

CE/Comm/CP/NCE/Tariff/ 11675

Date: 29.04.2013.

COMMERCIAL CIRCULAR No. 196.

Sub: - Tariff of Non-conventional Energy (NCE)/ Renewable Energy Projects for FY 2013-14.

Ref: - MERC RE Tariff order dated 22nd March 2013.

The Maharashtra Electricity Regulatory Commission has notified the Maharashtra Electricity Regulatory Commission (Terms and Conditions for determination of RE Tariff) Regulations, 2010 ("RE Tariff Regulations") on 7th June 2010.

Accordingly, MERC issued generic RE tariff order for the first year of the control period (i.e FY 2010-11) on dated 14th July 2010. The guidelines were issued vide Commercial Circular No. 122 dated 12.10.2010 which shall continue to remain applicable for RE Projects commissioned on or before March 31, 2011.

Subsequently, the Hon'ble Commission has issued generic RE tariff orders on 29th April 2011 and 30th March 2012 for the renewable energy projects for the second and third year of the control period (i.e FY 2011-12 & FY 2012-13). The guidelines were issued vide Commercial Circular No. 137 dated 16.06.2011 and Commercial Circular No. 164 dated 20.04.2012 which shall be applicable for RE Projects commissioned during FY 2011-12 (i.e from April 1, 2011 to March 31, 2012) and FY 2012-13 (i.e from April 1, 2012 to March 31, 2013) respectively.

Now, the Hon'ble Commission has issued generic RE tariff order, on 22nd March 2013 for the renewable energy projects for the fourth year of the control period (i.e FY 2013-14). Hence, the guidelines as under are issued for implementation of the said order of the Commission.

1. Applicability of Tariff Order:-

This Tariff is applicable for New RE Projects to be commissioned during FY 2013-14 (i.e. from April 1, 2013 to March 31, 2014).

2. Tariff for Renewable Energy Projects:-

I. WIND:

Wind Zone-wise Levellised Tariff for New RE Projects for FY 2013-14.

Particular	CUF	Tariff Period in Years	Levellised Total Tariff (FY 2013-14)	Benefit of Accelerated Depreciation (if availed)	Net Levellised Tariff (upon adjusting for Accelerated Depreciation benefit (if availed))
			(Rs/kWh)	(Rs/kWh)	(Rs/kWh)
Wind Energy Projects					
Wind Zone-1	20%	13	5.81	(0.35)	5.46
Wind Zone-2	23%	13	5.05	(0.31)	4.74
Wind Zone-3	27%	13	4.31	(0.26)	4.05
Wind Zone-4	30%	13	3.88	(0.23)	3.65

Notes:

- The above Tariff shall be valid for Projects Commissioned in FY 2013-14 and for a Tariff Period of 13 years from the Commercial Operation Date (COD).

II. SMALL HYDRO:**Levelling tariff for new small hydro and mini/micro hydro projects in FY 2013-14:**

Particulars		Tariff Period	Levelling Total Tariff(FY 2013-14)	Benefit of Accelerated Depreciation (if Aailed)	Net Levelling Tariff (upon adjusting for Accelerated Depreciation benefit) (if Aailed)
		years	(Rs/kWh)	(Rs/kWh)	(Rs/kWh)
Small Hydro Project					
Mini and Micro Hydro Projects	500 KW & below	35	5.91	(0.59)	5.32
	Above 500 KW & upto & including 1 MW	35	5.41	(0.59)	4.82
Other Small Hydro Projects	Above 1 MW & upto and including 5MW	35	4.92	(0.58)	4.34
	Above 5 MW & upto and including 25MW	13	4.21	(0.53)	3.68

The above Tariff shall be applicable for Projects commissioned in FY 2013-14 and shall be valid for the entire tariff period as specified above.

III. BIOMASS POWER PROJECTS:**Levelling tariff for Biomass power projects commissioned in FY 2013-14:**

Tariff period (years)	Levelling Fixed Charge (Rs/kWh)	Variable Charge for FY 2013-14 (Rs/kWh)	Tariff for FY 2013-14 (Rs/kWh)	Benefit of Accelerated Depreciation (if Aailed) (Rs/kWh)	Net Levelling Tariff (upon adjusting for Accelerated Depreciation benefit) (if Aailed) (Rs/kWh)
13	2.17	3.70	5.87	(0.21)	5.66

The Tariff Rate comprises two parts viz. (i) fixed charge component and (ii) variable charge component and shall be applicable for Rankine cycle based biomass power project for sale of power to Distribution Licensee within Maharashtra during FY 2013-14.

