



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 05'2023

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	27.90	15.65
UI_{out}	Net Power exported (MU) in UI mode	MU	6.66	3.73
E_p	Total Power purchase (MU) against bill	MU	362.03	203.07
E_g	Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation)	MU	3161.59	1773.34
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.	2184384810	1225221440
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.	419390287	235236012
CTU_{loss}	Loss through inter state transmission system for import of power from different sources.	MU	11.55	6.48
$R-E_x$	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.	153155709	85905037

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.	11038688541	6191600403
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	1925.81	1080.19
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	15807.95	8866.68
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 Ex_Proj during balance period of the year	Rs.	0.00	0.00

E) Computation of MVCA

Tot _{ENR}	$E_p + E_g + UI_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$	11932.44
Tot _{ENR_Consumer}	$Tot_{ENR} - UI_{out} - E_x - E_{x_Proj} - (E_{p_PSP} + E_{p_PSP_Proj}) / (1-TL)$	11928.70
MVC	$PP_{cost} + FC + UI_{cost_{in}} + P_{Proj} + FC_{Proj}$	7652057854
MVC _{consumer}	$MVC - (R - E_x + R - UI_{out} + R - E_{x_Proj})$	7566152817
E _{sc}	$Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$	11600.66
MVC _{unit_consumer}	$MVC_{consumer} / (E_{sc} \times 10^6)$	0.65
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	8.02
MVCA rounded to nearest lower integer		8.00

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

Sources	Upto previous Month			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	1332361	15260460	11.45	1306185	8839362	6.77	2638546	24099822	9.13
KBUNL	0	0		0	0		0	0	
NHPC									
Rangit	1173650	7102477	6.05	1824925	9606288	5.26	2998575	16708765	5.57
Teesta	13966042	41190008	2.95	24065510	55000270	2.29	38031552	96190278	2.53
Supplementary Bill					5304592			5304592	
PTC									
Chukha	17162	41216	2.40	0	0	0.00	17162	41216	2.40
Kurichu	0	0	0.00	0	0	0.00	0	0	0.00
Tala	15286	34699	2.27	0	0	0.00	15286	34699	2.27
Supplementary Bill								0	
MPL	99367550	388265619	3.91	100561650	591972875	5.89	199929200	980238494	4.90
Exchange Purchase	9845883	57914568	5.88	58550408	419003455	7.16	68396290	476918023	6.97
	0	0							
Renewable	26263765	171779285	6.54	23744441	177057211	7.46	50008206	348836496	6.98
	0	0							
Transmission and POSOCO Charge etc.	0	121413586			114598839			236012425	
Total	151981699	803001918	5.28	210053119	1381382892	6.58	362034817	2184384810	6.03

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	13.19	G*10/2	9.13	120499111
KBUNL	54.97	0.00	PPA surrendered		0
NHPC					
Rangit	32.53	29.53	J-G	5.57	164556044
Teesta	207.33	169.30	J-G	2.53	428193537
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	999.65	G*10/2	5.89	5884582409
Exchange Purchase	135	66.60	J-G	7.16	476635190
Renewable	73.16	250.04	G*10/2	7.46	1864502405
Transmission and POSOCO Charge etc.					1180062125
Total		1925.81		5.73	11038688541