



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 04'2023

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	14.61	8.20
UI_{out}	Net Power exported (MU) in UI mode	MU	2.76	1.55
E_p	Total Power purchase (MU) against bill	MU	151.98	85.25
E_g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	1592.43	893.20
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.	803001918	450403776
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.	237283290	133092197
CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	5.68	3.19
$R-E_x$	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.	71054416	39854422

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.	10079780810	5653749057
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	2143.97	1202.55
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	17516.76	9825.15
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}	$E_p + E_g + U_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	12011.16
Tot _{ENR_Consumer}	$Tot_{ENR} - U_{out} - E_x - E_{x_Proj} - (E_{P_PSP} + E_{P_PSP_Proj}) / (1-TL)$	12009.61
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	6237245029
MVC _{consumer}	$MVC - (R - E_x + R - U_{out} + R - E_{x_Proj})$	6197390608
E _{sc}	$Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11679.34
MVC _{unit_consumer}	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.53
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	-4.14
MVCA rounded to nearest lower integer		-4.00

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

Sources	Upto previous Month (Not Applicable)			Current Month (Apr'23)			Cumulative of Current Month (Upto Apr'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	0	0	0.00	1332361	15260460	11.45	1332361	15260460	11.45
KBUNL	0	0		0	0		0	0	
NHPC									
Rangit	0	0	0.00	1173650	7102477	6.05	1173650	7102477	6.05
Teesta	0	0	0.00	13966042	41190008	2.95	13966042	41190008	2.95
Supplementary Bill									
PTC									
Chukha	0	0	0.00	17162	41216	2.40	17162	41216	2.40
Kurichu	0	0	0.00	0	0	0.00	0	0	0.00
Tala	0	0	0.00	15286	34699	2.27	15286	34699	2.27
Supplementary Bill								0	
MPL	0	0	0.00	99367550	388265619	3.91	99367550	388265619	3.91
Exchange Purchase	0	0	0.00	9845883	57914568	5.88	9845883	57914568	5.88
Renewable	0	0	0.00	26263765	171779285	6.54	26263765	171779285	6.54
Transmission and POSOCO Charge etc.	0	0			121413586			121413586	
Total	0	0	0.00	151981699	803001918	5.28	151981699	803001918	5.28

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	14.66	G*11	11.45	167865062
KBUNL	54.97	0.00	PPA		0
NHPC					
Rangit	32.53	31.36	J-G	6.05	189756533
Teesta	207.33	193.36	J-G	2.95	570287772
PTC					
Chukha	169.23	169.21	J-G	2.40	406378996
Kurichu	49.25	49.25	J-G	2.17	106872500
Tala	179.05	179.03	J-G	2.27	406406224
MPL	1005	1093.04	G*11	3.91	4270921809
Exchange Purchase	135	125.15	J-G	5.88	736170335
Renewable	73.16	288.90	G*11	6.54	1889572133
Transmission and POSOCO Charge etc.					1335549446
Total		2143.97		4.70	10079780810