



DAMODAR VALLEY CORPORATION
दामोदर घाटी निगम

Monthly Variable Cost Adjustment (MVCA) on account of Power Purchase Cost only for the month of 12'2022

| 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 | 126.71 | 71.07 |
| UI_{out} | Net Power exported (MU) in UI mode | MU | 44.90 | 25.19 |
| E_p | Total Power purchase (MU) against bill | MU | 2042.07 | 1145.40 |
| E_g | Total sent out from own generation (MU) on normative basis (Excluding normative auxiliary consumption and transformation loss from gross generation) | MU | 13515.25 | 7580.70 |
| E_x | Energy sold (MU) to person other than licensee and consumers including swapout. | MU | 0 | 0.00 |
| E_{P_PSP} | 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. | 9941011055 | 5575913101 |
| 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. | 994852134 | 558012562 |
| CTU_{loss} | Loss through inter state transmission system for import of power from different sources. | MU | 60.62 | 34.00 |
| $R-E_x$ | 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. | 67188424 | 37685987 |

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. | 2684888167 | 1505953773 |
| 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 | 527.39 | 295.82 |
| 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 | 4505.08 | 2526.90 |
| 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} | $E_p + E_g + U_{in} - CTU_{loss} + E_{proj} + E_{G_Proj}$ | 11585.88 |
| Tot _{ENR_Consumer} | $Tot_{ENR} - U_{out} - E_x - E_{x_Proj} - (E_{P_PPSP} + E_{P_PSP_Proj}) / (1-TL)$ | 11560.70 |
| MVC | $PP_{cost} + FC + U_{cost_in} + P_{Proj} + FC_{Proj}$ | 7639879436 |
| MVC _{consumer} | $MVC - (R - E_x + R - U_{out} + R - E_{x_Proj})$ | 7602193449 |
| E _{sc} | $Tot_{ENR_Consumer} \times (1-TL \times 0.01) \times (1-DL \times 0.01)$ | 11306.36 |
| MVC _{unit_consumer} | $MVC_{consumer} / (E_{sc} \times 10^6)$ | 0.67 |
| mvc _{consumer} | $pp_{cost} + fc - pp_{cost_ex}$ | 5070207000 |
| mvc _{unit_consumer} | $mvc_{consumer} / (e_{sc} \times 10^6)$ | 0.57 |
| MVCA | $(MVC_{unit_consumer} - mvc_{unit_consumer} - Adhoc_V_{cost}) \times 100 \text{ Paisa/kWh}$ | 10.04 |
| MVCA rounded to nearest lower integer | | 10.00 |

Actual details of Power Purchase upto Dec'2022

| Sources | Upto previous Month (Nov'22) | | | Current Month (Dec'22) | | | Cumulative of Current Month (Upto Dec'22) | | |
|-------------------------------------|------------------------------|------------|---------|------------------------|-----------|---------|---|------------|---------|
| | 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 | 8998881 | 36377614 | 4.04 | 1360776 | 6397056 | 4.70 | 10359657 | 42774670 | 4.13 |
| KBUNL | 0 | 43658571 | | 0 | 0 | | | 43658571 | |
| NHPC | | | | | | | | | |
| Rangit | 28426425 | 106918206 | 3.76 | 1535300 | 9219198 | 6.00 | 29961725 | 116137404 | 3.88 |
| Teesta | 209928034 | 445890133 | 2.12 | 8353757 | 35921588 | 4.30 | 218281791 | 481811721 | 2.21 |
| Supplementary Bill | | | | | 82874157 | | | | |
| PTC | | | | | | | | | |
| Chukha | 163848919 | 393499564 | 2.40 | 0 | 0 | 0.00 | 163848919 | 393499564 | 2.40 |
| Kurichu | 9368560 | 20329775 | 2.17 | | | 0.00 | 9368560 | 20329775 | 2.17 |
| Tala | 128588810 | 291408456 | 2.27 | | | 0.00 | 128588810 | 291408456 | 2.27 |
| MPL | 776555168 | 3215926016 | 4.14 | 96100930 | 397417937 | 4.14 | 872656098 | 3613343953 | 4.14 |
| IEX | 314213515 | 1795445434 | 5.71 | 4311687.5 | 30194158 | 7.00 | 314213515 | 1825639592 | 5.81 |
| Renewable | 269296049 | 1821618318 | 6.76 | 25492862 | 170564735 | 6.69 | 294788910 | 1992183053 | 6.76 |
| Transmission and POSOCO Charge etc. | 0 | 980257131 | | | 139967165 | | | 1120224296 | |
| Total | 1909224361 | 9151329218 | 4.79 | 137155312 | 872555995 | 6.36 | 2042067985 | 9941011055 | 4.87 |



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 | 3.45 | G*3/9 | 4.70 | 16233705 |
| KBUNL | 54.97 | 0.00 | PPA surrendered | | 0 |
| NHPC | | | | | |
| Rangit | 32.53 | 2.57 | J-G | 6.00 | 15422025 |
| Teesta | 207.33 | 21.50 | Past Trend | 4.30 | 92451114 |
| 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 | 290.89 | G*3/9 | 4.14 | 1204447984 |
| IEX | 135 | 15.00 | Past Trend | 7.00 | 105042948.7 |
| Renewable | 73.16 | 98.26 | G*3/9 | 6.76 | 664061017.7 |
| Transmission and POSOCO Charge etc. | | | | | 373408098.7 |
| Total | | 527.39 | | 5.09 | 2684888167 |