

“बिजनेस पोस्ट के अन्तर्गत डाक शुल्क के नगद भुगतान (बिना डाक टिकट) के प्रेषण हेतु अनुमत. क्रमांक जी.2-22-छत्तीसगढ़ गजट / 38 सि. से. भिलाई. दिनांक 30-05-2001.”



पंजीयन क्रमांक
“छत्तीसगढ़/दुर्ग/09/2013-2015.”

छत्तीसगढ़ राजपत्र

(असाधारण)
प्राधिकार से प्रकाशित

क्रमांक 590]

रायपुर, गुरुवार, दिनांक 18 नवम्बर 2021 — कार्तिक 27, शक 1943

ऊर्जा विभाग
मंत्रालय, महानदी भवन, नवा रायपुर अटल नगर

छत्तीसगढ़ राज्य विद्युत नियामक आयोग
सिंचाई कॉलोनी, शांति नगर, रायपुर (छ.ग.)

रायपुर, दिनांक 14 नवम्बर 2021

क्रमांक 92/सीएसईआरसी/2021.— विद्युत अधिनियम, 2003 की धारा 61 और 62 सहपठित धारा 181(2) और धारा 32(3) के अधीन प्रदत्त शक्तियों तथा इस हेतु आयोग को समर्थ बनाने वाली अन्य समस्त शक्तियों का प्रयोग करते हुए छत्तीसगढ़ राज्य विद्युत नियामक आयोग एतद्वारा निम्नलिखित विनियम बनाता है:

छत्तीसगढ़ राज्य विद्युत नियामक आयोग (बहुवर्षीय टैरिफ सिद्धान्तों के अनुरूप टैरिफ के निर्धारण और टैरिफ एवं प्रभारों से अनुमानित राजस्व के अवधारण हेतु अपनायी जाने वाली कार्य प्रणाली एवं प्रक्रिया तथा निबंधन एवं शर्तों) विनियम, 2021.

अध्याय—1 प्रारंभिक

1. संक्षिप्त नाम तथा प्रारंभ:

- (i) ये विनियम छत्तीसगढ़ राज्य विद्युत नियामक आयोग (बहुवर्षीय टैरिफ सिद्धान्तों के अनुरूप टैरिफ के निर्धारण और टैरिफ एवं प्रभारों से अनुमानित राजस्व के अवधारण हेतु अपनायी जाने वाली कार्य प्रणाली एवं प्रक्रिया तथा निबंधन एवं शर्तों) विनियम, 2021 कहलाएंगे।
- (ii) ये विनियम, अधिनियम की धारा 62 के अधीन टैरिफ एवं धारा 32(3) के अधीन राज्य भार प्रेषण केन्द्र के लिए शुल्क एवं प्रभारों के निर्धारण हेतु वित्तीय वर्ष 2022-23 से वित्तीय वर्ष 2024-25 तक की अवधि में लागू रहेंगे और आगे भी तब तक प्रभावी बने रहेंगे, जब तक कि इन विनियमों को नए विनियमों से अतिष्ठित नहीं कर दिया जाता।

Raipur, the 14th November 2021

No. 92/CSERC/2021.— In exercise of powers conferred under Section 61 and 62 read with Section 181(2) and Section 32 (3) of the Electricity Act 2003 and all other powers enabling it in this behalf, the Chhattisgarh State Electricity Regulatory Commission hereby makes the following regulations:

Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2021.

Chapter 1

PRELIMINARY

1. SHORT TITLE AND COMMENCEMENT:

- (i) This Regulation may be called the Chhattisgarh State Electricity Regulatory Commission (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2021.
- (ii) This Regulation shall be applicable for determination of tariff under Section 62 and for fees and charges of SLDC as per Section 32 (3) of the Act for the financial year 2022-23 to financial year 2024-25, and will remain in effect until this Regulation superseded by new Regulations.
- (iii) This Regulation shall extend to the whole of Chhattisgarh.

2. SCOPE AND EXTENT OF APPLICATION:

2.1. This Regulation shall apply to the following persons operating in the State of Chhattisgarh:

- (a) The State Transmission Utility (STU);
- (b) All generating stations supplying power directly or through State trading licensee(s) to distribution licensees of the State under long term agreement except generating stations which are subject to the jurisdiction of the Central Commission and also such renewable energy generating stations located in the State whose tariff is decided by the Commission under relevant Regulations and orders;

Provided that these regulations shall also apply in all cases where a generating company has the arrangement for supply of coal 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.

- (c) All intra-state transmission licensee(s);
- (d) All distribution licensee(s); and
- (e) The State Load Despatch Centre (SLDC).

Provided that in absence of any provision in this regulation, the Commission shall be guided by the norms specified under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (CERC) for such period as decided by Commission.

- 2.2. This Regulation will not apply to stand-alone generators, bulk consumers and captive users.

Provided, that the stand-alone generators who avail services of SLDC for energy metering or accounting for the purpose of Renewable Energy Certificates or any other such purposes as may be mandated by the Commission from time to time shall be required to pay fee & charges as specified under this regulation.

- 2.3. All proceedings under this Regulation shall be governed by the CSERC (Conduct of Business) Regulations, 2009 and amendment or enactments thereon.

3. **DEFINITIONS: In this Regulation, unless the context otherwise requires,-**

- 3.1. **“Accounting Statement”** means for each year, the following statements, namely-

balance sheet, profit and loss account and cash flow statement prepared in accordance with the form or requirement contained in the Companies Act, duly certified by the statutory auditors;

reconciliation statement, duly certified by the Chartered Accountant/ Cost Accountant, showing the reconciliation between the total expenses, revenue, assets and liabilities, of the entity as a Company and the expenses, revenue, assets and liabilities, separately for each business regulated by the Commission and other/unregulated business operations;

Provided further that, in case separate Accounting Statements are not submitted for each licensed Business in accordance with the License conditions and for each regulated Business for the Year 2022-23 onwards, the Petitions filed by the Generating Company or Licensee or SLDC, may be rejected by the Commission after giving the Petitioner a reasonable opportunity of being heard;

Provided also that till the SLDC is not separately established as state agency, separate books of accounts for SLDC as separate unit under Chhattisgarh State Power Transmission Company Limited (CSPTCL) shall be maintained and certified by the CSPTCL;

- 3.2. **“Act”** means the Electricity Act, 2003 (36 of 2003) or any amendments made to the same or any succeeding enactment thereof;

- 3.3. **"Additional capitalization"** means the capital expenditure incurred or projected to be incurred, after the date of commercial operation of the project and admitted by the Commission after prudence check, subject to provisions of Regulation 19;
- 3.4. **"Aggregate Revenue Requirement" or "ARR"** means the costs pertaining to the licensed and / or regulated business, which are permitted, in accordance with this Regulation, to be recovered from the tariffs and charges determined by the Commission.
- 3.5. **"Allocation Matrix"**, shall comprise of elements as specified in Chapter 6 of this Regulation.
- 3.6. **"Annual Target Quantity" or 'ATQ'** in respect of an integrated mine(s) means the quantity of coal 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 is ready for supply of coal 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.

- 3.7. **"Applicant"** means a licensee or a generating company who has made a petition for determination of tariff or a petition for true up in accordance with this Regulation and the Act.
- 3.8. **"Auditor"** means an auditor appointed by a generating company or a transmission licensee or a distribution licensee or the SLDC, in accordance with the provisions of sections 139, or section 148 of the Companies Act, 2013, or any other law for the time being in force;
- 3.9. **"Auxiliary Energy Consumption in generating station" or "AUX"** in relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipments of the generating station, such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station and transformer losses within the generating station, expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of the generating station;

Provided that auxiliary energy consumption shall not include energy consumed for supply of power to housing colony and other facilities at the generating station and the power consumed for construction works at the generating station.

Provided further that 'Auxiliary energy consumption for emission control system ' or 'AUXe' in relation to a period in case of coal based thermal generating station means the quantum of energy consumed by auxiliary equipment of the emission control system of the coal based thermal generating station in addition to the auxiliary energy consumption under the main clause of this Regulation(AUX); however the AUXe shall not be considered for the purpose of computation of ECR and its impact on the energy charge shall be dealt through supplementary tariff by way of ECR.

- 3.10. **"Auxiliary Energy Consumption in Sub-station" or "AUXs"** in relation to a period in case of Substation means the quantum of energy consumed for lighting arrangements, battery charging and auxiliary equipment of the sub-station including consumption in control room of the sub-station excluding energy consumed in

housing colony;

3.11. "Beneficiary"

- (a) In relation to a **generating station** means the person buying power generated by such station on payment of annual fixed charges and / or energy charges; and
- (b) In relation to **transmission system** means long term and / or medium term open access customers as defined in Chhattisgarh State Electricity Regulatory Commission (Intra-state Open Access in Chhattisgarh) Regulations, 2011, as amended from time to time, and includes distribution licensee(s) who have transmission service agreement with the STU / transmission licensee.
- (c) in relation to the Distribution Wires Business, the supply Company or licensee or consumer, as the case may be;
- (d) in relation to the Retail Supply Business, the consumers;
- (e) in relation to the SLDC, generating company or licensee or open access consumer, who utilise the Intra-State Transmission system for transmission of electricity and / or utilise the distribution system of a licensee in the State, as the case may be, for wheeling of electricity and / or avail the services of the SLDC relating to scheduling and real-time grid operations, State energy accounting, operation of pool account, etc.:

3.12. "Capital Cost" means the capital cost as defined in Regulation 18 of these regulations in respect of generating station or transmission or distribution system as the case may be and Regulation 55 in respect of integrated mine(s);

3.13. "Capital Investment Plan" shall comprise of elements as specified in Regulation 7 of this Regulation;

3.14. "Change in Law" means occurrence of any of the following events:

- (1) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of Indian law; or
- (2) change in interpretation of Indian law by a competent court, Tribunal or Indian Governmental Instrumentality which is the final authority under law for such interpretation; or
- (3) change by any competent statutory authority, in any condition or covenant of any consent or clearance or, approval or license available or obtained for the project.
- (4) coming into force or change in any bilateral or multilateral agreement or treaty between the Government of India and any other Sovereign Government having implication for the generating station or the licensees regulated under these regulations."

3.15. "Commission" means the Chhattisgarh State Electricity Regulatory Commission referred to in sub-section (1) of section 82 of the Act;

3.16. "Control Period" means a multi-year period fixed by the Commission, from 1st April 2022 and up to 31st March 2025;

3.17. "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);

3.18. “Date of Commencement of Production” in respect of integrated mine(s) means the date of touching of coal, as the case may be, as declared by the generating company;

3.19. “Date of Commercial Operation” or “COD” means

- (i) in relation to a unit or block of the thermal generating station, the date declared by the generating company after demonstrating the maximum continuous rating (MCR) or the installed capacity (IC) through a successful trial run after due notice to the beneficiaries, from 00:00 hour of which scheduling process as per the Indian Electricity Grid Code (IEGC) / CG State Grid Code and amended from time to time is fully implemented, and in relation to the generating station as a whole, the date of commercial operation of the last unit or the block of the generating station.
- (ii) COD in respect of an emission control system means the date of putting the emission control system into use and environmental standards, wherein “emission control system” means a set of equipment or devices required to be installed in coal based thermal generating station or unit thereof to meet the revised emission standards;
- (iii) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —
 - a) 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
 - b) the first date of the year succeeding the year in which the value of production estimated in accordance with these regulations, exceeds total expenditure upto that year; or
 - c) 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 (a) to (c) above, 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 (v) of this Regulation;

Provided also that in cases wherein the proposed COD is on or after 01.04.2022, 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.

Provided further that in cases wherein COD of the mine occurred before these regulations came into force, the COD shall be deemed on compliance of the conditionality specified in clause (iii) above and prior notice shall not be required.

- (iv) in relation to a unit of hydro generating station, the date declared by the generating company from 00:00 hour of which, after due notice to the beneficiaries, scheduling process in accordance with the Indian Electricity Grid Code (IEGC) / CG State Grid Code is fully implemented, and in relation to the generating station as a whole, the date declared by the generating company after demonstrating peaking capability corresponding to installed capacity of the generating station through a successful trial run, after due notice to the beneficiaries.

Note

1. In case the hydro generating station with pondage or storage is not able to demonstrate peaking capability corresponding to the installed capacity for the reasons of insufficient reservoir or pond level, the date of commercial operation of the last unit of the generating station shall be considered as the date of commercial operation of the generating station as a whole, provided that it will be mandatory for such hydro generating station to demonstrate peaking capability equivalent to installed capacity of the generating unit or the generating station as and when full reservoir /pond level is achieved.
 2. In case of purely run-of-river hydro generating station if the unit or the generating station is declared under commercial operation during lean inflows period when the water is not sufficient for such demonstration, it shall be mandatory for such hydro generating station or unit to demonstrate peaking capability equivalent to installed capacity as and when sufficient inflow is available
- (v) In relation to the transmission system, the date declared by the STU / transmission licensee from 00:00 hour of which an element of the transmission system is in regular service after successful charging and trial operation for transmitting electricity and communication signal from sending end to receiving end;

Provided that where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable;

Provided that the date shall be the first day of a calendar month and its availability shall be accounted for, from that date;

Provided further that in case an element of the transmission system is ready for regular service but is prevented from providing such service for reasons not attributable to the transmission licensee, its suppliers or contractors, the Commission may approve the date of commercial operation prior to the element coming into regular service;

- (vi) Date of commercial operation in relation to a communication system or element thereof shall mean the date declared by the transmission licensee from 00:00 hour of which a communication system or element is put into service after completion of site

acceptance test including transfer of voice and data to respective control centre as certified by the respective State Load Dispatch Centre.

- (vii) In relation to a distribution system, means the date of charging electric lines or substations to its declared voltage level. In cases where line(s)/substation(s) are declared ready for charging but the licensee is not able to charge for reasons not attributable to the licensee, "date of operation" in respect of such line(s)/substation(s) shall be reckoned as seven days after the line(s)/substations(s) have been declared ready for charging.

3.20. "Day" means the 24 hour period starting at 00:00 hour;

3.21. "De-capitalisation" for the purpose of the tariff under this regulation, means reduction in Gross Fixed Assets of the project corresponding to the removal/deletion of assets as admitted by the Commission;

3.22. "Declared Capacity" or "DC" in relation to a generating station means, the capability to deliver ex-bus electricity in MW declared by such generating station in relation to any time-block of the day or whole of the day, duly taking into account the availability of fuel or water, and subject to further qualification in the relevant regulation;

3.23. "De-Commissioning" means removal from service of a generating station or a unit thereof or transmission system including communication system or element thereof or load dispatch Centre equipments including communication system or element thereof or distribution system or element thereof, after it is certified by the Central Electricity Authority or any other authorized agency, either on its own or on an application made by the project developer or the beneficiaries or both, that the project cannot be operated due to non performance of the assets on account of technological obsolescence or uneconomic operation or a combination of these factors;

3.24. "Design Energy" in case of hydro generating station, means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station;

3.25. "ERC" means expected revenue from tariff and charges that a licensee is permitted to recover;

3.26. "Existing Generating Station" means a generating station declared under commercial operation on a date prior to 01.04.2022;

3.27. "Existing Project" means the project declared under commercial operation on a date prior to 01.04.2022;

3.28. "Expenditure Incurred" means the fund, whether the equity or debt or both, actually deployed and paid in cash or cash equivalent, for creation or acquisition of a useful asset and does not include commitments or liabilities for which no payment has been released;

Provided any subsequent payment for creation or acquisition of the assets shall be considered as expenditure incurred from the date of its release.

3.29. "Escrow account" in reference to the Integrated mine 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;”

- 3.30. **“Fees”** means the one-time or annual fixed payments collected by the SLDC on its behalf or any other account as specified by the Commission from time to time;
- 3.31. **“Force Majeure”** means any event which is beyond the control of the intra-state user involved which they could not foresee or with reasonable amount of diligence could not have foreseen or which could not be prevented and which substantially affect the performance by either agency such as but not limited to
- (i) Acts of God, natural phenomena including but not limited to floods, droughts, earthquakes and epidemics etc.
 - (ii) Acts of any Government, domestic or foreign including but not limited to war declared or undeclared, hostilities, priorities, quarantines, embargoes, lockdown etc.
 - (iii) Riot or civil commotion
 - (iv) Grid’s failure not attributable to agencies involved
- 3.32. **“Gross Calorific Value” or “GCV”** in relation to a thermal generating station means the heat produced in Kcal by complete combustion of one kilogram of solid fuel or one liter of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;
- 3.33. **“Gross Station Heat Rate” or “SHR”** means the heat energy input in Kcal required to generate one kWh of electrical energy at generator terminals of a thermal generating station
- 3.34. **“Indian Governmental Instrumentality”** means the Government of India, Governments of State (where the project is located) and any ministry or department or board or agency controlled by Government of India or Government of State or the local government where the project is located, or quasi-judicial authority constituted under the relevant statutes in India
- 3.35. **“Infirm Power”** means electricity injected into the grid prior to the commercial operation of a unit(s) of the generating station;
- 3.36. **“Input Price”** means the price of coal sourced from the integrated mines at which the coal is transferred to the generating station for the purpose of computing the energy charges for generation and supply of electricity to the beneficiaries and determined in accordance to these regulations;
- 3.37. **“Installed Capacity” or “IC”** means the capacity of the generating station reckoned at the generator terminals as may be approved by the Commission from time to time subject to maximum ceiling limit of the summation of the name plate capacities of all the units of the generating station.
- 3.38. **“Integrated Mine”** means the captive mine (allocated for use in one or more identified generating station) or basket mine (allocated to a generating company for use in any of its generating stations) or both being developed by the generating company for supply of coal to one or more specified end use generating stations for generation and sale of electricity to the beneficiaries;
- 3.39. **“Intra-State buyer”** means a distribution licensee or electricity trader or bulk

- consumer or captive user receiving power through open access by using intra-State transmission system and / or distribution system including such system when it is used in conjunction with inter-State transmission system and whose scheduling, metering and energy accounting is coordinated by the SLDC.
- 3.40. **“Intra-State entity”** means such persons whose scheduling, metering and energy accounting is coordinated by the SLDC;
- 3.41. **“Intra-State market operation function”** includes functions of scheduling, despatch, metering, data collection, energy accounting and settlement, transmission loss calculation and apportionment, operation of pool account and congestion charge account, administering ancillary services, information dissemination and any other functions assigned to the SLDC by the Act or by Commission’s Regulations and orders;
- 3.42. **“Intra-State seller”** means a generating station including captive generating plant or distribution licensee or electricity trader supplying power through open access by using intra-State transmission system and/or distribution system including such system when it is used in conjunction with inter-State transmission system and whose scheduling, metering and energy accounting is coordinated by SLDC.
- 3.43. **“Intra-State user”** means a person whose electrical plant is connected to the State grid at voltage level of 33 KV and above such as a generating company including captive generating plant or transmission licensee (other than CTU and STU) or distribution licensee or bulk consumer including captive user.
- 3.44. **“Landed Fuel Cost”** means the total cost of coal (including biomass in case of cofiring), lignite or the gas delivered at the unloading point of the generating station and shall include the base price or input price, washery charges wherever applicable, transportation cost (overseas or inland or both) and handling cost, charges for third party sampling and applicable statutory charges
- 3.45. **“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 dispatch of coal , as the case may be;”
- 3.46. **“Long-term”** means a period of exceeding 7 years and above;
- 3.47. **“Maximum Continuous Rating” or “MCR”** in relation to a unit of the thermal generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters, with water or steam injection (if applicable) and corrected to 50 Hz grid frequency and specified site conditions;
- 3.48. **“Medium-Term”** means any period exceeding four months and up to 7 years;
- 3.49. **“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 (R&R) of persons affected by mining operations under the relevant law

