## ODISHA ELECTRICITY REGULATORY COMMISSION BIDYUT NIYAMAK BHAWAN PLOT NO.-4, CHUNAKOLI, SHAILASHREE VIHAR BHUBANESWAR - 751 021

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Present: Shri S. P. Nanda, Chairperson Shri A. K. Das, Member

## Case No. 45/2015

M/s. Dharani Mahila Mahasangha ....... Petitioner

Vrs.

SOUTHCO Utility ....... Respondent

In the matter of: An application under S. 86 (1) (a), (b) & (e) and all other applicable

provisions of the Electricity Act, 2003 for approval of Project specific tariff for generation of electricity from 25 kW sized bio mass based

Gasifier for FY 2015-16.

For Petitioner: Mr. Sanjay Mande, Associate Director on behalf of M/s. Dharani Mahila

Mahasangha.

For Respondent: Ms. Sasmita Patajoshi, Manager (PP), GRIDCO Limited, Ms. Niharika

Pattnayak, ALO, DoE, GoO.

Nobody is present on behalf of M/s. OREDA and SOUTHCO & WESCO Utility. The authorization letter filed by Mr. Sanjay Mande, Associate Director of ERI, the Tripartite Agreement executed between GRIDCO Ltd., SOUTHCO Utility & M/s. Dharani Mahila Mahasangha filed by GRIDCO

Ltd. are taken on record.

## **Order**

Date of hearing: 20.09.2016 Date of order:21.09.2016

The Petitioner M/s. Maa Dharani Mahila Maha Sangh (MDMMS in short) has filed the present application under Section 86 (1) (a) & (b) & (e) for determination of project specific Annual Revenue Requirement (ARR) and Tariff for electricity generation from 25 KW Biomass based Gasifier power plant for the FY 2015-16.

2. The Petitioner MDMMS has submitted that it is a Self Help Group Federation (SHGF) registered at Rayagada in Odisha under the Society Registration Act in the name of "Maa Dharani Adibasi Mahila Maha Sangh", which is subsequently changed to "Maa Dharani Mahila Maha Sangh (MDMMS)" vide meeting of its member of 24.09.2011 and recorded in the office of the Collector, Rayagada on 20.12.2014. MDMMS federation works together to strengthen the community of women in Bisamcuttack block of Rayagada district and also undertake the activity of producing a dry nutrimix (Sattu) to be given to anganwadi centres.

In the meantime MDMMS has entered into an agreement with The Energy and Resources Institute (TERI), whereby TERI shall implement a two stage biomass gasifier based power plant and handover the same to MDMMS at no cost. Subsequent to the handing over, MDMMS shall own, operate and maintain the gasifier system and provide power to its own nutrition mix plant and shall also provide basic electricity services for lighting in Sindhitota and Karli villages community.

- 3. MDMMS submitted that the biomass gasifier plant shall be considered as its captive generating unit and the system will operate 300 days in a year. The daily operational schedule of the plant will be as follows:
  - (i) 5 AM to 9 AM: Gasifer will serve residential load
  - (ii) 9 AM to 5 PM: Gasifier will serve commercial (productive nutri mix) load
  - (iii) 5 PM to 10 PM: Gasifier will serve residential load
  - (iv) 10 PM to 5 AM (next day): Gasifier will not operate. During this period, the gasifier will be charged with fuel (biomass).
- 4. The Petitioner submitted that the Commission in its generic tariff order for renewable energy sources have not determined the generic tariff for such biomass based gasifier power plants and hence requested the Commission to determine the project specific tariff for the subject 25 KW biomass gasifier power plant. MDMMS stated that after commissioning of the said power plant TERI shall handover it to the MDMMS at no cost for operation and maintenance of the system and for establishing interconnection with the LT side of the distribution transformer of the SOUTHCO Utility. However, the Petitioner has computed the levelised fixed cost of generation @ Rs.1.48 per KWh and variable cost of Rs.3.53 per KWh for the first year with the total tariff of Rs.5.01 per KWh for the FY 2015-16, which is based on the tariff determined by the Commission in its generic tariff order for biomass sources of energy. However, in its submission the Petitioner MDMMS has not taken into consideration Return on Equity, Interest on Loans and Depreciation since the total project cost has been borne by the project sponsor. Only interest on working capital and operation & maintenance expenses have been considered in the fixed cost component while fuel price has been considered in the variable component. The MDMMS in its proposal has indicated a gross energy generation of 1,09,917 Kwh per annum out of which 40,800 shall be for its captive consumption by Micro Enterprises (nutri mix) and 43,286 Kwh for residential consumers which shall be fed to the SOUTHCO system. At any point of time the gasifier plant shall supply electricity to either the captive load or the residential consumers of the two villages.

- 5. The matter was heard for the first time on 04.12.2015 and in its interim order dated 09.12.2015 the Commission had directed the Petitioner, SOUTHCO Utility and GRIDCO Ltd. to enter into tripartite agreement for making the transaction workable. Accordingly, the tripartite agreement has been signed and submitted before the Commission for approval. In the said tripartite agreement it is agreed that the tariff for sale of power by MDMMS to GRIDCO/SOUTHCO Utility shall be as decided by OERC.
- 6. The Respondent GRIDCO supported the tripartite agreement and requested the Commission to approve the same.
- 7. Heard the parties and their written submissions are taken into records. The Commission observed that the subject 25 KW biomass gasifer power plant is the first of its kind in our State. Therefore, it has not found a place in our renewable generic tariff order. The operation of the plant is also unique in nature since it will inject its full capacity at particular time of the day for residential use elsewhere.
- 8. The Petitioner has prayed the Commission to allow them interest on working capital and O&M cost as part of the fixed cost. Similarly, they have also requested the Commission to allow them variable cost akin to bio-mass power plant as approved by the Commission in the generic tariff order.
- 9. The Commission is in the process preparing generic tariff order for renewable energy sources for the next control period. This matter is also subject under such order. The plant has also not reached its date of commercial operation (CoD) such that the O&M cost can be ascertained. Therefore, in fitness of thing we are allowing a tariff of Rs.3.53 per unit provisionally in line with the variable cost of biomass power plant for 2015-16 to the unit of the Petitioner. Once the power plant becomes operational GRIDCO/ the Petitioner may approach the Commission for fixation of final tariff. We also approve the tripartite agreement executed between GRIDCO Ltd., SOUTHCO Utility and the Petitioner MDMMS on 27.06.2016 for procurement of power from the 25 KW biomass gasifier based power plant being set up by the Petitioner in Papadam village in Bisamcuttack block of Rayagada district in Odisha.
- 10. Accordingly, the case is disposed of.

Sd/-(A. K. Das) Member Sd/-(S. P. Nanda) Chairperson