

## MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

### NOTIFICATION (DRAFT)

#### **ELECTRICITY ACT, 2003.**

No. MERC/Tech/Regulation/\_\_\_\_.- In exercise of the powers conferred under Section 61 and Section 86(3) read with Section 181 of the Electricity Act, 2003 (36 of 2003) and in pursuance to Clause 5.3 of the Tariff Policy, 2016 and all other powers enabling it in this behalf, and after previous publication, the Maharashtra Electricity Regulatory Commission makes the following Regulations to amend the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2019 (**‘the Principal Regulations’**), namely:

#### **1 Preamble**

The State Electricity Regulatory Commission has been vested with the responsibility to determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State under Section 86 of the Electricity Act, 2003. The Maharashtra Electricity Regulatory Commission notified the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2019 on August 1, 2019. There have been certain sectoral developments, including the First and Second Amendments notified by the Central Electricity Regulatory Commission to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019. These changes have been appropriately incorporated in the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (Second Amendment) Regulations, 2022.

#### **2 Short title and commencement**

- 2.1. These Regulations may be called the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) (Second Amendment) Regulations, 2022.
- 2.2. These Regulations shall come into force from the date of their publication in the Official Gazette.

#### **3 Amendment to Regulation 1 of the Principal Regulations:-**

##### **3.1 Regulation 1.3 (A) is introduced after Regulation 1.3 of the Principal Regulations:—**

“1.3 (A) These Regulations shall be applicable in all cases where a Generating Company has the arrangement for supply of coal or lignite from the integrated mine(s) allocated to it, for one or more of its specified end-use generating stations, whose tariff is required to be determined by the Commission under Section 62 of the Act read with Section 86 thereof.”

#### **4 Amendment to Regulation 2 of the Principal Regulations:-**

##### **4.1 Clause (5)(a) is introduced after Clause (5) of the Principal Regulations:—**

“(5) (a) **“Annual Target Quantity”** or **“ATQ”** in respect of an integrated mine(s) means the quantity of coal or lignite to be extracted during a year from such integrated mine(s) as specified in the Mining Plan:

Provided that in case the integrated mine(s) of coal or lignite is ready for supply of coal or lignite as per the Mining Plan but is prevented due to reasons not attributable to the Generating Company, the Commission may relax the Annual Target Quantity up to a maximum of 15% of the quantity of coal or lignite to be extracted during a year as specified in the Mining Plan.”

**4.2 Proviso to Clause (7) of the Principal Regulations is amended as under:—**

“Provided that it shall not include energy consumed for supply of power by the generating Station to its housing colony and other facilities, for construction works at the generating Station **and integrated mine;**”

**4.3 Clause (7)(a) is introduced after Clause (7) of the Principal Regulations:—**

“(7)(a) **“Auxiliary energy consumption for emission control system”** or **“AUXe”** in relation to a period in case of coal or lignite based thermal generating station means the quantum of energy consumed by auxiliary equipment of the emission control system of the coal or lignite based thermal generating station in addition to the auxiliary energy consumption under Clause (7) of this Regulation;”

**4.4 Clause (8)(a) of the Principal Regulations shall be substituted as under:**

“(a) **“Availability”** in relation to a thermal Generating Station/Unit for any period means the average of the daily average declared capacities as certified by MSLDC for all the days during that period, expressed as a percentage of the installed capacity of the Generating Station/Unit minus the normative **Auxiliary Energy Consumption and normative Auxiliary Energy Consumption for Emission Control System** in Megawatts (MW), as specified in these Regulations, and shall be computed in accordance with the following formula:

$$\text{Availability} = 100 \times \frac{\sum_{i=1}^N DC_i}{\{ N \times IC \times (1 - AUX_n - AUX_{en}) \}} \%$$

where - N = number of time blocks in the given period;

DC = Average Declared Capacity in MW for the i<sup>th</sup> time block in such period;

IC = Installed Capacity of the Generating Station/Unit in MW;

AUX = Normative Auxiliary Consumption in MW, expressed as a percentage of gross generation;

**AUX<sub>en</sub> = Normative Auxiliary Consumption for Emission Control System in MW, expressed as a percentage of gross generation:**

Provided that Availability of a thermal Generating Station/Unit for any period shall not exceed hundred per cent;”

**4.5 Clause (11)(a) is introduced after Clause (11) of the Principal Regulations:—**

"(11)(a) **“Base Rate of Delayed Payment Charge”** shall mean the one-year Marginal Cost of Funds-based Lending Rate (‘MCLR’) as declared by the State Bank of India, as applicable on the 1<sup>st</sup> April of the financial year in which the period lies, plus five percent and in the absence of MCLR, any other arrangement that substitutes it, which the Central Government may, by notification, in the Official Gazette, specify:

Provided that if the period of default lies in two or more financial years, the Base Rate of Delayed Payment Charge shall be calculated separately for the periods falling in different years;”

**4.6 Clause (14)(a) is introduced after Clause (14) of the Principal Regulations:—**

“(14)(a) **“Capital Cost”** means the capital cost as determined in Regulation 24 of these Regulations in respect of generating station or transmission system or distribution system, as the case may be, and Regulation 55 (D) in respect of integrated mine(s).”

**4.7 Clause (21) of the Principal Regulations shall be substituted as under:**

“(21) **“Contracted Capacity”** means the capacity in MW contracted by a long-term Transmission System User as part of its long-term **and medium-term** power procurement plan through a power purchase agreement or arrangement, and shall be equivalent to the deemed Transmission Capacity Right of a Transmission System User as specified under the Regulations of the Commission governing Transmission Open Access;”

**4.8 Clause (23) of the Principal Regulations is amended as under:—**

“(23) **“Cut-off Date”** means the last day of the calendar month after thirty-six months from the date of commercial operation of the project, **except in case of integrated mine(s);”**

**4.9 Clause (24)(a) is introduced after Clause (24) of the Principal Regulations:—**

“(24)(a) **“Date of Commencement of Production”** in respect of integrated mine(s) means the date of touching of coal or lignite, as the case may be, as declared by the Generating Company;”

**4.10 Clause (25) d. is introduced after Clause (25) c. of the Principal Regulations:—**

“(25) d. in respect of an emission control system, the date of putting the emission control system into use after meeting all applicable technical and environmental standards, certified through the Management Certificate duly signed by an authorised person, not below the level of Director of the Generating Company or Generating Business.”

**4.11 Clause (25) e. is introduced after Clause (25) d. of the Principal Regulations:—**

- “e. The date of commercial operation in case of integrated mine(s), shall mean the earliest of —
- i. the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
  - ii. the first date of the year succeeding the year in which the value of production estimated in accordance with Regulation 24.9 (A) of these Regulations, exceeds total expenditure in that year; or
  - iii. the date of two years from the date of commencement of production:

Provided that on earliest occurrence of any of the events under sub-clauses (i) to (iii) of Clause (e) of this Regulation, the Generating Company shall declare the date of commercial operation of the integrated mine(s) under the relevant sub-clause with one week prior intimation to the beneficiaries of the end-use or associated generating station(s):

Provided further that in case the integrated mine(s) is ready for commercial operation but is prevented from declaration of the date of commercial operation for reasons not attributable to the Generating Company or its suppliers or contractors or the Mine Developer and Operator, the Commission, on an application made by the Generating Company, may approve such other date as the date of commercial operation as may be considered appropriate after considering the relevant reasons that prevented the declaration of the date of commercial operation under any of the sub-clauses of Clause (e) of this Regulation:

Provided also that the Generating Company seeking the approval of the date of commercial operation under the preceding proviso shall give prior notice of one month to the beneficiaries of the end-use or associated generating station(s) of the integrated mine(s) regarding the date of commercial operation.”

**4.12 Clause (33)(a), (b), and (c) are introduced after Clause (33) of the Principal Regulations:—**

“(33)(a) "**due date**" means the date by which the bill for the charges for power supplied by the Generating Company or for the transmission service provided by a Transmission Licensee

are to be paid, in accordance with the Agreement, as the case may be, and if not specified in the Agreement, forty-five days from the date of presentation of the bill by such Generating Company or Transmission Licensee/**STU**;

“(33)(b) **“Emission Control System”** means a set of equipment or devices required to be installed in coal or lignite based thermal generating station or unit thereof to meet the revised emission standards;”

“(33)(c) **“Escrow account”** means the account for deposit and withdrawal of mine closure expenses of integrated mine(s), maintained in accordance with the Guidelines issued by the Coal Controller, Ministry of Coal, Government of India;”

#### **4.13 Clause (50)(a) is introduced after Clause (50) of the Principal Regulations:—**

“(50)(a) **“Investment Approval”** means approval by the Board of the Generating Company or the Transmission Licensee or the Distribution Licensee for the project including funding of the project and the timeline for the implementation of the project:

Provided that the date of Investment Approval shall be reckoned from the date of the resolution of the Board of the Generating Company or the Transmission Licensee or the Distribution Licensee:

Provided further that in respect of the integrated mine(s), funding and timeline for implementation shall be indicated separately and distinctly in the Investment Approval:

Provided also that where Investment Approval includes both the generating station and the integrated mine(s), the funding and timeline for implementation of the integrated mine(s) shall be worked out and indicated separately and distinctly in the Investment Approval.”

