

## DAMODAR VALLEY CORPORATION दामोदर घाटी निगम



# Draft Regulation for Terms and Conditions of tariff for 2019-2024

Date: 01/02/2019

## 1. "Start Date' and 'Declaration of COD of Transmission System' [Regulation -3(66) and 5 (2)]

## **Definition of Start Date [Regulation- 3(66)]:**

In draft regulation Hon'ble Commission has defined 'Start Date'.

## **Justification by DVC:**

There is a considerable time gap between Investment Approval and actual Cap-Ex disbursement due to delay beyond the control of Project developer.

## **DVC proposes**

that 'Start Date' to be considered from the date of Cap-Ex disbursement in place of Investment approval.

**Documents required for declaration of COD of Transmission System [Regulation- 5(2)]:** 

In draft regulation Hon'ble Commission has specified documents to be submitted under Sl. No. (a) to (f).

## **DVC proposes**

that submission of documents as mandated to be required under Clause-5 (Date of Commercial operation) may please be exempted for any Transmission system COD of which is not dependent on the COD of any interconnected Generating Station or any interconnected Transmission System.

## 2. Variable Charges or Energy Charges [Regulation16(2)]

#### **DVC proposes**

that the supplementary energy charges on account of implementation of emission standard may not be considered for the purpose **O**f ranking merit order dispatch; otherwise the units having FGD installed will suffer.

## 3. Capital Cost of Existing Project [Regulation 18(3)]

#### DVC proposes –

- (a) For inclusion of Capital expenditure on account of gypsum disposal/handling/ transportation facility or acquisition of land towards disposal of gypsum, in order to meet revised emission control norms and
- (b) For inclusion of Capital expenditure incurred towards augmentation of railway infrastructure for transportation of limestone up to receiving end of generating station, in order to meet revised emission control norms and
- (c) For inclusion of Capital expenditure for emission control system.

## 4. Additional capitalization beyond the original Scope (Regulation 25)

In draft regulation, there is no provision for capital expenditure required for replacement of asset for efficient operation of Transmission System on the ground of up-gradation of capacity for the technical reason, obsolesce of technology etc. This provision was available under Regulation 14 (3) (vii) & (ix) of 2014-19.

#### **DVC proposes**-

- (i) For inclusion of the specific clauses available under sl no. 14 (3) (vii) & (ix) of 2014-19 regulation in 2019-24 regulation also
- (ii) To consider expenditure due to the development/extension/augmentation/raising the height of existing Ash pond owing to technical requirement/ environmental compulsion through acquisition of adjacent land for the existing projects. The total additional capital cost, in this respect, may include the cost of R&R packages offered to the PAFs/ evictees including annuity etc. over and above the land cost
- (iii) Expenditure incurred in respect of Captive coal transportation mode (Closed conveyor System) as per directive of MOP.

## 5. Return on Equity [Regulation-17 (6) and 30(2)]

For the Generating Station which has been set-up much earlier than 2019-24 regulation period, the deployment of Capital in the form of equity and Loan was envisaged without considering the present provision as proposed by CERC in this draft regulation. Moreover, any under recovery of ROE due to lower Plant availability factor will not get compensated in the course of time on achieving higher availability if the same provision of reduction in equity is done in such a fashion. This may lead to tendency of decommissioning of plant/Transmission asset after useful life, although it can still run, which is a national loss.

#### DVC proposes-

that Hon'ble Commission may please modify Regulation 17 (6) to that extent and to continue treatment of Equity after useful life same as per the existing Regulation, 2014

Draft Regulation - 30 (2) proposes to allow weighted average rate of interest instead of 15.5% in ROE in respect of Add. Cap after cut off date within or beyond the original scope.

#### **DVC proposes**-

For consideration of Additional Capitalization beyond the cut of date within or beyond the Original Scope, allow ROE of 15.5% on equity component of add cap.

## 6. Operation & Maintenance Expense (Regulation: 35)

Due to implementation of emission control system to meet revised emission norms there will be an increase in O&M expenses.

**DVC** proposes that O&M expenses due to the requirement of revised emission norms, may be provided over and above the normative O & M.

**DVC also proposes-**

- (a) 'Compensation Allowance' for old stations (age more than 10 years) may please be continued as is existing in 2014-19 regulation to meet expenses on new asset of capital nature not admissible under regulation for additional capital expenditure and
- (b) to allow ash evacuation & transportation expenses additionally in case of thermal power stations.
- (c) For consideration of Security Expenses to be allowed separately, all type of security namely CISF/DGR etc. to be included.

