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SIKKIM STATE ELECTRICITY REGULATORY COMMISSION GANGTOK

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In exercise of the powers conferred on it by section 181 of the Electricity Act 2003 (Act 36 of 2003) and all other powers enabling it in this behalf, after previous publication, the Sikkim State Electricity Regulatory Commission hereby makes the following regulations: -

CHAPTER – 1: PRELIMINARY

1. Short Title, Commencement and Extent

These regulations may be called the Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2020.

These regulations shall come into force on the date of their publication in the Sikkim Government Gazette.

These regulations shall extend to the whole of the State of Sikkim.

- (a) These regulations shall be applicable for determination of tariff in all cases covered under these regulations from April 1, 2021 and onwards;
- (b) These regulations shall be applicable to all existing and future Generating Companies, Transmission Licensees and Distribution Licensees and their successors, if any;

2. Definitions:

In these regulations, unless the context otherwise requires;

“**Accounting Statement**” means for each financial year, the following statements, namely:

- (i) Balance sheet, prepared in accordance with the form contained in Part I of Schedule VI to the Companies Act, 1956 as amended from time to time;

- (ii) Profit and loss account, complying with the requirements contained in Part II of Schedule VI to the Companies Act, 1956;
- (iii) Cash flow statement, prepared in accordance with the Accounting Standard on Cash Flow Statement (AS-3) of the Institute of Chartered Accountants of India;
- (iv) Report of the statutory auditors;
- (v) Cost records prescribed by the Central Government under Section 209(1)(d) of the Companies Act, 1956;

Together with notes thereto, and such other supporting statements and information as the Commission may direct from time to time: Provided that in case of any local authority engaged in the business of distribution of electricity, the Accounting Statement shall mean the items, as mentioned above, prepared and maintained in accordance with the relevant Acts or Statutes as applicable to such local authority:

Provided further that once the Commission notifies the Regulations for submission of Regulatory Accounts, the applications for tariff determination and truing up shall be based on the Regulatory Accounts.

“Act” means the Electricity Act, 2003 (36 of 2003) as amended from time to time;

“Additional Capitalization” means the capital expenditure actually incurred or projected to be incurred after the date of commercial operation of the project and admitted by the Commission after prudence check;

“Applicant” means a Generating Company or a Transmission Licensee or a Distribution Licensee who has made an application for determination of Aggregate Revenue Requirement and tariff in accordance with these regulations and the Act and includes a generating company or a transmission licensee or a distribution licensee whose tariff is the subject of review by the Commission;

“Aggregate Revenue Requirement” or **“ARR”** means the requirement of Generating Company or Transmission Licensee or a Distribution Licensee for recovery, through tariffs, of allowable expenses and return on equity in accordance with these regulations.

“Allocation Statement” means for each financial year, a statement in respect of each of the separate businesses of the Generating Company or Transmission Licensee or Distribution Licensee, showing the amounts of any revenue, cost, asset, liability, reserve or provision etc, which has been either:

- i) charged from or to each such Other Business together with a description of the basis of that charge; or

- ii) determined by apportionment or allocation between different businesses of the licensee including the Licensed Businesses, together with a description of the basis of the apportionment or allocation:

Provided that for the purpose of this Regulation, the licensed business of the Distribution Licensee for an area of supply would be separated as Distribution Wires and Retail Supply business:

Provided further that such allocation statement in respect of a generating station, owned and/or maintained and/or operated by the distribution licensee, shall be maintained in a manner so as to enable tariff determination, stage- wise, Unit wise and/or for the whole generating station.

“Allotted Transmission Capacity” means the power transfer in MW between the specified point(s) of injection and point(s) of drawal allowed to a long-term customer or a medium-term customer on the intra-State transmission system under the normal circumstances and the expression "allotment" of transmission capacity" shall be construed accordingly:

Provided that the Allotted Transmission Capacity to a long-term transmission customer or a medium-term transmission customer shall be sum of the generating capacities allocated to the long-term transmission customer or the medium-term transmission customer from the generating stations and the contracted power, if any;

“Area Of Supply” means the area within which a Distribution Licensee is authorized by its License to supply electricity.

“Auditor” means an auditor appointed in accordance with the provisions of section 224 and 619 of the Companies Act, 1956 (1 of 1956), or any other law for the time being in the force;

“Authority” means Central Electricity Authority referred to in Section 70 of the Act;

“Auxiliary Energy Consumption” or '**AUX**' in relation to a period means the quantum of energy consumed by auxiliary equipment of the generating unit / station and transformer losses within the station, expressed as a percentage of the sum of gross energy generated at the generator terminals of the generating unit / all the units of the generating plant;

“Availability” in relation to transmission system for a given period means the time in hours during that period the transmission system is capable to transmit electricity at its rated voltage and shall be expressed in percentage of total hours in the given period and calculated as per the CERC formula specified in Appen-

dix - I to these regulations;

“Availability” in relation to thermal generating station for any period means the average of the daily average declared capacities (DCs) for all the days during that period expressed as a percentage of the installed capacity of generating station minus normative auxiliary consumption in MW.