#### **4.14 Clause (51)(a) and (b) are introduced after Clause (51) of the Principal Regulations:—**

“(51)(a) **“Life-cycle Cost Analysis”** means the process of assessing the total cost of ownership of an asset over its entire Useful Life, after taking into account all costs of acquiring, owning, maintaining and disposing of such asset;”

“(51)(b) **“Loading Point”** in respect of integrated mine(s) means the location of railway siding or silo or the coal handling plant or such other arrangements like conveyor belt, whichever is nearest to the mine, for despatch of coal or lignite, as the case may be;”

#### **4.15 Clause (54)(a) and (b) are introduced after Clause (54) of the Principal Regulations:—**

“(54 a) **“Mine Infrastructure”** shall include assets of the integrated mine(s) such as tangible assets used for mining operations, being civil works, workshops, immovable winning

equipment, foundations, embankments, pavements, electrical systems, communication systems, relief centres, site administrative offices, fixed installations, handling arrangements, crushing and conveying systems, railway sidings, pits, shafts, inclines, underground transport systems, hauling systems (except movable equipment unless the same is embedded in land for permanent beneficial enjoyment thereof), land demarcated for afforestation and land for rehabilitation and resettlement of persons affected by mining operations under the relevant law;”

“(54 b) **“Mining Plan”** or **“Mine Plan”** in respect of integrated mine(s) means a plan prepared in accordance with the provisions of the Mineral Concession Rules, 1960, as amended from time to time and approved under clause (b) of sub-section (2) of Section 5 of the Mines and Minerals (Development and Rehabilitation) Act, 1957 by the Central Government or by the State Government, as the case may be;”

#### **4.16 Proviso to Clause (63) is introduced in the Principal Regulations:—**

“Provided that for integrated mine(s), the Operation and Maintenance Expenses shall not include the mining charge paid to the Mine Developer and Operator, if any, engaged by the Generating Company, and the mine closure expenses.”

#### **4.17 Clause (64)(a) and (b) are introduced after Clause (64) of the Principal Regulations:—**

“(64)(a) **“outstanding dues”** means the dues of a Generating Company or a Transmission Licensee, not stayed by a competent court or Tribunal or Dispute Resolution Agency as designated in the Agreement, which remains unpaid by the beneficiary beyond the due date and includes the amount of instalment not paid after the re-determined due date under Regulation 37.6.

“(64)(b) **“Peak Rated Capacity”** in respect of integrated mine(s) means the peak rated capacity of the mine, as specified in the Mining Plan;”

#### **4.18 Clause (68) of the Principal Regulations shall be substituted as under:**

“(68) **“Plant Load Factor”** or **“PLF”**, in relation to a thermal Generating Station or Unit for a given period, means the total sent-out energy corresponding to scheduled generation during such period, expressed as a percentage of sent-out energy corresponding to installed capacity in that period, and shall be computed in accordance with the following formula:

$$\text{Plant Load Factor (\%)} = 100 \times \sum_{i=1}^N \text{SG}_i / \{ N \times \text{IC} \times (1 - \text{AUX}_n - \text{AUX}_{en}) \} \%$$

Where,

$N$  = number of time blocks in the given period;

$SG_i$  = Scheduled Generation in MW for the  $i^{th}$  time block in such period;

$IC$  = Installed Capacity of the Generating Station in MW;

$AUX_n$  = Normative Auxiliary Consumption in MW, expressed as a percentage of gross generation;

**$AUX_{en}$  = Normative Auxiliary Consumption for Emission Control System in MW, expressed as a percentage of gross generation;**

**4.19 Clause (83)(a) is introduced after Clause (83) of the Principal Regulations:—**

“(83)(a) **“tonne”** means a metric tonne of coal or lignite in respect of integrated mine(s);”

**4.20 Clause (90) of the Principal Regulations shall be substituted as under:**

“(90) **“Year”** means a financial year (‘FY’) beginning from 1st April and ending on 31st March:

Provided that the first year in case of new project or integrated mine(s) shall commence from the date of commercial operation and end on the immediately following 31st March;”

**5 Amendment to Regulation 24 of the Principal Regulations**

**5.1 Clause (f) is introduced after Clause (e) of Regulation 24.1 of the Principal Regulations as under:—**

5.1.1 “(f) Capital expenditure on account of biomass handling equipment and facilities, for co-firing:...”

**5.2 Third proviso is introduced after the second proviso to Regulation 24.7 of the Principal Regulations as under:—**

“Provided also that the Commission shall allow capitalisation against non-DPR schemes for any Year in excess of 20% or such other limit as may have been stipulated by the Commission through Order, in case the limit of Non-DPR Schemes has been exceeded on account of increase in the limit for consideration as DPR Scheme from Rs. 10 Crore to Rs. 25 Crore, as specified in Regulation 4.1 of the Maharashtra (Approval of Capital Investment) Regulations, 2022, as amended from time to time.”

**5.3 Regulation 24.9(A) is introduced after Regulation 24.9 of the Principal Regulations as under:—**

“24.9(A) **Supply of Coal or Lignite prior to the Date of Commercial Operation of Integrated Mine:**

The input price for supply of coal or lignite from the integrated mine(s) prior to their date of commercial operation shall be:

- (a) in case of coal, the estimated price available in the investment approval, or the notified price of Coal India Limited for the corresponding grade of coal supplied to the power sector, whichever is lower; and
- (b) in case of lignite, the estimated price available in the investment approval or the last available pooled lignite price as determined by the Commission for transfer price of lignite, whichever is lower:

Provided that any revenue earned from supply of coal or lignite prior to the date of commercial operation of the integrated mine(s) shall be applied in adjusting the capital cost of the said integrated mine(s).”

**5.4 Sub-clause (viii) is introduced after Sub-clause (vii) under Clause (d) of Regulation 24.10 of the Principal Regulations, as under:—**

“(viii) Integrated Mine: As per the Mining Plan:”

**5.5 First Proviso to Regulation 24.10 of the Principal Regulations is introduced as under:—**

“Provided that where the Emission Control System is installed, the norms of initial spares specified in this Regulation for coal based/ lignite fired Generating Stations as the case may be, shall apply.”

**6 Amendment to Regulation 28 of the Principal Regulations**

**6.1 Clauses (c) and (d) are introduced after Clause (b) of Regulation 28.1 of the Principal Regulations as under:—**

“(c) Where the Emission Control System is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the Emission Control System are the same, depreciation of the generating station or unit thereof including the Emission Control System shall be computed in accordance with Clauses (a) to (c) of this Regulation.

(d) Depreciation of the Emission Control System of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of —

- i. Twenty-five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or



- ii. balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or
- iii. ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

## **6.2 Introduction of Regulation 28.4 (A) and (B) after Regulation 28.4 of the Principal Regulations as under:—**

“28.4 (A) The depreciation on capital investment schemes undertaken by Generating Companies or Generating Businesses shall be allowed proportionately correlated to the remaining tenure of the Power Purchase Agreement with the Distribution Licensee.

28.4 (B) Depreciation on capital investment schemes shall be computed annually from the date of operation of such capital investment based on straight line method, with salvage value of 10%, over a period of —

- i. Twenty-five years, in case the principal asset is in operation for fifteen years or less as on the date of operation of the capital investment; or
- ii. balance useful life of the principal asset plus fifteen years, in case the principal asset is in operation for more than fifteen years as on the date of operation of the capital investment.”

## **7 Amendment to Regulation 29 of the Principal Regulations**

### **7.1 First Proviso to Regulation 29.3 of the Principal Regulations is amended as under:**

“Provided that Base Return on Equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law or revised emission standards, shall be computed at the weighted average rate of interest on actual loan portfolio of the Generating Station or Generating Company or the transmission system or the Transmission Licensee, as the case may be, subject to ceiling of 14 per cent:”

### **7.2 Second Proviso is introduced after the first Proviso to Regulation 29.3 of the Principal Regulations, as under:**

“Provided further that the Return on Equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of commercial operation (COD) occurs plus 350 basis points, subject to ceiling of 14 per cent.”

**7.3 Regulation 29.10 is introduced after Regulation 29.9 of the Principal Regulations as under:—**

“29.10 The Commission may either disallow the capitalisation claimed against the respective DPR Scheme, in part or in full, as appropriate, or allow lower Return on Equity on such investment in the following cases:

- (a) If the in-principle approval has not been obtained for the Capital Investment Scheme in accordance with Regulation 4.3 of the Maharashtra Electricity Regulatory Commission (Approval of Capital Investment Schemes) Regulations, 2022; or
- (b) If the Applicant is unable to establish the benefits as submitted in the Application for in-principle approval either fully or partly; or
- (c) If asset replacement has been permitted despite not meeting criteria specified in Regulation 3.23 of Maharashtra Electricity Regulatory Commission (Approval of Capital Investment Schemes) Regulations, 2022 .”

