

ODISHA ELECTRICITY REGULATORY COMMISSION
BIDYUT NIYAMAK BHAWAN
UNIT-VIII, BHUBANESWAR - 751 012

Present : **Shri S.P Nanda, Chairperson**
Shri B.K. Misra, Member
Shri S.P.Swain, Member

Case No. 16/2013

M/s Shalivahana Green Energy Ltd. Petitioner
Vrs.
GRIDCO & Others Respondents

In the matter of: **An application for determination of tariff for Bio-mass Power Plants for the Second Control Period starting from FY 2013-14 to 2015-16 based on the order dated 14.09.2010 passed in Case No. 37/2008 for finalizing the policy on harnessing of power from Renewable sources of energy.**

For the petitioner: Ms. Swapna Seshadri, Advocate, Shri E.Satwik, Executive Secretary.

For the respondents: Shri U.N. Mishra, GRIDCO, Ms.S.Patjoshi, GRIDCO, Shri K.C.Nanda, DGM (Fin),WESCO, Shri Niladri Khadanga, CSO, NESCO& SOUTHCO, Shri Sudarsan Nayak, CEO,CESU, Ms. Sujata Dash, Verifier, OREDA and Ms. Niharika Pattanayak, ALO, DoE, GoO.

ORDER

Date of hearing:-26.11.2013

Date of order:01.03.2014

1. This petition has been filed by M/s Shalivahana Green Energy Ltd. (SGEL). The petitioner has set up a Biomass based power plant of 20 MW installed capacity located at village Wimidha in the district of Dhenkanal. The petitioner's plant was commissioned during the first control period from FY 2010-11 to 2012-13 and commercially started injecting power to State with effect from 19th Dec. 2011 as per the PPA executed with GRIDCO.

2. In the present petition the applicant has made following submissions:
- a) To determine urgently the biomass tariff for the first year of the 2nd control period starting from the FY 2013-14 up to 2015-16.
 - b) The levelised fixed cost of Rs.1.95 Kwh be also reviewed and the benefit of higher Return on Equity (20%) and higher interest burden be taken into consideration to re-determine the levelised fixed cost in view of such parameters approved by CERC Renewable Regulations 2012.
 - c) The applicant has shut down its plant as it is facing financial crisis due to lower tariff and also on account of the non-payment of the monthly bills for energy supplied and due to unilateral deductions by GRIDCO Ltd.
 - d) GRIDCO should make payment through LC mechanism within a maximum period not exceeding 30 days.
 - e) The petitioner has not availed benefit of accelerated depreciation and therefore deduction towards the benefit of the same should not be made.
 - f) The entire CDM benefit should be allowed to the Biomass Power Plant.
 - g) The biomass is being procured at a higher price and therefore it should be reviewed with consequent revision of variable cost for FY 2013-14. A provisional tariff of Rs.6.00 per Kwh may be allowed for its present power plant.
 - h) Orders may be passed regarding connectivity with the grid as well as refund of the expenditure already incurred for execution of the transmission line and bays in the grid substation.
3. GRIDCO has not given any response to the present petition; however, they have made their observation on the petition of the generic tariff of renewable energy including Biomass Plant. CESU in its response to the petition has submitted that they have no objection if there is increase in generic tariff but the tariff shall be same as BSP of GRIDCO and there shall not be any hike on BSP applicable to CESU. In case of switching over the connectivity from GRIDCO to CESU, the purchase price of CESU

from Renewable power shall not exceed the APPC rate determined by the Commission from time to time.

4. The petitioner has also made additional submission on the Suo-Motu proceedings initiated by the Commission for finalization of generic tariff of Renewable Energy sources including cogeneration for the second control period from 2013-14 to 2017-18. In the additional submission the petitioner has highlighted that inspite of the fact that GRIDCO has signed 9 PPAs with the biomass developers, only its plant has been set up in the state of Odisha. The inability of other generators to setup their Biomass plants is mainly on account of factors such as tariff not being reflective of cost, uncertainties and risks surrounding the availability and ever increasing price of biomass rendering investment unattractive and risky. Petitioner has highlighted the report (July 2013) of the committee constituted by CERC to undertake a detailed study on the performance/ viability of biomass based power projects operating in the country. The petitioner in view of such report has submitted for revision of tariff for its biomass plant for FY 2013-14 by revising capital cost, O&M expenses, SHR, GCV, Fuel Cost, Ancillary consumption, Evacuation Expenses, ROI, Interest on working capital and enforcing RPO obligation.

