



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 01'2023

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	143.30	80.38
UI_{out}	Net Power exported (MU) in UI mode	MU	46.20	25.91
E_p	Total Power purchase (MU) against bill	MU	2187.72	1227.09
E_g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	15151.15	8498.28
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.	10946083042	6139657978
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 Ulin in Rs.	Rs.	1232185065	691132603
CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	64.48	36.17
$R-E_x$	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.	120541374	67611657

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.	2213528811	1241568310
FC _{Proj}	Projected fuel Cots 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	396.48	222.38
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	3030.23	1699.66
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 E _x _Proj during balance period of the year	Rs.	0.00	0.00

E) Computation of MVCA

Tot _{ENR}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11691.62
Tot _{ENR_Consumer}	$Tot_{ENR} - UI_{out} - E_x - E_{x_Proj} - (E_{P_PSP} + E_{P_PSP_Proj}) / (1-TL)$	11665.71
MVC	$PP_{cost} + FC + UI_{cost_in} + P_{Proj} + FC_{Proj}$	8072358892
MVC _{consumer}	$MVC - (R - E_x + R - UI_{out} + R_{E_x_Proj})$	8004747235
E _{sc}	$Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11409.06
MVC _{unit_consumer}	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.70
mvc _{consumer}	$pp_{cost} + fc - pp_{cost_ex}$	5070207000
mvc _{unit_consumer}	$mvc_{consumer} / (e_{sc} \times 10^6)$	0.57
MVCA	$(MVC_{unit_consumer} - mvc_{unit_consumer} - Adhoc_V_{cost}) \times 100$ Paisa/kWh	12.96
MVCA rounded to nearest lower integer		12.00

Actual details of Power Purchase upto Jan'2023

Sources	Upto previous Month (Dec'22)			Current Month (Jan'23)			Cumulative of Current Month (Upto Jan'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	10359657	42774670	4.13	1369338	6254628	4.57	11728994.96	49029298	4.18
KBUNL	0	43658571		0	0			43658571	
NHPC									
Rangit	29961725	116137404	3.88	482650	3763799	7.80	30444375	119901203	3.94
Teesta	218281791	481811721	2.21	6314285	28957072	4.59	224596076	510768793	2.27
Supplementary Bill					7388424			7388424	
PTC									
Chukha	163848919	393499564	2.40	0	0	0.00	163848919	393499564	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					1981125			1981125	
MPL	872656098	3613343953	4.14	67163860	324192820	4.83	939819958	3937536773	4.19
IEX	318525203	1825639592	5.73	21847892.5	143360773	6.56	340373095	1969000365	5.78
Renewable	294788910	1992183053	6.76	44157728	382046977	8.65	338946638	2374230030	7.00
Transmission and POSOCO Charge etc.	0	1120224296			107126369			1227350665	
Total	2046379673	9941011055	4.86	141335753	1005071987	7.11	2187715426	10946083042	5.00

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	2.35	G*2/10	4.57	10714739
KBUNL	54.97	0.00	PPA surrendered		0
NHPC					
Rangit	32.53	2.09	J-G	7.80	16264111
Teesta	207.33	16.57	Past Trend	4.59	75989393
PTC					
Chukha	169.23	5.38	J-G	2.40	12923204
Kurichu	49.25	39.88	J-G	2.17	86542726
Tala	179.05	50.46	J-G	2.27	114355343
MPL	1005	187.96	G*2/10	4.83	907282227.3
IEX	135	24.00	Past Trend	6.56	157482400.3
Renewable	73.16	67.79	G*2/10	8.65	586504534.4
Transmission and POSOCO Charge etc.					245470133
Total		396.48		5.58	2213528811