**8 Amendment to Regulation 30 of the Principal Regulations**

**8.1 Regulation 30.5(A) is introduced after Regulation 30.5 of the Principal Regulations as under:—**

“30.5(A) The rate of interest on loan for installation of Emission Control System shall be the weighted average rate of interest of actual loan portfolio of the Emission Control System or in the absence of actual loan portfolio, the weighted average rate of interest computed in accordance with Regulation 30.5 shall be considered.”

**9 Amendment to Regulation 31 of the Principal Regulations**

**9.1 Regulation 31.4 and 31.5 are introduced after Regulation 31.3 of the Principal Regulations as under:—**

“31.4 The Generating Company or Licensee shall follow prudent contract practice by incorporating necessary safeguard clauses against risk of price increment on account of Foreign Exchange Rate Variation on imported material.

31.5 Any extra rupee liability towards Foreign Exchange Rate Variation on import of material may be disallowed.

**Explanation:** The incidence of Foreign Exchange Rate Variation is invariably expected to be negligible, unless such equipment is not available in India.”

## **10 Amendment to Regulation 32 of the Principal Regulations**

### **10.1 Clause (aa) is introduced after Clause (a) of Regulation 32.1 of the Principal Regulations as under:—**

- “(aa) In case of Emission Control System of coal or lignite based thermal generating stations, working capital in addition to working capital computed in accordance with Regulation 32.1 (a) shall be allowed covering:
- (i) Cost of limestone or reagent towards stock for 20 days for generation corresponding to the target availability;
  - (ii) Advance payment for 30 days towards cost of reagent for generation corresponding to the target availability;
  - (iii) Normative Operation and maintenance expenses in respect of emission control system for one month;
  - (iv) Maintenance spares at one per cent of the opening Gross Fixed Assets in respect of emission control system.”

## **11 Amendment to Regulation 37 of the Principal Regulations**

### **11.1 Regulation 37.1 shall be substituted as under:—**

“37.1 In case the payment of bills of Generation Tariff or Transmission Charges or MSLDC Fees and Charges by the Beneficiary is delayed beyond the due date, Delayed Payment Charge at the Base Rate of Delayed Payment Charge shall be payable on the payment outstanding for the first month of default, notwithstanding anything to the contrary as may have been stipulated in the Agreement or Arrangement with the Beneficiaries:

Provided that the rate of Delayed Payment Charge for the successive months of default shall increase by 0.5 percent for every month of delay subject to the condition that the Delayed Payment Charge shall not be more than three percent higher than the Base Rate of Delayed Payment Charge at any time:

Provided further that the rate at which Delayed Payment Charge shall be payable, shall not be higher than the rate of Late Payment Surcharge specified in the Agreement, if any.”

### **11.2 Regulations 37.5, 37.6 and 37.7 are introduced after Regulation 37.4 as under:—**

“37.5 All payments by a Distribution Licensee to a Generating Company for power procured from it or by a user of a transmission system to a Transmission Licensee shall be first adjusted towards Delayed Payment Charge and thereafter, towards monthly charges, starting from the longest overdue bill.”

“37.6 (1) In case the Distribution Licensee has communicated, in writing, to the Generating Company or Transmission Licensee, as the case may be, the outstanding dues and number of instalments in which, the outstanding dues would be paid, within thirty days of the notification of the Late Payment Surcharge Rules, 2022, the following conditions shall be applicable:

- (a) The Distribution Licensee may make payment in a month more than the equated monthly instalment for the month;
- (b) The payment of instalment shall be done to all the concerned Generating Companies and Transmission Licensees, as the case may be, on pro-rata basis, depending upon the proportion of their individual outstanding dues.

(2) Notwithstanding anything contained in Regulation 37.1, if the Distribution Licensee agrees to payment of the arrears dues as per the instalment fixed under the Late Payment Surcharge Rules, 2022, and makes timely payment of these instalments, then the Delayed Payment Charge shall not be payable on the outstanding dues.

(3) In case of delay in payment of an instalment under Clause (1), Delayed Payment Charge shall be payable on the entire outstanding dues as on the date of notification of the Late Payment Surcharge Rules, 2022.”

“37.7 All the bills payable by a Distribution Licensee to a Generating Company or a Transmission Company shall be time tagged with respect to the date and time of submission of the bill and the payment made by the Distribution Licensee shall be adjusted first against the oldest bill and then to the second oldest bill and so on, so as to ensure that payment against a bill is not adjusted unless and until all bills older than it have been paid for:

Provided that any adjustment towards Delayed Payment Charge shall be done in the manner as specified in Regulation 37.5.”

## **12 Amendment to Regulation 39 of the Principal Regulations**

### **12.1 Regulation 39.12(A) is introduced after Regulation 39.12 of the Principal Regulations as under:—**

“39.12(A) A Generating Company with integrated mine(s) shall file a Petition for determination of input price of coal or lignite from the integrated mine(s) not later than 60 days from the date of commercial operation of the integrated mine(s) or from the date of notification of these Regulations, whichever is later:

Provided that the Generating Company having integrated mine(s) shall file Petition before the Commission for determination of the input price of coal or lignite from the integrated mine(s) containing the details of expenditure incurred and projected to be incurred duly certified by the Auditor, in accordance with the Formats that may be stipulated by the Commission.”

### 13 Amendment to Regulation 41 of the Principal Regulations

#### 13.1 Regulation 41.1 of the Principal Regulations is amended as under:—

“41.1 The Tariff for sale of electricity from a thermal power Generating Station **including Emission Control System** shall comprise two parts, namely, Annual Fixed Charge and Energy Charge”.

### 14 Amendment to Regulation 46 of the Principal Regulations

#### 14.1 Regulation 46.17(A) and 46.17(B) are introduced after Regulation 46.17 of the Principal Regulations, as under:—

“46.17(A) Normative Auxiliary Energy Consumption for Emission Control System (AUXen) of thermal generating stations shall be:

Sl.	Name of Technology	AUX <sub>en</sub> (as per cent of gross generation)
<b>(1)</b>	<b>For reduction of emission of sulphur dioxide</b>	
a)	Wet Limestone based FGD system (without Gas to Gas heater)	1.0%
b)	Lime Spray Dryer or Semi dry FGD System	1.0%
c)	Dry Sorbent Injection System (using Sodium bicarbonate)	NIL
d)	For CBFC Power plant (furnace injection)	NIL
e)	Sea water based FGD system (without Gas to Gas heater)	0.7%
<b>(2)</b>	<b>For reduction of emission of oxide of nitrogen</b>	
a)	Selective Non-Catalytic Reduction system	NIL
b)	Selective Catalytic Reduction system	0.2%

Provided that where the technology is installed with “Gas to Gas” heater, AUXen specified above shall be increased by 0.3% of gross generation.

#### 46.17 (B) Norms for consumption of reagent:

(1) The normative consumption of specific reagent for various technologies for reduction of emission of sulphur dioxide shall be as under:

**(a) For Wet Limestone based Flue Gas De-sulphurisation (FGD) system:** The specific limestone consumption (g/kWh) shall be worked out by following formula:

$$[K \times \text{SHR} \times S/\text{CVPF}] \times [85/\text{LP}]$$

Where,

S = Sulphur content in percentage;

LP= Limestone Purity in percentage;

SHR= Gross station heat rate, in kcal per kWh;

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kcal per kg for coal based thermal generating stations less 85 kcal/kg on account of variation during storage at generating station;

(b) Weighted Average Gross calorific value of lignite as received, in kcal per kg, as applicable for lignite based thermal generating stations:

Provided that value of K shall be equivalent to  $(35.2 \times \text{Design SO}_2 \text{ Removal Efficiency}/96\%)$  for units to comply with SO<sub>2</sub> emission norm of 100/200 mg/Nm<sup>3</sup> or  $(26.8 \times \text{Design SO}_2 \text{ Removal Efficiency}/73\%)$  for units to comply with SO<sub>2</sub> emission norm of 600 mg/Nm<sup>3</sup>;

Provided further that the limestone purity shall not be less than 85%.

**(b) For Lime Spray Dryer or Semi-dry Flue Gas Desulphurisation (FGD) system:**

The specific lime consumption shall be worked out based on minimum purity of lime (LP) as at 90% or more by applying formula  $[6 \times 90 / \text{LP}]$  g/kWh;

**(c) For Dry Sorbent Injection System (using sodium bicarbonate):** The specific consumption of sodium bicarbonate shall be 12 g per kWh at 100% purity.

