



**DAMODAR VALLEY CORPORATION**  
दामोदर घाटी निगम

**Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 08'2023**

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	54.03	30.30
$UI_{out}$	Net Power exported (MU) in UI mode	MU	43.32	24.30
$E_p$	Total Power purchase (MU) against bill	MU	1243.70	697.59
$E_g$	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	7601.15	4263.49
$E_x$	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.	6095732741	3419096495
FC	Total fuel cost of own generation as per normative parameter fixed by the Commission in Rs.	Rs.	0	0.00
$UICost_{in}$	Power purchase cost for $UI_{in}$ in Rs.	Rs.	816451161	457947456
$CTU_{loss}$	Loss through inter state transmission system for import of power from different sources.	MU	33.74	18.93
$R-E_x$	Revenue earned in Rs. On account of part of variable cost only due to Energy sold against $E_x$	Rs.	0	0.00
$R-UI_{out}$	Revenue earned in Rs due to power exported in UI mode.	Rs.	472486045	265017423

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 <sub>cost</sub>	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 <sub>Proj</sub>	Projected power purchase cost in Rs for the balance period of the year	Rs.	7199851447	4038396677
FC <sub>Proj</sub>	Projected fuel Cots for the balance period of the year	Rs.	0.00	0
E <sub>proj</sub>	Projected energy in MU to be purchased for the balance year	MU	1437.47	806.27
E <sub>P_PSP_Proj</sub>	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 <sub>G_Proj</sub>	Total projected energy to be sent out from own generation during the balance period of the year	MU	10641.61	5968.88
E <sub>x_Proj</sub>	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 <sub>E<sub>x</sub>_Proj</sub>	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 <sub>ENR</sub>	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G\_Proj}$	11747.61
Tot <sub>ENR_Consumer</sub>	$Tot_{ENR} - UI_{out} - E_x - E_{x\_Proj} - (E_{p\_PSP} + E_{p\_PSP\_Proj}) / (1-TL)$	11723.31
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	7915440627
MVC <sub>consumer</sub>	$MVC - (R - E_x + R - UI_{out} + R - E_{x\_Proj})$	7650423205
E <sub>sc</sub>	$Tot_{ENR\_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11400.92
MVC <sub>unit_consumer</sub>	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.67
mvc <sub>consumer</sub>	$pp_{cost} + fc - pp_{cost\_ex}$	5070207000
mvc <sub>unit_consumer</sub>	$mvc_{consumer} / (e_{sc} \times 10^6)$	0.57
MVCA	$(MVC_{unit\_consumer} - mvc_{unit\_consumer} - Adhoc\_V_{cost}) \times 100$ Paisa/kWh	9.90
<b>MVCA rounded to nearest lower integer</b>		<b>9.00</b>

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

Sources	Upto previous Month			Current Month (Aug'23)			Cumulative of Current Month (Upto Aug'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	5158983	36065953	6.99	1045703	3806681	3.64	6204686	39872634	6.43
KBUNL	13098770	70346144		6865186	35084034	5.11	19963956	105430178	5.28
Supplementary Bill					164359			164359	
NHPC									
Rangit	9708875	42242729	4.35	3964225	14384726	3.63	13673100	56627455	4.14
Teesta	97616448	214881538	2.20	32561222	63781647	1.96	130177670	278663185	2.14
Supplementary Bill		6681138			-2134063			4547075	
PTC									
Chukha	41791561	100366613	2.40	25396478	60992182	2.40	67188039	161358795	2.40
Kurichu	6077680	13857110	2.28	3588695	8182225	2.28	9666375	22039335	2.28
Tala	28306241	64255167	2.27	22013906	49971567	2.27	50320147	114226734	2.27
Supplementary Bill		2534312						2534312	
MPL	38807750	1746069768	4.50	90836540	359905914	3.96	478914290	2105975682	4.40
Exchange Purchase	248457083	1221751941	4.92	91800159	441652192	4.81	340257242	1663404133	4.89
	0	0							
Renewable	113024837	786981996	6.96	14314541	109817331	7.67	127339377	896799327	7.04
	0	0							
Transmission and POSOCO Charge etc.	0	533225404			110864134			644089538	
Total	951318227	4839259813	5.09	292386655	1248126345	4.27	1243704882	6095732741	4.90

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	8.69	G*7/5	6.43	55821687
KBUNL	54.97	27.95	G*7/5	5.28	147602249
NHPC					
Rangit	32.53	18.86	J-G	4.14	78096281
Teesta	207.33	77.15	J-G	2.14	165155161
PTC					
Chukha	169.23	102.04	J-G	2.40	245063975
Kurichu	49.25	39.58	J-G	2.28	90250669
Tala	179.05	128.73	J-G	2.27	292216769
MPL	1005	670.48	G*7/5	4.40	2948365955
Exchange Purchase	135	185.71	Past Trend	4.89	907874231
Renewable	73.16	178.28	G*7/5	7.67	1367679117
Transmission and POSOCO Charge etc.					901725353.2
Total		1437.47		5.01	7199851447