Commission's Observations and Directions

5. The Commission has taken into consideration the submissions and all other documents submitted in support of the petition. The Commission for the first time determined generic tariff for renewable sources of energy for the control period (FY 2010-11 to 2012-13) including that of Biomass power plant in its order in Case No. 37/2008 (Suo-Motu) dated 14.09.10. Commission later reviewed its order on such generic tariff in case of Biomass power plant during that control period and revised the generic tariff in its order in Case No. 151-155/2010 dated 23.09.2011. Accordingly the present applicable generic tariff for biomass power plant commissioned during the first control period (FY 2010-11 to 2012-13) and also applicable to the petitioner is reproduced below:

<i>No</i>	<i>Technical Parameters</i>	<i>Value</i>	<i>Unit</i>
1	Capacity of the Power Project	1	MW
2	Capacity Utilization Factor (2nd year-20 year)	80.00	%
3	Annual Gross energy Generation (during stabilization period)	56.94	Lakh kWhs
3a	Annual Gross energy generation (2nd yr-20yr)	70.08	Lakh kWhs
4	Auxiliary energy consumption	10.00	%
5	Net energy generation (during stabilization period)	51.24	Lakh kWhs

5a	Net energy generation (2nd year-20 year)	63.07	Lakh kWhs
6	Life of Plant and Machinery / Project Life	20	years
7	Station Heat Rate	3800	Kcal/Kwh
8	Gross Calorific Value	3522	Kcal/Kg
No	Financial Parameters	Value	Unit
1	Project Cost	450.00	Rs Lacs/MW
2	Non depreciable cost	10.00	% of Capital Cost
3	Debt	315.00	lacs
4	Equity	135.00	lacs
5	Interest Rate on Term Loan	12.50	%
6	Repayment Period	10	years
7	Depreciation (Straight Line Method, Company Law) (for first 10 years)	7.00	%
8	Discount Rate	15.20	%
9	O&M	21.41	lacs/MW
10	O&M Cost Escalation	5.72	%
11A	Return on Equity (Pre Tax) - in case of MAT (1-10 year)	19.00	%
11B	Return on Equity (Pre Tax) - in case of corporate tax (11-20 year)	24.00	
12	Interest on working capital	12.00	%
13	Fuel cost	2316	Rs /MT
14	Annual escalation factor for fuel cost	5.00	%

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Variable tariff	2.92	3.06	3.21	3.37	3.54	3.72	3.91	4.10	4.31	4.52	4.75	4.99	5.24
Levellers fixed Tariff	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Year Wise Tariff	4.87	5.01	5.16	5.32	5.49	5.67	5.86	6.05	6.26	6.47	6.70	6.94	7.19
Benefit of Accel. Deprn	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Yearwise tariff after Accel Deprn	4.66	4.80	4.95	5.11	5.28	5.46	5.65	5.84	6.05	6.26	6.49	6.73	6.98

6. Commission in the meantime have also finalized the Suo-Motu proceedings for finalization of generic tariff of Renewable Energy Sources including cogeneration for the second control period 2013-14 to 2017-18 in Case No. 80/2013 dated 15.01.2014. This order is applicable to the power plants based on renewable sources of energy being commissioned during the second control period. Most of the concerns and submissions of the petitioner regarding revising capital cost, O&M expenses, SHR, GCV, Fuel Cost, Ancillary consumption, Evacuation Expenses, ROI, Interest on working capital and enforcing RPO obligation raised in the present petition have been considered in the order dated 15.01.2014 applicable for the plants commissioned during second control period.