**(d) For CFBC Technology (furnace injection) based generating station:** The specific limestone consumption for CFBC based generating station (furnace injection) shall be computed with the following formula:

$$[62.9 \times S \times \text{SHR} / \text{CVPF}] \times [85 / \text{LP}]$$

Where

S = Sulphur content in percentage;

LP = Limestone Purity in percentage;

SHR = Gross station heat rate, in kcal per kWh;

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kcal per kg for coal based thermal generating stations less 85 kcal/kg on account of variation during storage at generating station;

(b) Weighted Average Gross calorific value of lignite as received, in kcal per kg as applicable for lignite based thermal generating stations;

**(e) For Sea Water based Flue Gas Desulphurisation (FGD) system:** The reagent used in sea water based Flue Gas Desulphurisation (FGD) system shall be NIL

(2) The normative consumption of specific reagent for various technologies for reduction of emission of oxide of nitrogen shall be as below:

**(a) For Selective Non-Catalytic Reduction (SNCR) System:** The specific urea consumption of SNCR system shall be 1.2 g per kWh at 100% purity of urea.

**(b) For Selective Catalytic Reduction (SCR) System:** The specific ammonia consumption of SCR system shall be 0.6 g per kWh at 100% purity of ammonia.”

## **15 Amendment to Regulation 47 of the Principal Regulations**

### **15.1 Clause (d) of Regulation 47.1 of the Principal Regulations is amended as under:—**

“d) Water Charges shall be allowed separately as per actuals, based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check **and considering the norms of specific water consumption notified by the Ministry of Environment, Forest and Climate Change:...**”

### **15.2 Clause (g) of Regulation 47.1 of the Principal Regulations is amended as under:—**

“(g) A Generating Company may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Generating Company shall submit detailed justification, cost benefit analysis, **and life-cycle cost analysis** of such schemes as against capex schemes, and savings in O&M expenses, if any.”

### **15.3 Clause (h) is introduced after Clause (g) of Regulation 47.1 of the Principal Regulations:—**

“h) The Commission may consider any request for revision of the normative O&M expenses on account of consideration of some Schemes under O&M rather than Capital Investment on case-to-case basis, depending on the justification to be submitted by the Applicant and the life-cycle cost analysis:

Provided that if actual O&M expenses are lower than normative O&M expenses on this account, then no sharing of efficiency gains shall be done to that extent”.

### **15.4 Regulation 47.1 is introduced after Regulation 47.2 of the Principal Regulations:—**

“47.3 The operation and maintenance expenses on account of Emission Control System in coal or lignite based thermal generating station shall be 2% of the admitted capital expenditure (excluding interest during construction) as on its date of commercial operation, which shall be escalated annually @3.5% during the Control Period ending on 31st March 2025:

Provided that income generated from sale of gypsum or other by-products shall be reduced from the operation and maintenance expenses.”

## **16 Amendment to Regulation 49 of the Principal Regulations**

### **16.1 Clause (f) of Regulation 49.1 of the Principal Regulations is amended as under:—**

“(f) A Generating Company may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Generating Company shall submit detailed justification, cost benefit analysis, **and life-cycle cost analysis** of such schemes as against capex schemes, and savings in O&M expenses, if any.”

### **16.2 Clause (g) is introduced in Regulation 49.1 after Clause (f) of the Principal Regulations:—**

“(g) The Commission may consider any request for revision of the normative O&M expenses on account of consideration of some Schemes under O&M rather than Capital Investment on case-to-case basis, depending on the justification to be submitted by the Applicant and the life-cycle cost analysis:

Provided that if actual O&M expenses are lower than normative O&M expenses on this account, then no sharing of efficiency gains shall be done to that extent”.

## **17 Amendment to Regulation 50 of the Principal Regulations**

### **17.1 Proviso to Regulation 50.2 of the Principal Regulations is modified as under:—**

“Provided that in case of generating station or unit thereof under shutdown due to Renovation and Modernisation **or installation of Emission Control System, as the case may be**, the Generating Company shall be allowed to recover O&M expenses and interest on loan only.”

### **17.2 Proviso to Regulation 50.5 of the Principal Regulations is introduced as under:—**



“Provided also that in case of supply of coal or lignite from the integrated mine(s), the landed cost of primary fuel shall be based on the input price of coal or lignite, as the case may be, as computed in accordance with these Regulations”.

**17.3 Regulation 50.6 of the Principal Regulations is substituted as under:—**

“50.6 Energy Charge Rate (ECR) in Rs/kWh shall be computed up to three decimal places and shall be the sum of the cost of normative quantities of primary and secondary fuel for delivering ex-bus one kWh of electricity, and shall be computed as per the following formula:

$$ECR = \frac{[P_p \times (Q_p)_n + P_s \times (Q_s)_n + \mathbf{SRC} \times \mathbf{LPR}]}{[1-(\mathbf{AUX}_n + \mathbf{AUX}_{en})]} \quad (\text{Rs/kWh})$$

Where,  $P_p$  = landed cost of primary fuel, namely coal or lignite or gas or liquid fuel and limestone, if applicable, in Rs/kg or Rs/cum or Rs/litre, as the case may be;

$(Q_p)_n$  = Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in kg or litre or standard cubic metre, as the case may be, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil for coal/lignite based Generating Stations) and gross calorific value of coal/lignite or gas or liquid fuel as billed by supplier less:

- (a) Actual loss in calorific value of coal between “as billed by supplier” and “as received at generating station”, subject to the maximum loss in calorific value of 300 kcal/kg; and
- (b) actual stacking loss subject to the maximum stacking loss of 85 kcal/kg for pithead stations and 120 kcal/kg for non-pithead stations;

$P_s$  = landed cost of Secondary fuel oil in Rs./ml;

$(Q_s)_n$  = Normative Quantity of Secondary fuel oil in ml/kWh as per Regulations 46.11 and 46.12;

**SRC = Specific reagent consumption on account of revised emission standards (in g/kWh);**

**LPR = Weighted average landed price of reagent for Emission Control System (in Rs/kg);**

$AUX_n$  = Normative Auxiliary Energy Consumption as % of gross generation as per Regulations 46.13 to 46.17;

**$AUX_{en}$  = Normative Auxiliary Energy Consumption of Emission Control System as % of gross generation as per Regulation 47.3:...**”

**17.4 Sixth and Seventh provisos are introduced after the fifth proviso to Regulation 50.6 of the Principal Regulations as under:—**

“Provided also that where biomass fuel is used for blending with coal, the landed cost of biomass fuel shall be worked out based on the delivered cost of biomass at the unloading point of the generating station, inclusive of taxes and duties as applicable:

Provided also that the energy charge rate of the blended fuel shall be worked out considering consumption of biomass based on blending ratio as specified by Authority or actual consumption of biomass, whichever is lower.”

**17.5 Regulations 50.6 (A), 50.6 (B), and 50.6 (C) are introduced after Regulation 50.6 in the Principal Regulations as under:—**

“50.6(A) The Generating Company shall, after the date of commercial operation of the integrated mine(s) till the input price of coal is determined by the Commission under these Regulations, adopt the notified price of Coal India Limited commensurate with the grade of the coal from the integrated mine(s) or the estimated price available in the investment approval, whichever is lower, as the input price of coal for the generating station:

Provided that the difference between the input price of coal determined under these Regulations and the input price of coal so adopted prior to such determination, for the quantity of coal billed, shall be adjusted in accordance with Regulation 50.6 (C).

50.6 (B) The Generating Company shall, after the date of commercial operation of the integrated mine(s), till the input price of lignite is determined by the Commission under these Regulations, fix the input price of lignite for the generating station at the last available pooled lignite price as determined by the Commission for transfer price of lignite or the estimated price available in the investment approval, whichever is lower:

Provided that the difference between the input price of lignite determined under these Regulations and the input price of lignite so fixed prior to such determination, for the quantity of lignite billed, shall be adjusted in accordance with Regulation 50.6 (C).

50.6 (C) In case of excess or short recovery of input price under Regulation 50.6 (A) or Regulation 50.6 (B), the Generating Company shall refund the excess amount or recover the shortfall amount, as the case may be, with simple rate of interest, equal to the Base Rate , as prevalent on the first day of April of the respective Year, plus 150 basis points, in six equal monthly instalments.”

## **18 Amendment to Regulation 51 of the Principal Regulations**

### **18.1 Regulation 51.4 of the Principal Regulations is substituted as under:—**

“51.4 The PAFM shall be computed in accordance with the following formula:

$$\text{PAFM} = 100 \times \frac{\sum_{i=1}^N \text{DC}_i}{\{ N \times \text{IC} \times (1 - \text{AUX} - \text{AUX}_e) \}} \%$$

Where,

AUX = Normative auxiliary energy consumption as a percentage of gross energy generation;

AUX<sub>e</sub> = Normative auxiliary energy consumption for Emission Control System as a percentage of gross energy generation, wherever applicable;

DC<sub>i</sub> = Declared capacity (in ex-bus MW) for the i<sup>th</sup> day of the month which the Station can deliver for at least three hours, as certified by the MSLDC after the day is over;

IC = Installed capacity (in MW) of the complete Generating Station;

N = Number of days in the month.

18.1.1 **Note:** DC<sub>i</sub> and IC shall exclude the capacity of generating units not declared under commercial operation and in case of a change in IC during the concerned period, its average value shall be taken.

