses, transmission/ wheeling charges, reactive energy charges, deviations and grid support charges, surcharges etc., as per Electricity Act, 2003/ Kerala State Electricity Regulatory Commission (Connectivity and Intra State Open Access) Regulations, 2013 and the Tariff orders issued by the Commission from time to time, as the case may be, applicable to the persons availing open access.*

*(2) The Renewable Energy Generator shall follow the Indian Electricity Grid Code 2010, Kerala State Grid Code and the relevant CERC/ KSERC Regulations and procedures for forecasting, scheduling and dispatch of renewable energy, as amended from time to time.”*

#### **Comments of the Commission**

19. The Commission has examined the chronology of the events in this case and noticed that, KSEB Ltd has given the feasibility for the installation of 300 kWp solar plant on 04.06.2018 and RGCH had completed the registration process by making the payment of Rs.3.00 lakhs on 26.07.2018. Since the initial installation contractor did not take up the work, RGCH awarded the work to M/s Solgen Energy Private Ltd only on 17.03.2020. Thereafter, the installation for 400 kWp solar plant was completed by them on 24.12.2020.

20. The KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014 amendment dated 15<sup>th</sup> March 2016, mentioned that, the registration for the solar energy system allotted to the eligible consumer provided by the licensee shall be valid for six months only. Further the distribution licensee can extend the validity of registration for a further period for six months for good and sufficient reasons, beyond the control of the applicant. The relevant portion from Regulation 9 of KSERC (Grid Interactive Distributed Solar Energy System) Amendment Regulations, 2016 is indicated below:

*(9) (a) The distribution licensee shall, on receipt of the registration fee and on curing defects if any noticed in the application and the documents submitted under sub regulation (7), register the scheme and assign a registration number.*

- (b) *The registration given under clause (a) above shall be valid for a period of six months from the date of registration, unless the validity period is extended by the distribution licensee under clause (c) below.*
- (c) *The distribution licensee may on application from an eligible consumer, for good and sufficient reasons beyond the control of the applicant, extend the validity of registration for a period not exceeding six months.*
- (d) *The distribution licensee may allot to other applicants in accordance with the provisions of these regulations, such capacity for connectivity of solar energy system, if the eligible consumer whose scheme has been registered does not avail the connectivity within the period of validity of registration.*
- (e) *The distribution licensee may allot to other applicants in accordance with the provisions of these regulations, the balance capacity available for connectivity of solar energy system if the eligible consumer whose scheme has been registered does not avail, within the period of validity of registration, the full capacity allotted to him.*
- (f) *The distribution licensee shall refund to the eligible consumer eighty percent of the registration fee collected by it, if the eligible consumer has installed the solar energy system within the period of validity of the registration.*

21. Rajiv Gandhi Co-operative Hospital (RGCH) should have completed the work by 26.07.2019, as per Regulation 9(b) and 9(c) of the KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014 and its amendment dated 15<sup>th</sup> March, 2016. Hence, the validity of the Registration for 300 kWp Solar plant lapsed on 25.07.2019. The Commission also noticed that, there is no enabling provision in the 2014 or 2020 Net metering Regulations, to permit a consumer to have connectivity to a solar plant beyond one year of the date of original registration, by providing condonation for delay. KSEB Ltd is bound to permit the installations only as per the conditions specified in the Regulations.

22. The Commission during the hearing pointed out that, since the validity of the 300 kWp solar plant had lapsed, the whole installation process already carried out is not as per the rules and regulations in force. So, regularisation of the 400 kWp solar plant, based on the feasibility accorded by KSEBL earlier is not possible. Since RGCH had already completed the installation of the 400kWp solar system and 300kWp was already given sanction for energising by KSEB Ltd on 26.03.2021, the only way out of the issue is for RGCH, if they so desire



can approach KSEB Ltd with a new application for the 400 kWp solar plant. The Commission also asked KSEB Ltd to view the application sympathetically considering the fact that it was a co-operative hospital providing reduced cost treatment to deserving patients and they had already invested over Rs.1.96 Cores. in this installation. KSEB Ltd shall process the same without delay, as per the applicable Regulations in force.

23. The Commission also directed that while considering connectivity, they shall follow the due procedure as per the KSERC (Renewable Energy and Net Metering) Regulations, 2020 in their fresh application for the feasibility, for the total 400 kWp solar plant. Further, since it exceeds the contract demand, they cannot be considered for Net Metering. Instead, they have to be treated either as an open access consumer as envisaged under Regulation 25 mentioned in Para 18 above or as Captive Consumer as per Regulation 27 of KSERC (Renewable Energy and Net Metering) Regulations, 2020, which is quoted below:

*27(3) Captive consumers under these Regulations are permitted to install Renewable Energy System at their premise irrespective of their connected load or contract demand, to offset their energy consumption on annual basis, subject to the terms and conditions specified in these Regulations.*

*Provided that, as a promotional measure, such consumers are permitted to inject energy into the grid during any time period and to draw back the energy during any other time period subject to the condition specified in sub-Regulation.*

### **Analysis and decision of the Commission**

24. The Commission has examined the petition submitted by RGCH, their averments, the provisions in the Net metering Regulations issued in 2014, 2016 and 2020, the deliberations of the petitioners and the respondent during the hearing and related rules and regulations and observe that;

RGCH had applied to KSEB Ltd for the Grid connected solar plant of capacity 300 kWp and got its feasibility on 28.05.2018. They completed the registration process on 26.07.2018. As per 'the Net Metering Regulations 2014 read with the Amendment in 2016', the installation of the plant should had been completed within a maximum period of one year from the date of registration.

