



**DAMODAR VALLEY CORPORATION**  
दामोदर घाटी निगम

**Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 02'2023**

Notation	Particulars	Unit	Value mentioned in Tariff Order
TL	Normative Transmission Loss in %	%	0
DL	Normative Distribution Loss in %	%	2.2
$e_{sc}$	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	151.63	85.05
$UI_{out}$	Net Power exported (MU) in UI mode	MU	51.95	29.14
$E_p$	Total Power purchase (MU) against bill	MU	2302.22	1291.32
$E_g$	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	16689.72	9361.26
$E_x$	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.	11866187990	6655744844
FC	Total fuel cost of own generation as per normative parameter fixed by the Commission in Rs.	Rs.	0	0.00
$UI_{cost\_in}$	Power purchase cost for $UI_{in}$ in Rs.	Rs.	1410075773	790911501
$CTU_{loss}$	Loss through inter state transmission system for import of power from different sources.	MU	68.79	38.59
$R-E_x$	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.	206748864	115965438

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.	1388303246	778699290
FC <sub>Proj</sub>	Projected fuel Costs 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	258.42	144.95
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	1517.25	851.02
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_E <sub>x_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>	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G\_Proj}$	11695.01
Tot <sub>ENR_Consumer</sub>	$Tot_{ENR} - UI_{out} - E_x - E_{x\_Proj} - (E_{P\_PSP} + E_{P\_PSP\_Proj}) / (1 - TL)$	11665.88
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	8225355635
MVC <sub>consumer</sub>	$MVC - (R - E_x + R - UI_{out} + R_{E_{x\_Proj}})$	8109390197
E <sub>sc</sub>	$Tot_{ENR\_Consumer} \times (1 - TL \times 0.01) \times (1 - DL \times 0.01)$	11409.23
MVC <sub>unit_consumer</sub>	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.71
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	$(MVC_{unit\_consumer} - mvc_{unit\_consumer} - Adhoc\_V_{cost}) \times 100 \text{ Paisa/kWh}$	13.88
<b>MVCA rounded to nearest lower integer</b>		<b>13.00</b>

Actual details of Power Purchase upto Feb'2023

Sources	Upto previous Month (Jan'23)			Current Month (Feb'23)			Cumulative of Current Month (Upto Feb'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	11728994.96	49029298	4.18	1193868	5829965	4.88	12922863.46	54859263	4.25
KBUNL	0	43658571		0	0			43658571	
NHPC									
Rangit	30444375	119901203	3.94	0	3573	0.00	30444375	119904776	3.94
Teesta	224596076	510768793	2.27	5953781	26218284	4.40	230549857	536987077	2.33
Supplementary Bill					8748719			8748719	
PTC									
Chukha	163848919	393499564	2.40	2593	6227	2.40	163851512	393505791	2.40
Kurichu	9368560	20329775	2.17	0	0	0.00	9368560	20329775	2.17
Tala	128588810	291408456	2.27	0	0	0.00	128588810	291408456	2.27
Supplementary Bill								0	
MPL	939819958	3937536773	4.19	47102180	265502607	5.64	986922138	4203039380	4.26
IEX	340373095	1969000365	5.78	27482660	213980964	7.79	367855755	2182981329	5.93
	0	0							
Renewable	338946638	2374230030	7.00	32769560	283559352	8.65	371716197.5	2657789383	7.15
	0	0							
Transmission and POSOCO Charge etc.	0	1227350665			125624805			1352975470	
Total	2187715426	10936713493	5.00	114504642	929474497	8.12	2302220068	11866187990	5.15

Projection for rest of year of the FY 2022-23

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	1.17	G*1/11	4.88	5736877
KBUNL	54.97	0.00	PPA surrendered		0
NHPC					
Rangit	32.53	2.09	J-G	3.94	8214207
Teesta	207.33	11.93	Past Trend	4.40	52535377
PTC					
Chukha	169.23	5.38	J-G	2.40	12916977
Kurichu	49.25	39.88	J-G	2.17	86542726
Tala	179.05	50.46	J-G	2.27	114355343
MPL	1005	89.72	G*1/11	5.64	505729151.1
IEX	135	24.00	Past Trend	7.79	186864849.9
Renewable	73.16	33.79	G*1/11	8.65	292409967.9
Transmission and POSOCO Charge etc.					122997770
Total		258.42		5.37	1388303246