BEFORE THE HONOURABLE KERALA STATE ELECTRICITY REGULATORY COMMISSION

At its office at CV Raman Pillai Road, Vellayambalam, Thiruvananthapuram.

FILING NO

/2021

CASE No.

IN THE MATTER OF:

Petition in the matter of determination of generic Tariff for Electricity generated from Municipal Solid Waste (MSW) to energy Projects under Section 62, Section 86 (1) (e) of Electricity Act 2003.

AND

PETITIONER:

Kerala State Electricity Board Limited, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram

Applicant

Chief Engineer (Commercial & Tariff) Kerala State Electricity Board Limited

AFFIDAVIT VERIFYING THE APPLICATION

I, P.K. Sreekumar, son of P.K. Kunjukrishnan Nair aged 55 years, residing at Sreedeepam, Elankathu Nagar, Thirumala, Thiruvananthapuram do solemnly affirm and state as follows:

I am the **Chief Engineer (Commercial & Tariff)** of the Kerala State Electricity Board Limited, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram, and the **respondent** in the above matter and I am duly authorized by the Board to make this affidavit on its behalf. I solemnly affirm at Thiruvananthapuram on this the **03.08.2021 that**

- (i) Contents of the above petition are true to my information, knowledge and belief. I believe that no part of it is false and no material has been concealed there from.
- (ii) That the statements made in paragraphs of the accompanying application now shown to me are true to my knowledge and are derived from the official records made available to me and are based on information and advice received which I believe to be true and correct.

Deponent

Chief Engineer (Commercial & Tariff)
Kerala State Electricity Board Limited, Vydyuthi Bhavanam,
Pattom, Thiruvananthapuram – 695 004

VERIFICATION

I, the above named deponent, solemnly affirm at Thiruvananthapuram on this the **03.08.2021** that the contents of the affidavit are true to my information, knowledge and belief, that no part of it is false and that no material has been concealed there from.

Deponent

Chief Engineer (Commercial & Tariff)
Kerala State Electricity Board Limited, Vydyuthi
Bhavanam,

Pattom, Thiruvananthapuram - 695 004

Solemnly affirmed and signed before me

Advocate and Notary 3-8 202

T.N OMANA

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Advocate & Notary

Thiruvananthapuram Revenue District

Kerala State South India

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BEFORE THE HONOURABLE KERALA STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF:

Petition in the matter of determination of generic Tariff for Electricity generated from Municipal Solid Waste (MSW) to energy Projects under Section 62, Section 86 (1) (e) of Electricity Act 2003

PETITIONER:

Kerala State Electricity Board Limited Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004

The petitioner, KSEBL, respectfully submits this petition based on the provisions of the Section 62, 86 (1) (e) of the Electricity Act, 2003

- This petition is filed before this Honorable Commission in the matter of determination of generic Tariff for Electricity generated from Municipal Solid Waste (MSW) to energy Projects,
- ii. Government of Kerala (hereinafter referred to as the Government) has accorded high priority to the solid waste management in environmentally sustainable manner. The government policy intends to develop Integrated Solid Waste Management Projects with waste to energy (ISWMP-W2E) in Thiruvananthapuram, Kollam, Ernakulam, Trissur, Palakkad, Malappuram, Kozhikode and Kannur districts on DBFOT basis through PPP Model, as the sustainable solution to the problems of solid waste in the state.
- iii. It is submitted that the Government has observed that the finalization of power tariff for Waste to Energy Project is a time-consuming process involving multiple procedural requirements. Since Power tariff is a vital component for the concessionaire to tie up necessary financial support and to achieve the financial closure for the development of the project, delay in finalizing the power tariff affects the pace of development of the project.
- iv. Further submitted that the Government has observed that a pre-determined tariff would provide a financially sound foundation to the development of the MSW project especially in PPP basis.

- v. A high-level meeting was convened by Chief Principal Secretary (CPS) to the Chief Minister, Government of Kerala on 25/06/2021 to discuss the standardisation of electricity tariff for solid waste management in the state. It was observed that arriving at the tariff of the electricity generated from solid waste is one serious point of delay in project implementation and tendering process.
- vi. The Government has decided to request the state Electricity Regulatory Commission for fixing a general tariff for electricity from the solid waste projects in the state, which would be valid for a specified period as specified by the commission.
- vii. The high-level meeting also observed that, The electricity regulatory commission Karnataka has issued an order which standardized the tariff for electricity from solid waste.
- viii. It is submitted that Electricity Regulatory Commissions of other states including Tamil Nadu, Haryana, Maharashtra etc have determined generic tariff for waste to Energy Projects.
 - ix. Regulation 55 of the said Regulations provides for the determination of tariff of projects using MSW for generation of power. It is stated therein that "The Commission shall determine only project specific capital cost and tariff based on prevailing market trends for MSW projects".
 - x. This Hon'ble commission has determined project specific Tariff for 10 MW MSW based Waste to Energy (WtE) Plant (OP:10/2017) located at Brahmapuram, Cochin (@Rs 6.17/unit) and 6 MW ISWM Waste to Energy (WtE) Project (OA No 06/2020), Njalianparambu, Kozhikode (@ Rs 6.81/unit without the benefit of accelerated depreciation and Rs 6.31/unit with the benefit of accelerated depreciation).
 - xi. It is submitted that in the case of MSW to energy project at Kozhikode this honorable Commission has provisionally considered a generic capital cost of Rs 15.00 crore/MW, as specified by CERC, in the CERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) (fourth amendment) Regulations, 2015 notified in October, 2015 as the primary basis for tariff determination for the base year 2015. In addition to this honorable commission has considered the costs required to comply with various environmental norms introduced thereafter, other site specific requirements, additional costs for site development, scientific landfill for the

rejects, end of process waste etc. Accordingly, the Commission has provided Rs 1.00 crore/MW additionally for the MSW project at Kozhikode. Escalation based on Whole Sale Price index has also been done to arrive at the capital cost at 2020 price level.