Due to the consumer's own fault, they were unable to complete the installation by 25.07.2018. Instead, they completed the installation in December 2020 only. It is seen that KSEB Ltd has permitted energising this 300 kWp plant in January 2021, even though there is no Regulation permitting them to give connectivity to a plant, which has lapsed its registration in July 2019 itself. ***Hence the action of KSEB Ltd is against the provisions under the Net metering Regulations in force and is to be invalidated.***

25. The KSERC (Renewable Energy and Net Metering) Regulations, 2020 came into force on 5<sup>th</sup> June 2020 even though it was notified on 7<sup>th</sup> February 2020. At the time of application for feasibility for the 300 kWp solar plant by RGCH, the Regulation that prevailed was KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014. This Regulation did not limit the Grid Interactive Renewable Energy Systems, connected to the net meter of the distribution system to the sanctioned connected load or contract demand as applicable to the prosumer with the distribution licensee. The relevant portions of KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014 are quoted below:

*" 4(3) The capacity of the solar energy system to be installed at the premises of any eligible consumer shall not be less than one kilo Watt peak (kWp) and shall not exceed one Mega Watt peak (MWp) subject to the condition as specified in sub-regulation (4):*

*Provided that the capacity of the solar energy system shall be in conformity with the provisions relating to the connected load or contract demand permissible at each voltage level as specified in the Kerala Electricity Supply Code, 2014, as amended from time to time."*

26. RGCH had approached KSEB Ltd for the feasibility of an additional 100 kWp solar plant on 22.05.2020. The Regulation that prevailed at that time was the KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014. RGCH could have approached KSEB Ltd for feasibility for the entire 400 kWp solar plant, on the date at which they applied feasibility for the additional 100 kWp i.e., on 22.05.2020. If so, they could have been given feasibility for the Grid Interactive Renewable Energy Systems for the total 400 kWp plant, as per Regulation 4(3) of KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014. Instead, RGCH applied only for addition of 100 kWp solar plant and KSEB Ltd accordingly issued feasibility for the additional 100 kWp solar plant, presumably against the 300 kWp (not installed) solar plant, whose registration validity had already expired in July 2019 itself.

***Hence, the feasibility order and registration done for the additional 100 kWp solar plant is also not in order.***

27. The Commission has further observed that, both the Petitioner RGCH and the respondent KSEB Ltd has violated the KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014 and KSERC (Renewable Energy and Net Metering) Regulations, 2020 and the procedure followed for energising the 300 kWp is against the provisions of the applicable Regulations. ***So, the Commission cannot entertain the prayers of the petitioner RGCH.***

28. However, the Commission has observed that, the petitioner has already installed the 400 kWp solar plant and the installation is technically feasible for grid connectivity. At a time, when the State and Central Government are vigorously pursuing for addition of solar power generation, it is not at all advisable to keep such an installation idle, wasting the effective utilization of national resources. So, KSEB Ltd is hereby advised that in the event the petitioner approaches KSEB Ltd with an application for grid connectivity for the 400 kWp solar plant, they shall take necessary immediate steps to provide connectivity, observing the provisions under the applicable Regulations. The applicants shall if they so desire file the requisite applications/ documents forthwith to KSEB Ltd and KSEB Ltd should process the same without delay and as per the provisions of the applicable regulations in force.

***29. In view of the above observations, the Commission do not find any merit on the prayers in the petition and direct both the applicant and KSEB Ltd to resolve the issue afresh, as per the applicable rules and regulations in force.***

#### **Orders of the Commission**

30. The Commission after duly considering the petition filed by M/s Rajiv Gandhi Co-operative Hospital and Solgen Energy Private Ltd, the arguments of KSEB Ltd and the petitioner during the hearing, KSERC (Grid Interactive Distributed Solar Energy System) Regulations, 2014, KSERC (Renewable Energy and Net Metering) Regulations, 2020 and, the analysis and decisions made above, hereby orders as follows;

- 1) The Commission did not find any merit for consideration in the prayers of the petitioner in the petition and the petition is dismissed;

- 2) The feasibility order and registration done for the additional 100 kWp solar plant is also not in order.
- 3) The Commission cannot entertain the prayers of the petitioner RGCH.
- 4) The Commission direct both the applicant and KSEB Ltd to resolve the issue afresh, as per the applicable rules and regulations in force.
- 5) M/s Rajiv Gandhi Co-operative Hospital shall apply afresh for grid connectivity for the 400 kWp solar plant already installed in their premises and KSEB Ltd shall process the same and provide connectivity to the installation, observing due procedures as per the Regulations in force, without delay.

The petition is disposed off as ordered above.

Sd/-  
**Adv. A. J. Wilson**  
Member (Law)

Sd/-  
**Preman Dinaraj**  
Chairman

Approved for issue

Sd/-  
C R Satheesh Chandran  
Secretary