## **19 Introduction of PART E(A): DETERMINATION OF INPUT PRICE OF COAL AND LIGNITE FROM INTEGRATED MINE of the Principal Regulations**

### **19.1 Introduction of Regulations 55(A) to 55(S), after Regulation 55.2 in the Principal Regulations as under:—:**

#### **“55 (A). Input Price of coal or Lignite**

55 (A).1 Input price of coal or lignite from the integrated mine(s) shall be determined based on the following components:

I) Run of Mine (ROM) Cost; and

II) Additional charges:

a. crushing charges;

b. transportation charge within the mine up to the washery end or coal handling plant associated with the integrated mine, as the case may be;

c. handling charges at mine end;

d. washing charges; and

e. transportation charges beyond the washery end or coal handling plant, as the case may be, and up to the loading point:

Provided that one or more components of additional charges may be applicable in case of the integrated mine(s), based on the scope and nature of the mining activities:

Provided further that the input price of lignite shall be computed based on Run of Mine (ROM) based on the technology such as bucket excavator-conveyor or belt-spreader or its combination and handling charges, if any.

Provided also that Statutory Charges, as applicable, shall be allowed as pass-through expenses.

#### **55 (B). Run of Mine (ROM) Cost**

55 (B).1 Run of Mine Cost of coal in case of integrated mine(s) allocated through auction route under Coal Mines (Special Provisions) Act, 2015 shall be worked out as under:

$$\text{ROM Cost} = (\text{Quoted Price of coal}) + (\text{Fixed Reserve Price})$$

Where,

- i. Quoted Price of coal is the Final Price Offer of coal in respect of the concerned coal block or mine, along with subsequent escalation, if any, as provided in the Coal Mine Development and Production Agreement: Provided that additional premium, if any, quoted by the generating company during auction, shall not be considered in the Run of Mine Cost;
- ii. Fixed Reserve Price is the fixed reserve price per tonne along with subsequent escalation, if any, as provided in the Coal Mine Development and Production Agreement: and
- iii. Capital cost under Regulation 36D and additional capital expenditure under Regulation 36E shall not be admissible for the purpose of ROM cost in respect of integrated mine(s) allocated through auction route.

55 (B).2 Run of Mine Cost of coal in case of integrated mine allocated through allotment route under Coal Mines (Special Provisions) Act, 2015 shall be worked out as under:

$$\text{ROM Cost} = [(\text{Annual Extraction Cost} / \text{ATQ}) + \text{Mining Charge}] + (\text{Fixed Reserve Price}).$$

Where,

- i. Annual Extraction Cost is the cost of extraction of coal as computed in accordance with Regulation 55 (F) of these Regulations;

- ii. Mining Charge is the charge per tonne of coal paid by the generating company to the Mine Developer and Operator engaged by the Generating Company for mining, wherever applicable; and
- iii. Fixed Reserve Price is the fixed reserve price per tonne along with subsequent escalation, if any, as provided in the Coal Mine Development and Production Agreement.

55 (B).3 Run of Mine Cost of lignite in case of integrated mine(s) for lignite shall be worked out as under:

$$\text{ROM Cost} = [(\text{Annual Extraction Cost} / \text{ATQ}) + (\text{Mining Charge})]$$

Where,

- i. Annual Extraction Cost is the cost of extraction of lignite as computed in accordance with Regulation 55 (F) of these Regulations; and
- ii. Mining Charge is the charge per tonne of lignite paid by the Generating Company to the Mine Developer and Operator engaged by the Generating Company for mining, wherever applicable.

55 (B).4 The Generating Company shall adhere to the Mining Plan for extraction of coal or lignite on annual basis and shall submit a certificate to that effect from the Coal Controller or the competent authority:

Provided that deviations from the Mining Plan shall be considered only if such deviations have been approved by the Coal Controller or the revised Mining Plan has been approved by the competent authority.

55 (B).5 Run of Mine Cost of coal and lignite shall be worked out in terms of Rupees per tonne.

### **55 (C). Additional Charges**

55 (C).1 Where crushing or transportation or handling or washing are undertaken by the Generating Company without engaging Mine Developer and Operator or an agency other than Mine Developer and Operator, additional charges shall be worked out as under:

- (i) Crushing Charges = Annual Crushing Cost/Quantity;
- (ii) Transportation Charges = Annual Transportation Cost/Quantity:

Provided that separate transportation charges, as applicable, shall be considered from mine up to washery end or coal handling plant associated with the integrated mine(s) and beyond washery end or coal handling plant associated with the integrated mine(s) and up to the loading point, as the case may be;

- (iii) Handling charges = Annual Handling Cost/Quantity; and
- (iv) Washing Charges = Annual Washing Cost/Quantity.

Where,

- a. Annual Crushing Cost, Annual Transportation Cost, Annual Handling Cost and Annual Washing Cost shall be worked out on the basis of following components, for which the generating company shall submit the capital cost separately:
  - i. Depreciation;
  - ii. Interest on Working Capital;
  - iii. Interest on Loan;
  - iv. Return on Equity;
  - v. Operation and Maintenance Expenses, excluding mining charge;
  - vi. Statutory charges, if applicable.
- b. Quantity shall be the quantity of coal or lignite in tonne crushed or transported or handled or washed, as the case may be, during the year duly certified by the Auditor.

55 (C).2 Where crushing, transportation, handling or washing are within the scope of the Mine Developer and Operator engaged by the Generating Company, no additional charges shall be admitted, as the same shall be recovered through Mining Charge of the Mine Developer and Operator.

55 (C).3 Where crushing, transportation, handling or washing are undertaken by the Generating Company by engaging an agency other than Mine Developer and Operator, the annual charges of such agencies shall be considered as part of the Operation and Maintenance Expenses, provided that the charges have been discovered through a transparent competitive bidding process.

55 (C).4 The crushing charges, transportation charges, handling charges, and washing charges shall be admitted by the Commission after prudence check, considering charges of Coal India Limited or similarly placed coal mines or any other reference charges.

55 (C).5 The crushing charges, transportation charges, handling charges, and washing charges shall be worked out in terms of Rupees per tonne

#### **55 (D). Capital Cost**

55 (D).1 The expenditure incurred, including IDC, duly certified by the Auditor, for development of the integrated mine(s) up to the date of commercial operation, shall be considered for arriving at the capital cost.

55 (D).2 Capital expenditure incurred shall be admitted by the Commission after prudence check.

55 (D).3 Capital expenditure incurred on infrastructure for crushing, transportation, handling, washing and other mining activities required for mining operations shall be arrived at separately in accordance with these Regulations:

Provided that where crushing, transportation, handling or washing are undertaken by the Generating Company, the expenditure incurred on infrastructures of these components shall be capitalized:

Provided further that where mine development and operation, with or without any component of crushing, transportation, handling or washing are undertaken by the Generating Company by engaging Mine Developer and Operator or an agency other than Mine Developer and Operator, the capital expenditure incurred by Mine Developer and Operator or such agency shall not be capitalised by the Generating Company and shall not be considered for the determination of input price.

55 (D).4 The capital expenditure shall be determined by considering, but not limited to, the Mining Plan, detailed project report, mine closure plan, cost audit report and such other details as deemed fit by the Commission.

#### **55 (E). Additional Capital Expenditure**

55 (E).1 The expenditure, in respect of the integrated mine(s), incurred or projected to be incurred after the date of commercial operation and up to the date of achieving the Peak Rated Capacity may be admitted by the Commission, subject to prudence check and shall be capitalized in the respective year of the Control Period as additional capital expenditure corresponding to the Annual Target Quantity of the year as specified in the Mining Plan or actual extraction in that year, whichever is higher, on following counts:

- a. expenditure incurred on activities as per the Mining Plan;
- b. expenditure for works deferred for execution and un-discharged liabilities recognized for works executed prior to date of commercial operation;
- c. expenditure for works required to be carried out for complying with directions or orders of any statutory authorities;

- d. liabilities arising out of compliance of order or decree of any court of law or award of arbitration;
- e. expenditure for procurement and development of land as per the Mining Plan;
- f. expenditure for procurement of additional heavy earth moving machineries for replacement, on completion of their useful life; and
- g. liabilities due to Change in Law or Force Majeure events:

Provided that in case of replacement of any assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de- capitalization:

Provided further that the Generating Company shall prepare guidelines for procurement and replacement of heavy mining equipment such as Heavy Earth Moving Machineries and share the same with the beneficiaries and submit it to the Commission along with its Petition.

55 (E).2 The expenditure, in respect of the integrated mine(s), incurred or projected to be incurred after the date of achieving the Peak Rated Capacity may be admitted by the Commission subject to prudence check, and shall be capitalized as Additional Capital Expenditure, corresponding to the Annual Target Quantity of the respective years as specified in the Mining Plan, on following counts:

- a. expenditure incurred on activities, if any, as per Mining Plan;
- b. expenditure for works required to be carried out for complying with directions or order of any statutory authority;
- c. liabilities arising out of compliance of order or decree of any court of law or award of arbitration;
- d. expenditure for procurement and development of land as per the Mining Plan; and
- e. liabilities due to Change in Law or Force Majeure events:

Provided that in case of replacement of any assets, the additional capitalization shall be worked out after adjusting the gross fixed assets, cumulative depreciation and cumulative repayment of loan of the assets replaced on account of de-capitalization.