- 3.50. **“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;”
- 3.51. **“New Generating Station”** means the station achieving COD on or anticipated to be achieving COD on or after 1.4.2022;
- 3.52. **“Normative Annual Plant Availability Factor” or “NAPAF”** in relation to a generating station means the availability factor specified in Regulation 43 for thermal generating station and in Regulation 44 for hydro generating station;
- 3.53. **“Operation and Maintenance Expenses” or “O&M expenses”** means the expenditure on operation and maintenance of the project, or part thereof, and includes the expenditure on manpower expenses, repairs, spares, consumables, insurance, and general overheads;
- For the purpose of this Regulation, O&M expense is the total of the HR and M&G expenses, which in turn have been dealt in the relevant sections
- “Provided that for integrated mine(s), the O&M 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.”
- 3.54. **“Original Project Cost”** means the capital expenditure incurred by the generating company or the transmission licensee / STU or the distribution licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;
- 3.55. **“Peak Rated Capacity” in respect of integrated mine(s)** means the peak rated capacity of the mine, as specified in the Mining Plan;
- 3.56. **“Pit Head Generating Station”** means a generating station having dedicated transportation system for transportation of coal from mines up to the generating station without involving any public transportation system;
- 3.57. **“Plant Availability Factor (PAF)”** in relation to a generating station for any period means the average of the daily declared capacities (DCs) for all the days during that period expressed as a percentage of the installed capacity in MW reduced by the normative auxiliary energy consumption;
- 3.58. **“Plant Load Factor (PLF)”** in relation to thermal generating station or unit for a given period means the total sent out energy corresponding to scheduled generation during the 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:

$$PLF = 10000 \times \frac{\sum_{i=1}^N SG_i}{\{N \times IC \times (100 - AUX_n)\}} \%$$

Where,

IC = Installed Capacity of the generating station or unit in MW,

SGi= Scheduled Generation in MW for the i^{th} time block of the period,

N = Number of time blocks during the period, and

AUXn = Normative Auxiliary Energy Consumption as percentage of gross energy generation;

Provided that upon commissioning of the emission control systems or element thereof, the PLF shall be computed as under

$$PLF = 10000 \times \frac{\sum_{i=1}^N SG_i}{\{N \times IC \times (100 - AUX_n - AUX_{en})\}} \%$$

Where,

AUX_{en} = Normative Auxiliary Energy Consumption for the Emission Control System or its element thereof which has been put to use, as percentage of gross energy generation;

- 3.59. **“Project”** means a generating station including integrated coal mines or the transmission system or the distribution system, as the case may be, and in case of a hydro generating station includes all components of generating facility, such as dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;
- 3.60. **“Pumped storage hydro generating station”** means a hydro station which generates power through energy stored in the form of water energy, pumped from a lower elevation reservoir to a higher elevation reservoir;
- 3.61. **“Rated Voltage”** means the manufacturer's design voltage at which the transmission system is designed to operate and includes such lower voltage at which any transmission line is charged or for the time being charged, in consultation with beneficiary;
- 3.62. **“Regulated Business”** means the functions and activities which the licensee is required to undertake, in terms of the license granted by the Commission or as a deemed licensee under the Act; and the generating company in terms of the provisions of the Act and the Regulations notified by the Commission;
- 3.63. **“Retail Supply Business”** means the business of sale of electricity by a distribution licensee to its consumers in accordance with terms of license;
- 3.64. **“Retail Supply Tariff”** is the rate charged by the distribution licensee for supply to consumer and includes charges for wheeling and retail supply services;
- 3.65. **“Run-of-River Generating Station”** means a hydro generating station which does not have upstream pondage or submergence;
- 3.66. **“Run-of-River Generating Station With Pondage”** means a hydro generating station with sufficient pondage for meeting the diurnal variation of power demand;
- 3.67. **“Scheduled Commercial Operation Date or SCOD”** shall mean the date(s) of commercial operation of a generating station or generating unit or block thereof or

transmission system or element thereof as indicated in the CIP or as agreed in power purchase agreement or transmission service agreement as the case may be, whichever is earlier;

- 3.68. **“Scheduled Energy”** means the quantum of energy scheduled by the concerned Load Despatch Centre to be injected into the grid by a generating station for a given time period;
- 3.69. **“Scheduled Generation” or “SG”** at any time or for any period or time-block means schedule of generation in MW or MWh ex-bus, given by the State Load Despatch Centre;
- 3.70. **“Scheme”** means the facilities and equipments associated with and installed at generating station/ transmission system / distribution system (s) / the SLDC and also includes but not limited to the following, namely:-
- computer systems, hardware and software,
 - auxiliary power supply system comprising Uninterrupted Power Supply, Diesel Generating Set(s) and DC power system,
 - general telephone, fax and other off line communication system,
 - other infrastructure facilities, such as air-conditioning, fire-fighting and construction and renovation of buildings,
 - any innovative schemes R & D projects and pilot projects for better system operation, such as Synchrophasors, System Protection Scheme,
 - Back-up control centers for SLDC,
 - Surveillance Camera System, and
 - Cyber Security System;
- 3.71. **“SLDC charges”** means recurring and monthly payments to be collected by SLDC;
- 3.72. **“Start Date or Zero Date”** means the date indicated in the Investment Approval for commencement of implementation of the project and where no date has been indicated, the date of investment approval shall be deemed to be Start Date or Zero Date;
- 3.73. **“State Load Despatch Centre” or “SLDC”** means the centre established under subsection (1) of section 31 of the Act;
- 3.74. **“State pool account”** means State accounts for payments regarding deviation charges or Reactive Energy Exchanges (Reactive Energy Account) or any other such Accounts which may be operated by SLDC from time to time as per the Regulations or directions of the Commission;
- 3.75. **“State system operation function”** includes monitoring of grid operations, supervision and control over the intra-State transmission system, real-time operations for grid control and dispatch, system restoration following grid disturbances, compiling and furnishing data pertaining to system operation, congestion management, black start coordination and any other function(s) assigned to the SLDC by the Act and / or by the Commission’s regulations and / or orders;
- 3.76. **“Storage Type Generating Station”** means a hydro generating station associated with large storage capacity to enable variation in generation of electricity according to demand;

- 3.77. **“Transmission Service Agreement (TSA)”** means the agreement, contract, memorandum of understanding, or any such covenant, entered into between the transmission licensee / STU and the beneficiary for the operational phase of the transmission system.
- 3.78. **“Transmission System”** means a line or a group of lines with or without associated sub-station, and includes equipment associated with transmission lines and sub-stations;
- 3.79. **“Trial Run” or “Trial Operation”** in relation to a generating station or a transmission system or an element thereof shall be as specified in the Central Commission’s Regulations and its amendments/ enactments thereof.
- 3.80. **“Unit”** in relation to a thermal generating station means steam generator, turbine-generator and auxiliaries; and in relation to a hydro generating station means turbine-generator and its auxiliaries;
- 3.81. **“Useful Life”** in relation to a unit of a generating station, transmission and distribution system from the COD shall mean the following, namely:-
- | | |
|---|--|
| (a) Coal based thermal generating station | 25 years |
| (b) AC and DC sub-station | 25 years |
| (c) Hydro generating station including pumped storage hydro generating stations | 40 years |
| (d) Transmission or distribution line | 35 years |
| (e) Integrated mine | 20 years or as per Mining Plan, whichever is lower |
- 3.82. **“Wheeling”** means the operation whereby the distribution system and associated facilities of a transmission licensee or distribution licensee, as the case may be, are used by another person for the conveyance of electricity on payment of charges to be determined under Section 62 of the Act.
- 3.83. **“Distribution Wire Business”** means the business of operating and maintaining a distribution system for conveyance of electricity in the area of supply of the distribution licensee;
- 3.84. **“Year”** means the financial year ending on 31st March,
- | |
|---|
| (a) “Current Year” means the year in which the statement of annual accounts or application for determination of tariff is filed; |
| (b) “Ensuing Year” means the year next following the current year; and |
| (c) “Previous Year” means the year immediately preceding the current year. |
- 3.85. The words and expressions used in this Regulation and not defined herein but defined in the Act shall have the meaning assigned to them under the Act and other Regulations notified by the Commission, provided that when a word or phrase is used by the Commission in a specific context, the meaning applicable in that specific context, shall prevail and the generic definition given above may not be applicable.

Chapter 2

GENERAL PRINCIPLES

4. MYT FRAMEWORK:

- 4.1. The Commission in specifying this Regulation is guided by the principles contained in Sections 61 and 62 of the Act, the National Electricity Policy and the Tariff Policy notified by the Central Government for the determination of tariff for the generating stations in the state, transmission licensee/ STU, distribution licensee and Section 32 (3) of the Act for determination of fees and charges for State Load Dispatch Centre (SLDC),;

Provided that the Commission may, either on suo-motu basis or upon application made to it by a generating company or STU/ transmission licensee or distribution licensee or SLDC, for the reasons to be recorded in writing, exempt the determination of tariff under the Multi-Year Tariff framework for such period as may be contained in the Order granting such an exemption and such tariff shall be determined as per the direction of the Commission.

- 4.2. The Multi-Year Tariff framework shall be based on the following elements for determination of Aggregate Revenue Requirement and expected revenue from tariff and charges for generating company, STU/ transmission licensee, SLDC, distribution wheeling business and retail supply business:
- (a) Approval of capital investment plan for a period not less than the Control Period before the start of the Control Period;
 - (b) Mechanism for Truing up;
 - (c) Mechanism for pass through of uncontrollable items;
 - (d) Mechanism for sharing of gains or losses on account of controllable items;
 - (e) Determination of separate ARR and tariff & charges for each year of the control period.
 - (f) Determination of input price of coal from integrated coal mine

5. PROCEDURE FOR FILING PETITION

- 5.1. The petition under MYT by the generating company, STU/ transmission licensee, SLDC and distribution licensee shall be filed as per the timelines specified in this Regulation and in compliance with the principles for determination of ARR as specified in this Regulation, in such form as may be prescribed by the Commission from time to time.
- 5.2. The generating company, STU/ transmission licensee and SLDC shall file the MYT application by 30th November 2021 in accordance with Regulation 5.7(a) (i). The yearly true-up petition shall be filed by 30th November of current year in accordance with Regulation 5.7(b) (i).
- 5.3. The distribution licensee shall file MYT petition by 30th November 2021 in

accordance with Regulation 5.7 (a) i.a.ii). The yearly true-up petition shall be filed by 30th November of current year in accordance with Regulation 5.7(b) (ii).

- 5.4. The petitioner shall also submit a statement showing status of compliance to directives issued by the Commission in its previous orders.
- 5.5. All the filings by any petitioner should also be in conformity with the provisions of the CSERC (License) Regulations, 2004, its amendment(s) and the conditions of license. The multi-year tariff filing shall be in such form and in such manner as may be prescribed by the Commission from time to time.
- 5.6. Every application for determination of tariff for each year or for continuation of previously determined tariff for each year shall be accompanied by a fee as specified in the CSERC (Fees and Charges) Regulations, 2009, as amended from time to time. The Commission may seek clarification and additional information on the application and the applicant shall provide clarifications and additional information on or before the date stipulated by the Commission.
- 5.7. The filing for the Control Period under this Regulation shall be as under;

(a) MYT Petition shall comprise of:

- i. For Generation, Transmission and SLDC business –
 1. Truing up for previous year;
 2. Multi-Year Aggregate Revenue Requirement for each year of the entire Control Period;
 3. Application for determination of tariff and fees and charges for each year of the entire Control Period;
- ii. For Distribution Wire business and retail supply business –
 1. Truing up for previous year;
 2. Multi-Year Aggregate Revenue Requirement for each year of the entire Control Period.
 3. Revenue from retail sale of power at existing tariffs & charges and projected revenue gap for the first year of the Control Period.
 4. Application for retail tariff proposal along with proposed category-wise Tariff or Fees & Charges for the first year of the Control Period.

In case books of account of the Distribution Wire Business and Retail Supply Business are not segregated, its Aggregate Revenue Requirement shall be apportioned between the Distribution Wires Business and Retail Supply Business in accordance with the Allocation Matrix specified in Regulations 80.

(b) After first year of control period and onwards, the yearly true up petition shall comprise of:

- i. For Generation, Transmission, and SLDC business - Truing up for preceding year(s).

The STU/transmission licensee shall also file proposal for determination of transmission charges for the short term open access customers along with true-up petition.

ii. For Distribution Wire and Retail Supply Business

1. The truing up petition for preceding year(s).
 2. Revised power purchase quantum/cost (if any), with details thereof for the ensuing year.
 3. Revenue from existing tariffs and charges and projected revenue for the ensuing year.
 4. Application for re-determination of ARR for the ensuing year along-with retail tariff proposal.
- (c) A generating company shall submit, generating station wise performance data, except for true up for such years, for which tariff order itself provided for determination of single part tariff.
- (d) True up for any period shall be governed by the provisions of the regulation under which the tariff for that year was determined.

Provided also that if the Petition is not filed within the specified timelines and/or data sought by the Commission for processing the Petition is not submitted within the stipulated time, then the carrying cost, if any, due to consequential delay, shall not be allowed to the Generating Company or Transmission Licensee or Distribution Licensees or SLDC, as the case may be:

Provided also that a Petition may be filed at any time during the Control Period in case of variation in uncontrollable factors that may result in sudden, steep, and sustained increase in tariff.

- (e) The Commission shall also consider the true up petition for the previous years where the truing-up has been done on the basis of provisional accounts.

5.8. A generating company may make a Petition for determination of provisional tariff in advance of the anticipated Date of Commercial Operation of unit or stage or generating station as a whole, or for the emission control systems, as the case may be, based on the capital expenditure actually incurred up to the date of making the Petition or a date prior to making of the Petition, duly audited and/or certified by the statutory auditors/Chartered Accountant/Cost Accountant and the provisional tariff shall be applicable from the date of commercial operation of such Unit or Stage or Generating station, as the case may be.

5.9. The generating company shall file separate generating station wise petition for supplementary tariff for emission control systems.

In respect of Integrated mine, the generating company shall file separate mine wise petition for determination of input price of coal from such mine.

5.10. A generating company shall make a fresh Petition in accordance with this Regulation, for determination of final tariff / supplementary tariff based on actual capital expenditure incurred up to the date of commercial operation of the Generating Station, or for the emission control systems, as the case may be, for which provisional tariff is approved based on Annual Audited accounts duly certified by the statutory auditors.

5.11. Any difference in provisional tariff and the final tariff (the expression tariff includes the supplementary tariff) determined by the Commission and not attributable to the Generating Company may be adjusted at the time of determination of final tariff for

the following year or as directed by the Commission.

6. DISPOSAL OF PETITION

- 6.1.** The Commission shall process the MYT tariff petition of the applicants in accordance with this Regulation read with the Conduct of Business Regulations 2009, as amended from time to time.
- 6.2.** Copies of the tariff petition filed by Generation Company, STU/ transmission licensee, distribution licensee and SLDC shall be made available for sale on payment of charges at the Commission's office and in such offices of the applicant as directed by the Commission. The document shall also be uploaded on the petitioner's website in downloadable format for easy accessibility to all stakeholders.
- 6.3.** The Commission shall hold proceedings on the ARR and expected ERC proposed by the applicant on the basis of prevailing and proposed tariff, and shall hear such persons as the Commission considers appropriate, before deciding on such proposals.
- 6.4.** The generation, STU/ transmission, distribution and SLDC shall publish the summary/gist of the proposals, as approved by the Commission for publication, highlighting the salient features of the application that are of interest to various stakeholders, in at least three newspapers, two in Hindi and one in English, having wide circulation in the State or in the area of the petitioner. Minimum 21 days time shall be given for filing suggestion/ objections by the stakeholders.
- 6.5.** The applicant shall publish the gist of the order including the approved tariffs, in at least three daily newspapers, two in Hindi and one in English, having wide circulation in its area of supply. Such tariff shall take effect from the date as may be specified by the Commission in the relevant tariff order.
- 6.6.** The Commission shall, within seven days of making the order, send a copy of the order to the appropriate State Government, the Central Electricity Authority and the concerned generating company / licensee/ beneficiaries.

7. CAPITAL INVESTMENT PLAN

- 7.1.** The generating company, STU/ transmission licensee, SLDC and distribution licensee shall file for approval of the Commission a capital investment plan by 31st October 2021. The capital investment plan should cover the entire Control Period, with separate details for each year of the Control Period.
- 7.2.** The capital investment plan may be in respect of new generation projects or transmission/ distribution schemes (for lines, sub stations, bays, etc.) or system operation for capacity addition/ enhancement or renovation of existing capacities on completion of useful life or work required for compliance of law or expenditure incurred to comply with revised emission standards or deferred execution of work included in original scope or efficiency improvement or such works which may be expedient for operation of the system.
 - (a)** The capital investment plan shall show separately, on-going projects that will spill over into the Control Period, and such new projects (along with justification) which will commence in the Control Period but may be completed within or beyond the Control Period. The capital investment plan

shall contain the scheme details, justification for the work, capitalization schedule, capital structure and cost benefit analysis, if applicable.

(b) In addition to above:

- i. The generating company shall submit the power sale arrangement in respect of new projects.
- ii. For renovation and modernization schemes of power plants and all schemes meant for efficiency gain of power plants which have completed useful life, the generating company shall submit a petition containing duly approved cost benefit analysis and expected performance targets along with RLA study report;
- iii. The transmission licensee shall submit the power evacuation plan and system strengthening plan in respect of future load forecast by the distribution licensee;
- iv. The distribution licensee shall submit a sales forecast, load forecast, power procurement plan and proposed measure to ensure 24 X 7 quality supply;
- v. The distribution licensee shall submit a plan for installation of meters at all connections, to bring transparency in billing, to reduce distribution loss and to improve consumer services.

7.3. The Commission shall approve the capital investment plan after considering cost benefit analysis and also prudence check and after giving due opportunity to all the stakeholders to offer views/ suggestions/ objections and holding a hearing on the proposed plan and after taking into consideration the objections/ suggestions so received and any additional information provided by the applicant.

7.4. The Commission shall approve the capital investment plan before issuing the tariff order in accordance with this regulation and shall consider the impact of approved capital investment plan in the tariff order.

7.5. To meet any urgent requirements, the generating company, STU/ transmission licensee, distribution licensee and SLDC may request the Commission for amendment in the approved capital investment plan or may file additional CIP, as the case may be.

7.6. The licensee or the generating company, as the case may be, in case, where urgent action is required to mitigate threat to life and property take up urgent work, subject to prior intimation of the nature of urgency, brief about the proposed work and cost estimate. In such cases, ex post facto approval of the Commission may be obtained.

8. SPECIFIC TRAJECTORY FOR CERTAIN VARIABLES

8.1. Targets will be set by the Commission for the items that are “controllable”. Besides, trajectory for specific variables may be prescribed by the Commission.

9. DETERMINATION OF TARIFF

9.1. Notwithstanding anything contained in this Regulation, the Commission shall at all times have the authority, either on suo-motu basis or on a Petition filed by the

applicant, to determine the tariff, including terms and conditions thereof, of any generating company or STU/ transmission licensee or distribution licensee or SLDC.

