



**DAMODAR VALLEY CORPORATION**  
दामोदर घाटी निगम

**Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 07'2023**

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	49.06	27.52
$UI_{out}$	Net Power exported (MU) in UI mode	MU	34.05	19.10
$E_p$	Total Power purchase (MU) against bill	MU	951.32	533.59
$E_g$	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	6116.82	3430.92
$E_x$	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.	4839259813	2714340829
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.	668483489	374952389
$CTU_{loss}$	Loss through inter state transmission system for import of power from different sources.	MU	29.56	16.58
$R-E_x$	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.	326527240	183149129

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.	8684526663	4871151005
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	1745.15	978.86
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	12233.64	6861.85
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>	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G\_Proj}$	11816.16
Tot <sub>ENR_Consumer</sub>	$Tot_{ENR} - UI_{out} - E_x - E_{x\_Proj} - (E_{p\_PSP} + E_{p\_PSP\_Proj}) / (1-TL)$	11797.07
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	7960444223
MVC <sub>consumer</sub>	$MVC - (R - E_x + R - UI_{out} + R - E_{x\_Proj})$	7777295094
E <sub>sc</sub>	$Tot_{ENR\_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11472.65
MVC <sub>unit_consumer</sub>	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.68
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	$(MVC_{unit\_consumer} - mvc_{unit\_consumer} - Adhoc\_V_{cost}) \times 100 \text{ Paisa/kWh}$	10.59
<b>MVCA rounded to nearest lower integer</b>		<b>10.00</b>

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

Sources	Upto previous Month			Current Month (July'23)			Cumulative of Current Month (Upto July'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
<b>NTPC</b>									
TSTPS	3944226	32122498	8.14	1214757	3943455	3.25	5158983	36065953	6.99
KBUNL	6851983	34458086		6246787	35888058	5.75	13098770	70346144	5.37
Supplementary Bill					-46734747				
<b>NHPC</b>									
Rangit	5919425	28510174	4.82	3789450	13732555	3.62	9708875	42242729	4.35
Teesta	66557290	153791750	2.31	31059158	61089788	1.97	97616448	214881538	2.20
Supplementary Bill		5992865			688273			6681138	
<b>PTC</b>									
Chukha	14640844	35161451	2.40	27150717	65205162	2.40	41791561	100366613	2.40
Kurichu	3055640	6966859	0.00	3022040	6890251	2.28	6077680	13857110	2.28
Tala	4341829	9855952	2.27	23964412	54399215	2.27	28306241	64255167	2.27
Supplementary Bill		2573865			-39553			2534312	
MPL	289768000	1361523600	4.70	98309750	384546168	3.91	388077750	1746069768	4.50
Exchange Purchase	131510728	781581441	5.94	116946355	440170500	3.76	248457083	1221751941	4.92
Renewable	77696337	546536231	7.03	35328500	240445765	6.81	113024837	786981996	6.96
Transmission and POSOCO Charge etc.	0	345136227			188089177			533225404	
<b>Total</b>	<b>604286302</b>	<b>3344210998</b>	<b>5.53</b>	<b>347031926</b>	<b>1488158563</b>	<b>4.29</b>	<b>951318227</b>	<b>4839259813</b>	<b>5.09</b>

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
<b>NTPC</b>					
TSTPS	19.42	10.32	G*8/4	6.99	72131906
KBUNL	54.97	26.20	G*8/4	5.75	150505986
<b>NHPC</b>					
Rangit	32.53	22.82	J-G	4.35	99293337
Teesta	207.33	109.71	J-G	2.20	241510701
<b>PTC</b>					
Chukha	169.23	127.44	J-G	2.40	306056155
Kurichu	49.25	43.17	J-G	2.28	98432887
Tala	179.05	150.74	J-G	2.27	342188333
MPL	1005	776.16	G*8/4	4.50	3492139536
Exchange Purchase	135	252.54	Past Trend	4.92	1241853023
Renewable	73.16	226.05	G*8/4	6.96	1573963992
Transmission and POSOCO Charge etc.					1066450808
<b>Total</b>		<b>1745.15</b>		<b>4.98</b>	<b>8684526663</b>