

Calculation of MFCA in accordance with the Fuel Surcharge Formula in Paragraph B of Schedule - 7B of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011

Hiranmaye Energy Limited

a) Values taken from the Order dated 30 Jun 2021, in Case No: TP - 82 / 19-20

Details	Parameters	Unit	Amount
Normative Auxiliary Consumption	Aux _n	%	10.50
Normative oil consumption rate	Oil _n	ml/kWh	1
Normative gross station heat rate of power station	SHR _n	kCal/kWh	2477.15
Normative transit and handling loss	T _L	%	0.8
Average Energy cost for sent out energy as per Tariff Order	EC _T	Rs/kWh	2.9618

b) Values for the Month - June 2021

Details	Parameters	Unit	Amount
Sent out energy from the Power Station	E _g	MU	93.61
Price of Oil	Oil _{price}	Rs/KL	56,289.03
Heat Value of Oil	Oil _{gcv}	kCal/L	10640
Heat Value of Coal Purchased	Coal _{gcv}	kCal/kg	3,078.00
Average coal price	Coal _{price}	Rs/MT	4,249.32

c) Value to be taken from the Order of Adhoc Variable Cost or Adhoc Power Purchase Cost (if any)

Details	Parameters	Unit	Amount
Adhoc Fuel Cost	Adhoc_F _{cost}	Rs/kWh	0

d) Computation of MFCA for the month of July 2021

Details	Parameters	Formula	Unit	Amount
Normative generation of the power station	G _n	$E_g / (1 - Aux_n \times 0.01)$	MU	104.59
Total cost on normative oil consumption	Oil _c	$G_n \times Oil_n \times Oil_{price}$	Rs	5887083.93
Heat generated from oil consumption	Oil _{Heat}	$G_n \times Oil_n \times Oil_{gcv} \times 10^3$	kCal	1112802529.61
Total Normative heat required for sent out generation	T _H	$G_n \times SHR_n \times 10^6$	kCal	259076953592.18
Heat required from coal (Primary Fuel)	F _H	$T_H - Oil_{Heat}$	kCal	257964151062.57
Normative coal consumption	Coal _{con}	$F_H / (Coal_{gcv} \times 1000)$	MT	83809.02
Normative coal required	Coal _{req}	$Coal_{con} / (1 - T_L \times 0.01)$	MT	84484.90
Total coal cost on normative coal required	TC _c	$Coal_{req} \times Coal_{price}$	Rs	359003769.67
Average energy cost for sent out energy	EC _{avg}	$(TC_c + Oil_c) / (E_g \times 10^6)$	Rs/kWh	3.8982
Monthly fuel cost adjustment for per unit of sent out energy	MFCA	$(EC_{avg} - EC_T - Adhoc_F_{cost}) \times 100$	paise/kWh	93.64

Applicable MFCA for July 2021 = 93 paise/kWh