- 9.2.** Tariff in respect of a generating station may be determined for the whole of the generating station or a stage or unit or block of the generating station, and tariff for the transmission system may be determined for the whole of the transmission system or any part of the transmission system. The retail supply tariff, wheeling charges and miscellaneous charges for the distribution licensee shall also be decided by the Commission for whole of the distribution system.
- 9.3.** The Commission shall determine the tariff and fees and charges for:
- (a) Generation of electricity, in accordance with Chapter-4 of this Regulation;
 - (b) Transmission of electricity, in accordance with Chapter-6 of this Regulation;
 - (c) Distribution Wheeling Business, in accordance with Chapter-7 of this Regulation;
 - (d) Retail Supply Business, in accordance with Chapter-8 of this Regulation; and
 - (e) SLDC, in accordance with Chapter-9 of this Regulation.

10. TRUING-UP

- 10.1.** Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a generating company or STU/ transmission licensee or distribution licensee or SLDC is covered under a Multi-Year Tariff framework, then such generating company or STU/ transmission licensee or distribution licensee or SLDC, as the case may be, shall be subject to truing up of controllable and uncontrollable items defined as per Regulation 11 during the Control Period in accordance with this Regulation.

- 10.2.** The generating company, the STU/transmission licensee, the distribution licensee and SLDC shall file an application each year during the Control Period for truing up within the time limit as specified in this Regulation.

Provided that the generating company or STU/transmission licensee or distribution licensee or SLDC, as the case may be, shall submit to the Commission information in such form as may be prescribed by the Commission, together with the Audited Accounts duly certified by the Auditor, extracts of books of account and such other details as the Commission may require to assess the reasons for and extent of any variation in financial performance from the approved forecast.

- 10.3.** In case the audited accounts are not available, then the provisional truing up shall be done on the basis of un-audited/ provisional account and such truing up shall be subject to further final truing up, as soon as the audited accounts is made available.
- 10.4.** The scope of the truing up shall consist of comparison of the performance of the generating company or STU/ transmission licensee or distribution licensee or SLDC with the approved forecast and shall includes following:
- (a) A comparison of the audited performance of the applicant for the previous financial year(s) with the approved forecast for such previous financial year(s), subject to the prudence check including pass-through of impact of all uncontrollable factors;

- (b) Review of compliance to directives issued by the Commission from time to time;
- (c) Any other relevant details.

- 10.5.** The net financial impact of true-ups in case of generation company or STU/ transmission licensee or distribution licensee shall be accounted for as per the provisions of Regulation 12 and Regulation 13 considering the factors like inflation, natural calamity etc. by the Commission. The net financial impact shall be passed on annual basis.
- 10.6.** In case of SLDC, where after the truing up, the fee & charges recovered if exceeds/ falls short of the amount approved by the Commission under these regulations, the excess amount so recovered or shortfall to be recovered, as the case may be shall be adjusted while determining the fee and charges for the next year or as decided by the Commission.
- 10.7.** Truing up of preceding year(s), prior to commencement of this control period, shall be governed as per applicable Regulations/orders (under which tariff order has been passed).

11. CONTROLLABLE AND UN-CONTROLLABLE FACTORS

- 11.1.** For the purpose of this Regulation, the term “uncontrollable factors” shall comprise of the following factors, but not limited to, which were beyond the control of the applicant, and could not be mitigated by the applicant:
- (a) Force Majeure events;
 - (b) Change in law,
 - (c) Judicial pronouncements,
 - (d) Fuel prices;
 - (e) Sales mix
 - (f) quantum of Sales;
 - (g) Cost of power purchase;
 - (h) Cost on account of inflation;
 - (i) Human Resource (HR) Expenses;
 - (j) All Taxes, including Income Tax, cess and Statutory levies and
 - (k) Any other expenses as admitted by Commission.
- 11.2.** For the purpose of this Regulation, the term “Controllable factors” shall comprise of the following:
- (a) Capitalization on account of cost overruns in the implementation of a CIP not attributable to an approved change in scope of such project, change in statutory levies or circumstances beyond control of the generating company or the licensee, as the case may be.
 - (b) Generation performance parameters like PLF, SHR, Auxiliary consumption,

PAF etc;

- (c) Energy losses computed in accordance to Regulation 98;
- (d) Maintenance & General (M&G) expenses;
- (e) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted;
- (f) Variation in Wires Availability and Supply Availability.

12. MECHANISM FOR PASS THROUGH OF GAINS OR LOSSES ON ACCOUNT OF UNCONTROLLABLE FACTORS

The aggregate net gains / losses to the generating company or STU/ transmission licensee or distribution licensee or SLDC on account of uncontrollable items (as per the Tariff Order) over such period shall be passed on to beneficiaries/consumers through the next ARR or as may be specified in the Order of the Commission passed under this Regulation.

13. MECHANISM FOR SHARING OF GAINS OR LOSSES ON ACCOUNT OF CONTROLLABLE FACTORS

- 13.1.** The mechanism for sharing of aggregate net gain on account of over achievement in reference to the target set in tariff order for efficiency linked controllable items and energy losses computed in accordance to Regulation 98 shall be passed on to the beneficiary / consumer(s) and retained by the generating company or the licensee or SLDC, as the case may be, in the ratio of 2:1 or as may be specified in the Order of the Commission passed under this Regulation.
- 13.2.** The mechanism for sharing of aggregate net loss on account of under achievement in reference to the target set in tariff order for efficiency linked controllable items and energy losses computed in accordance to Regulation 98 shall be passed on to the beneficiary / consumer(s) and by the generating company or the licensee, as the case may be, in the ratio of 1:2 or as may be specified in the Order of the Commission passed under this Regulation.

14. TARIFF ORDER

Based on the petitioner's filings, the Commission may accept the petition, with such modifications and / or such conditions as may be deemed just and appropriate and pass orders as per the Act.

15. ADHERENCE TO TARIFF ORDER

All tariff orders passed under this regulation shall be in force till issue of next tariff order. No tariff or part of any tariff may be ordinarily amended, more frequently than once in any Financial year, except adjustment on account of fuel cost and power purchase based on VCA formula approved by the Commission.

16. SUBSIDY MECHANISM

- 16.1.** If the State Government decides to subsidize any consumer or class of consumers, it shall release subsidy in advance, as per the provisions of Section 65 of the Act, to compensate the licensee.

- 16.2. To determine tariff applicable for each of the subsidized consumer as per the directives of the State Government, the Commission shall initially determine the tariff, without considering the subsidy committed by the State Government and finally subsidized tariff shall be arrived at after considering the committed subsidy by the State Government.

Chapter 3

FINANCIAL PRINCIPLES**17. DEBT EQUITY RATIO**

- 17.1.** For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. For an investment made on or after the date of transfer or 31st March 2022 whichever is later, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:
- iii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
- iv. any consumer contribution/deposit work/grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

Explanation – The premium, if any, raised by the generating company or the transmission licensee or the distribution licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system or the distribution system.

Provided, further that any consumer contribution, deposit work and grant obtained for the execution of the project shall not be considered as part of the capital structure for the purpose of computation of normative debt: equity.

- 17.2.** In case of the generating station and the licensee declared under commercial operation prior to 01.04.2022, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2022 shall be considered.
- 17.3.** Any expenditure incurred or projected to be incurred on or after 01.04.2022 as may be admitted by the Commission as additional capital expenditure for determination of tariff, including renovation and modernization expenditure for life extension, installation of emission control systems, for development and commissioning of integrated mines shall be serviced in the manner specified in Regulation 17 of this Regulation.
- 17.4.** In case of transmission licensee or distribution licensee the cost of project and accordingly debt equity ratio may be calculated considering the whole network of transmission or distribution system of the licensee, as the case may be, in place of individual line or project.
- 17.5.** For SLDC business, the actual debt: equity ratio appearing in the books of accounts as on the date of transfer shall be considered for the opening capital cost of SLDC.

Provided further that till SLDC is operated by a Government company or any

authority or corporation established or constitute by or under any State Act, the debt equity ratio in the books of accounts of the STU shall be considered.

18. CAPITAL COST AND CAPITAL STRUCTURE

18.1. Capital cost for a project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction, incidental expenses during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) Interest during construction (IDC)

- i. Interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds up to SCOD.
- ii. In case of additional costs on account of IDC due to delay in achieving the SCOD, the generating company or STU/ transmission licensee or distribution licensee or SLDC as the case may be, shall be required to furnish detailed justifications with supporting documents for such delay including prudent phasing of funds:
- iii. Provided that if the delay is not attributable to the generating company or STU/ transmission licensee or the distribution licensee or SLDC as the case may be, and is due to uncontrollable factors as specified in Regulation 11 of this regulation, IDC may be allowed after due prudence check:

Provided further that only IDC on actual loan may be allowed beyond the COD to the extent, the delay is found beyond the control of generating company or the transmission licensee or distribution licensee or SLDC, as the case may be, after due prudence and taking into account prudent phasing of funds.

(c) Incidental Expenditure during Construction (IEDC):

- i. Incidental expenditure during construction shall be computed from the zero date and after taking into account pre-operative expenses up to SCOD:

Provided that any revenue earned during construction period up to SCOD on account of interest on deposits or advances, or any other receipts may be taken into account for reduction in incidental expenditure during construction.

- ii. In case of additional costs on account of IEDC due to delay in achieving the SCOD, the generating company or STU/ transmission licensee or distribution licensee or SLDC as the case may be, shall be required to furnish detailed justification with supporting documents for such delay including the details of incidental expenditure during the period of delay and liquidated damages recovered or recoverable corresponding to the delay:

Provided that if the delay is not attributable to the generating company or STU/ transmission licensee or distribution licensee or SLDC as the case may be, and is due to uncontrollable factors as specified in Regulation 11, IEDC may be allowed after due prudence check:

Provided further that where the delay is attributable to an agency or contractor or supplier engaged by the generating company or STU/ transmission licensee or distribution licensee or SLDC, the liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost.

- iii. In case the time over-run beyond SCOD is not admissible after due prudence, the increase of capital cost on account of cost variation corresponding to the period of time over run may be excluded from capitalization irrespective of price variation provisions in the contracts with supplier or contractor of the generating company or STU/ transmission licensee or distribution licensee or SLDC.
- (d) in case of SLDC business, the capital cost appearing in the books of accounts of SLDC/STU as on the date of transfer along with the approved CAPEX plan for the control period shall be the basis for determination of charges.
- (e) capitalized initial spares subject to the ceiling rates specified in Regulation 18.4; and
- (f) additional capital expenditure determined under Regulation 19:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

18.2. The capital cost for the emission control systems as well as the integrated mines, except for deviations specifically provided in these regulations, shall generally follow the same principles as laid down in the Regulation 18.1.

18.3. The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that prudence check may include scrutiny of project cost of the capital expenditure, financing plan, IDC and IEDC, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff:

Provided that where the actual capital cost is lower than the approved capital cost, the actual capital cost shall be considered for tariff determination. Any escalation in capital cost over and above the approved capital cost may be considered by the Commission subject to prudence check or independently vetted by the Commission.

Provided that in case the site of a hydro generating station is awarded to a developer by a State Government by following a two stage transparent process of bidding, any expenditure incurred or committed to be incurred by the project developer for getting the project site allotted shall not be included in the capital cost:

Provided also that the capital cost in case of such hydro generating station shall include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with R&R package as approved; and
- (b) cost of the developer's contribution towards any scheme approved by the State Government in the affected area:

Provided also that where the long-term power purchase agreement entered into between the generating company and the beneficiaries or the transmission service agreement entered into between the transmission licensee and the beneficiary, as the case may be, provide for ceiling of actual expenditure, lower of such ceiling and the capital expenditure as admitted by the Commission shall be taken into consideration for determination of tariff.

18.4. The capital cost may also include capitalized initial spares.

18.4.1. Generating Station (s)

Initial spares shall be capitalized as a percentage of the plant and machinery cost, subject to following ceiling norms:

- i. Coal-based/lignite-fired thermal generating stations - 4.00%
Provided that as and when the emission control systems are installed, or an integrated mine is commissioned, additional initial spares at the same rate as given above shall be allowable separately.
- ii. Hydro generating stations - 4.00%

18.4.2. Transmission system or Distribution system

Initial spares shall be capitalized as a percentage of the original capital cost, subject to following ceiling norms:

- i. Transmission or distribution line - 0.50%
- ii. Transmission or distribution substation - 1.00%
- iii. Series/parallel compensation devices and HVDC Station - 3.50%
- iv. Gas insulated sub-station - 3.50%

18.5. Any expenditure on replacement, renovation and modernization or extension of life of old fixed assets, as applicable to generating company, transmission licensee and distribution licensee, shall be considered after writing off the GFA of such replaced assets from the original capital cost and the accumulated depreciation on the asset from the total accumulated depreciation.

18.6. In case of de-capitalisation of assets of a generating company or the licensee, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised.

18.7. The average capital cost during a year shall be computed as average of opening and closing gross fixed assets for the year.

Provided that for the new generating station or unit, the capital cost shall be charged on pro-rata basis during the year for the asset declared under commercial operation and for subsequent years, the capital cost shall be computed on the average asset base.

19. ADDITIONAL CAPITALIZATION

19.1. The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- i. Un-discharged liabilities to the extent of discharge of such liabilities by actual payments;
- ii. Works deferred for execution;
- iii. Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 18.4;
- iv. Liabilities to meet award of arbitration or for compliance of the order or decree of a court or any statutory authority;
- v. Change in law or 'Compliance of any laws; and
- vi. Force Majeure;

19.2. The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

- i. Liabilities to meet award of arbitration or for compliance of the order or decree of a court or any statutory authority;
- ii. Liability for works admitted by the Commission to the extent of discharge of such liabilities by actual payments; and
- iii. Change in law or 'Compliance of any laws;
- iv. Force Majeure;
- v. Deferred works relating to ash pond or ash handling system;
- vi. Capital Investment for water conservation works including Usage of water from sewage treatment plant in thermal generating station.
- vii. Need for higher security and safety of the plant in line with approvals accorded by the Central Commission;
- viii. In case of hydro generating stations, any investment which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and investment of more than Rs. 1 Crore which is considered indispensable by the Commission for running the generating station; and
- ix. In case of transmission /distribution system any additional investment on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by

insurance and any other investment more than Rs. 1 Crore which has become necessary for successful and efficient operation of transmission/ distribution system;

- x. Any investment of more than Rs. 1 Crore which is considered indispensable by the Commission for running the thermal generating station:

Provided that any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, heat convectors, computer, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff and/or fees and charges as the case maybe.

- 19.3.** In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- a. The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;
- b. The replacement of the asset or equipment is necessary on account of change in law or compliance of law or Force Majeure conditions;
- c. The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
- d. The replacement of such asset or equipment has otherwise been allowed by the Commission.

- 20. In-principle approval in specific circumstances:** "The generating company or the licensee planning any additional capitalization which otherwise fits into the qualifying criterion for consideration as additional capitalization under these regulations, however the cost and time projections may not be possible beforehand for the uncontrollable reasons beyond the control of the generating company or the licensee, as the case may be, may file petition for in-principle approval for incurring such expenditure after prior notice to the beneficiaries or the long term customers, as the case may be, along with underlying assumptions, and justification for such expenditure."

21. RENOVATION AND MODERNIZATION

- 21.1. The generating company or the transmission licensee/STU or the distribution licensee, as the case may be, for meeting the expenditure on renovation and modernization for the purpose of extension of life beyond the useful life of the generating station or a unit thereof or the transmission system or the distribution system, shall make an application before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the generating company or the transmission licensee or the distribution licensee:**

- 21.2. Where the generating company or the transmission licensee or the distribution licensee, as the case may be, makes an application for approval of its proposal for renovation and modernization, the approval shall be granted after due consideration of reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission
- 21.3. Any expenditure incurred or projected to be incurred on renovation and modernization shall be treated in line with the provisions under Regulation 18.5.

SPECIAL ALLOWANCE FOR COAL-BASED THERMAL GENERATING STATIONS

- 21.4. In case the generating station other than HTPS decides to operate any of its coal-based thermal generating unit(s) which has completed useful life without investment in 'Renovation & Modernisation' and meets the operational performance benchmark in accordance with the norms specified in this regulation then such generating station shall be eligible for annual 'special allowance' @ Rs. 9.5 lakh/ MW/ year. In case of HTPS, the special allowance may be decided in the tariff petition/Capital investment plan.
- 21.5. In the event of granting special allowance by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be submitted to the Commission at the time of filing of tariff petitions/true-up petitions.

22. CONSUMER CONTRIBUTION, DEPOSIT WORK AND GRANT

- 22.1. The following nature of work carried out by the generation company, STU/transmission licensee or distribution licensee shall be classified under this category:

- (a) All type of works funded fully or partly by Consumers(s);
- (b) All capital works implemented by utilizing grants received from the State and/or Central Governments, etc;
- (c) Work funded by any other grant of similar nature and such amount received without any obligation to return the same and with no interest costs attached to such subvention.

Provided that in case of part funding, the treatment shall be limited to the extent funds deposited by Consumer (s).

- 22.2. Principles for treatment of the expenses on such capital expenditure shall be as follows:

- (a) O&M expenses as specified in this Regulation shall be allowed.
- (b) Depreciation, Return on Equity, and Interest on normative loan shall not be allowed.

23. RETURN ON EQUITY

- 23.1. Base rate for Return on equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 17. Return on equity shall be computed at

the rate of 14.0% for Generation and Transmission and SLDC.

- 23.2. Distribution: Base rate for Return on equity shall be computed in rupee terms on the equity base determined in accordance with Regulation 17. Return on equity shall be computed at the rate of 16.0%.
- 23.3. The ROE shall be grossed up at the time of tariff by MAT rate for the year in which tariff is being determined, subject to the condition that MAT / Corporate tax has been paid for last three consecutive years for regulated business filed petition under these Regulations. In such case, Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of return on equity = Base rate / (1-MAT Rate)

At the time of True up, the income tax shall be pass through on actual basis, subject to ceiling as following:

= Average Permissible Equity X Base Rate of Return X ((t/ (1-t))

Where “t” is the actual tax rate for the year. The tax rate shall be calculated without considering the delay payment surcharge received or receivable during the said financial year by generating company or licensee as the case may be.

24. INTEREST AND FINANCE CHARGES ON LOAN CAPITAL

- 24.1. The debt arrived at in the manner indicated in Regulation 17 shall be considered as gross normative loan for calculation of interest on loan.
- 24.2. The normative loan outstanding as on 01.04.2022 shall be worked out by deducting, the cumulative repayment as admitted by the Commission up to 31.03.2022, from the gross normative loan.
- 24.3. The repayment of loan for the year of the tariff period shall be deemed to be equal to the depreciation allowed for that year.
- 24.4. Notwithstanding any moratorium period availed by the generating company or the licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
- 24.5. The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the licensee as a whole shall be considered:

Provided further, in case of new generating station or the licensee commencing its operation after the date of effectiveness of this Regulation, and which don't have actual loan portfolio, the rate of interest shall be considered on normative basis and shall be equal to the Marginal Cost of Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 150 basis points as applicable on the date of COD.

- 24.6. The interest on loan shall be calculated on the average of opening and closing loan of the year. For the computation of interest amount, the interest rate shall be the weighted average rate of interest for the same year.
- 24.7. The interest amount as per regulation 24.6 shall exclude interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, grants or deposit works carried out by generating company, transmission licensee, SLDC or distribution licensee, as the case may be.
- 24.8. The generating company or SLDC or the licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the STU or the transmission licensee, as the case may be, in the ratio of 2:1.