55 (E).3 The expenditure on following counts shall not be considered as additional capital expenditure for the purpose of these Regulations:

- a. expenditure incurred but not capitalized as the assets have not been put in service (capital work in progress);
- b. mine closure expenses;



- c. expenditure on works not covered under Mining Plan, unless covered under sub-clause (g) of Regulation 55 (E).1 or sub-clause (e) of Regulation 55 (E).2;
- d. expenditure on replacement due to obsolescence of assets on account of completion of the useful life or due to obsolescence of technology, if the original cost of such assets have not been de-capitalised from the gross fixed assets.

#### **55 (F). Annual Extraction Cost**

The Annual Extraction Cost of integrated mine(s) shall consist of the following components:

- a. Depreciation;
- b. Interest on Loan;
- c. Return on Equity;
- d. Operation and Maintenance Expenses, excluding mining charge;
- e. Interest on Working Capital;
- f. Mine closure expenses, if not included in mining charge; and
- g. Statutory charges, if applicable.

#### **55 (G). Capital Structure, Return on Equity and Interest on Loan**

55 (G).1 For integrated mine(s), debt-equity ratio as on the date of commercial operation and as on the date of achieving Peak Rated Capacity shall be considered in the manner as specified under Regulation 27.

55 (G).2 For integrated mine(s), debt-equity ratio for additional capital expenditure admitted by the Commission under these Regulations shall be considered in the manner as specified under Regulation 55 (G).1.

55 (G).3 Return on equity shall be computed in rupee terms on the equity base arrived under Regulation 55 (G).1 at the base rate of 14%.

55 (G).4 The base rate of return on equity as per Regulation 55 (G).3 shall be grossed up with the effective tax rate computed in the manner specified under Regulation 34.2.

55 (G).5 Interest on loan, including normative loan, if any, determined under Clause (1) of this Regulation, shall be arrived at by considering the weighted average rate of interest calculated on the basis of actual loan portfolio, in accordance with Clauses (2) to (7) of Regulation 32 of these Regulations.

#### **55 (H). Depreciation**

55 (H).1 Depreciation in respect of integrated mine(s) shall be computed from the date of commercial operation by applying Straight Line Method.

55 (H).2 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that,

- a. freehold land or assets purchased from grant shall not be considered as depreciable assets and their cost shall be excluded from the capital cost while computing depreciable value of the assets;
- b. where the allotment of freehold land is conditional and is required to be returned, the cost of such land shall be part of value base for the purpose of depreciation, subject to prudence check by the Commission; and
- c. lease hold land shall be amortized over the lease period or remaining life of the integrated mine(s), whichever is lower.

55 (H).3 The salvage value of an asset shall be considered as 10% of the capital cost of the asset:

Provided that the salvage value shall be:

- i) zero for IT equipment and software;
- ii) zero or as agreed by the Generating Company with the State Government for land; and
- iii) as notified by the Ministry of Corporate Affairs under the Companies Act, 2013 for specialized mining equipment.

55 (H).4 Depreciation in respect of integrated mine(s) shall be arrived at annually by applying depreciation rates or on the basis of expected useful life specified in **Annexure-1(A)** of these Regulations:

Provided that specialized mining equipment shall be depreciated as per the useful life and depreciation rate as notified by the Ministry of Corporate Affairs under the Companies Act, 2013.

### **55 (I). Operation and Maintenance Expenses**

55 (I).1 The Operation and Maintenance expenses in respect of integrated mine(s) of coal, for the Control Period ending on 31st March 2025 shall be allowed based on the projected Operation and Maintenance Expenses for each year of the tariff period subject to prudence check by the Commission:

Provided that the Operation and Maintenance expenses allowed under this clause shall be trued up based on actual expenses for the Control Period ending on 31<sup>st</sup> March, 2025.

55 (I).2 Where the development and operation of the integrated mine(s) is undertaken by the Generating Company by engaging Mine Developer and Operator, the Mining Charge of such Mine Developer and Operator shall not be included in Operation and Maintenance Expenses under Regulation 55 (I).1.

55 (I).3 Where an agency other than Mine Developer and Operator is engaged by the Generating Company, through a transparent competitive bidding process, for crushing or transportation or handling or washing or any combination thereof, the annual charges of such agency shall be considered as part of Operation and Maintenance Expenses under Regulation 55 (I).1, subject to prudence check by the Commission.

### **55 (J). Interest on Working Capital**

55 (J).1 The working capital of the integrated mine(s) of coal shall cover:

- (i) Input cost of coal stock for 7 days of production corresponding to the Annual Target Quantity for the relevant year;
- (ii) Consumption of stores and spares including explosives, lubricants and fuel @ 15% of operation and maintenance expenses, excluding mining charge of Mine Developer and Operator and annual charges of the agency other than Mine Developer and Operator, engaged by the Generating Company; and
- (iii) Operation and maintenance expenses for one month, excluding mining charge of Mine Developer and Operator and annual charges of the agency other than Mine Developer and Operator, engaged by the Generating Company.

55 (J).2 The working capital of the integrated mine(s) of lignite shall cover:-

- (i) Input cost of lignite stock for 7 days of production corresponding to the Annual Target Quantity for the year;
- (ii) Consumption of stores and spare including explosives, lubricants and fuel @ 20% of Operation and Maintenance expenses, excluding Mining Charge of Mine Developer and Operator and annual charges of the agency other than Mine Developer or Operator, engaged by the Generating Company; and
- (iii) Operation and Maintenance expenses for one month, excluding Mining Charge of Mine Developer and Operator and annual charges of the agency other than Mine Developer and Operator, engaged by the Generating Company.

55 (J).3 The rate and payment of interest on working capital shall be determined in accordance with Regulation 32.1(f).

### **55 (K). Mine Closure Expenses**

55 (K).1 Where the mine closure is undertaken by the Generating Company, the amount deposited in the Escrow Account as per the Mining Plan, after adjusting interest earned, if any, on the said deposits shall be admitted as Mine Closure Expenses: Provided that,

- a. the amount deposited in the Escrow Account as per the Mining Plan prior to the Date of Commercial Operation of the integrated mine(s) shall be indicated separately and shall be recovered over the useful life of the integrated mine(s) in the form of annuity linked to the borrowing rate;
- b. the amount deposited in the Escrow Account as per the Mining Plan or any expenditure incurred towards mine closure shall be excluded from the capital cost for computing input price;
- c. where the expenditure incurred towards mine closure falls short of or is in excess of the reimbursement received from the Escrow Account during the Control Period till 31<sup>st</sup> March 2025, the shortfall or excess shall be carried forward to the subsequent years for adjustments.

55 (K).2 The amount towards mine closure shall be deposited in the Escrow Account as per the Mining Plan and shall be recovered as part of input price irrespective of the expenditure incurred towards mine closure during any of the years of the Control Period.

55 (K).3 Where mine closure is within the scope of Mine Developer and Operator engaged by the Generating Company and mine closure expenses are part of the Mining Charge of Mine Developer and Operator, the mine closure expenses shall be met out of the Mining Charge and no mine closure expenses shall be admissible to the Generating Company separately:

Provided that,

- a. the amount deposited in the Escrow Account by the Mine Developer and Operator or by the Generating Company and any amount received from the Escrow Account against expenditure incurred towards mine closure shall not be considered for computing input price; and
- b. the difference between the borrowing cost, arrived at by considering the weighted average rate of interest calculated on the basis of actual loan portfolio in accordance with the methodology specified in Regulation 30, and the amount deposited in Escrow Account and the interest received from Escrow Account in a year shall be adjusted in the input price of coal or lignite of the respective year, as part of mine closure expenses, on case-to-case basis.

55 (K).4 Where the mine closure is within the scope of Mine Developer and Operator engaged by the Generating Company only for a part of useful life of the integrated mine(s) and the Generating Company undertakes the mine closure for the balance useful life, the treatment of mine closure during the period undertaken by the Generating Company shall be in accordance with Regulation 55 (K).1 and mine closure during the period undertaken by the Mine Developer and Operator shall be in accordance with Regulation 55 (K).3:

Provided that the treatment of mine closure at the end of useful life of the integrated mine(s) shall be decided by the Commission on case-to-case basis.

55 (K).5 The mine closure expenses worked out in accordance with this Regulation shall not be applicable in case of the integrated mine(s) allocated through auction route under Coal Mines (Special Provisions) Act, 2015.

#### **55 (L). Determination of Input Price**

55 (L).1 The input price of coal or lignite shall be determined as under:

Input Price = [ROM Cost + Additional charges]

55 (L).2 The credit arising on account of adjustment due to shortfall in overburden removal, GCV Adjustment and Non-tariff Income, if any, shall be dealt separately in the manner specified in these Regulations.

