



**ANDHRA PRADESH ELECTRICITY REGULATORY COMMISSION**

4<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

Present

**Sri. Justice G. Bhavani Prasad, Chairman**

**Dr. P. Raghunath, Member**

**Sri. P. Rama Mohan, Member**

MONDAY, THE EIGHTH DAY OF APRIL, TWO THOUSAND AND NINETEEN

In the matter of

**Determination of Tariff for Waste to Energy Project.**

**O.P.No.23 of 2018**

**Between**

M/s Anantapur MSW Private limited

... Petitioner

and

1. M/s Southern Power Distribution Company Limited of Andhra Pradesh,
2. Principal Secretary, Energy, Infrastructure & Investment Department, GoAP,
3. Vice Chairman & Managing Director, New & Renewable Energy Development Corporation of Andhra Pradesh (NREDCAP),
4. The Municipal Corporation of Anantapuram Municipality, Anantapur

... Respondents

Petition under section 86 (1) (b) and other relevant provisions of the Electricity Act, 2003 seeking approval of tariff of Rs.7.50 for the entire plant capacity in pursuance of the amendment dated 19<sup>th</sup> July 2018 to the power purchase agreement (PPA) dated 24.08.2016 filed by M/s Anantapur MSW Private Limited, Mumbai for its Waste to Energy Project to be set up at Rapthadu Village, Anantapur came up for final hearing on 08.03.2019 in the presence of Sri P. Govardhan Reddy, Manager of the petitioner and Sri G.V. Brahmananda Rao, learned counsel representing Sri P. Shiva Rao, learned standing Counsel for the 1<sup>st</sup> respondent . After carefully considering the material available on record and after hearing the arguments of the learned counsel for both parties, the Commission passed the following:

## **ORDER**

1. The petitioner's case is that it has entered into a power purchase agreement (PPA) with the Andhra Pradesh Southern Power Distribution Company Limited, (APSPDCL), Respondent No.1, to set up Waste to Energy Project of 4MW capacity at Rapthadu Village, Anantapur at a Tariff of Rs.7.50 per unit (kWh) electricity generated for first financial year and with some changes in tariff for subsequent years according to the formula specified in PPA. The tenure of PPA is 25 years and it was approved by the Commission. The tariff was determined in competitive bidding conducted by the New & Renewable Energy Development Corporation of Andhra Pradesh (NREDCAP) Respondent No.3, as per the directions of the Principal Secretary, Energy, Infrastructure & Investment Department, GoAP, Respondent No.2. Accordingly, the petitioner had also entered into a concession agreement with the Municipal Corporation of Anantapuram Municipality, Anantapur Respondent no.4, which is a Lead Urban Local Body (LULB) representing cluster of ULBs in Anantapur District for supply of Municipal Solid Waste (MSW) that is needed for the project to use as a fuel to generate electricity.
2. The petitioner has proposed to enhance the capacity of the project from 4MW to 5MW to utilise the resources optimally on the stated advice of the financial institutions/lenders for financial closure. Respondent no.4, has also agreed and accordingly an amended concession agreement was entered for supply of additional waste required corresponding to 5 MW.
3. The Respondent No.1 had approached this Commission, inter alia, for an appropriate amendment to the PPA to incorporate the capacity change from 4MW to 5MW. The said amendments were returned with certain suggestions to be incorporated in the PPA for consent of the Commission. With reference to enhancement of capacity and tariff for such enhanced capacity, the clause 2.4 of the PPA was brought to Respondent No.1's notice, which is as stated below:

*“The WtE developer, at any time during validity of this agreement, shall endeavor to add to enhance the generation capacity of the WtE Project over and above the installed capacity defined in the PPA subject to the mutual agreement of Participating ULBs and DISCOM. The tariff applicable for such enhanced generation capacity shall be determined by the Commission (APERC) upon filing of the petition by either of the parties. The Commission while determining the tariff will take into account any additional investment made towards enhancement of the generation capacity. Notwithstanding anything contained hereinabove, it is hereby agreed that any generation over and above 100% of Contracted Capacity shall not be paid if no associated / additional investment is made.”*

4. Accordingly, the present petition was filed before the Commission by the petitioner praying the Commission to approve, hold and declare that the tariff of Rs.7.50 / unit as discovered in the bidding process shall be applicable for the entire plant capacity of 5 MW.
5. All the respondents have agreed for enhancement of the capacity of the project from 4MW to 5MW.
6. In response to the petition, the Respondent No.1 submitted that, waste to energy MSW projects bring several Swatch Bharat and Swatch Andhra Pradesh related social benefits such as waste disposal, cleanliness, freedom from pollution and communal health benefits etc. and therefore, as part of its social responsibility, the 1<sup>st</sup> respondent will honour the decision of the Commission with regard to determination of tariff as per the clause 2.4 of PPA for the generation corresponding to enhanced capacity of the project.
7. On the material on record, the point that arises for consideration herein is whether the competitive bidding tariff of Rs.7.50 per unit, be made applicable for the entire plant capacity of 5 MW.