Provided in case of SLDC, this provision shall be applicable only to those intra-State entities who are availing services of SLDC on long-term basis.

Provided that re-finance shall not be done if it results in net increase on interest or shall not be subject to any adverse terms and conditions leading to additional cost.

Provided also that the net savings in interest shall be computed after factoring all the terms and conditions, and based on the weighted average rate of interest of actual portfolio of loans taken from Banks and Financial Institutions recognised by the Reserve Bank of India, before and after re-financing of loans:

Provided that the beneficiary shall not withhold any payment on account of the interest claimed by the generating company or the licensee during the pendency of any dispute arising out of re-financing of loan.

- 24.9. The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- 24.10. In case of licensee, the interest paid on security deposit to the consumers shall not be allowed as a part of Annual Revenue Requirement. The licensee shall bear the interest liability on security deposit.

25. DEPRECIATION

- 25.1. The value base for the purpose of depreciation shall be the capital cost of the asset as admitted by the Commission:
- 25.2. Provided that the capital cost shall not include funds from grant or consumer contribution or deposit works received for funding of fixed asset as specified in Regulation 22.
- 25.3. The salvage value of the asset except for IT equipments and software used for SLDC business shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.
- 25.4. Provided that, the salvage value for IT equipments and Software shall be considered as NIL and 100% value of the assets shall be considered depreciable.
- 25.5. Land other than the land held under lease and the land for reservoir in case of hydro generating station and the land for ash-bund for thermal power stations shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing

depreciable value of the asset. Subject to specific provisions, Land for integrated mine shall also be considered for depreciation.

- 25.6.** Depreciation shall be calculated annually based on Straight Line Method and at rates as specified in Appendix-I to this regulation for the assets of the generating station, transmission system, distribution system and SLDC and Appendix –I (A) for integrated coal mine:

Provided that, in case of the existing projects, the balance depreciable value as on 01.04.2022 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.03.2022 from the gross depreciable value of the assets.

Provided that in those cases where the capital investment plan has been approved by the Commission and the depreciation rates as provided in this Regulation are insufficient for the repayment of loan, the rate of depreciation shall be decided by the Commission at the time of issuance of tariff order, subject to prudence check.

Provided that in the case where additional capital investment is approved by the commission for a plant at the end of its useful life or after its useful life is already over, the recoverable depreciation in respect of additional capital investment, shall be spread over the balance projected physical life as submitted by the generation company or the licensee in the capital investment plan after prudence check by the Commission.

Provided that until a Government company or any authority or corporation is notified for operating the SLDC, the depreciation shall be calculated as applicable for the STU under these Regulations.

Provided further the balance depreciable value as on the date of transfer shall be worked out by deducting the cumulative depreciation from the gross depreciable value of the assets appearing in the books of accounts of the SLDC for the SLDC as on the date of transfer.

- 25.7.** Depreciation shall be chargeable from the first year of commercial operation. The depreciation shall be computed on the average asset base during the year:

Provided that for the new generating station or unit, assets of transmission licensee or assets of distribution licensee or SLDC, as the case may be, the depreciation on such new assets shall be charged on day-wise pro-rata basis during the first year the asset has been declared under commercial operation. For subsequent years, the depreciation shall be computed on the average asset base during the year.

26. INTEREST ON WORKING CAPITAL

- 26.1.** The working capital shall include:

- (a) For coal based thermal generating stations:
 - i. Cost of coal, if applicable, for 10 days for pit- head generating stations 20 days for non-pit-head generating stations, for generation corresponding to the normative annual plant availability factor; plus.
 - ii. Advance payment for 30 days towards cost of coal for generation corresponding to the normative annual plant availability factor.

- iii. Cost of secondary fuel oil for one months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil; plus
- iv. O&M expenses for 15 days; plus
- v. Maintenance spares @ 20% of M&G expenses specified in Regulation 40.5.2; plus
- vi. Receivables equivalent to one (1) month of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor.

Provided further that upon COD of the emission control systems the following component shall be considered additionally.

- a. Cost of limestone or reagent towards stock for 20 days corresponding to the normative annual plant availability factor;
 - b. Advance payment for 30 days towards cost of reagent for generation corresponding to the normative annual plant availability factor;
 - c. Receivables equivalent to 1 month days of supplementary capacity charge and supplementary energy charge for sale of electricity calculated on the normative annual plant availability factor;
 - d. O&M expenses in respect of emission control system for 7 days;
 - e. Maintenance spares @ 20% of O&M expenses in respect of emission control system.”
- (b) For Hydro generating station:
- i. O&M expenses for 15 days; plus
 - ii. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 39.5.1 or 39.5.2 as the case may be; plus
 - iii. Receivables equivalent to one (1) month of fixed cost.
- (c) For Transmission business:
- i. O&M expenses for 15 days ; plus
 - ii. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 73.5.1; plus
 - iii. Receivables equivalent to one (1) month of fixed cost.
- (d) For Distribution Wheeling Business:
- i. O&M expenses for 15 days; plus
 - ii. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 83.4.1; plus
 - iii. One (1) month equivalent of the revenue from charges for use of Distribution Wires at the prevailing tariff;
- (e) For Retail Supply of Electricity:
- i. O&M expenses for 15 days; plus

- ii. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 92.6.2; plus
- iii. Receivables equivalent to one (1) month of the revenue from sale of electricity at the prevailing tariffs within state;
- (f) For SLDC business:
 - i. O&M expenses for 15 days; plus
 - ii. Maintenance spares @ 20% of Maintenance and General expenses specified in Regulation 101.5; plus
 - iii. Receivables equivalent to one (1) month of system operation charges and market operation charges as approved by the Commission.
- 26.2. At the time of True-Up, the receivables for the computation of working capital requirement of the generating company, STU/transmission licensee, distribution licensee and SLDC will be determined equivalent to one (1) month of actual revenue billed.
- 26.3. The cost of fuel in cases covered under sub-clauses (a) of Regulation 26.1 shall be based on the landed cost incurred taking into account normative transit and handling losses by the generating company and gross calorific value of the fuel as per latest available actual data for the three months and no fuel price escalation projection shall be considered during the tariff period.
- 26.4. Interest on working capital shall be estimated at the rate equal to the Marginal Cost of Fund based Lending Rate (MCLR - one year tenor) of State Bank of India plus 200 basis point prevailing on 30th September of current financial year. During true-up, the interest on working capital shall be computed at an average actual sanctioned rate of interest during the year.
- 27. **TAX ON INCOME**
Tax on any income stream other than the core business shall not be a pass through component in tariff and tax on such other income shall be borne by the generating company or transmission licensee or distribution licensee or SLDC as the case may be. However, any tax paid against income/services from sale of energy or under other sources or non-tariff income which are considered in ARR, such taxes will also be passed through tariff.
- 28. **REBATE**
For payment of bills of the generating company, STU/ transmission licensee and SLDC through letter of credit or otherwise, a rebate of 1% of the paid amount corresponding to current bill shall be allowed if payment is made within 7 days of presentation of bills, by the generating company or the transmission licensee, as the case may be.
- 29. **LATE PAYMENT SURCHARGE**
 - 29.1. In case the payment of any bill for charges payable under this Regulation is delayed by a beneficiary/ intra-state entity beyond a period of 30 days from the date of billing, notwithstanding any rule framed by any authority, a late payment surcharge at the rate of 0.025% for each day of delay as simple interest on outstanding amount, shall

be levied by the generating company or the STU/ transmission licensee or the SLDC/ system operator. At the time of true-up, the late payment surcharge paid/ received by the beneficiary/licensee shall not be considered as an expense/ revenue, as the case may be.

Late payment surcharge from retail consumer shall be recoverable as per the relevant provisions of applicable tariff order.

30. FOREIGN EXCHANGE RATE VARIATION

30.1. The generating company or the transmission licensee or the distribution licensee or SLDC, as the case may be, may hedge foreign exchange exposure in respect of the interest on foreign currency loan and repayment of foreign loan acquired for the generating station or the transmission or distribution system, in part or full in the discretion of the generating company or the licensee.

30.2. Every generating company and SLDC and licensee shall recover the cost of hedging of foreign exchange rate variation corresponding to the normative foreign debt, in the relevant year on year-to-year basis as expenses in the period in which it arises and extra rupee liability corresponding to such foreign exchange rate variation shall not be allowed against the hedged foreign debt.

30.3. To the extent the generating company or SLDC or the licensee is not able to hedge the foreign exchange exposure, the extra rupee liability towards interest payment and loan repayment corresponding to the normative foreign currency loan in the relevant year shall be permissible provided it is not attributable to the generating company or the licensee or its suppliers or contractors.

31. RECOVERY OF COST OF HEDGING FOREIGN EXCHANGE RATE VARIATION

Every generating company and/or the transmission licensee and/or the distribution licensee and/or SLDC recover the cost of hedging and foreign exchange rate variation on year-to-year basis as income or expenses in the period in which it arises, from beneficiaries.

32. CARRYING COST OR HOLDING COST

The Commission shall compute carrying cost/ holding cost as the case may be for a particular year, at the rate equal to the rate of interest rate as allowed for computation of Interest on Working Capital Loan for the said year.

33. BILLING AND PAYMENT OF CHARGES

33.1. Bills shall be raised for capacity charge and energy charge on monthly basis by the generating company and the transmission licensee/STU in accordance with this Regulation and payments shall be made by the beneficiaries directly to the generating company / transmission licensee/STU, as the case may be.

33.2. Transmission charges corresponding to any plant capacity for which a beneficiary has not been identified and contracted, shall be paid by the concerned generating company.

33.3. The billing and recovery of fees and charges of SLDC business shall be as defined in Chapter 8 of this Regulation.

- 33.4. The billing to the retail consumers shall be done in accordance with the provisions specified in the prevailing CG supply code and amendments thereon.
- 33.5. In case, the State Govt. does not pay the due amount of subsidy in time and in cash for the retail supply consumers, the CSPDCL / distribution licensee shall issue the bill on the basis of the tariff determined by the Commission.

34. PENSION FUND

- 34.1. For meeting up the past unfunded liabilities of employees appointed before 01.01.2004 erstwhile CSEB State Power Companies, a pension and gratuity trust has been constituted and funding to the same has been allowed in the past by the Commission. The contribution to this fund shall be specified by the Commission on the basis of actuarial analysis, expected pension outflow for the State Power Companies and availability of fund with the Pension trust at the time of determination of MYT / ARR for each year of the control period. The pension outflow shall be met from the Pension and Gratuity Fund. Contribution to the pension fund as approved by the Commission shall be recoverable as specified in this regulations.

Provided till the time SLDC is administered by STU, SLDC's share to the Pension and Gratuity Fund shall be met by the STU on pro-rata basis. For the purpose of ratio determination, the employee strength of SLDC and STU as on 1st April of the preceding year shall be considered.

Chapter 4

GENERATION

35. PETITION FOR DETERMINATION OF GENERATION TARIFF

- 35.1.** A generating company is required to file a Petition for determination of tariff for supply of electricity directly or through State trading licensee(s) to distribution licensees of the State under long term agreement in accordance with the provisions of this Regulation.
- 35.2.** In compliance to National Tariff policy, 2016 notified by Ministry of Power vide its notification dated 28th January 2016 along with its subsequent amendment, a generating company shall be allowed to bundle RE power.

36. COMPONENTS OF TARIFF

- 36.1.** The tariff for supply of electricity from a thermal generating station shall comprise two parts, namely, capacity charge (for recovery of annual fixed cost consisting of the components specified in Regulation 37) and energy charge (for recovery of fuel cost).
- 36.2.** The tariff for supply of electricity from a hydro generating station shall comprise composite capacity charge and energy charge to be derived in the manner specified in Regulation 46, (consisting of the components referred in Regulation 37).

37. ANNUAL FIXED CHARGES

- 37.1.** The annual fixed cost (AFC) of a generating station shall consist of the following components:

- (1) Return on equity;
- (2) Interest and finance charges;
- (3) Depreciation;
- (4) Interest on working capital;
- (5) O&M expenses;
 - a. HR expenses;
 - (i) Employee expenses;
 - (ii) Impact of Pay revision
 - (iii) Manpower deployed on outsourcing basis;
 - b. M&G expenses;
- (6) Pension & Gratuity fund contribution

Less:
- (7) Non Tariff Income
- (8) Income from other business, to the extent specified in regulation 42 of this Regulation.

NOTE:

1. Non-Tariff Income as specified in the Regulation 41, shall be subtracted from the sum of above (a to e) to arrive at AFC.

2. The SLDC charges shall be recovered in accordance with fees and charges determined in accordance with provisions of Chapter 9 of this regulation.
3. Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as may be determined by the Commission in the Tariff order.
4. The water charges, statutory taxes, duties and cess actually paid, shall be pass through.

Provided that Depreciation, Interest and finance charges on Loan Capital, Interest on Working Capital and Return on Equity for Thermal and Hydro Generating Stations shall be allowed in accordance with the provisions specified in Chapter 3 of this Regulation.

38. CAPITAL COST

- 38.1.** The capital cost shall be allowed as provided in Regulation 18 of this Regulation.

39. SALE OF INFIRM POWER

- 39.1.** Tariff for sale of infirm power shall be as specified by the Commission from time to time.

Provided that any revenue earned by the generating company from supply of infirm power after accounting for the fuel expenses shall be adjusted in the capital cost.

40. CALCULATION OF ANNUAL FIXED CHARGES

40.1. Return On Equity

The generating company shall be allowed a ROE as specified in Regulation 23 of this Regulation.

40.2. Interest On Loan Capital

The generating company shall be allowed interest and finance charges on loan capital as specified in Regulation 24 of this Regulation.

40.3. Depreciation

The generating company shall be permitted to recover depreciation on the value of fixed assets as specified in Regulation 25 of this Regulation.

40.4. Interest On Working Capital

The generating company shall be allowed interest on the estimated level of working capital, as specified in Regulation 26 of this Regulation.

40.5. Operation And Maintenance (O&M) Expenses

40.5.1. Human Resource (HR) Expenses

- a) HR expenses for generating company shall include:
 - (i) employees costs;
 - (ii) impact of Pay revision;
 - (iii) manpower deployed on outsourcing basis;

- b) The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period for all existing generating stations.
- c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expenses of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expenses of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission.
- d) The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR expenses (excluding impact of pension fund contribution and pay revision and any other expenses of non-recurring nature, if any) for each year of the control period.
- e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.

Provided further that during the true-up, actual cash outflow on impact of pay revision (including arrears) and pension fund contribution shall be allowed as per accounts, subject to prudence check and any other factor considered appropriate by the Commission.

- f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

40.5.2. Maintenance & General (M&G) Expenses

40.5.2.1. Thermal Generating Station:

Maintenance and General (M&G) expenses for generating company shall include:

- a) Administrative and General (A&G) expenses;
- b) Repair and Maintenance (R&M) expenses

the year wise projections for M&G expenses for the control period with annual escalation of 3.5% are as under

(in Rs. Lakh/MW)

Year	200/210/250 MW Series	300/330/350 MW Series	500 MW Series	600 MW Series	800MW & above
FY 2022-23	18.65	15.69	12.73	11.46	10.31
FY 2023-24	19.30	16.24	13.18	11.86	10.67
FY 2024-25	19.97	16.80	13.64	12.28	11.05

At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis.

Provided further that the O&M expenses on account of emission control system in coal based thermal generating station shall be 2% of the admitted capital expenditure (excluding IDC and IEDC) as on its date of commercial operation, which shall be escalated annually @3.5% during the tariff period subject to true up as above.

Provided that in all cases the additional O&M cost incurred due to any change/compliance of law or any direction by in statutory authority including but not limited to expenses on ash utilization (not covered in additional capitalisation) shall be pass through over and above the O&M charges allowed in tariff order.

Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};

Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

Provided that water charges shall be pass-through in tariff on reimbursement on actual basis.

40.5.2.2. For Existing Hydro Generating Stations

- a) Maintenance & General (M&G) expenses for generating Company shall include:
 - (i) Administrative and General (A&G) expenses;
 - (ii) Repair and Maintenance (R&M) expenses.
- b) The Commission shall stipulate a separate trajectory for each of the components of M&G expenses viz., R&M and A&G expenses for the Control Period.
- c) The A&G and R&M expenses for the base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding water charges) and R&M expenses, respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission. Any other expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.
- d) The normalization of A&G and R&M expenses shall be estimated by applying last five year average increase in Wholesale Price Index (WPI) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The base year value so arrived, shall be escalated by the above inflation rate to estimate the A&G and R&M expenses for each year of the control period.
- e) At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

Provided that water charges shall be pass through in tariff on reimbursement basis.

Provided further that in all the cases the additional M&G cost incurred due to any change in law or a direction by any statutory authority shall be pass through over and above the M&G charges allowed in the Tariff order

40.5.3. For New Thermal Generating Stations:

The O&M expenses allowable shall be 90% of the CERC (Terms and Conditions of Tariff) Regulations, 2019. It shall be inclusive of HR and M&G expenses. For the purpose of working capital computation or any other consideration, as the case may be, the ratio of HR and M&G expenses shall be considered 40:60.

Provided that norm for FY 2024-25 which is not prescribed with CSERC (Terms and Conditions of Tariff) Regulations, 2021, shall be derived by escalation factor @ 3.50% per annum on the norm of FY 2023-24 of the said regulation.

40.5.4. For New Hydro Generating Stations:

- a) O&M expenses for the first year of operation will be 1.25% of the original project cost (excluding cost of R&R works):
- b) The O&M expenses for each year of the control period shall be determined by escalating, the base year expenses determined above for the first year of operation, at the escalation factor provided in Regulation 40.5.2.2

41. NON TARIFF INCOME

41.1. Any income incidental to the business of the generating company derived from sources, including but not limited to the disposal of assets, income from investments, rents, disposed value of scrap/assets after adjusting its depreciated value and cost of sale/decommissioning/dismantling etc, rental income for using assets which includes receipts against advertisements, interest on advances to suppliers/contractors, income from sale of ash/ rejected coal, income generated from sale of gypsum or other by-products and any other miscellaneous receipts but other than income from sale of energy, shall constitute the non tariff income.

41.2. The amount of Non-Tariff Income relating to the generation business as approved by the Commission shall be deducted from the Annual Fixed Cost in determining the Annual Fixed Charge of the generation station:

Provided that the generation company shall submit full details of its forecast of Non-Tariff Income to the Commission in such form as may be stipulated by the Commission from time to time.

Provided further Non tariff Income for the integrated mine shall be considered as per provisions of the Chapter 5 of these Regulations.

42. INCOME FROM OTHER BUSINESS

Where the generating company is engaged in any other business including merchant sale of coal from integrated mines, the income earned by using the asset of the generating company then income from such business shall be shared between generator and beneficiary in following manner:

- a) Amount equal to two-third of the income from such other business shall be deducted from the Aggregate Revenue Requirement.

- b) Amount equal to one third of income from such other business shall be retained by generator.

43. NORMS OF OPERATION FOR THERMAL GENERATING STATION

43.1. Normative Annual Plant Availability Factor (NAPAF) for recovery of fixed charges:-

- a) All thermal generating stations except HTPS and ABVTPS - 85%
- b) For Hasdeo Thermal Power Station Korba (HTPS) and ABVTPS, the NAPAF is as follows:

FY	2022-23	2023-24	2024-25
HTPS	79%	78%	76.5%
ABVTPS	79%	82%	85%

Provided that for the purpose of sharing of gains, no gains shall be allowed to be retained by CSPGCL for HTPS and ABVTPS, for NAPAF, below 80% and 85% respectively.