55 (L).3 Statutory Charges, as applicable, shall be allowed.

#### **55 (M). Recovery of Input Charges**

55 (M).1 The input charges of coal or lignite shall be recovered as under:

Input Charges = [Input Price x Quantity of coal or lignite supplied] + Statutory charges, as applicable:

Provided that where energy charge rate based on input price of coal from integrated mine(s) exceeds by 20% of energy charge rate based on notified price of Coal India Limited for the commensurate grade of coal in a month, prior consent of the beneficiary(ies) shall be required to be obtained by the Generating Company:

Provided further that where such consents of beneficiaries are not available, input price of coal from such integrated mine(s) shall be so fixed that energy charge rate based on input price of coal from integrated mine(s) does not exceed by more

than 20% the energy charge rate based on notified price of Coal India Limited for the commensurate grade of coal in a month:

Provided also that energy charge rate based on input price of coal does not lead to higher energy charge rate throughout the tenure of power purchase agreement than that, which would have been obtained as per terms and conditions of the existing power purchase agreement.

55 (M).2 The Generating Company shall work out the comparative energy charge rate based on the input price of coal and notified price of Coal India Limited for the commensurate grade of coal for every month from the date of commercial operation of integrated mine(s) and share the same with beneficiaries.

**55 (N). Adjustment on account of Shortfall of Overburden Removal (OB Adjustment)**

55 (N).1 The Generating Company shall remove overburden as specified in the Mining Plan.

55 (N).2 In case of shortfall of overburden removal during a year, the generating company shall be allowed to adjust such shortfall against excess of overburden removal, if any, during subsequent three years.

55 (N).3 In case of excess of overburden removal during a year, the generating company shall be allowed to carry forward such excess for adjustment against the shortfall, if any, during subsequent three years.

55 (N).4 Where the shortfall of overburden removal of any year is not made good by the generating company in accordance with Clause (2) of this Regulation, the adjustment on account of shortfall of overburden removal (OB Adjustment) for that year shall be worked out as under:

Where,

i) Factor of adjustment for shortfall of overburden removal during the year shall be computed as under:

$$\frac{[(\text{Actual quantity of coal or lignite extracted during the year} \times \text{Annual Stripping Ratio as per Mining Plan}) - (\text{Actual quantity of overburden removed during the year} / \text{Annual Stripping Ratio as per Mining Plan})]}{(\text{Annual Target Quantity})};$$

ii) Annual Stripping ratio is the ratio of volume of overburden to be removed for one unit of coal or lignite as specified in the Mining Plan.

iii) Mining Charge is the charge per tonne of coal or lignite paid by the Generating Company to the Mine Developer and Operator engaged by the Generating Company for mining, wherever applicable.

55 (N).5 The provisions of this Regulation regarding adjustment on account of shortfall of overburden removal shall not be applicable in case of the integrated mine(s) allocated through auction route under Coal Mines (Special Provisions) Act, 2015.

**55 (O). Adjustment on account of shortfall in GCV (GCV Adjustment)**

55 (O).1 In case the weighted average GCV of coal extracted from the integrated mine(s) in a year is higher than the declared GCV of coal for such mine(s), no GCV adjustment shall be allowed.

55 (O).2 In case the weighted average GCV of coal extracted from the integrated mine(s) in a year is lower than the declared GCV of coal of such mine(s), the GCV adjustment in that year shall be worked out as under:

a. Where the integrated mine(s) are allocated through auction route under Coal Mines (Special Provisions) Act, 2015:

$$\text{GCV Adjustment} = (\text{Quoted Price of coal} + \text{Fixed Reserve Price}) \times [(\text{Declared GCV of coal} - \text{Weighted Average GCV of coal extracted in the year}) / (\text{Declared GCV of coal})]$$

Where,

- i) Quoted Price of coal is the Final Price Offer of coal in respect of the concerned coal Block or Mine, along with subsequent escalation, if any, as provided in the Coal Mine Development and Production Agreement: Provided that additional premium, if any, quoted by the Generating Company in auction, shall not be considered; and
- ii) Declared GCV of coal shall be the GCV of coal as specified or quoted in the auction.

b. Where the integrated mine(s) are allocated through allotment route under Coal Mines (Special Provisions) Act, 2015:

$$\text{GCV Adjustment} = [(\text{Annual Extraction Cost/ATQ}) + (\text{Mining Charge})] \times [(\text{Declared GCV of coal} - \text{Weighted Average GCV of coal extracted in the year}) / (\text{Declared GCV of coal})]$$

Where,

- i) Annual Extraction Cost is the cost of extraction of coal as computed in accordance with Regulation 55 (F);
- ii) Mining Charge is the charge per tonne of coal paid by the Generating Company to the Mine Developer and Operator engaged by the Generating Company for mining, wherever applicable; and

- iii) Declared GCV of coal shall be the average GCV as per the Mining Plan or as approved by the Coal Controller.

**55 (P). Adjustment on account of Non-Tariff Income (NTI Adjustment)**

55 (P).1 Adjustment on account of Non-Tariff Income (NTI Adjustment) for any year, such as income from sale of washery rejects in case of integrated mine of coal and profit, if any, from supply of coal to the Coal India Limited or merchant sale of coal as allowed under the Coal Mines (Special Provisions) Act, 2015 shall be worked out as under:

$$\text{NTI Adjustment} = (\text{All Non-Tariff Income during the year}) / (\text{Actual quantity of coal or lignite extracted during the year})$$

55 (P).2 The adjustment on account of Non-Tariff Income worked out in accordance with this Regulation shall not be applicable in case of the integrated mine(s) allocated through auction route under Coal Mines (Special Provisions) Act, 2015.

**55 (Q). Credit Adjustment Note**

55 (Q).1 The credit arising on account of OB Adjustment, GCV Adjustment and NTI Adjustment shall be dealt through Credit Adjustment Note for any year.

55 (Q).2 The Credit Adjustment Note shall be issued in favour of the specified end use generating stations on account of OB Adjustment, GCV Adjustment or NTI Adjustment, as the case may be, for that year as under:

- i. OB Adjustment for the year X Quantity of coal or lignite supplied in that year;
- ii. GCV Adjustment for the year X Quantity of coal or lignite supplied in that year; and
- iii. NTI Adjustment in the year X Quantity of coal or lignite supplied in that year.

55 (Q).3 The amount in Credit Adjustment Note shall be adjusted against the charges of coal or lignite supplied after the date of issue of Credit Adjustment Note and the integrated mine(s) shall prepare an annual reconciliation statement of such adjustment and furnish the same to all the end use plants and also publish the same on its website.

**55 (R). Quality Measurement**

The quality of coal or lignite supplied from the integrated mine(s) shall be measured at the loading point through third party sampling as per the guidelines and procedure specified by



the Ministry of Coal, Government of India and records of such measurement of quality of coal shall be made available to the beneficiaries on demand.

### **55 (S). Special Provision**

Provisions of Part D of these Regulations shall not be applicable in case of integrated mine(s), except to the extent specifically provided for or referred to in Part E (A):

Provided that the financial parameters required for determination of input price of coal or lignite from integrated mine(s), if not specifically provided for or referred to in Part E (A), shall be considered as per provisions of these Regulations as applicable to the coal or lignite based generating stations.”

## **20 Amendment to Regulation 61 of the Principal Regulations**

### **20.1 Regulation 61.8 of the Principal Regulations is amended as under:—**

“ 61.8 A Transmission Licensee may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Transmission Licensee shall submit detailed justification, cost benefit analysis, **and life-cycle cost analysis** of such schemes as against capex schemes, and savings in O&M expenses, if any.”

### **20.2 Regulation 61.9 is introduced after Regulation 61.8 of the Principal Regulations:—**

“61.9 The Commission may consider any request for revision of the normative O&M expenses of the Transmission Licensee on account of consideration of some Schemes under O&M rather than Capital Investment on case-to-case basis, depending on the justification to be submitted by the Applicant and the life-cycle cost analysis:

Provided that if actual O&M expenses are lower than normative O&M expenses on this account, then no sharing of efficiency gains shall be done to that extent”.