Further to above, O & M expenses for communication system on account of following may also kindly be considered:-

- (a) EMS/SCADA control centers & PMU Control Centre.
- (b) OPGW Communication equipment like SDH & PDH.
- (c) Power Line Carrier Communication equipment for Sub Stations and Power Stations.
- (d) Telephone Exchange for Inter-communication.
- (e) Auxiliary Equipments like UPS System, DC Power Supply System

## 7. Computation of Capacity Charge for Thermal Generating Station [Regulation 51]

#### (i) Relaxation in NQPAF due to 'Shortage of Coal' :

Annual PAF loss due to shortage of coal during last five years faced by DVC Plants are furnished below:

Year	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19 (till Dec'18)
PAF loss due to shortage of coal (in %)	9.7	6.5	NIL	8.7	20.2

## **DVC proposes:** For consideration of

- (a) 'loss of PAF due to shortage of coal' in recovery of fixed charge and
- (b) Different 'Normative Availability' (i.e. NQPAF) be fixed from Quarter to Quarter considering the seasonal variation of generation due to uncontrolled factors.

## (ii) Formula for capacity charge does not capture the following provisions of the Regulation :

- (a) Permission for compensation of shortfall in availability during off peak period with increased availability during peak period in a quarter
- (c) Exclusion of annual scheduled maintenance period during calculation of QPAF.
- (d) Determination of PAFQ for the IPP whose PPA has been tied up in MW instead of percentage of IC.

#### **DVC** therefore proposes

For inclusion of those factors embedded in the formula meant for calculation for capacity charges.

In addition DVC proposes that any improved Plant availability over and above the normative availability in a quarter may be allowed to carry over to the next quarter  $\frac{7}{7}$ 

## 8. Norms of Operation for Thermal Generating Station [Regulation 59]

#### Relaxation in 'Heat Rate' [Station Heat Rate for 210 /250MW & 500 MW Units]:

As per draft regulation 2019-24, the relaxation of Heat Rate has been increased from 4.5 % to 5.0 % over designed Heat Rate for 500 MW Units. But, in case of some DVC Units, allowed Heat rate have been decreased as tabulated hereunder:

Station	Heat rate Approved in 2014-19	Heat rate as per 2019-24 Reg (Draft)
MTPS U-1,2,3& MTPS-4, MTPS-5,6 & CTPS-7,8	2450	2410
DSTPS U-1&2	2441	2374

As per Explanatory memorandum (Page-211, Table-55) while fixing up 'normative Heat Rate' of 500 MW Units, commission considered 7 nos. Units of NTPC which are having design heat rate in the range of 2260 – 2300 Kcal/Kwh. Whereas, in case of both DSTPS and KTPS units (500 MW) of DVC, designed heat rate is 2336 Kcal/Kwh which is much more than heat rate of above 7 nos. Units of NTPC considered as reference.

Allowed heat Rate of DSTPS and KTPS is 2374 Kcal/Kwh (only **1.6** % higher than designed Heat rate), which is practically not possible to maintain.

#### **DVC proposes that:**

- (a) Either allow 5 % margin over the designed heat rate for both DSTPS and KTPS or at least keep the allowed heat rate of DSTPS what it was in 2014-19 regulation.
- (b) Keep normative station heat rate either 2450 kcal/kwh (same as 2014-19 period) for both 210 MW & 250 MW units of DVC or at least keep 2450 Kcal/Kwh for 210 MW Units.

## 9. Norms of Operation for Thermal Generating Station [Regulation 59]

## □ Auxiliary Power Consumption(APC) :

Draft Regulation 2019-24 does not specify about relaxation of APC norms after implementation of emission control measures (FGD, Low NOx burners, ESP augmentation, etc.) at Station.

#### Justification for relaxation for APC norms of MTPS U#1-4

Higher Auxiliary Power Consumption than Normative APC was observed even with best operating condition against CERC Normative PLF of 85 % for MTPS U#1-4. MTPS U#1-3 was designed and commissioned much before Regulatory Regime,2003. MTPS U#4 design stage was completed before Regulatory Regime, having lower energy efficient auxiliaries. As per Draft Regulation 2019-24, Normative APC for MTPS U#1-4 having induced draft cooling towers and tube coal mills is 9.8 %. But DVC submitted detailed justification through Consultation papers in July, 2018 that even with best operating condition APC can not be achieved below 10.5 %.

Justification for relaxation for APC norms for Stations having Single Unit

Comparatively higher Auxiliary Power Consumption is observed in stations having Single Unit like Bokaro TPS-A of DVC.

#### **DVC proposes:**

- (a) Additional relaxation in APC norms over and above specified norms for the respective stations after implementation of emission control measures.
- (b) Relaxation of APC norms of MTPS U#1 to 4 as 10.5% .
- (c) Additional relaxation in APC norms for BTPS-A (Station having Single Unit).