43.2. Normative Annual Plant Load Factor (NAPLF) :-

- a) All thermal generating stations except HTPS - 85%
- b) For Hasdeo Thermal Power Station Korba (HTPS) - 80%:

43.3. Gross Station Heat Rate

A. Existing Thermal Generating Station

- (a) Existing Coal -based Thermal Generating Stations, other than HTPS:

200/210/250 MW Sets	300 MW/500 MW Sets (sub-critical)
2430 KCal/kWh	2390 KCal/kWh

- (b) Hasdeo Thermal Power Station Korba (4 x 210 MW), the GSHR shall be 2650KCal/kWh

Note 1:

In respect of 300 MW and above units where the boiler feed pumps are electrically operated, the gross station heat rate shall be 40 kCal/kWh lower than the gross station heat rate specified above.

Note 2:

For the generating stations having combination of 200/210/250/300 MW sets and 500 MW and above sets, the normative gross station heat rate shall be the weighted average gross station heat rate of the combinations.

- B. New generating station achieving COD on or after 01.04.2022 and any existing generating station for which norms of operation have not been finalized by this Commission for determination of tariff

Coal-based Thermal Generating Stations=1.05 X Design Heat Rate (KCal/kWh)

Where the Design Heat Rate of a unit means the unit heat rate guaranteed by the supplier at conditions of 100% MCR, zero percent make up, design coal and design cooling water temperature/ back pressure:

Provided that the design heat rate shall not exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:

Pressure Rating (Kg/cm ²)	150	170	170	247	247	270	270
SHT/RHT (0C)	535/535	537/537	537/565	537/565	565/593	593/593	600/600
Type of BFP	Electrical Driven	Turbine Driven	Turbine Driven	Turbine Driven	Turbine Driven	Turbine Driven	Turbine Driven
Max Turbine Cycle Heat rate (KCal/kWh)	1955	1950	1935	1900	1850	1810	1800
Min. Boiler Efficiency							
Sub-Bituminous Indian Coal	0.86	0.86	0.86	0.86	0.86	0.865	0.865
Bituminous Imported Coal	0.89	0.89	0.89	0.89	0.89	0.895	0.895
Max Design Unit Heat rate (Kcal/kWh)							
Sub-Bituminous Indian Coal	2273	2267	2250	2222	2151	2105	2081
Bituminous Imported Coal	2197	2191	2174	2135	2078	2034	2022

Provided further that in case pressure and temperature parameters of a unit are different from above ratings, the maximum design unit heat rate of the nearest class shall be taken:

Provided also that where unit heat rate has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the unit design heat rate shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency:

Note: In respect of units where the boiler feed pumps are electrically operated, the maximum design unit heat rate shall be 40 kCal/kWh lower than the maximum design unit heat rate specified above with turbine driven BFP.

43.4. Secondary fuel oil consumption

Coal-based generating stations except HTPS shall be: 0.50 ml/kWh

For HTPS: 0.80 ml/kwh

43.5. Auxiliary Energy Consumption

(a) Coal-based generating stations except for HTPS:

		With Natural Draught cooling tower or without cooling tower
(i)	200/250 MW series	8.50%
(ii)	300/500 MW and above	
	Steam driven boiler feed pumps	5.25%
	Electrically driven boiler feed pumps	7.75%

Provided further that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8% respectively.

Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	(% of gross generation)
Direct cooling air cooled condensers with mechanical draft fans	1.0%
Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower	0.5%

(b) Considering For the Hasdeo Thermal power stations (HTPS) of CSPGCL is fixed at 9.70%.

(c) Norms of Auxiliary energy consumption for emission control system (AUXen) of thermal generating stations:

Name of Technology	AUXen (as % of gross generation)
(1) For reduction of emission of sulphur dioxide:	
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 CFBC Power plant (furnace injection)	NIL
e) Sea water based FGD system (without Gas to Gas heater)	0.7%
(2) For reduction of emission of oxide of nitrogen :	
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."

43.6. Transit and handling losses

Transit and handling losses for coal based generating stations except for DSPM for the control period, as a percentage of quantity of indigenous coal dispatched by the coal supply company during the month shall be as given below:

- (i) Pit head generating stations : 0.20%;
- (ii) Non-pit head generating stations : 0.80%.

Provided that, for DSPM based on historical performance transit and handling losses is capped at 0.20%.

Provided that the above norms shall be applicable for domestic coal and/or washed coal, in case of imported, the normative transit and handling losses shall be 0.15%;

Provided further that for the procurement of coal on delivery basis, no transit and handling loss shall be allowed.

In case of integrated mines, the transit and handling loss shall be decided on case to case basis subject to prudence check.

- 43.7.** In the event of backing down instruction by SLDC to such generators supplying total net power to DISCOMs of the State, the SHR and auxiliary consumption shall be reviewed in accordance with relevant provision of the state electricity grid code.

Provided in the absence of norms in the State grid code, the SHR and auxiliary consumption shall be determined by adopting regulation notified by CERC.

- 43.8.** 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:

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

Where,

S = Sulphur content in percentage,

LP = Limestone Purity in percentage,

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

CVPF = Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based thermal generating stations as per regulations 45.4;

Provided that value of K shall be equivalent to (35.2 X Design SO₂ Removal Efficiency/96%) for units to comply with SO₂ emission norm of 100/200 mg/Nm³ or (26.8 X Design SO₂ Removal Efficiency/73%) for units to comply with SO₂ emission norm of 600 mg/Nm³;

Provided further that the limestone purity shall not be less than 85% or as decided by Commission in tariff order after prudence check.

- (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 = Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based thermal generating stations as per regulations 45.4;

- (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.

44. NORMS OF OPERATION FOR HYDRO GENERATING STATION

- 44.1. For the purpose of determination of Tariff, the gross generation shall be considered as Approved Design Energy for the plant
- 44.2. For the purpose of tariff determination a further allowance may be made by the Commission in respect of gross generation as compared to design energy under special circumstances, e.g. abnormal silt problem or other operating conditions, and known plant limitations.
- 44.3. In case of a new hydro electric project the developer shall have the option of approaching the Commission in advance for fixation of NAPAF based on the principles enumerated in prevailing Central Commission Regulation.

Auxiliary Energy Consumption (AUX):

Type of Station	Installed Capacity above 200MW	Installed Capacity upto 200MW
Surface		
Rotating Excitation	0.7%	0.7%
Static	1.0%	1.2%
Underground		
Rotating Excitation	0.9%	0.9%
Static	1.2%	1.3%

45. COMPUTATION AND PAYMENT OF CAPACITY CHARGE AND ENERGY CHARGE FOR THERMAL GENERATING STATIONS

- 45.1. The fixed cost of a thermal generating station shall be computed on annual basis, based on norms including relaxed norms specified under this Regulation, and recovered on monthly basis under capacity charge. The total capacity charge payable for a generating station shall be shared by its beneficiaries as per their respective percentage share/ allocation in the capacity of the generating station.
- 45.2. The capacity charge payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae :

$$CC1 = (AFC/12) \times (PAF1 / NAPAF) \text{ subject to a ceiling of } (AFC/12)$$

$$CC2 = \{(AFC/6) \times (PAF2 / NAPAF) \text{ subject to a ceiling of } (AFC/6)\} - CC1$$

$$CC3 = \{(AFC/4) \times (PAF3 / NAPAF) \text{ subject to a ceiling of } (AFC/4)\} - (CC1 + CC2)$$

$$CC4 = \{(AFC/3) \times (PAF4 / NAPAF) \text{ subject to a ceiling of } (AFC/3)\} - (CC1 + CC2 + CC3)$$

$$CC5 = \{(AFC \times 5/12) \times (PAF5 / NAPAF) \text{ subject to a ceiling of } (AFC \times 5/12)\} - (CC1 + CC2 + CC3 + CC4)$$

$$CC6 = \{(AFC/2) \times (PAF6 / NAPAF) \text{ subject to a ceiling of } (AFC/2)\} - (CC1 + CC2 + CC3 + CC4 + CC5)$$

$$CC7 = \{(AFC \times 7/12) \times (PAF7 / NAPAF) \text{ subject to a ceiling of } (AFC \times 7/12)\} - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6)$$

$$CC8 = \{(AFC \times 2/3) \times (PAF8 / NAPAF) \text{ subject to a ceiling of } (AFC \times 2/3)\} - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7)$$

$$CC9 = \{(AFC \times 3/4) \times (PAF9 / NAPAF) \text{ subject to a ceiling of } (AFC \times 3/4)\} - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8)$$

$$CC10 = \{(AFC \times 5/6) \times (PAF10 / NAPAF) \text{ subject to a ceiling of } (AFC \times 5/6)\} - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8 + CC9)$$

$$CC11 = \{(AFC \times 11/12) \times (PAF11 / NAPAF) \text{ subject to a ceiling of } (AFC \times 11/12)\} - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10)$$

$$CC12 = \{(AFC) \times (PAFY / NAPAF) \text{ subject to a ceiling of } (AFC)\} - (CC1 + CC2 + CC3 + CC4 + CC5 + CC6 + CC7 + CC8 + CC9 + CC10 + CC11)^1$$

Provided that in case of generating station or unit thereof as the case may be, under shutdown due to Renovation and Modernisation, the generating company shall be allowed to recover part of AFC which shall include O&M expenses and interest on loan only.

Where,

AFC = Annual fixed cost specified for the year, in Rupees.

NAPAF = Normative annual plant availability factor in percentage

PAF_M = Plant availability factor achieved upto the end of mth month, in percent:

PAFY = Plant availability factor achieved during the year, in percent

CC₁, CC₂, CC₃, CC₄, CC₅, CC₆, CC₇, CC₈, CC₉, CC₁₀, CC₁₁ and CC₁₂ are the capacity charges of 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th and 12th months respectively.

- 45.3. The PAFM and PAFY shall be computed in accordance with the following formula:

$$\text{PAFM or PAFY} = 10000 \times \sum_{i=1}^N \text{DCi} / \{ N \times \text{IC} \times (100 - \text{AUXn} - \text{AUXen}) \} \%$$

Where,

AUXn = Normative auxiliary energy consumption as percentage of gross generation.

AUXen = Normative auxiliary energy consumption for emission control system as a percentage of gross energy generation, wherever applicable."

DCi = Average declared capacity (in ex-bus MW), subject to clause below, for the ith day of the period i.e. the month or the year as the case may be, as certified by the State load dispatch centre after the day is over.

IC = Installed Capacity (in MW) of the generating station

N = Number of days during the period i.e. the month or the year as the case may be.

Note:

DCi and IC shall exclude the capacity of generating units not declared under commercial operation. In case of a change in IC during the concerned period, its average value shall be taken.

- 45.4. Generating station or unit thereof shall be paid an additional charge at a flat rate of 60 paise/kWh for ex-bus scheduled energy corresponding to scheduled generation in excess of ex-bus energy corresponding to Normative Annual Plant Load Factor (NAPLF) as specified in Regulation 43.1.

- 45.5. The energy charge shall cover the fuel cost (primary fuel as well as secondary fuel), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month. Total Energy charge payable to the generating company for a month shall be:

(Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined up to three decimal places in accordance with the following formulae for coal based stations:

$$ECR = [\{ (GHR - SFC \times CVSF) \times LPPF / CVPF \} + SFC \times LPSFi] \times 100 / (100 - AUX)$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF=(a) Gross calorific value of primary fuel as received at generating station, in kCal per kg, per litre or per standard cubic meter, as applicable after prudence check.

Provided where arrangements for taking samples for 'as received' basis is not in place, GCV of coal as received may be computed from GCV of coal "as billed"

Adjustment for total moistures shall be computed as per the CERC formula given as under:

$$\frac{GCV \times (1-TM)}{(1-IM)}$$

Where, GCV = Gross calorific value of coal

TM = Total Moisture

IM = Inherent Moisture

- (b) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;

Provided that at the time of true-up the GCV of coal on account of variation during storage at generating station shall be allowed at maximum value of 85 Kcal/kg.

- (c) In case of blending of fuel received through different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio. ;

CVSF = Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic meter, as applicable, during the month.

Provided that, in case of blending of fuel from different sources, the weighted average, landed cost of the primary fuel shall be arrived by considering the blending ratio.

Provided that, in case of primary fuel supply from integrated mines, the cost of fuel shall be computed in accordance with the regulations notified by CSERC. In the absence of State regulation, regulation notified by CERC shall be adopted.

SFC= Specific fuel oil consumption, in ml per kWh.

LPSFi= Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially

- 45.6. Though Secondary fuel cost shall be part of variable cost but shall not be part of Variable Cost Adjustment (VCA) formula. The impact on account of secondary fuel oil cost shall be taken care of at the time of true up.
- 45.7. Initially, the landed cost incurred by the generating company on secondary fuel oil shall be taken based on actual weighted average price of the three preceding months and in the absence of landed costs for the three preceding months, latest procurement price for the generating station, before the start of the year.
- 45.8. The secondary fuel oil expenses shall be subject to fuel cost adjustment at the end of the each year of tariff period, at the time of true up,
- 45.9. For reduction in cost of generation, Ministry of Power, Govt. of India has prescribed the methodology for use of transferred coal in Independent Power Producers (IPPs), generating unit for efficient utilization of domestic coal. Accordingly, the generation company, with prior approval of the Commission, shall be permitted to have flexibility in utilization of domestic coal and other resources for reducing the cost of power generation.
- 45.10. The landed cost of fuel for the month shall include price of fuel or input price, washery charges wherever applicable corresponding to the grade and quality of fuel, inclusive of royalty, taxes and duties as applicable, transportation cost by conveyer / rail / road or any other means, and, for the purpose of computation of energy charge, and in case of coal shall be arrived at after considering normative transit and handling losses as specified in Regulation 43.6.

Provided that cost of primary fuel or the landed cost of primary fuel as the case may be, procured through transparent competitive bidding process, the lowest rate discovered through such bidding shall be considered after adjusting for the account of quantity and quality.

Provided also that in case of coal-fired thermal generating station the Gross Calorific Value of primary fuel shall be considered on the basis of certificate/test report issued by reputed third party agency after prudence check. The expenses towards the third party testing shall be reimbursed by the beneficiaries.

- 45.11. The bi-monthly increase in the primary fuel cost shall be recovered as per the Fuel Cost Adjustment mechanism as per Regulation 93 of this Regulations.
- 45.12. The supplementary energy charge on account of emission control system shall cover the differential energy charges due to auxiliary energy consumption and cost of reagent consumption, and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the supplementary energy charge rate of the month. Total supplementary energy charge payable to the generating company for amount shall be:

Supplementary Energy Charges = (Supplementary energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh}"

Supplementary ECR for coal and lignite based thermal generating stations:

Supplementary ECR = $(\Delta ECR) + [(SRC \times LPR / 10) / (100 - (AUX_n + AUX_{en}))]$
Where,

(Δ ECR) = Difference between ECR with revised auxiliary energy consumption with emission control system equivalent to ($AUX_n + AUX_{en}$) and ECR with normative auxiliary energy consumption as specified in these regulations and revised;

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).

46. **COMPUTATION AND PAYMENT OF CAPACITY CHARGE AND ENERGY CHARGE FOR HYDRO GENERATING STATIONS**

The tariff for supply of electricity from a hydro generating station shall comprise composite capacity charge and energy charge to be derived in the manner as specified in CERC (Terms and Conditions of Tariff) Regulations, 2019,

Provided that the tariff for state owned hydro plant shall be single part tariff. The Hydro Generating stations shall be treated as must run power station.

47. **SHARING OF CDM and /or PAT BENEFITS**

The proceeds of carbon credit from approved CDM and/or PAT project shall be shared in the following manner, namely-

- (a) 100% of the gross proceeds on account of CDM and/or PAT to be retained by the project developer in the first year after the date of commercial operation of the generating station;
- (b) For the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, thereafter the proceeds shall be shared in equal proportion, by the generating company and the beneficiaries.

48. **DEVIATION CHARGES**

Variations between actual net injection and scheduled net injection for the generating stations, and variations between actual net drawl and scheduled net drawl for the beneficiaries shall be treated as their respective deviations and charges for such deviations shall be settled in accordance with CSERC (Intra state Availability Based Tariff and Deviation Settlement Mechanism) Regulations, 2016.

Provided that in absence of any provision in this regulation, the Commission shall adopt norms notified under Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related matters) Regulations, 2014 for such period as decided by Commission admitted by adopting as amended from time to time.

Provided that sharing of gains and losses, on account of deviation charges applicable to generating company supplying power to state owned distribution licensee shall be permitted at the time of True-up as per Regulation 13 of this Regulation.

Provided that actual net deviation of every Generating Station and Beneficiary shall be metered on its periphery through special energy meters (SEMs) installed by the transmission licensee / STU/ Distribution licensee, and computed in MWh for each 15-minute time block by the concerned SLDC.

Chapter 5

DETERMINATION OF INPUT PRICE OF COAL AND LIGNITE FROM INTEGRATED MINE**49. Input Price of coal and lignite for energy charges:**

- 49.1. Where the generating company has the arrangement for supply of coal from the integrated mine(s) allocated to it, for use in one or more of its generating stations as end use, partially or fully, the energy charge component of tariff of the generating station shall be determined based on the input price of coal, as the case may be, from such integrated mines determined in accordance with these regulations
- 49.2. 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:
- 49.3. Provided, if Commercial operation date of any integrated mine occurred before the notification of these regulations, input price of the coal supplied from such mine shall also be determined by the Commission as per provisions of these regulations.
- 49.4. Provided further 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 46.3.
- 49.5. In case of excess or short recovery of input price under regulations 46.2 of this Regulation, 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 rate equal to the rate as allowed for computation of Interest on Working Capital Loan for the said year in installment as may be decided by the Commission.

50. 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:

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;

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)

51. The input price of coal from the integrated mine(s) of the generating station(s) for the tariff period FY 2022-25 shall be trued up yearly for:
- the capital expenditure including additional capital expenditure incurred as allowed by the Commission;
 - the capital expenditure including additional capital expenditure incurred on account of Force Majeure and Change in Law.

- c) the capital expenditure including additional capital expenditure incurred to mitigate threat to life and property.
- c) The O&M expenses in accordance with applicable provisions of these Regulations.

After truing up, if the input price already recovered exceeds or falls short of the input price approved by the Commission under these regulations, the excess or the shortfall amount shall be refunded or recovered, as the case may be, by the generating company along with simple interest at the rate equal to the rate as allowed for computation of Interest on Working Capital Loan for the said year in installments as may be decided by the Commission.

Provided that the generating company shall refund such excess amount or recover the shortfall amount from the beneficiaries based on scheduled energy.”

52. Input Price of coal:

52.1. 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 in cases where the transportation is in two stages i.e from mine to the storage yard and then from the yard to the plant, the transportation charge shall imply cumulative of the two.

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;

52.2. Statutory Charges, as applicable, shall be allowed.

53. Run of Mine (ROM) Cost:

53.1. 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: ROM Cost = (Quoted Price of coal) + (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:

- (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.

53.2. 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:

ROM Cost = [(Annual Extraction Cost / ATQ) + Mining Charge] + (Fixed Reserve Price).

Where,

- (i) Annual Extraction Cost is the cost of extraction of coal as computed in accordance with Regulation 36F 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.