Tariff for Biomass power projects commissioned prior to FY 2013-14:

Tariff period (years)	Fixed Charge linked to year of operation (Rs/kWh)	Variable Charge for FY 2013-14 (Rs/kWh)	Tariff for FY 2013-14 (Rs/kWh)
13	1.70*	4.01	5.71

* Fixed charge component shall be governed as per the terms and conditions outlined under biomass tariff order dated 8 August, 2005 in Case No 37 of 2003 and Case no. 83 of 2008. The per unit fixed charge component is as under:

Year of operation	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th
Fixed Charge (Rs/kWh)	1.70	1.67	1.63	1.59	1.54	1.49	1.43	1.37	1.32	1.25	1.18	1.11	1.02

The fixed charge component is linked to year of operation, commencing from date of commissioning of plant and the variable charge component is linked to the financial year.

IV. NON FOSSIL FUEL BASED CO-GENERATION PROJECT (BAGASSE):

Levelling tariff for Non fossil bagasse based cogeneration power projects commissioned in FY 2013-14:

Tariff period (years)	Levelling Fixed Charge (Rs/kWh)	Variable Charge for FY 2013-14 (Rs/kWh)	Tariff for FY 2013-14 (Rs/kWh)	Benefit of Accelerated Depreciation (if Available) (Rs/kWh)	Net Levelling Tariff (upon adjusting for Accelerated Depreciation benefit) (if Available) (Rs/kWh)
13	2.38	3.43	5.81	(0.27)	5.54

Tariff for Non fossil bagasse based cogeneration power projects commissioned prior to FY 2013-14:

Tariff period (years)	Fixed Charge (Rs/kWh)	Variable Charge for FY 2013-14 (Rs/kWh)	Tariff for FY 2013-14 (Rs/kWh)
13	2.26*	3.43	5.69

* Fixed charge component is as per order dated 11th January, 2010 in Case No. 123 of 2008.

V. TARIFF FOR NON-QUALIFYING NON-FOSSIL FUEL-BASED CO-GENERATION PLANTS:

- The tariff rate for Non-Qualifying non fossil fuel based Co-generation projects (**existing and New**) shall be **Rs.2.28 Rs/kWh**.

USE OF FOSSIL FUEL (For Biomass based IPP projects and Cogeneration Projects) :

The use of fossil fuels is limited to 15% of the total fuel consumption on annual basis or as amended by MNRE from time to time.

The project developer using fossil fuel more than 15%, shall be ineligible for preferential tariff from the date of default and for duration of the default during financial year when such default occurs. During the period of default the tariff applicable shall be lower by Rs 0.50/kWh below the applicable preferential tariff determined.

VI. SOLAR:

a) SOLAR PHOTOVOLTAIC (PV), ROOFTOP PV AND OTHER SMALL SOLAR PROJECTS:

Levellised tariff for Solar Power projects in FY 2013-14:

Particular	Tariff Period	Levellised Tariff (FY 2013-14)	Benefit of Accelerated Depreciation (if Aailed)	Net Levellised Tariff(upon adjusting for accelerated Depreciation)
	years	(Rs/kWh)	(Rs/kWh)	(Rs/kWh)
Solar Power Projects				
Solar PV Projects	25	8.98	(1.29)	7.69
Solar rooftop PV and other small solar power Projects upto 2 MW	25	9.48	(1.29)	8.19

- The Tariff for Solar PV projects and Solar Rooftop PV and other small solar Projects as stated above shall be applicable for Projects wherein PPA are signed after March 31, 2013 and projects are commissioned during FY 2013-14, and shall be valid for a tariff period of 25 years from the Commercial Operation Date (COD).
- The Tariff for Solar PV projects, Solar Rooftop PV and other small solar Projects to be commissioned during FY 2013-14, wherein PPAs are signed on or before March 31, 2013, shall be as specified in the Commission's Generic RE Tariff Order (Case No. 10 of 2012) for RE technologies for Third year of control period, issued on 30th March, 2012.