7. However, the Biomass power plant of the present petitioner was commissioned during the first control period and as such the generic tariff determined for biomass power plant, in order No. 80/2013 dt. 15.01.2014 would not be applicable to the present petitioner. Commission in Case No. 37/2008 dt. 14.09.2010 while determining generic tariff for renewable resources for the 1st control period, at para 10 mentioned that tariff determined for RE projects, commissioned during the control period, shall continue to be applicable for the RE projects for the entire duration of tariff period.
8. Commission subsequently reviewed and revised the generic tariff of biomass power plant, during the first control period, in Case No. 151-155/2010 dt. 23.09.2011. In the said order Commission only revised the variable cost by revisiting the price of biomass fuel from Rs. 1765/MT to Rs. 2316/MT applicable for the first control period.
9. Commission has now finalized the generic tariff of Renewable Energy Sources for the second control period 2013-14 to 2017-18 including that of biomass sources of energy in order No. 80/2013 dt. 15.01.2014. Among other input parameters the biomass fuel cost has been considered at Rs.2500/MT in the said order. The Commission now decides to consider the same revision of fuel cost for biomass power plant commissioned during the first control period thereby revising the variable cost only. The fixed cost, however, as determined in Case No. 37/2008 dt. 14.09.2010 for biomass power plant commissioned during the first control period would continue to be unchanged for the entire tariff period. The input parameters for biomass power plant approved in case No. 151-155/2010 dt. 23.09.2011 is revised only in respect of fuel cost as discussed above.
10. According to the said revised input the year-wise tariff of levellised fixed tariff from FY 2013-14 to the life of the project and variable tariff from FY 2013-14 to FY 2015-16 applicable to the Biomass power plants commissioned during first control period (FY 2010-11 to 2012-13) shall be as follows. Commission would review the variable tariff for the next control period and finalise later based on prevailing fuel price at that time.

Year	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Variable tariff	3.47	3.64	3.83										
Levellised fixed Tariff	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95	1.95
Year Wise Tariff	5.42	5.59	5.78										

Benefit of Accel. Deprn (if availed)	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Yearwise tariff after Accel Deprn	5.21	5.38	5.57										

Commission has also considered other issues raised in the petition. After careful consideration of the issues raised in the petition, the Commission passes its order as detailed below:

The payment of the energy bills, rebate and late payment surcharge by GRIDCO is to be made as per the directions contained in para 39 and 40 of the order No. 37/2008 (Suo-Motu) dt. 14.09.2010.

11. Commission in the order in Case No. 80/2013 dt. 15.01.2014 applicable for the second control period have mentioned that the effective tariff shall be equal to the difference between applicable generic tariff and the benefit accruing on account of accelerated depreciation, if availed, by the generating company. The Commission accordingly decides to allow the benefit of accelerated depreciation as optional for the plants commissioned during the first control period also. The benefit of accelerated depreciation is to be deducted only if it is availed by the generating company. The earlier orders in this issue, therefore, stands modified.
12. The Commission in its order No. 37/2008 (Suo-Motu) dt. 14.09.2010 at para 25 mentioned about sharing of CDM benefits between the generating company and the beneficiaries. However, Commission in the present order in Case No. 80/2013 dt. 15.01.2014 have decided that the entire proceeds of carbon credit from approved CDM projects shall be retained by the generating company. The Commission in view of the said decision also modifies such provision in the order in Case No. 37/2008 (Suo-Motu) dtd. 14.09.2010 and the CDM benefit for the generating plants commissioned during first control period may also retain the entire proceeds of carbon credit from approved CDM projects.
13. As regards the connectivity Commission have elaborated the connectivity issue in the latest order in Case No. 80/2013 (Suo-Motu) dt. 15.01.2014. The Commission directs that the said issue shall be settled with GRIDCO in terms of the para 28 of the said order for all projects commissioned during first control period also.

14. As regards the payment of outstanding dues to the petitioner by GRIDCO, the petitioner has filed a separate petition for settlement of the said issue which has been registered as case no. 93/2013. The hearing in such case has also been concluded and this issue would accordingly be addressed in the said order.

The case is accordingly disposed of.

Sd/-
(S.P.Swain)
Member

Sd/-
(B.K.Misra)
Member

Sd/-
(S.P.Nanda)
Chairperson