53.3. The generating company shall adhere to the Mining Plan for extraction of coal or lignite on annual basis:

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.

53.4. Run of Mine Cost of coal and lignite shall be worked out in terms of Rupees per tonne.

54. Additional Charges:

54.1. 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;

Provided further that in cases where the transportation is in two stages i.e from mine to the storage yard and then from the yard to the plant, the transportation charge shall

imply cumulative of the two. In such cases the transportation cost per ton would be computed for the two stages separately and then the cumulative impact shall be considered.

(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:

- (1) Depreciation;
- (2) Interest on Working Capital;
- (3) Interest on Loan;
- (4) Return on Equity;
- (5) O&M Expenses, excluding mining charge;
 - a. HR Expenses
 - b. M&G Expenses;
- (6) 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/ Chartered Accountant/Cost Accountant.

54.2. 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.

54.3. 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 O&M Expenses, provided that the charges have been discovered through a transparent competitive bidding process.

54.4. In case of mutually agreed crushing charges, transportation charges, handling charges, and washing charges, without resorting to competitive bidding process, 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.

54.5. The crushing charges, transportation charges, handling charges, and washing charges shall be worked out in terms of Rupees per tonne.

55. Capital Cost:

- 55.1. The expenditure incurred, including IDC and IEDC, duly certified by the Chartered Accountant, for development of the integrated mine(s) up to the date of commercial operation, shall be considered for arriving at the capital cost.
- 55.2. Capital expenditure incurred shall be admitted by the Commission after prudence check.
- 55.3. 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.

- 55.4. 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.
- 55.5. In case of integrated mine(s) which have declared the date of commercial operation prior to 1.4.2022, the capital expenditure allowed by the Commission for the period ending 31.3.2022 as per provisions of these regulations shall form the basis for computation of input price.

56. Additional Capital Expenditure:

- 56.1. 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 tariff 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 (including but not limited to expenditure incurred on R&R of land oustees) 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 in order to mitigate threat to life and property;

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.

56.2. 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 or in order to mitigate threat to life and property;

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.

56.3. 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 Clause (1) or sub-clause (e) of Clause (2) of this Regulation;
- 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.

56.4. The generating company undertaking any additional capitalization in integrated mine(s) on account of change in law events or force majeure conditions or in order to

mitigate threat to life and property, may, after intimating the beneficiaries, file petition for in-principle approval for incurring such expenditure, along with underlying assumptions, estimates and justification for such expenditure,

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

- (1) Depreciation;
- (2) Interest on Loan;
- (3) Return on Equity;
- (4) O&M Expenses, excluding mining charge;
 - a. HR expenses
 - b. M&G Expenses
- (5) Interest on Working Capital;
- (6) Mine closure expenses, if not included in mining charge; and
- (7) Statutory charges, if applicable.

58. Capital Structure, Return on Equity and Interest on Loan:

- 58.1.** 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 17 of these regulations:
- 58.2.** 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 Clause (1) of this Regulation.
- 58.3.** Return on equity shall be computed applying principle laid down in-Regulation 23 of these Regulations.
- 58.4.** Interest on loan, including normative loan, if any, shall be arrived at by considering the weighted average rate of interest calculated on the basis of actual loan portfolio, in accordance with Regulation 24 of these regulations.

59. Depreciation:

- 59.1.** Depreciation in respect of integrated mine(s) shall be computed from the date of commercial operation by applying Straight Line Method
- 59.2.** The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that,

- i) 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;
- ii) 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

- iii) lease hold land / Intangible assets towards mining/surface rights, associated statutory payments and Rehabilitation & Resettlement (R&R) expenses shall be amortized over the lease period or remaining life of the integrated mine(s), whichever is lower.

59.3. The salvage value of an asset shall be considered as 5% of the capital cost of the asset:

Provided that the salvage value shall be:

- i) zero for IT equipment and software;
 - ii) zero for intangible assets towards mining/surface rights, associated statutory payments and R&R works
 - iii) zero or as agreed by the generating company with the State Government for land; and
 - iv) as notified by the Ministry of Corporate Affairs under the Companies Act, 2013 for specialized mining equipment.
- 59.4.** 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 Appendix 1A 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.

60. Operation and Maintenance (O&M) Expenses

60.1. The O&M expenses in respect of integrated mine(s) of coal, shall be allowed based on the projected O&M Expenses for each year of the tariff period subject to prudence check by the Commission;

Provided that the O&M expenses allowed under this clause shall be trued up yearly based on actual expenses.

60.2. The O&M expenses for the tariff period ending on 31st March 2022 in respect of the integrated mine(s) of coal commissioned on or before 31st March 2022, shall be allowed at actual after prudence check.

60.3. 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 O&M Expenses;

Provided that if any additional liability arises on the Generating company due to any change in law which is not a pass through the mine developer, the same shall be pass through as additional O&M charges to the generating company.

60.4. 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 O&M Expenses under this Regulation, subject to prudence check by the Commission.

61. Interest on Working Capital:

61.1. 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 O&M 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) O&M expenses for 15 days, 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.

61.2. The rate of interest for working capital shall be determined in accordance with Regulation 26.4 of these regulations. Truing up shall be done as per Regulation 26.4 of these Regulations.

62. Mine Closure Expenses:

62.1. 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 tariff period 2022-25, the shortfall or excess shall be carried forward to the subsequent years for adjustments.

62.2. 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 tariff period.

62.3. 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 24 of these regulations, 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;

62.4. 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 Clause(1) of this Regulation and mine closure during the period undertaken by the Mine Developer and Operator shall be in accordance with Clause (3) of this Regulation:

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.

62.5. 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.

63. Determination of Input Price:

63.1. The input price of coal or lignite shall be determined as under:

$$\text{Input Price} = [\text{ROM Cost} + \text{Additional charges}]$$

63.2. 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.

63.3. Statutory Charges, as applicable, shall be allowed.

64. Recovery of Input Charges:

64.1. The input charges of coal or lignite shall be recovered as under:

$$\text{Input Charges} = [\text{Input Price} \times \text{Quantity of coal or lignite supplied}] + \text{Statutory charges, as applicable;}$$

65. Adjustment on account of Shortfall of Overburden Removal (OB Adjustment):

65.1. The generating company shall remove overburden as specified in the Mining Plan.

65.2. 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.

65.3. 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.

- 65.4.** 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:

$$\text{OB Adjustment} = [\text{Factor of adjustment for shortfall of overburden removal during the year}] \times [\text{Mining Charge during the year} + \text{O\&M expenses during the year}]$$

Where,

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

(Actual quantity of coal or lignite extracted during the year x Annual Stripping Ratio as per Mining Plan) - (Actual quantity of overburden removed during the year/ Annual Stripping Ratio as per Mining Plan)]/ (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.

- iv) Mining Charge and O&M expenses shall be in terms of Rupees per tonne corresponding to the Annual Target Quantity.

- 65.5.** 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.

66. Adjustment on account of shortfall in GCV (GCV Adjustment):

- 66.1.** 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.

- 66.2.** 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)/(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 53 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) Declared GCV of coal shall be the average GCV as per the Mining Plan or as approved by the Coal Controller.

67. Adjustment on account of Non-tariff income (NTI Adjustment):

- 67.1.** 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:

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

- 67.2.** 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.

68. Credit Adjustment Note:

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

69. Quality Measurement: The quality of coal or lignite supplied from the integrated mine(s) shall be measured at the loading point or receiving plant end if so agreed by the generating company and Mine Developer and Operator, 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.

70. Special Provision: Provisions of Chapters 3 and 4 of these regulations shall not be applicable in case of integrated mine(s), except to the extent specifically provided for or referred to in this Chapter-5.

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 this Chapter, shall be considered as per provisions of these regulations as applicable to the coal or lignite based generating stations”.

Chapter 6

TRANSMISSION

71. COMPONENTS OF TARIFF

71.1. Annual Transmission Charges for each year of the Control Period:

The Annual Transmission Charges for each financial year of the Control Period shall provide for the recovery of the Aggregate Revenue Requirement of the transmission licensee / STU for the respective financial year of the Control Period, reduced by the amount of Non-Tariff Income and income from other business, as approved by the Commission:

71.2. The Annual Transmission Charges of the transmission licensee shall be determined by the Commission on the basis of an application for determination of Aggregate Revenue Requirement made by the transmission licensee in accordance with Chapter-2 of this Regulation.

72. CAPITAL INVESTMENT PLAN

The transmission licensee shall submit a capital investment plan in the manner specified in Chapter-2 of this Regulation.

73. COMPUTATION OF ANNUAL CHARGES FOR INTRA-STATE TRANSMISSION NETWORK

73.1. Aggregate Revenue Requirement of transmission licensee shall comprise the following components, viz.

- (1) Return on Equity (ROE);
- (2) Interest and finance charges;
- (3) Depreciation;
- (4) Operation and Maintenance (O&M) expenses;
 - a. HR expenses
 - (i) Employee expenses;
 - (ii) Impact of Pay revision
 - (iii) Manpower deployed on outsourcing basis;

- b. Maintenance & General expenses;
- (5) Pension & Gratuity fund contribution;
- (6) Interest on working capital;

Less:

- (1) Non-Tariff Income;
- (2) Income from other business, to the extent specified in regulation 74 of this Regulation

NOTE:

1. Non-tariff income as specified in the Regulation 73.7 shall be subtracted from the sum of above (a to e) to arrive at AFC.
2. The Statutory taxes, cess and Duties shall be recoverable on reimbursement basis, as per actual.

3. The charges for auxiliary energy consumption in the sub-station shall be borne by the transmission licensee/ STU and shall be recoverable on reimbursement basis, as per actual.
4. Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as may be determined by the Commission in the Tariff order.

73.2. Return on Equity

The transmission licensee shall be allowed a ROE as specified in Regulation 23 of this Regulation.

73.3. Interest on Loan Capital

The transmission licensee shall be allowed interest and finance charges on loan capital as specified in Regulation 24 of this Regulation.

73.4. Depreciation

The transmission licensee shall be permitted to recover depreciation on the value of fixed assets as specified in Regulation 25 of this Regulation.

73.5. Operation And Maintenance (O&M) Expenses

73.5.1. Human Resource (HR) Expenses

- (a) HR expenses shall include:
 - (i) employees costs;
 - (ii) impact of Pay revision;
 - (iii) manpower deployed on outsourcing basis;
- (b) The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period.
- (c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expense of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission.
- (d) The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR expense (excluding impact of pension fund contribution and pay revision and any other expense of non-recurring nature, if any) for each year of the control period.
- (e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.

Provided further that during the true-up, actual cash outflow on impact of pay revision (including arrears) and pension fund contribution shall be allowed as per accounts, subject to prudence check and any other factor considered appropriate by the Commission.

- (f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

73.5.2. Maintenance & General (M&G) Expenses

- (a) Maintenance & General (M&G) expenses shall include:
 - (i) Administrative and General (A&G) expenses;
 - (ii) Repair and Maintenance (R&M) expenses
- (b) The Commission shall stipulate a separate trajectory for M&G expenses i.e., R&M and A&G expenses for the Control Period.
- (c) The A&G expenses (excluding expenses towards outsourcing manpower if any) for the base year i.e. FY 2020-21, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower if any) available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission. Any other expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.
- (d) For normalization of A&G expenses shall be estimated by applying last five year average increase/decrease in inflation to be considered on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2020-21. The projected base year value shall be escalated by the above inflation rate to estimate the A&G expense.
- (e) R&M expenses for the first year of the control period shall be calculated as a percentage (as per the norm decided in the tariff order) of opening Gross Fixed Assets. For arriving at the R&M expenses of subsequent years of the control period, projected WPI rate shall be applied on the estimated R&M expenses of first year.
- (f) Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};
- (g) Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.
- (h) At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

73.5.3. In cases the additional O&M expenses incurred due to additional capital investment or any change in law or any direction by any statutory authority shall be pass-through over and above the O&M charges allowed in the Tariff order after prudence check by the Commission.

73.6. Interest on working capital

The transmission licensee shall be allowed interest on the estimated level of working capital, as specified in Regulation 26 of this Regulation.

73.7. Non-Tariff Income

Any income being incidental to the business of the transmission licensee derived from sources, including but not limited to the disposal of assets, income from investments, rents, disposed value of scrap/assets after adjusting its depreciated value of scrap/asset, rental income for using assets which includes receipts against advertisements, interest on advances to suppliers/contractors and any other miscellaneous receipts shall constitute the non tariff income.

The amount of Non-Tariff Income relating to the transmission business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining annual transmission charges of the transmission licensee:

Provided that the transmission licensee shall submit full details of his forecast of Non-Tariff Income to the Commission along with its application for determination of Aggregate Revenue Requirement.

74. INCOME FROM OTHER BUSINESS

Where the transmission licensee has engaged in any other business, the income earned by using the asset of the transmission licensee then income from such business shall be shared between licensee and beneficiary in following manner:

- a) Amount equal to two-third of the income from such other business shall be deducted from the Aggregate Revenue Requirement in determining the transmission charges:
- b) Amount equal to one third of income from such other business shall be retained by licensee to meet the expenditure on R&D for improving efficiency.

75. SHARING OF CHARGES FOR INTRA-STATE TRANSMISSION NETWORK

The fixed cost of the transmission system shall be computed on annual basis, in accordance with norms contained in this regulation, aggregated as appropriate, and recovered on monthly basis as transmission charge from the beneficiaries as per the methodology specified in the Open Access Regulation.

76. TRANSMISSION SYSTEM LOSS

76.1. The energy loss in transmission system of the transmission licensee, as determined by the State Load Dispatch Centre and approved by the Commission, shall be borne by the Transmission System Users in proportion to their uses of the Intra State Transmission System:

Provided that the quantum of the energy consumed by the auxiliary system of a transmission sub-station and station transformer losses within the sub-station shall not be considered as transmission loss.

76.2. Transmission loss levels shall be calculated as the difference between the sum of net energy injected into the transmission system from CTU and all other energy injected into the transmission system (X) at different interface points and the sum of energy transmitted to distribution licensee(s) at 33 KV outgoing feeder of all EHV sub-

station, and retail and/or open access consumer(s) connected with transmission system(Y). Transmission losses expressed as a percentage shall be the transmission loss as a percentage of the total energy injected into the transmission system.

$$(X - Y) \times 100$$

Transmission loss (%) = -----

X

77. ENERGY LOSS FOR OPEN ACCESS CUSTOMER

For using transmission system by any open access customer(s), recovery of energy loss shall be allowed at the rate equivalent to transmission loss projected by the Commission for the respective Financial Year of the control period in tariff order.

Chapter 7**DISTRIBUTION WHEELING BUSINESS****78. APPLICABILITY**

The Regulations contained in this Chapter shall apply to the determination of tariff payable for usage of distribution wires of a distribution licensee.

79. COMPONENTS OF AGGREGATE REVENUE REQUIREMENT FOR DISTRIBUTION WHEELING BUSINESS

79.1. The wheeling charges for distribution wheeling business of the distribution licensee shall provide for the recovery of the ARR, as provided in Regulation 89 of this Regulation: and shall comprise of the following:

- (1) Return on Equity (ROE);
- (2) Interest and finance charges;
- (3) Depreciation;
- (4) O&M expenses
 - (a) HR expenses
 - (i) Employee expenses;
 - (ii) Impact of Pay revision
 - (iii) Manpower deployed on outsourcing basis;
 - (b) Maintenance & General expenses;
- (5) Pension & Gratuity fund contribution
- (6) Interest on working capital;

Less:

- (1) Non Tariff Income
- (2) Income from Other Business, to the extent specified in regulation 84 of this Regulation

NOTE:

1. Non-Tariff Income as specified in the Regulation 83.6, shall be subtracted from the sum of above (a to f) to arrive at AFC.
2. The Statutory Taxes, cess and Duties shall be recoverable on reimbursement basis, as per actual.
3. The charges for auxiliary energy consumption in the licensees sub-station shall be considered as expenses for the purpose of computation of ARR.
4. Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as may be determined by the Commission in the Tariff order.

Provided that the wheeling charges of the distribution licensee shall be determined by the Commission on the basis of petition for determination of tariff made by the distribution licensee in accordance with Chapter-2 of this Regulation:

Provided further that the wheeling charges may be denominated in terms of Rupees/kWh, for the purpose of recovery from the distribution system user, or any such denomination, as stipulated by the Commission from time to time.

80. ALLOCATION MATRIX

The distribution licensee shall segregate its accounts into wheeling business and retail supply business. The wheeling charges of the distribution licensee shall be determined by the Commission on the basis of segregated accounts of distribution wires business:

Provided that where the distribution licensee is not able to submit separate accounts for distribution wheeling business and retail supply business, the Commission shall determine allocation matrix in the following manner:

Particulars	Distribution Wheeling Business (%)	Retail Supply Business (%)
Power Purchase Expenses	-	100
Inter-State Transmission Charges	-	100
Intra-State Transmission Charges	-	100
O&M Expenses:		
HR expenses;	65	35
M&G Expenses:		
(i) R&M expenses;	90	10
(ii) A&G expenses;	90	10
Depreciation	90	10
Interest on Long-term Loan Capital	90	10
Interest on Working Capital	10	90
Contribution to Pension and Gratuity Fund	65	35
Provision for bad and doubtful debts	10	90
Return on Equity	90	10
Income Tax	90	10

81. CAPITAL INVESTMENT PLAN

The distribution licensee shall submit a capital investment plan in the manner specified in Chapter-2 of this Regulation.

82. CAPITAL COST

The capital cost shall be considered as provided in Chapter 3 of this Regulation.

83. CALCULATION OF AGGREGATE REVENUE REQUIREMENT

83.1. Return on Equity

The distribution licensee shall be allowed a ROE for distribution wheeling business, as specified in Regulation 23 of this Regulation.

83.2. Interest on Loan Capital

Interest on loan capital shall be computed in accordance with Regulations 24 of this Regulation.

83.3. Depreciation

Depreciation of the assets of distribution licensee shall be computed in the manner prescribed in Regulation 25 of this Regulation.

83.4. Operation And Maintenance (O&M) Expenses**83.4.1. Human Resource (HR) Expenses**

- (a) HR expenses shall include:
 - (i) employees costs;
 - (ii) impact of Pay revision;
 - (iii) manpower deployed on outsourcing basis;
- (b) The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period.
- (c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expense of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission.
- (d) The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR expenses (excluding impact of pension fund contribution and pay revision and any other expense of non-recurring nature, if any) for each year of the control period.
- (e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.

Provided further that during the true-up, actual cash outflow on impact of pay revision (including arrears) and pension fund contribution shall be allowed as per accounts, subject to prudence check and any other factor considered appropriate by the Commission.
- (f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

83.4.2. Maintenance and General (M&G) Expenses

- (a) Maintenance and General (M&G) expenses shall include:
 - (i) Administrative and General (A&G) expenses;
 - (ii) Repair and Maintenance (R&M) expenses
- (b) The Commission shall stipulate a separate trajectory for each of the components of M&G expenses viz., R&M and A&G expenses for the Control Period.
- (c) The A&G expenses (excluding expenses towards outsourcing manpower) (A&G) and R&M expenses (excluding expenses towards outsourcing manpower) (R&M) for the base year i.e. FY 2020-21, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower) and R&M expenses (excluding expenses towards outsourcing manpower), respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission. Any other expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.
- (d) The normalization of R&M expenses shall be done by applying last five year average increase/decrease in Wholesale Price Index (WPI) of all commodities on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22.
- (e) For normalization of A&G expenses shall be estimated by applying last five year average increase/decrease in Inflation to be considered on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2020-21.
- (f) The projected base year value shall be escalated by the above inflation rate to estimate the A&G and R&M expenses for each year of the control period.
- (g) Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};
- (h) Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.
- (i) At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

83.4.3. In cases the additional O&M expenses incurred due to additional capital investment or any change in law or any direction by any statutory authority shall be pass through over and above the O&M charges allowed in the Tariff order after prudence check by the Commission.

