



Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 12'2023

Notation	Particulars	Unit	Value mentioned in Tariff Order
TL	Normative Transmission Loss in %	%	0
DL	Normative Distribution Loss in % (As per WBERC Tariff Regulation (Fourth Amendment), 2023 applicable from 01.04.2023)	%	2.75
e _{sc}	Energy Sale to consumer and Licensee in MU as per Tariff Order	MU	8863.9
pp _{cost}	Power Purchase Cost allowed in the Tariff order in Rs.	Rs.	5070207000
fc	Fuel Cost allowed in the tariff order in Rs,	Rs.	0
pp _{cost_ex}	Power Purchase cost/fuel cost for sale to person other than licensee and consumers as allowed in the tariff order in Rs.	MU	0

B) Value taken upto the month under consideration

Notation	Particulars	Unit	Total for DVC	Apportionment for the state of West Bengal @ 56.09%
UI _{in}	Net Power drawal (MU) in UI mode	MU	261.73	146.81
UI _{out}	Net Power exported (MU) in UI mode	MU	189.25	106.15
E _p	Total Power purchase (MU) against bill	MU	1998.61	1121.02
E _g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	13613.62	7635.88
E _x	Energy sold (MU) to person other than licensee and consumers including swapout.	MU	0	0.00
E _{P_PPSP}	Net power drawal from pumping energy of Pumped Storage Project	MU	0	0.00
PP _{cost}	Total cost of Power purchase from different sources in Rs.	Rs.	10142810750	5689102550
FC	Total fuel cost of own generation as per normative parameter fixed by the Commission in Rs.	Rs.	0	0.00
Ulc _{in}	Power purchase cost for Ulin in Rs.	Rs.	1559722618	874848416

CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	70.53	39.56
$R-E_x$	Revenue earned in Rs. On account of part of variable cost only due to Energy sold against Ex	Rs.	0	0.00
$R-UI_{out}$	Revenue earned in Rs due to power exported in UI mode.	Rs.	294490595	165179774

C) Value taken from order of Adhoc Variable cost or Adhoc Power Purchase Cost if any

Notation	Particulars	Unit	Total for DVC	Apportionment for the state of West Bengal @ 56.09%
Adhoc_ V_{cost}	Adhoc_Adhoc Variable Cost or Adhoc Power Purchase Cost in Rs./kWh	Rs.	0	0

D) Value to be taken for the balance period of the year.

Notation	Particulars	Unit	Total for DVC	Apportionment for the state of West Bengal @ 56.09%
P_{Proj}	Projected power purchase cost in Rs for the balance period of the year	Rs.	2470207171	1385539202
FC_{Proj}	Projected fuel Costs for the balance period of the year	Rs.	0.00	0
E_{proj}	Projected energy in MU to be purchased for the balance year	MU	586.40	328.91
$E_{P_PSP_Proj}$	Projected net drawal in MU of Pumping energy from pumped storage project during the balance period of the year	MU	0.00	0.00
E_{G_Proj}	Total projected energy to be sent out from own generation during the balance period of the year	MU	4537.87	2545.29
E_{x_Proj}	Projected energy to be sold (MU) to person other than licensee and consumers during the balance period of the year	MU	0.00	0.00
$R_E_{x_Proj}$	Projected Revenue earned on account of part of variable cost only due to Energy sold against E_{x_Proj} during balance period of the year	Rs.	0.00	0.00

E) Computation of MVCA

Tot_{ENR}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11738.35
$Tot_{ENR_Consumer}$	$Tot_{ENR} - UI_{out} - E_x - E_{x_Proj} - (E_{P_PSP} + E_{P_PSP_Proj})/(1-TL)$	11632.21
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	7949490168
$MVC_{consumer}$	$MVC - (R-E_x + R-UI_{out} + R_E_{x_Proj})$	7784310394

E_{sc}	$Tot_{ENR_Consumer} \times (1 - TL \times 0.01) \times (1 - DL \times 0.01)$	11312.32
$MVC_{unit_consumer}$	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.69
$mvc_{consumer}$	$pp_{cost} + fc - pp_{cost_ex}$	5070207000
$mvc_{unit_consumer}$	$mvc_{consumer} / (e_{sc} \times 10^6)$	0.57
MVCA	$(MVC_{unit_consumer} - mvc_{unit_consumer} - Adhoc_V_{cost}) \times 100 \text{ Paisa/kWh}$	11.61
MVCA rounded to nearest lower integer		11.00

Actual details of Power Purchase upto Dec'2023 in FY 2023-24

Sources	Upto previous Month			Current Month (Dec'23)			Cumulative of Current Month (Upto Dec'23)		
	Energy	Amount	Rate	Energy	Amount	Rate	Energy	Amount	Rate
	kWh	Rs	Rs/kWh	kWh	Rs	Rs/kWh	kWh	Rs	Rs/kWh
	A	B	C = B/A	D	E	F = E/D	G = A+D	H = B+E	I = H/G
NTPC									
TSTPS	10138876	50653266	5.00	1331554	3653013	2.74	11470430	54306279	4.73
KBUNL	39355335	205817261	5.23	3421548	22762219	6.65	42776883	228579480	5.34
Supplementary Bill		14953818			3770221			18724039	
NHPC									
Rangit	23679675	95442785	4.03	2029000	9174676	4.52	25708675	104617461	4.07
Teesta	163348040	345243918	2.11	0	0	0.00	163348040	345243918	2.11
Supplementary Bill		1207745			37233			1244978	
PTC									
Chukha	100280313	240833201	2.40	0	0	0.00	100280313	240833201	2.40
Kurichu	13052186	29758984	2.28	0	0	0.00	13052186	29758984	2.28
Tala	68442334	155364099	2.27	0	0	0.00	68442334	155364099	2.27
Supplementary Bill		4978743						4978743	
MPL									
	770931630	3334087165	4.32	104346000	440746385	4.22	875277630	3774833550	4.31
Exchange Purchase	535956704	2877090720	5.37	0	0	0.00	535956704	2877090720	5.37
Renewable	158817992	1155547981	7.28	3479569	36239570	10.41	162297561	1191787551	7.34
	0	0							
Transmission and POSOCO Charge etc.	0	1011476105			103971642			1115447747	
Total	1884003085	9522455791	5.05	114607671	620354959	5.41	1998610757	10142810750	5.07

Projection for rest of year of the FY 2023-24

Sources	Energy Approved in Order dtd. 17.06.2022	Projected energy for balance period	Basis of projection	Applicable Rate for balance energy	Projected Amount
	(MU)	(MU)		Rs./Kwh	Rs.
	J	K		L = Max of I & F	M = K * L
NTPC					
TSTPS	19.42	3.82	G*3/9	4.73	18102093
KBUNL	54.97	14.26	G*3/9	6.65	94859284
NHPC					
Rangit	32.53	6.82	J-G	4.52	30844478
Teesta	207.33	43.98	J-G	2.11	92957982
PTC					
Chukha	169.23	68.95	J-G	2.40	165589569
Kurichu	49.25	36.20	J-G	2.28	82531016
Tala	179.05	110.61	J-G	2.27	251079403
MPL					
	1005	291.76	G*3/9	4.31	1258277850
Exchange Purchase	135	0.00	Past Trend	0.00	0
Renewable	73.16	10.00	Past Trend	10.41	104149580
Transmission and POSOCO Charge etc.					371815915.7
Total		586.40		4.21	2470207171