8. The Commission is primarily guided by the provisions of PPA with reference to determination of Tariff for energy supplied corresponding to the enhanced capacity as the PPA was entered into in consequence of an open competitive bidding. That apart, the petitioner has not provided any other supporting data regarding any additional investment expected/likely to be incurred, if the project capacity is enhanced from 4MW to 5MW. However, the petitioner has submitted that if it is necessary to establish the project with 5 MW capacity, incurring the entire cost and expenditure for the 5 MW capacity is a must and the corresponding tariff for the 5 MW capacity should also remain the same at Rs.7.50 per kWh for the MSW plant. Infact all the generating plants being established under the same bidding process bid for a tariff of Rs.7.50 per kWh for 4 MW and 5MW plants. Tariff did not come down for increased capacity from 4 MW to 5MW. Per unit cost of electricity generation up to 4 MW or 5 MW was the same and the additional 1 MW was not offered to be generated at a lower cost. The per unit financial impact on the petitioner for the generation of the balance 1 MW would be the same as the other 4 MW according to the petitioner due to which it seeks the applicability of the same tariff for the entire plant capacity, as was discovered in the bidding process.
9. In response to the petition, the Respondent No.3 has submitted the following points to Commission vide its letter Dt.13.12.2018:

- a) The following Waste to Energy projects have been awarded after conducting bidding :

<b>S. No.</b>	<b>Name of the Developer</b>	<b>Name of the Lead ULB</b>	<b>Capacity of WtE (MW)</b>	<b>Quoted Tariff (Rs/Kwh)</b>	<b>Status of the Project</b>
1	M/s. Essel Infra Projects Limited, Mumbai	Tadepalligudem	5	7.5	Under pipeline
2		Kadapa	5	7.5	
3		Ananthapur	4	7.5	
4	M/s Envikare, Hyderabad	Nellore	4	7.5	

- b) Majority of the Financial Institutions/Banks did not come forward to finance the above Waste to Energy projects. On the request of the developers, the Government of Andhra Pradesh had pursued with M/s. Rural Electrification Corporation, New Delhi to finance the WtE Projects in the State of Andhra Pradesh.
- c) M/s. Rural Electrification Corporation, New Delhi has requested the Government of Andhra Pradesh to enhance the project capacity from 4 MW to 5 MW to make the projects financially viable.
- d) In view of the enhancement of capacity from 4MW to 5MW, there may not be any change in the capital investment. Hence, Commission may consider the same tariff of Rs.7.50 per unit which was earlier fixed for both 4MW and 5MW projects.

10. The cost of 5MW machinery and equipment would be more than cost of 4MW machinery and equipment with higher associated costs in the ordinary and natural course of human events. In view of the fact that there is no definite material available to show that there would be savings in cost of per unit generation to the developer due to increase in capacity from 4 MW to 5 MW, the petitioner's and Respondent No.3's submissions to determine tariff for the enhanced /total capacity of the project at the same rate appears to be in tune with the natural probability of higher capacity requiring proportionate higher costs.

11. Further, the objective of the project is to develop and implement a viable & environmentally sustainable MSW management system in Andhra Pradesh as a 'model system' for India. The project would include, processing and disposal of the MSW through Waste to Energy Plant through DBFOT basis on a Public Private Partnership (PPP) model.

12. The Ministry of Power, Government of India vide Gazette Notification dated 28-01-2016 issued the revised Tariff Policy, 2016, which provides that the Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the appropriate Commission under section 62 of the Act.
13. Twentieth Report on “Power Generation from Municipal Solid Waste”, presented to Lok Sabha on 05.08.2016, laid in Rajya Sabha on 05.08.2016 by Standing Committee on Energy (2015-16) (Sixteenth Lok Sabha), Ministry of New and Renewable Energy, appreciated the efforts of the State Government of Andhra Pradesh. In the view of the Committee, the Andhra Model may serve as an example to other States to come forward and adopt innovative methods for scientific disposal and treatment of Municipal Solid Waste. So, there is a need to showcase the few success stories that the country has in the field of Waste to Energy so as to spread awareness and encourage States to come up with innovative methods suitable to their local conditions.
14. In view of the above, if the tariff is not determined by the Commission for the enhanced capacity, the project may not achieve financial closure or viability and hence the project may not come up as envisaged. It has crossed several stages in the process and therefore, Commission desires to remove the impediment in the whole process by determining tariff for enhanced capacity of the project.
15. Therefore, in accordance with section 63 of the Electricity Act, 2003, the Commission shall adopt the tariff if such tariff has been determined through a transparent process of bidding and hence the tariff with respect to 4MW capacity is Rs.7.50 per unit for the first financial year of the commissioning as determined in bidding. For the enhanced 1MW capacity also, the Commission, in exercise of the powers vested in it under Section 62 read with section 86 (1) (b) of the Electricity Act, 2003 (Central Act No. 36 of 2003) and of all other powers hereunto enabling, here by approves Rs.7.50

per unit in line with the tariff of Rs.7.50 per unit determined for 4 MW capacity and a tariff of Rs.7.50 per unit is thus determined for the entire 5MW capacity under competitive bidding route for the first financial year.

16. The tariff for the entire capacity of 5 MW in subsequent years shall be paid according to the formula specified in the PPA.
17. This original petition is ordered accordingly.

This Order is signed on the 8<sup>th</sup> day of April, 2019.

**Sd/-**  
**P. Rama Mohan**  
**Member**

**Sd/-**  
**Dr. P. Raghu**  
**Member**

**Sd/-**  
**Justice G. Bhavani Prasad**  
**Chairman**