83.5. Interest on Working Capital

Interest on working capital shall be allowed in accordance with Regulations 26 of this Regulation.

83.6. Non-Tariff Income

Any income incidental to the business of the distribution licensee earned from other sources, including but not limited to the disposal of assets, income from investments, rents, disposed value of scrap/assets after adjusting its depreciated value of scrap/asset, rental income for using assets which includes receipts against advertisements, interest on advances to suppliers/contractors, open access charges, parallel operation charges penalties and any other miscellaneous receipts but other than income from sale of energy, shall constitute the non tariff income.

The amount of Non-Tariff Income relating to the distribution wheeling business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of distribution wires business of the distribution licensee:

Provided that the distribution licensee shall submit full details of his forecast of Non-Tariff Income to the Commission along with its application for determination of Aggregate Revenue Requirement.

84. INCOME FROM OTHER BUSINESS

Where the distribution licensee has engaged in any other business (excluding trading of electricity), the income earned by using the asset of the distribution licensee then income from such business shall be shared between licensee and beneficiary in following manner:

- a) Amount equal to two-third of the income from such other business shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of distribution wires business of the distribution licensee:
- b) Amount equal to one third of income from such other business shall be retained by licensee to meet the expenditure on R&D for improving efficiency.

85. DETERMINATION OF WHEELING CHARGES

The Commission shall specify the wheeling charge of wheeling business of the distribution licensee in its Order passed under Section 62 of the Act. Notwithstanding anything contained in this Regulation the wheeling charges applicable to open access customers shall be computed and applied at relevant voltage level(s). Provided that the wheeling charges payable by an open access customers (other than the retail consumers getting electricity supply from the same distribution licensee), shall be governed as per open access regulation.

Provided further that the charges paid by such open access customers shall be used to reduce the Aggregate Revenue Requirement of the retail supply business in accordance with the Regulations in Chapter 8.

86. WHEELING LOSSES

The distribution wire business shall be allowed to recover, in kind, the approved target level of wheeling losses arising from the operation of the distribution system as stipulated in the respective tariff order.

Chapter 8

RETAIL SUPPLY BUSINESS

87. APPLICABILITY

This Regulation shall apply to determination of tariff for retail supply of electricity by a distribution licensee to its consumers.

88. COMPONENTS OF TARIFF

88.1. The ARR for retail supply business of the distribution licensee for each year of the control period shall comprise of the following, namely:

- (1) Power purchase costs
- (2) Transmission and SLDC charges
- (3) O&M expense
 - a) HR expenses
 - (i) Employee expenses;
 - (ii) Impact of Pay revision
 - (iii) Manpower deployed on outsourcing basis;
 - b) M&G expense
- (4) Pension & Gratuity fund contribution
- (5) Depreciation
- (6) Interest and finance charges
- (7) Interest on working capital
- (8) Return on equity
- (9) Provision for bad and doubtful debts
- (10) Aggregate Revenue Requirement for distribution wheeling business, as determined under Chapter 6 of this Regulation,

Less:

- (11) Non Tariff Income
- (12) Income from other business, to the extent specified in regulation 96 of this Regulation
- (13) Revenue on account of open access / wheeling charges.
- (14) Revenue from sale of surplus power (other than retail consumers.)

Provided that the receipt of revenue on account of cross-subsidy surcharge shall be considered only at the time of truing up exercise based on actual receipts as per accounts.

88.2. The tariff for retail supply by a distribution licensee shall be determined by the Commission on the basis of segregated accounts or allocation matrix, as the case may be, in accordance with the Regulation 80 of this Regulation.

89. CAPITAL INVESTMENT PLAN

The distribution licensee shall submit a capital investment plan in the manner specified in Chapter 2 of this Regulation.

90. CAPITAL COST

The capital cost shall be allowed as provided in Chapter 3 of this Regulation.

91. SALES FORECAST

91.1. The licensee shall submit forecast of restricted demand (in MW) and unrestricted demand (in MW) and total sale of electricity (in MU) for different categories of consumers in his area of supply, for each year of the Control Period. The forecasts for category-wise sale of electricity shall generally be projected on the basis of CAGR and/or any other prudent method.

91.2. The sales forecast for unmetered consumer categories, if any, shall be subject to assessment by Commission after prudent check.

91.3. The Commission shall examine the forecasts by considering growth in energy demand, increase in number of consumers, change in pattern of consumption, loss trajectory of previous years and any other relevant factor, which the Commission may consider appropriate for approval of the projected sales for computing ARR and ERC.

92. CALCULATION OF AGGREGATE REVENUE REQUIREMENT**92.1. Return on Equity:**

The distribution licensee shall be allowed a ROE, as specified in Regulation 23 of this Regulation.

92.2. Interest on Loan Capital:

Interest on loan capital shall be computed in accordance with Regulations 24 of this Regulation.

92.3. Depreciation:

Depreciation of the assets of distribution licensee shall be computed in the manner prescribed in Regulation 25 of this Regulation.

92.4. Power purchase Cost:

92.4.1. The distribution licensee shall be permitted to recover power purchase cost as approved by the Commission.

92.4.2. Approved retail sales shall be grossed up by normative level of T&D losses as per approved loss trajectory for the purpose of assessing the quantum of energy required for sale to the retail consumers.

92.4.3. Provided that at the time of true up, the Deviation charges, if any, shall be considered for arriving at the power purchase cost and revenue from sale of surplus power shall be accounted separately.

92.4.4. The bi-monthly increase in the power purchase cost shall be recoverable as per the Variable Cost Adjustment (VCA) mechanism detailed in Regulation 93 of this Regulation.

92.5. Transmission and SLDC charges:

The distribution licensee shall also be allowed to recover the expenses at the approved level:

- (a) Intra-state transmission charges
- (b) Inter-state transmission charges
- (c) the charges for intervening transmission facilities;
- (d) wheeling charges for use of distribution system of other distribution licensee(s); and
- (e) the fees and charges payable to the RLDC and SLDC as may be specified by the appropriate Commission.

92.6. Operation and Maintenance (O&M) expenses**92.6.1. Human Resource (HR) expenses**

HR expenses for retail supply business shall be allowed in accordance with Regulation 83.4.1 of this Regulation.

92.6.2. Maintenance and General (M&G) expenses

Maintenance and General (M&G) expenses for retail supply business shall be allowed in accordance with Regulation 83.4.2 of this Regulation.

92.7. Interest on Working Capital

Interest on working capital shall be allowed in accordance with Regulations 26 of this Regulation.

92.8. Bad debt written off

92.8.1. The Commission may allow bad debts written off, as approved by the Competent Authority, as a pass through in the Aggregate Revenue Requirement, based on the trend of write off of bad debts in the previous years, subject to prudent check:

92.8.2. Provided that the Commission shall true-up the bad debts written off in the ARR based on the actual write off of bad debts excluding delayed payment surcharge waived off, if any during the year, subject to prudent check:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realized from such bad debts the same shall be included as an uncontrollable item under the non tariff income of the year in which such revenue is realized.

93. FUEL COST AND VARIABLE COST ADJUSTMENT (VCA):

93.1. The FCA amount for CSPGCL shall be determined on bi-monthly basis or as decided by the Commission in the tariff order.

93.2. CHFC is the change in the primary fuel cost. This will be computed only for Hasdeo Thermal Power Stations (HTPS), Korba West, Korba West Extension (1X500) and DrShyama Prasad Mukherjee Thermal Power Stations (Korba East Extn / DSPM) stations of the CSPGCL. For new power stations of CSPGCL, commissioned and supplying firm power to CSPDCL, the mechanism for computation applicable in the

instant order shall remain same however the parameters shall be as per the relevant tariff order.

93.3. CHFC for ABVTPS (Marwa) shall be recovered from beneficiary procuring Marwa power.

93.4. The CHFC shall be calculated by the CSPGCL for each of its thermal stations separately for each month and then summed up for determination of the bi-monthly amount. The CHFC for a month shall be calculated as under: -

CHFC in Rs. = Scheduled energy (ex-bus) for the month X difference in monthly Energy Charge Rate (ECR),

Difference in monthly ECR = ECR (T) – ECR (M)

Where,

ECR (T) = ECR specified for the particular plant in the tariff order.

ECR (M) = Computed ECR for the particular plant for the particular month as per formula given below.

$$ECR (M) = \{ (GHR - SFC \times CVSF) \times LPPF / CVPF \} \times 100 / (100 - AUX)$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as received in kCal per kg

CVSF = Calorific value of secondary fuel as considered in the tariff order, in kCal per ml.

GHR = Normative Gross station heat rate allowed in the Tariff order, in kCal per kWh.

LPPF = Actual Weighted average landed price of primary fuel, in Rupees per kg.

SFC = Normative Specific fuel oil consumption, in ml per kWh.

The CSPGCL shall work out the ECR on the basis of normative GSHR, normative auxiliary consumption, normative specific secondary fuel oil consumption, weighted average GCV of the coal as received and secondary fuel oil as indicated in the tariff order and actual landed price of the primary fuel (LPPF).

93.5. The variations if any in the gross calorific value of the coal and the secondary fuel oil shall be taken care of at the time of truing up in annual performance review.

93.6. The amount of VCA shall be determined for all long term contracts of the CSPDCL with the CSPGCL's coal fired stations, all power purchase from the Central Generating Stations, power purchase from renewable sources, short term power purchase and other power purchases if any as per the appendix-II The UI payable/receivable, sale of power outside the State (if any) etc. shall be excluded for determining the amount of VCA. Any variations in the power purchase cost from these sources versus the estimates made in the tariff order shall be taken care of at the time of true up on annual performance review or at the time of final true up.

93.7. Recovery of the approved amount of VCA on bi-monthly basis shall be done from the consumers by way of a VCA charge in Rs. per kWh to be added in their regular monthly bills as per the provisions given in this order.

93.8. The VCA charge shall be in the form of paise per unit (kWh) rounded off to the nearest integer. For this purpose, fraction up to 0.5 shall be ignored and fraction

higher than 0.5 shall be rounded off to the next higher integer. This charge shall be added to or deduced from, as the case may be, the energy charges as per the existing tariff for the energy billed to every consumer and shall be indicated separately in the electricity bills issued to the consumers and shall be treated as part of energy charge. This VCA charge shall be uniformly applicable to all categories of consumers of the CSPDCL. However, the same shall be subject to restriction as detailed in regulations 93.13 and regulations 93.14.

- 93.9.** The CSPDCL shall compute the amount of “variable cost adjustment charge” (in paise/ kWh) and shall intimate the amount thereof and manner determination of the same to the Commission for the period as decided by the Commission in tariff order. The gist of VCA computation should be widely publicized by CSPDCL in the leading newspaper of the State. Calculations of the VCA charge in paise/kWh for the particular bi-monthly period shall be displayed by the CSPDCL in its website for the information of the consumers, which shall remain on the website till truing up the ARR of the particular year.
- 93.10.** The CSPGCL and CSPDCL shall compute the CHFC (FCA) and VCA respectively as per the scheduled decided in the tariff order.
- 93.11.** Further any under/ over recovery due to implementation of VCA shall be trued up based on the accounts as a part of year end truing up exercise and the tariff determination process or at the time of final true up.
- 93.12.** The CSPDCL shall show the amount of variable cost charge billed to the consumers separately in the books of Accounts as also in R-15. The CSPDCL shall also keep information of the amount billed as variable cost charge in a separate account head.
- 93.13.** All consumers belonging to EHV and HV categories that are billed on KVAh basis, VCA charge for such consumers shall be billed on the basis of actual recorded kWh.
- 93.14.** VCA is allowable on the allowed power purchased quantum as per the tariff order or as specifically approved otherwise by the Commission. Such power purchase costs, which have been incurred by the licensee in breach of its economic purchasing obligation, shall not be considered and decision of the Commission in this regard shall be final.
- 93.15.** The Commission may at any time may review and amend the said formula of VCA through the regulatory process.

94. NON-TARIFF INCOME

Any income being incidental to the business of the distribution licensee derived from sources, including but not limited to the disposal of assets, income from investments, rents, disposed value of scrap/assets after adjusting its depreciated value of scrap/asset, rental income for using assets which includes receipts against advertisements, interest on advances to suppliers/ contractors, **parallel operation charges**, and any other miscellaneous receipts but other than income from sale of energy, shall constitute the non tariff income.

The distribution licensee shall submit full details of his forecast of Non-Tariff Income to the Commission along with its application for determination of Aggregate Revenue Requirement.

95. BANKING OF ENERGY

Charges for banking of energy shall be permitted as stipulated in the respective tariff order.

96. INCOME FROM OTHER BUSINESS

Where the distribution licensee has engaged in any other business which excludes income from trading of electricity, the income earned by using the assets of distribution licensee from such business shall be shared between licensee and beneficiary as detail below:

- a) Amount equal to two-third of the income from such other business shall be deducted from the Aggregate Revenue Requirement in determining the transmission charges:
- b) Amount equal to one third of income from such other business shall be retained by licensee.

97. RECEIPTS ON ACCOUNT OF CROSS-SUBSIDY SURCHARGE

The amount received by the distribution licensee by way of cross-subsidy surcharge, as approved by the Commission in accordance with the Chhattisgarh State Electricity Regulatory Commission (Connectivity and Intra-State Open Access) Regulations, 2011, as applicable and as amended from time to time, shall be deducted from the Aggregate Revenue Requirement in calculating the tariff for retail supply of electricity by such distribution licensee, at the time of true up.

98. ENERGY LOSSES FOR DISTRIBUTION SYSTEM

- 98.1. The energy loss for 33 KV and below voltage level, shall be computed as per relevant provision(s) of the State Grid Code 2011 as amended from time to time. The difference between the energy injected at 33 KV voltage level and the sum of energy sold to all its consumers (retail and open access), at voltage level 33 KV and below shall be the energy loss for the 33KV and below system. The same shall be considered for the gain/ loss at the time of true up.
- 98.2. Energy sold shall be the sum of metered sales and assessed unmetered sales, if any, based on prudence check by the Commission.
- 98.3. Energy Loss trajectory for distribution licensee shall be as specified by the Commission in the tariff order.

Chapter 9**SLDC BUSINESS****99. ANNUAL CHARGES**

99.1. Annual charges of SLDC shall be collected in the form of system operation charges and market operation charges. The annual charges shall be levied and collected only from the intra-State entities availing long-term and medium term services of SLDC other than stand alone generators, short-term open access customers, bulk consumers and captive users.

100. CAPITAL INVESTMENT PLAN

The SLDC shall submit a Capital Investment Plan in the manner specified in Chapter-2 of this Regulation.

101. COMPONENTS OF TARIFF

101.1. The annual charges shall consist of the following components, namely:-

- 1) Return on equity;
- 2) Interest on loan capital;
- 3) Depreciation;
- 4) O&M expenses:
 - a) HR expenses
 - (i) Employee expenses;
 - (ii) Impact of Pay revision
 - (iii) Manpower deployed on outsourcing basis;
 - b) M&G expenses;
- 5) Pension & Gratuity fund contribution
- 6) Interest on working capital;

NOTE:

Pension & Gratuity Fund Contribution shall be recoverable in equal monthly installments as may be determined by the Commission in the Tariff order

101.2. Return on Equity

The SLDC shall be allowed a ROE as specified in Regulation 23 of this Regulation.

101.3. Interest on Loan Capital

The SLDC shall be allowed Interest and Finance Charges on loan capital as specified in Regulation 24 of this Regulation.

101.4. Depreciation

The SLDC shall be permitted to recover depreciation on the value of fixed assets as specified in Regulation 25 of this Regulation.

101.5. Operation And Maintenance (O&M) Expenses**101.5.1. Human Resource (HR) Expenses**

- (a) HR expenses shall include:

- (i) employees costs;
 - (ii) impact of Pay revision;
 - (iii) manpower deployed on outsourcing basis;
 - (iv) pension & gratuity fund contribution
- (b) The Commission shall stipulate a separate trajectory for each of the components of HR expenses for the Control Period.
- (c) The HR expenses includes employee cost, impact of pay revision arrears, all expenses towards manpower deployed on outsourcing basis, pension fund contribution, and any other expense of non-recurring nature related to HR. The base year i.e. FY 2021-22, shall be derived on the basis of the normalized average of the actual HR expenses excluding pension fund contribution, impact of pay revision arrears and any other expense of non-recurring nature, available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission.
- (d) The normalization of HR expenses shall be done by applying last five year average increase in Consumer Price Index Industrial Worker (CPI (IW)) on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22. The projected base year value shall be escalated by the above inflation rate to estimate the HR expense (excluding impact of pension fund contribution and pay revision and any other expense of non-recurring nature, if any) for each year of the control period.
- (e) At the time of true up, the HR expenses shall be considered at actual and shall not be subjected to gain/loss mechanism.
- Provided further that during the true-up, actual cash outflow on impact of pay revision (including arrears) and pension fund contribution shall be allowed as per accounts, subject to prudence check and any other factor considered appropriate by the Commission.
- (f) CPI (IW) (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.

101.5.2. Maintenance & General (M&G) Expenses

- (a) Maintenance & General (M&G) expenses shall include:
- (i) Administrative and General (A&G) expenses;
 - (ii) Repair and Maintenance (R&M) expenses
- (b) The Commission shall stipulate a separate trajectory for each of the components of M&G expenses viz., R&M and A&G expenses for the Control Period.

Provided further that in all the cases the additional O&M cost incurred due to additional capital investment or any change in law or any direction by any statutory authority shall be pass through over and above the O&M charges allowed in the Tariff order after prudence check by the Commission.

- (c) The A&G expenses (excluding expenses towards outsourcing manpower) (A&G) and R&M expenses (excluding expenses towards outsourcing manpower) (R&M) for the base year i.e. FY 2020-21, shall be derived on the basis of the normalized average of the actual A&G expenses (excluding expenses towards outsourcing manpower) and R&M expenses (excluding expenses towards outsourcing manpower), respectively available in the accounts for the previous five (5) years immediately preceding the base year FY 2021-22, subject to prudence check by the Commission. Any other expense of non-recurring nature shall be excluded while determining normalized average for the previous five (5) years.
- (d) The normalization of R&M expenses shall be done by applying last five year average increase/decrease in Wholesale Price Index (WPI) of all commodities on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2021-22.
- (e) For normalization of A&G expenses shall be estimated by applying last five year average increase/decrease in Inflation to be considered on the basis of 40% weightage of WPI and 60% weightage of CPI respectively on year to year basis. The average of normalized net present value for FY 2016-17 to FY 2020-21, shall then be used to project base year value for FY 2020-21.
- (f) The projected base year value shall be escalated by the above inflation rate to estimate the A&G and R&M expenses for each year of the control period.
- (g) Wholesale Price Index numbers of all commodities shall be as per Office of Economic Advisor, Ministry of Commerce & Industry, Government of India {Base Year: 2011-12 Series};
- (h) Consumer Price Index for Industrial Workers (all India) shall be as per Labour Bureau, Government of India {Base Year: 2001=100}.
- (i) At the time of true up, the A&G and R&M expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period.