## **21 Amendment to Regulation 66 of the Principal Regulations:-**

### **21.1 Regulation 66 of the Principal Regulations shall be substituted as under:**

#### **“66. Usage of Intra-State Transmission System**

The charges for intra-State transmission usage shall be shared among various TSUs in the following manner:

- a) Long-Term TSU with Recorded Demand **in any 15-minute time block** up to Base TCR shall not be subjected to payment of Short-Term Transmission Charges.
- b) Long-Term TSU with Recorded Demand **in any 15-minute time block** greater than Base TCR but lower than Contracted Capacity shall make payment of Short-Term Transmission Charges for the recorded demand in excess of Base TCR.
- c) Long-Term TSU with Recorded Demand in any 15-minute time block lower than Base TCR and greater than Contracted Capacity shall not be subjected to payment of Short-Term Transmission Charges.
- d) Long-Term TSU with Recorded Demand in any 15-minute time block greater than Contracted Capacity, where Contracted Capacity is greater than Base TCR, shall make payment of Short-Term Transmission Charges for the Recorded Demand in excess of Base TCR and shall also make payment of Additional Regulatory Charge for Recorded Demand in excess of Contracted Capacity as specified in Regulation 14.5 of the Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016, as amended time to time.
- e) Long-Term TSU with Recorded Demand in any 15-minute time block greater than Base TCR, where Contracted Capacity is less than Base TCR, shall make payment of Short-Term Transmission Charges for the Recorded Demand in excess of Base TCR and shall also make payment of an Additional Regulatory Charge for Recorded Demand in excess of Base TCR as specified in Regulation 14.5 of the Maharashtra Electricity Regulatory Commission (Transmission Open Access) Regulations, 2016 as amended time to time:

Provided that the calculation of the Short-Term Transmission Charges and Additional Regulatory Charge shall be based on the 15-minute time block basis or as amended time to time:

Provided further that the applicability and calculation of the Short-Term Transmission Charges and Additional Regulatory Charge shall be as shown in the Table below:

Sl. No.	Scenario	Applicable Charges	Calculations of charges on 15-minute time block basis
a)	<b>RD</b> < Base TCR < CC	Only Monthly Transmission Charges (MTC)	STTC will not apply as RD is within Base TCR. TSU pays Transmission charges upto Base TCR.
b)	Base TCR < <b>RD</b> < CC	STTC as per Regulation 66(b) of MYT Regulations, 2019	STTC = (RD – Base TCR) in kW x S.T. Rate (Rs./kWh)
c(i)	CC < <b>RD</b> < Base TCR	Only MTC	STTC will not apply as RD is within Base TCR. TSU pays Transmission charges upto Base TCR.

Sl. No.	Scenario	Applicable Charges	Calculations of charges on 15-minute time block basis
c(ii)	Base TCR < CC < RD	STTC as per Regulation 66 (b)  ARC equal to 25% of the LTTC for the use of InSTS in excess of its CC as per Regulation 66 (c) and Regulation 14.5 of TOAR, 2016.	STTC = (RD – Base TCR) in kW x S.T. Rate (Rs./kWh)  ARC = (RD – CC) in kW x 0.25 x LTTC (Rs/kW/month)
C (iii)	CC < Base TCR < RD	STTC as per Regulation 66 (b) of MYT Regulations 2019  ARC=25% of the LTTC for the use of an InSTS in excess of its Base TCR. Regulation 14.5 of TOA,2016	STTC = (RD – Base TCR) in kW x S.T. Rate (Rs./kWh)  ARC = (RD – Base TCR) in kW x 0.25 x LTTC (Rs/kW/month)

”

## 22 Amendment to Regulation 75 of the Principal Regulations

### 22.1 Regulation 75.7 of the Principal Regulations is amended as under:—

“75.7 A Distribution Licensee may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Distribution Licensee shall submit detailed justification, cost benefit analysis, **and life-cycle cost analysis** of such schemes as against capex schemes, and savings in O&M expenses, if any.”

### 22.2 Regulation 75.9 is introduced after Regulation 75.8 of the Principal Regulations:—

“75.9 The Commission may consider any request for revision of the normative O&M expenses of the Distribution Licensee on account of consideration of some Schemes under O&M rather than Capital Investment on case-to-case basis, depending on the justification to be submitted by the Applicant and the life-cycle cost analysis:

Provided that if actual O&M expenses are lower than normative O&M expenses on this account, then no sharing of efficiency gains shall be done to that extent”.

## 23 Amendment to Regulation 84 of the Principal Regulations

### 23.1 Regulation 84.7 of the Principal Regulations is amended as under:—

“ 84.7 A Distribution Licensee may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the Distribution Licensee shall submit detailed justification, cost benefit analysis, **and life-cycle cost analysis** of such schemes as against capex schemes, and savings in O&M expenses, if any.”

### **23.2 Regulation 84.9 is introduced after Regulation 84.8 of the Principal Regulations:—**

“84.9 The Commission may consider any request for revision of the normative O&M expenses of the Distribution Licensee on account of consideration of some Schemes under O&M rather than Capital Investment on case-to-case basis, depending on the justification to be submitted by the Applicant and the life-cycle cost analysis:

Provided that if actual O&M expenses are lower than normative O&M expenses on this account, then no sharing of efficiency gains shall be done to that extent”.

## **24 Amendment to Regulation 91 of the Principal Regulations**

### **24.1 Illustration is introduced after Regulation 91.2 of the Principal Regulations:—**

“**Illustration:**

Total Capital Investment against all Schemes in FY 2021-22 in a local area = Rs. 500 Crore;

Total RI Charges included in above Capital Investment = Rs. 250 Crore;

Total expenditure recoverable as Capital Investment = Rs. 375 Crore (i.e., Rs. 250 Crore + 50% of Rs. 250 Crore of RI);

Balance expenditure recoverable as Additional Charges from concerned Local Area on account of RI in FY 2022-23 = Rs. 125 Crore (i.e., 50% of Rs. 250 Crore of RI);

Total Sales of concerned Local Area in FY 2022-23 = 5000 Million Units;

Additional Energy Charges for all categories of consumers in concerned Local Area on account of RI in FY 2022-23 = Rs. 0.25 per kWh (125\*10/5000)”

## **25 Amendment to Regulation 96 of the Principal Regulations**

### **25.1 Regulation 96.6 of the Principal Regulations is amended as under:—**

“ 96.6 The MSLDC may undertake Opex schemes for system automation, new technology and IT implementation, etc., and such expenses may be allowed over and above normative O&M Expenses, subject to prudence check by the Commission:

Provided that the MSLDC shall submit detailed justification, cost benefit analysis, **and life-cycle cost analysis** of such schemes as against capex schemes, and savings in O&M expenses, if any.”

**25.2 Regulation 96.7 is introduced after Regulation 96.6 of the Principal Regulations:—**

“96.7 The Commission may consider any request for revision of the normative O&M expenses of MSLDC on account of consideration of some Schemes under O&M rather than Capital Investment on case-to-case basis, depending on the justification to be submitted by the Applicant and the life-cycle cost analysis:

Provided that if actual O&M expenses are lower than normative O&M expenses on this account, then no sharing of efficiency gains shall be done to that extent”.

**26 Amendment to Annexure of the Principal Regulations**

**26.1 Annexure I(A) is introduced after Annexure I of the Principal Regulations:—**

**“Annexure-I (A): DEPRECIATION SCHEDULE FOR INTEGRATED MINE**

Sr.	Asset Particulars	Life in Years
1	Land Freehold @	999
2	Land Leasehold	&&&
3	Temporary Erections	1
4	HEMM \$	8
5	Road, bridges, culverts, helipads	25
6	Main Plant Buildings	30
7	Machinery other than HEMM	15
8	Water Supply, drainage and sewerage	15
9	Furniture and Fixtures	15
10	Office equipment, other than computers	15
11	Hospital equipment	15
12	EDP, WP machines, SATCOM & communication equipment	15
13	Electrical Installations	15
14	Self-propelled vehicles	10
15	Computers, software	3
16	Mine Development Expenses #	20 or life of mine, whichever is lower
17	Evaluation and exploration #	20 or life of mine, whichever is lower
18	Others not covered above	15

Sr.	Asset Particulars	Life in Years
	<p>Salvage Value shall be other than 5% for following assets –</p> <p>a. IT Equipment, software Zero(0)</p> <p>b. Zero or as agreed with state Government in case of land</p> <p>c. For specialized mining equipment as specified by Ministry of Corporate affairs</p> <p>d. Mine Development expenses, Evaluation and Exploration Zero (0)</p>	
@	<p>Petitioner to submit if the Freehold Land is attached with any conditions for return. If yes, to submit the conditions and period after which the land is to be returned. In such case, the land shall be depreciable based on such details.</p>	
&&&	<p>To be filled by Petitioner, least of lease agreement/mine life/right to use period</p>	
\$	<p>List of individual HEMM with cost of each HEMM be provided separately</p>	
#	<p>In generic sense, Mine Development Expenditure is the expenditure incurred to bring the mine in usable condition after ensuring the economic viability and decision is taken by Mine Owner to develop the mine. While filling under this head, details to the extent feasible are to be given separately.</p> <p>Evaluation and exploration expenditure is generally the expenditure incurred associated with finding the mineral by carrying out topographical, geological, geochemical and geophysical studies, exploratory drilling, trenching, sampling, expenditure for activities in relation to evaluation of technical feasibility and commercial viability, acquisition of rights to explore, etc. While filling under this head details to the extent feasible are to be given separately.</p>	

“

Mumbai

Dated: \_\_\_\_, 2022

**(Abhijit Deshpande)**

Secretary,

Maharashtra Electricity Regulatory Commission