xii. The commission order for the petition (OA No 06/2020) dated 10.02.2021, the Hon'ble commission observed that, as per the Order of the MNRE, Central Government dated 28.02.2020 and 17.06.2020 in File No. 20/222/2016-17, the Central Finance Assistance up to Rs 5.00 crore/MW is available to MSW projects. It is requested to consider all such grant/ subsidies available for Waste to Energy project before finalising the generic tariff.

xiii. Further to this the capital cost is subject to variation based on the technology adopted for the project. It is also submitted that various state commissions have determined the tariff for waste to energy projects and is indicated below:

		Tariff		
SI No	State	(Rs/kWh)	Remark	
			MSW plant order issued on 19.09.2016 and	
1 KARNATAKA Rs. 7.08 extented the validity		extented the validity (3 times) up to 31.03.2021		
			Levelised Tariff (with CFA) order issued on	
			22/03/2021 (in connection with tariff	
			determination of Pune Bioenergy Systems Pvt.	
2	MAHARASHTRA	Rs. 6.08	Ltd 13.19 MW)	
			Suo Motu order dated 20.12.2019 for WtE fot FY	
3	HARYANA	Rs. 6.66	2019-20 & FY 2020-21	
			Retained the tariff (2016 & 2019) for	
4	Andra predash	Rs. 7.50	enhancement project order dated 8/04/2019	
			Comprehensive Tariff Order for MSW plant	
5	TAMILNADU	Rs. 6.28	dated 28-03-2019	

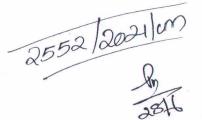
xiv. Accordingly, in line with the Government decision KSEBL is submitting the current petition as per Section 62, Section 86 (1) (e)(promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee) of Electricity Act,2003 in order to enable this honourable Commission for looking into the possibility of initiating steps to determine generic Tariff for Electricity generated from Municipal Solid to Waste (MSW) to energy Projects.

Prayer

 KSEBL humbly prays before this Hon'ble Commission for looking into the possibility of determining generic Tariff for Electricity generated from Municipal Solid to Waste (MSW) to energy Projects in accordance with Section 62, Section 86 (1) (e) of Electricity Act,2003, as decided by the Government of Kerala.

Chief Engineer
Commercial & Tariff

Acc: Annexure I.



Deputy Chief Engineer (Comml. & Plg.)
with full powers of Chief Engineer

DY. CE

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EE-I

EY. CE(TRAC)

EE (N.C)

INWARD No: 550

INITIAL & DATE 28-5201

2 8 JUN 2021

Minutes of the meeting convened by Chief Principal Secretary to Chief Minister

on 25.06.2021 to discuss the standardization of Electricity Tariff for Solid

Waste Management Projects in the State.

The meeting started at 04.00 pm with the following participants.

Sl No.	Name	Designation	INW 550
1	Shri. M C Dathan	Mentor (Science) to Hon CM	28 [6 2]
2	Shri. Bishwanath Sinha IAS	Principal Secretary, LSGD (Urban)	EEIN/F
3	Dr. B Ashok IAS	Secretary, Power	AEEAE SA CALCA
4	Shri. N S Pillai	Chairman, KSEB	

- Opening the discussion, CPS to Chief Minister informed that arriving at the tariff of electricity generated from the Solid Waste is one serious points of delay in the project implementation. The Electricity Regulatory Commission Karnataka has issued an order which standardized the tariff for electricity from solid waste and a similar strategy can be adopted in our State also.
- 2. The Chairman KSEB informed that as per the Electricity Act only the Electricity Regulatory Commission of the State can fix the tariff of electricity. But the Commission can fix the general tariff also in specific cases like that of Solid Waste also. Chairman also informed that in view of the social priority of such projects attached by Government to WTE project, KSEB will not contest in the rate fixed by the Commission. Furthermore, he said that the volume of electricity is very meagre from the Solid Waste and the Board would accept this in public interest.
- 3. Secretary, Power advised that it may not be a proper use of Section 108 to get the Commission to fix a specified tariff under that Section. However, Government can move the Commission for fixing a general tariff for WTE plants.
- 4. Principal Secretary LSGD also opined that fixing of general tariff for a specific period will reduce the time for fixing the individual tariffs of different projects in the State and it will enable speeding up of the tender process of the project. Mentor (Science) to Hon. CM also supported this view.
- 5. Considering the consensus it was decided that Electricity Regulatory Commission shall be requested by Government for fixing a general tariff for electricity from the Solid Waste Projects in the State which would be valid for a specified period as

specified by the Commission. The successful bidder would not be precluded from approaching the Commission for fixing the tariffs where it feels that the tariff allowed to it is not in line with the general prevailing tariff and if it has a grievance on such grounds.

6. The meeting concluded at 4.30 pm.

Chief Principal Secretary to Chief Minister