101.6. Interest on working capital

The SLDC shall be allowed interest on the estimated level of working capital, as specified in Regulation 26 of this Regulation.

102. LEVY OF FEES AND CHARGES

102.1. Collection

- a) SLDC shall collect the fees and charges, as determined under this regulation.
- b) SLDC shall levy and collect registration fees from the generating companies and licensees as specified in this regulation. Registration fees shall not be levied and collected from those to whom these regulations do not apply as per Regulation 2.
- c) SLDC shall be permitted to levy and collect fees and charges from the generating companies, licensees, and power exchanges as specified in any other regulations.

102.2. Allocation and apportionment of components of annual charges to system operation

function and market operation function:

- a) Annual charges towards State system operation function shall comprise 80% of the annual charges.
- b) Annual charges towards intra-State market operation function shall comprise the balance 20% of annual charges.
- c) The ratio of allocation of annual charges to system operation charges and market operation charges may be reviewed and decided by the Commission from time to time.

102.3. Levy of System Operation Charges (SOC) and Market Operation Charges (MOC):

System operation charges and market operation charges as specified in Regulation 102.2 of this regulation shall be determined by adding up the allocated and/or apportioned amount of various components of the annual charges.

102.4. Levy of System Operation Charges:

- a) The System operation charges shall be collected as per the norms given below:-
 - i. Intra state transmission licensee(s) (other than STU): 10% of system operation charges;
 - ii. Intra-State sellers (excluding renewable energy based power generating plant) 45% of system operation charges;
 - iii. Intra-State buyers (excluding bulk consumers and captive users): 45% of system operation charges.

Provided that if intra state transmission licensee(s) (other than STU) is not availing the services of SLDC, the system operation charges shall be collected from the intra-State buyers and intra-State sellers as per the norms given below:-

- i. Intra-State sellers: (excluding renewable energy based power generating plant) 50% of system operation charges;
 - ii. Intra-State buyers: (excluding bulk consumers and captive users) 50% of system operation charges.
- b) The system operation charges shall be levied on the intra- state transmission licensees (other than STU) on the basis of the ckt.-km of the lines owned by them as on the last day of the month prior to billing of the month.
- c) The system operation charges from the intra-State sellers shall be collected in proportion to their contracted capacity, for use of state transmission system.
- d) The system operation charges from the intra-State buyers shall be collected in proportion to their contracted capacities, for use of state transmission system.

Note: The above provisions shall not be applicable to the renewable energy based power generating plant, bulk consumers and captive users. Further, these charges shall also not be applicable to the other intra-State buyers and intra-State sellers for the quantum of power procuring or selling power through the short-term open access route.

102.5. Levy of Market Operation Charges:

The market operation charges shall be collected equally from all the intra-State sellers and intra-State buyers irrespective of their contracted capacity.

Note: The above provisions shall not be applicable to the renewable energy based power generating plant, bulk consumers, and captive users. Further this charge shall also not be applicable to the other intra-State buyers and intra-State sellers procuring or selling power through the short-term open access route only. Provided that if the intra-state seller is a generating company, it shall pay the charges generating station wise.

102.6. Fee & Charges for other Open Access Customers :

- a) The fee and charges for short-term open access customers (intra-State buyers and intra-State sellers) not covered above shall be as per the fee and charges as specified by Central Commission from time to time (i.e. for intra-State entity availing short-term inter-State open access).
- b) Such charges collected from short-term open access customers shall be treated as 'miscellaneous income' of SLDC. SLDC shall maintain separate account for the revenue earned from short-term open access customers.

102.7. Levy of Registration fees:

- a) All generating companies and licensees (excluding those covered in Regulation 2.2) intending to get connected to the intra-state transmission system or distribution system shall register themselves with the SLDC by filing application in the format specified as Appendix-V to this Regulation. The registration will be valid for the period of ten years and thereafter renewal of registration shall be done in the manner as specified above and on payment of fees and charges as decided by the Commission.

Provided that the registration of all generating companies and licensees already registered with the SLDC will be valid for the period of ten years from the date of registration.

Note: Transfer/change of ownership need to be registered as a fresh in accordance with the Regulation 102.7(a).

- b) The application for registration for power generating plant (including captive generating plant) shall be accompanied by fees of Rs 10 lakh for installed capacity of 50 MW and above, or Rs 5 lakh for installed capacity below 50 MW.

Provided that renewable energy based grid connected power generating plant shall be required to register their power generating stations with SLDC on payment of Rs. 2 lakh, (irrespective of the installed capacity). The renewable energy based power generating company shall have to submit a certificate of eligibility as a renewable energy generating plant duly certified by the State Nodal agency i.e. Chhattisgarh Renewable Energy Development Agency (CREDA).

Provided, that the stand-alone generators who avail services of SLDC for energy metering or accounting for the purpose of RE Certificates or any other

such purposes as may be mandated by the Commission from time to time shall also be required to get registered with the SLDC. The fee in such cases shall be Rs. 1 lakh irrespective of the installed capacity of the plant.

- c) The registration fees for all generating companies and licensees intending to avail services of SLDC shall be Rs. 10 lakh.
- d) In case of default in payment of registration fees by the generating companies (including captive generating plant) and licensees the SLDC may make a reference to the Commission.
- e) The SLDC, after scrutinizing application and after being satisfied with correctness of the information furnished in the application shall register the applicant in its register duly intimating the applicant about its acceptance.
- f) The registration fees is non-refundable. In case the generating station enhances its capacity from less than 50 MW to 50 MW or above, a differential amount of Rs. 5 lakh shall be payable.
- g) SLDC shall maintain a list of all registered generating companies and licensees on its website. The SLDC shall file consolidated information about the generating station and licensees connected to the intra-State transmission network and distribution network and being monitored / serviced by it, to the Commission every year by end of April every year.
- h) The SLDC shall dispose all applications for registration within 30 days. In case of delay in processing or refusal, SLDC shall intimate the applicant with the valid reasons regarding the same, within 5 working days of completion of above time limit.

Note: All generating companies and licensees shall be required to register at SLDC. These shall be generating plants, captive generating plants, licensees directly connected to State grid, stand alone generating plants who avail the services of SLDC for REC and other intra-State entities.

103. BILLING AND OTHER MISCELLANEOUS PROVISIONS

103.1. Billing and Payment:

Bills shall be raised for the system operation charge and market operation charge on monthly basis by the SLDC in accordance with this regulation, and payments shall be made by the respective intra-State entities directly to the SLDC.

103.2. Persistent default in payment of SLDC fee and charges would be brought to the notice of the Commission.

Chapter 10

SUBMISSION OF INFORMATION AND CALCULATION OF EXPECTED REVENUE FROM TARIFF AND CHARGES

104. FILING OF THE EXPECTED REVENUE FROM TARIFFS AND CHARGES

- 104.1.** Every utility who opts for determination of tariff under section 62 by the Commission, shall be required to file expected revenue from tariff and charges in the prescribed formats as per due procedure.
- 104.2.** The licensee or the generating company if intending to meet the gap or a portion of the gap through revision in tariff for charges shall have to file appropriate petition with the Commission requesting it to consider revision in tariff for charges to be applicable for the ensuing financial year.

105. PROCEDURE – EXPECTED REVENUE FROM TARIFFS & CHARGES

The generating company or the licensee or SLDC, in case of non availability of prior period audited figures, may submit data as per provisional accounts. In such case, it shall utilize the verified and validated data of computerized billing/ financial accounting system (subject to availability of such system), after incorporating appropriate annual corrections with explanatory notes.

106. FORMATS FOR FILING OF THE ESTIMATED REVENUE FROM TARIFF AND CHARGES

The licensee or the generating company shall file with the Commission the estimated revenue from tariff and charges, in appropriate formats as may be prescribed by the Commission.

107. DISPLAY OF INFORMATION AND DATA VERIFICATION

107.1. Application fees

Notwithstanding anything contained in the prevailing CSERC (Fees and Charges) Regulations, the generating company or the licensee or SLDC, while submitting the information under this regulation, shall not be required to pay any fees to the Commission.

107.2. Display of information

The information received in the formats from the generating companies or the licensees or SLDC shall be posted on the website of the Commission / generator / licensee / SLDC.

Chapter 11**MISCELLANEOUS PROVISIONS****108. CEILING NORMS FOR OPERATION**

Norms of operation specified in this Regulation are the ceiling norms and shall not preclude the generating company or the transmission licensee or the distribution licensee, as the case may be, and the beneficiaries and the long-term transmission customers from adopting / practicing improved norms of operation.

109. APPLICATION FEE AND THE PUBLICATION EXPENSES

The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff is allowed to be recovered by the generating company or the transmission licensee/ STU or the distribution licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be:

110. POWER TO RELAX

The Commission, for reasons to be recorded in writing, may relax any of the provisions of this regulation on its own motion or on an application made before it by an interested person.

111. SAVINGS AND REPEAL

111.1. Nothing in this Regulation shall be deemed to limit or otherwise impede the inherent power of the Commission to revise/review and make such orders as may be necessary, in the absence of sufficient data, to meet ends of justice or to prevent abuses of the process of the Commission.

111.2. Nothing in this Regulation shall impede the Commission from adopting, in conformity with the provisions of the Act, a procedure, which is at variance with any of the provisions of this Regulation, if the Commission, in view of the special circumstances of a matter or class of matters, and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.

112. POWER TO REMOVE DIFFICULTIES

If any difficulty arises in giving effect to the provisions of these regulations, the Commission may, by order, make such provision not inconsistent with the provisions of the Act or provisions of other regulations specified by the Commission, as may appear to be necessary for removing the difficulty in giving effect to the objectives of these regulations.

By order of the Commission

Sd/-

(S.P. Shukla)
Secretary.

Appendix-I**Depreciation Schedule**

Sl. No.	Asset Particulars	Depreciation Rate
		SLM
A	Land under full ownership	0.00%
B	Land Under Lease	
(i)	For investment in the land	3.34%
(ii)	For cost of clearing the site	3.34%
C	Assets purchased new	
(a)	Plant & Machinery in generating stations	
(i)	Hydro electric	5.28%
(ii)	Steam electric NHRB & waste heat recovery boilers	5.28%
(iii)	Diesel electric and gas plant	5.28%
(b)	Cooling towers & circulating water systems	5.28%
(c)	Hydraulic works forming part of the Hydro	
(i)	Dams, Spillways, Weirs, Canals, Reinforced concrete flumes and siphons	5.28%
(ii)	Reinforced concrete pipelines and surge tanks, steel pipelines, sluice gates, steel surge tanks, hydraulic control valves and hydraulic works	5.28%
(d)	Building & Civil Engineering works	
(i)	Offices and showrooms	3.34%
(ii)	Containing plant and equipments (incl. thermal or hydro)	3.34%
(iii)	Temporary erections such as wooden structures	100.00%
(iv)	Kutchra roads	100.00%
(v)	Road other than Kutchra Road	3.34%
(vi)	Others	3.34%
(e)	Transformers, Kiosk, sub-station equipment & other fixed apparatus (including plant foundation)	
(i)	Transformers including foundations having rating of 100 KVA and over	5.28%
(ii)	Other	5.28%
(f)	Switchgear including cable connections	5.28%
(g)	Lightning arrestor	
(i)	Station type	5.28%
(ii)	Pole type	5.28%
(iii)	Synchronous condenser	5.28%
D	Batteries	5.28%
(i)	Underground cable including joint boxes and disconnected boxes	5.28%

(ii)	Cable duct system	3.34%
E	Overhead lines including cable support systems	
(i)	Lines on fabricated steel operating at terminal voltages higher than 66 KV	5.28%
(ii)	Lines on steel supports operating at terminal voltages higher than 13.2 KV but not exceeding 66 KV	5.28%
(iii)	Lines on steel on reinforced concrete support	5.28%
(iv)	Lines on treated wood support	5.28%
F	Meters	5.28%
G	Self propelled vehicles	9.50%
H	Air Conditioning Plants	
(i)	Static	5.28%
(ii)	Portable	9.50%
I. (i)	Office furniture and furnishing	6.33%
(ii)	Office equipment	6.33%
(iii)	Internal wiring including fittings and apparatus	6.33%
(iv)	Street Light fittings	5.28%
J	Apparatus let on hire	
(i)	Other than motors	9.50%
(ii)	Motors	6.33%
K	Communication equipment	
(i)	Radio and high frequency carrier system	6.33%
(ii)	Telephone lines and telephones	6.33%
(iii)	Fiber Optic	6.33%
L	I.T. equipments including Software	15.00%
M	Any other assets not covered above	5.28%

Note: Where life of the particular asset is less than useful life of the project, the useful life of such particular asset shall be considered as per the provisions of the Companies Act, 2013 and subsequent amendment thereto.

Appendix IA

DEPRECIATION SCHEDULE FOR INTEGRATED MINE			
Sr No	Asset Particulars	Life in Years	Rate
1	Land Freehold@	999	999
2	Land Leasehold	&&&	&&&
3	Temporary erections	1	95%
4	HEMMS	8	12%
	Roads, bridges, culverts, helipads	25	4%
6	Main Plant Buildings	30	3%
7	Machinery other than HEMM	15	6%
8	Water Supply, Drainage and sewerage	15	6%
9	Furniture and Fixtures	15	6%
10	Office equipment/s other than computers	15	6%
11	Hospital equipment(s)	15	6%
12	EDP, WP machines, SATCOM & communication		6%
13	Equipment	15	6%
14	Electrical installations	15	6%
15	Self-propelled vehicles	10	10%
16	Computers, Software	3	32%
17	Laboratory & workshop equipment	15	6%
18	Mine Development Expenses	20 or life of mine, whichever is lower	5%
19	Evaluation and Exploration#	20 or life of mine, whichever is lower	5%
20	Others not covered above	15	6%
*	* Salvage Value shall be other than 5% for following assets - a. IT Equipment, software Zero(0) b. Zero or as agreed with state Government in case of land c. For specialized mining equipment as specified by Ministry of Corporate affairs d. Mine Development expenses, Evaluation and Exploration Zero (0)		*
@	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.		
&&&	To be filled by petitioner, least of lease agreement/mine life/right to use period		
	List of individual HEMM with cost of each HEMM be provided separately		
#	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. 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.		

Appendix-II

Computation of Q_{pp} and Q_{RS} (MU)			
S No	Particulars		
1	Quantum of actual power purchased from CSPGCL thermal power stations	Q_1	
2	Quantum of actual power purchased from CSPGCL hydro power stations	Q_2	
3	Quantum of actual power purchased from CSPGCL renewable power stations	Q_3	
4	Quantum of scheduled power purchased from CGS	Q_4	
5	PGCIL actual average losses for the bi-monthly period	L_1	
6	Quantum of scheduled power purchased from CGS at State periphery	$Q_5 = Q_4 \times (1 - L_1)$	
7	Quantum of actual power purchased from renewable energy sources (IPPs and CGPs)	Q_6	
8	Quantum of actual short term power purchased from State IPPs and CGPs	Q_7	
9	Quantum of scheduled short term purchased through inter-state route	Q_8	
10	Quantum of scheduled short term purchased through inter-state route at the State Periphery	$Q_9 = Q_8 \times (1 - L_1)$	
11	Quantum of power purchased from Other Sources (if any)	Q_{10}	
12	Total quantum of power purchased	$Q_{pp} = Q_1 + Q_2 + Q_3 + Q_5 + Q_6 + Q_7 + Q_9 + Q_{10}$	
13	Normative transmission and distribution losses as specified in the Tariff Order	L	
13	Quantum of power scheduled for interstate sale	Q_{PT}	
14	Quantum of power purchased for sale to retail consumers of the State	$Q_{RS} = Q_{pp} - Q_{PT}$	

Appendix-III**Computation of CHPP**

First bi-monthly period										
	Name of CGS	First month								
		PAF _M	NAPAF	AFC	Schedule energy in month (MU) (SE1)	Capacity charge in month Rs "A1"	Energy charge Rate (Rs/kwh)	Energy charge Rs "B1"	Taxes Rc "C1"	Total Rs X1= A1+B1+C1
	NTPC Korba									
	NTPC Sipat									
	NSPCL									
	Total thermal									
	Nuclear	NA	NA	NA						
	Hydel	NA	NA	NA						
	Total from all sources	NA	NA	NA						

First bi-monthly period										
	Name of CGS	Second month								
		PAFM	NAPAF	AFC	Scheduled energy in month (MU) (SE2)	Capacity charge in month Rs "A2"	Energy charge Rate (Rs/kwh)	Energy charge Rs "B2"	Taxes Rs "C2"	Total Rs X1= A2+B2+C2
	NTPC Korba									
	NTPC Sipat									
	NSPCL									
	Total thermal									
	Nuclear	NA	NA	NA						
	Hydel	NA	NA	NA						
	Total from all sources	NA	NA	NA						

Computation of CHPP

Scheduled energy for the bi-monthly period (SE1 + SE2)	MU	Q_{CGS}		
Average rate of PP cost as per Tariff Order	Rs/kwh	R_{PP1}		
Actual average rate of PP cost purchased during adjustment period	Rs /kwh	$R_{PP2} = (X1 + X2) / Q_{CGS}$		
CHPP	Rs	$CHPP = Q_{CGS} \times (R_{PP2} - R_{PP1})$		

Appendix-IV

Computation of VCA charge			
S No	Particulars		
1	CHFC	Rs	
2	CHPP	Rs	
3	Gross VCA (sub-total in Rs.)	Rs	
4	Allowable VCA (in Rs)	Rs.	
5	Allowable VCA (in Rs/kWh)= (CHFC +CHPP)/ Q_{pp} x (1- L)	Rs/kWh	

Appendix-V**(In Compliance Regulation 102.7)**

1. **Name of the entity (in bold letters):**
2. **Registered office address:**
3. **Area in which registration is sought:**
4. **Intra-State User category:**
 - (i) Generating Station
 - (ii) Captive generating plant
 - (iii) Renewable generating plant
 - (iv) Distribution licensee
 - (v) Transmission licensee
5. **Intra-State User details (as on 31st March of last financial year for existing user and for subsequent change, if any.):**
 - i. Category – Generating Station/Renewable generating plant/Captive generating plant
 - a. Total installed capacity
 - b. Maximum contracted capacity (MW) for using intra-State transmission system
 - c. Purpose of inter-connection with State grid (please tick appropriate option)
 - (i) For supply to State distribution licensee(long-term or medium-term or short-term)
 - (ii) For supply to captive use(long-term or medium-term or short-term)
 - (iii) For supply to bulk consumers(long-term or medium-term or short-term)
 - (iv) For supply to other than the above(long-term or medium-term or short-term)

d. Details of Connection to the intra-State transmission system:

Sl.No.	(i) Name of EHV S/s.	(ii) Voltage level (KV)	(iii) Whether Special Energy Meters (Main) installed at this location

- ii. Category – Transmission Licensee (intra – State)

a. Sub-stations:

Sl.No.	Sub-station Name	Number of transformer	Total Transformation Capacity or Design MVA handling capacity if switching station

b. Transmission lines:

Sl.No.	Voltage level (KV)	Number of Transmission lines	Total Circuit-Kilometers

6. Contact person(s) details for matters related to SLDC

- i. Name:
- ii. Designation:
- iii. Landline Telephone No.:
- iv. Mobile No.:
- v. E-mail address:
- vi. Postal address:

The above information is true to the best of my knowledge and belief.

Signature of Authorized Representative

Place:

Name :

Date

Designation :

Contact number :