b) SOLAR THERMAL PROJECTS:

Levellised tariff for Solar Thermal Power projects in FY 2013-14:

Particular	Tariff Period	Levellised Tariff (FY 2013-14)	Benefit of Accelerated Depreciation (if Aailed)	Net Levellised Tariff(upon adjusting for accelerated Depreciation)
	years	(Rs/kWh)	(Rs/kWh)	(Rs/kWh)
Solar Thermal power Projects	25	12.31	(1.60)	10.71

- The above Tariff for Solar thermal power Projects shall be applicable for the projects wherein PPA's are signed after March 31, 2013 and projects are commissioned during FY 2013-14, and shall be valid for a tariff period of 25 years from the Commercial Operation Date (COD).
- The Tariff for Solar thermal power Projects to be commissioned during FY 2013-14 wherein PPAs are signed on or before March 31, 2012, shall be as specified in the Commissions Generic RE Tariff Order (Case No. 10 of 2012) for RE technologies for Third year of control period, issued on 30th March, 2012.

GENERAL CONDITIONS FOR ALL New RE Projects:

PAYMENT MECHANISM:-

- Payment to be made within 60 days from the date of receipt of Bill/ Invoice in Circle office.
- Late payment surcharge at the rate of 1.25% per month shall be applicable for the payment beyond a period of 60 days from the date of billing.
- For existing RE projects commissioned on or before 31st March 2010, the payment mechanism shall be as per the EPA.

OTHER TERMS AND CONDITIONS:

- (i) The Tariff determined for a particular year shall continue to be applicable for the entire duration of the Tariff period i.e. Agreement Period.
- (ii) **The Tariff payable to all the RE generators shall be the Net Levelled Tariff** (upon adjusting for accelerated depreciation benefit). However, if benefit of accelerated depreciation is not availed by the project developer, the Total Levelled tariff shall be made applicable. In such case, the project developer shall submit the Duly certified certificate from the Chartered Accountant / Income tax Department confirming that, the benefit of accelerated depreciation is not availed.
- (iii) Applicability of Reactive Power Penalty :

With regard to the Reactive Power Compensation, the Hon'ble Commission has ruled that

" The Commission is of the view that, a detailed technical study and reactive energy compensation is necessary. The Commission had earlier observed that (Ref. Case No. 10 of 2012) MSEDCL may deliberate on the technical issues in the matter of ascertaining impact of harmonics and reactive energy exchange (draw/injection) for various RE technologies, at forum such as Grid Coordination Committee and MSEDCL was asked to propose suitable action plan. The Commission hereby directs MSEDCL to undertake such technical study and propose its recommendation in consultation with Grid Co-ordination Committee within a period of 4 months from this Order."

However, till the finalization of suitable action plan with regard to the reactive power penalty the reactive power compensation as stipulated in following paragraphs (in line with the MERC Order dated 29.04.2011) and as may be revised from time to time shall be applicable in the following manner for all the RE Projects (Existing and New):

- a. In case of Wind Energy Projects: Reactive energy charge at the rate of Rs 0.10/RkVAh shall apply for reactive energy consumption upto 10% of the active energy delivered to the grid by the Generators. The reactive energy consumption in excess of 10% of active energy delivered to the grid shall be payable at the rate of Rs 0.25/RkVAh.

Reactive energy charges shall be recovered from the bill of the developer for energy sold to the Utility; in case of self-use, these charges shall be added to the monthly electricity bill of the developer; in case of sale to third party, these charges shall be added to the monthly electricity bill of the consumer (third party purchaser to whose premises energy is wheeled). For the period when wheeling is discontinued, it will be recovered from the developer.

- b. In case of biomass power projects, non-fossil fuel based co-generation projects and Small Hydro projects, the Project will supply reactive power (RkVAh) equivalent to at least 36% of the active power (kWh) supplied to the grid on a monthly basis. In case of failure to do so, the STU/Licensee shall charge the shortfall at the rate of Rs 0.25/RkVAh, or such other rate as may be stipulated by the Commission from time to time.

All the field officers are requested to take necessary action accordingly.


Chief Engineer (Commercial)

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