



Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 10'2023

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%
U _{Iin}	Net Power drawal (MU) in UI mode	MU	95.93	53.81
U _{Iout}	Net Power exported (MU) in UI mode	MU	51.84	29.08
E _p	Total Power purchase (MU) against bill	MU	1768.78	992.11
E _g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	10110.39	5670.92
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.	8875517262	4978277633

FC	Total fuel cost of own generation as per normative parameter fixed by the Commission in Rs.	Rs.	0	0.00
U _{cost} _{in}	Power purchase cost for U _{in} in Rs.	Rs.	1102363467	618315669
CTU _{loss}	Loss through inter state transmission system for import of power from different sources.	MU	54.84	30.76
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-U _{out}	Revenue earned in Rs due to power exported in UI mode.	Rs.	645980169	362330277

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.	3873666462	2172739518
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	829.93	465.51
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	7221.71	4050.66
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 Ex_Proj during balance period of the year	Rs.	0.00	0.00

E) Computation of MVCA

Tot _{ENR}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11202.24
Tot _{ENR_Consumer}	$Tot_{ENR} - UI_{out} - E_x - E_{x_Proj} - (E_{P_PPSP} + E_{P_PSP_Proj}) / (1 - TL)$	11173.16
MVC	$PP_{cost} + FC + UI_{cost} + P_{Proj} + FC_{Proj}$	7769332820
MVC _{consumer}	$MVC - (R - E_x + R - UI_{out} + R - E_{x_Proj})$	7407002543
E _{sc}	$Tot_{ENR_Consumer} \times (1 - TL \times 0.01) \times (1 - DL \times 0.01)$	10865.90
MVC _{unit_consumer} r	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.68
mvc _{consumer}	$pp_{cost} + fc - pp_{cost_ex}$	5070207000
mvc _{unit_consumer}	$mvc_{consumer} / (e_{sc} \times 10^6)$	0.57
MVCA	$(MVC_{unit_consumer} - mvc_{unit_consumer} - Adhoc_V_{cost}) \times 100 \text{ Paisa/kWh}$	10.97
MVCA rounded to nearest lower integer		10.00

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

Sources	Upto previous Month			Current Month (Oct'23)			Cumulative of Current Month (Upto Oct'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	7537438	43633570	5.79	1318656	3751029	2.84	8856094	47384599	5.35
KBUNL	26607684	139862474	5.26	6393107	34005946	5.32	33000791	173868420	5.27
Supplementary Bill		5524542			2758268			8282810	
NHPC									
Rangit	17551125	70627921	4.02	3750150	13815644	3.68	21301275	84443565	3.96
Teesta	160205178	338292778	2.11	3142862	6951140	2.21	163348040	345243918	2.11
Supplementary Bill		2950426			-1596649			1353777	
PTC									
Chukha	85084502	204338941	2.40	15195811	36494260	2.40	100280313	240833201	2.40
Kurichu	12958248	29544805	2.28	93938	214179	2.28	13052186	29758984	2.28
Tala	64851987	147214011	2.27	3590347	8150088	2.27	68442334	155364099	2.27
Supplementary Bill		4978743			0			4978743	
MPL	579608540	2505707729	4.32	91085290	391762156	4.30	670693830	2897469885	4.32
Exchange Purchase	431728624	2213606609	5.13	104228080	663484111	6.37	535956704	2877090720	5.37
Renewable	142941323	1018586481	7.13	10903375	93838303	8.61	153844698	1112424784	7.23
Transmission and POSOCO Charge etc.	0	802895359			94124398			897019757	
Total	1529074649	7527764390	4.92	239701616	1347752873	5.62	1768776265	8875517262	5.02

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	6.33	G*5/7	5.35	33846142
KBUNL	54.97	23.57	G*5/7	5.32	125383155
NHPC					
Rangit	32.53	11.23	J-G	3.96	44513465
Teesta	207.33	43.98	J-G	2.21	97275910
PTC					
Chukha	169.23	68.95	J-G	2.40	165589570
Kurichu	49.25	36.20	J-G	2.28	82531155
Tala	179.05	110.61	J-G	2.27	251079411
MPL	1005	479.07	G*5/7	4.32	2069621346
Exchange Purchase	135	30.00	Past Trend	6.37	190970834
Renewable	73.16	20.00	Past Trend	8.61	172127075.7
Transmission and POSOCO Charge etc.					640728397.9
Total		829.93		4.67	3873666462