## 10. 'Computation of Variable Cost ' [Regulation - 46 to 49]

## □ Computation of Gross Calorific Value [Regulation- 3(31) & Regulation-47]:

Draft regulation, states that GCV is to be measured on "As received basis at Generating end" and tariff will be based on this GCV .

#### **DVC proposes :**

- (a) Consideration of the practical difficulty in measuring GCV from wagon top, allow collection of Rail borne coal sample after primary crusher at TPS end. Also, to consider GCV testing method to be adopted as on "Air dry basis".
- (b) Loss of GCV to be identified between "As Billed" and "As received " at the Generating station and the losses to be booked to Coal supplier or Railways and need to be taken care of in the light of provision of existing FSA. The quantum of GCV loss due to transit, handling etc required to be compensated adequately and to be increased from proposed 85 Kcal to more than 300 Kcal.

## 10. 'Computation of Variable Cost ' [Regulation - 46 to 49 ] contd.

#### **Landed cost of Primary Fuel [Regulation- 47]:**

In draft regulation, Landed cost has been defined and cost components up to the delivery point of the Generating stations.

#### **Justification by DVC:**

By the definition 'Landed cost', cost incurred for deployment of Locos dozers and other heavy equipments are not covered. Also unloading cost of coal rakes, sampling cost at loading and unloading ends, Fuel lab cost etc need to be included in landed cost of coal. Provision is to be kept for inclusion of Performance Incentives, Supplementary Bills, Interest bill etc which are parts of coal cost.

#### **DVC proposes : -**

(i) Consideration of the unloading cost of coal rakes, sampling cost at loading & unloading ends and Fuel Lab set-up cost. (ii) Provision for inclusion of performance incentives, supplementary bill, interest bill etc. Proper modification and insertion of the heads in Form 15 is necessary.

## 11. Computation of Capacity & Energy Charge for Pumped Storage Hydro Station [Regulation 55(3)]

#### **DVC proposes -**

that the incentive in tariff for operation of PSP in generation mode during peak period, and relaxation in tariff for the energy utilised during pumping mode of operation in offpeak period, may be considered.

## 12. 'Mining' [Regulation -3 and Regulation 36 to 45]

#### **DVC** proposes the following:

- (i) Definition of 'Mine Developer and Operator(MDO)' may be included
- (ii) 'O&M Expenses' should also include payment to the Mine Developer and Operator as per Coal Mine Agreement executed between Generating company and the MDO
- (iii) Instead of determining the O & M expenses of the mine based on the original Project cost for first year and thereafter at escalated at rate of WPI, it should be taken as the project cost in the year when target capacity is achieved and may be considered at actual on year to year basis.
- (iv) Instead of considering expenditure incurred after the date of commercial operation till date of achieving target capacity as Capital work in Progress (CWIP), Expenditure till date of achieving target capacity or 5 years from the date of COD, whichever is later, to be treated as CWIP.
- (vi) In "Depreciation Schedule" Land related to Integrated Mine should be allowed to be depreciated/amortised over life of mine as per approved Mine Plan/as per Industry practice.
- (vii) Instead of determining the landed cost of primary fuel on Government notified price, it may be considered based on Coal India Limited notified price or any other Coal Price Regulatory Authority as declared by the GOI.
- (viii) Provision for information for agreement signed with Mine Developer and Operator(MDO) in Appendix-V (J) and information for payment to MDO in Appendix-V (k) is to be provided .

## 13. Special Provision relating to Damodar Valley Corporation (Regulation-82)

#### **Pension Contribution separately in addition to existing normative O&M**

DVC requires to maintain two types of Provident Fund viz., CPF & GPF. Whereas liability for contribution ceases with the superannuation or otherwise of the employee concerned covered under CPF, liability for pension for employees covered under GPF continues after the superannuation till the death of the employees and even thereafter for payment of family pension.

Normative O&M Expenses considered by the Central Commission is based on the liability for CPF contribution only..

DVC therefore humbly submits that 'contribution towards Pension benefit' may be allowed to DVC separately over and above normative O&M that is mainly framed considering the CPF Scheme in general and not the Pension Scheme which is in existence in few organisations like DVC.

## 13. Discrepancies observed in the Draft Regulation , 2019

## • Chapter-8, Page-76,

O&M expense under regulation 35 (1)(1): Clause (b) & (d) as referred under the said regulation is missing.

## • Chapter-12, Page-123

The Definition of 'New Thermal Generating Station' is not found matching with the caption head under regulation-59(C)(b) i.e. 'New Thermal generating Station achieving COD on or after 01.04.2009'

#### • Chapter-8, Page-78:

Though 'Compensatory allowance ' has been taken away with but the reference of compensatory allowance is there in 3<sup>rd</sup> proviso of regulation 35 (1)(6).