“Bank Rate” shall mean the bank rate declared by the Reserve Bank of India from time to time;

“Base Year” means the financial year immediately preceding the first year of the Control Period and used for the purposes of these regulations;

“Beneficiary” in relation to a;

- (a) **“Generating Station”** means the person buying electricity generated at such a generating station whose tariff is determined under these regulations.
- (b) **“Transmission System”** means the person who has availed of the transmission system on payment of transmission charges determined under these regulations. This includes a distribution licensee, a transmission licensee, a person who has setup a captive power plant or a generating company including merchant power plant or a consumer availing long-term or medium-term open access utilizing such transmission system. Short-term open access consumers will not be treated as beneficiaries;
- (c) **“SLDC”** means the person who uses the services of SLDC and shall include distribution licensee, transmission licensee, a person who has set up captive power plant or a generating company including merchant power plant or a consumer availing long-term or medium-term open access.

“Block” in relation to a combined cycle thermal generating station includes combustion turbine-generator(s), associated waste heat recovery boiler(s), connected steam turbine generator and auxiliaries;

“Business Plan” shall comprise of elements as specified in Regulation 7.2 of these regulations;

“CERC” means the Central Electricity Regulatory Commission;

“Collection Efficiency” means the ratio of total revenue realized to the total revenue billed during the same financial year. The revenue realization from arrears pertaining to the same financial year shall be included but revenue realization from late payment surcharge and arrears pertaining to the previous years shall not be included for computation of collection efficiency;

“Commission” means the Sikkim State Electricity Regulatory Commission;

“Conduct of Business Regulation” means the Sikkim State Electricity Regulatory Commission (Conduct of Business) Regulations, 2012 as amended from time to time;

“Control Period” means the period of three years from April 1, 2021 to March 31, 2024, and for every block of three or five years thereafter, for submission or forecast in accordance with **Chapter-2** of these regulations.

“Core Business” for the purpose of these regulations, means the regulated activities of the generating company or the transmission licensee or the distribution licensee, as the case may be, and does not include any other business;

“Cut-off Date” means 31st March of the year closing after two years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation;

“Date of Commercial Operation (COD)” means

- a. in relation to a unit or block of a 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 notice to the beneficiaries, from 00:00 hour of which scheduling process as per the Commission's Order is fully implemented;
- b. in relation to the generating station, the date of commercial operation means the date of commercial operation of the last unit of the generating station;
- c. in relation to a unit of a hydro generating station, the date declared by the Generating Company from 00:00 hour of which, after notice to the beneficiaries, scheduling process in accordance with the Commission's Order 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 notice to the beneficiaries;

Note:

- i. 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 consid-

ered 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 such reservoir/pond level is achieved.

- ii. 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.

- d. in relation to the transmission system, the date declared by the transmission licensee from 00:00 hour of which an element of the transmission system is in regular service after successful charging and trial operation:

Provided that the date shall be the first day of a calendar month and transmission charge for the element shall be payable 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.

“Declared Capacity” means

- (a) For a thermal generating station, the capability of the generating station to deliver ex-bus electricity in MW declared by such generating station in relation to any period of the day or whole of the day, duly taking into account the availability of fuel:

Provided that in case of a gas turbine generating station or a combined cycle generating station, the generating station shall declare the capacity for units and modules on gas fuel and liquid fuel separately, and these shall be scheduled separately. Total declared capacity and total scheduled generation for the generating station should be the sum of the declared capacity and scheduled generation for gas fuel and liquid fuel for the purpose of computation of availability and Plant Load Factor, respec-

tively;

- (b) For hydro power generating stations, the ex-bus capacity in MW expected to be available from the generating station for the i^{th} day of the month, which the station can deliver for at least three (3) hours, as certified by the State Load Despatch Centre after the day is over, taking into account the availability of water;

“Design Energy” in relation to a hydro power generating station means the quantum of energy, which could be generated in a 90 per cent dependable year with 95 per cent installed capacity of the generating station;

“Distribution Business” means the business of operating and maintaining a distribution system for supplying electricity in the area of supply of the Distribution Licensee;

“Distribution Wires Business” means the business of operating and maintaining a distribution system for wheeling of electricity in the area of supply of the Distribution Licensee;

“Existing Generating Station” means a generating plant declared under commercial operation prior to the date of effectiveness of these regulations.

“Existing Transmission System” means the transmission system declared under commercial operation prior to the date of effectiveness of these regulations;

“Force Majeure Events” means, with respect to any party, any event or circumstance which is not within the reasonable control of, or due to an act or omission of that party and which, by the exercise of reasonable care and diligence, that party is not able to prevent, including, without limiting the generality of the foregoing, would include the following events:

- i. acts of God, including but not limited to lightning, storms, earthquakes, floods and other natural disasters;
- ii. strikes, lockouts, go-slow, bandhs or other industrial disturbances;
- iii. acts of public enemy, wars (declared or undeclared), blockades, insurrections, riots, revolution, sabotage and civil disturbance;
- iv. unavoidable accident, including but not limited to fire, explosion, radioactive contamination and toxic dangerous chemical contamination;
- v. any shutdown or interruption of the Grid, which is required or directed by the State or Central Government or by the Commission or the State/Regional Load Despatch Centre; and
- vi. any shut down or interruption, which is required to avoid serious

and immediate risks of a significant plant or equipment failure;

“Gross Calorific Value” or **‘GCV’** in relation to a thermal power generating station means the heat produced in kCal by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic meter of gaseous fuel, as the case may be;

“Station Heat Rate” or **‘SHR’** means the heat energy input in kCal required to generate one kWh of electrical energy at generator terminals;

“Infirm Power” means electricity injected into the grid prior to the date of commercial operation of a unit or block of a generating station whichever is earlier;

“Installed Capacity” or **‘IC’** means the summation of the name plate capacities of all the units of the generating station or the capacity of the generating station (reckoned at the generator terminals) approved by the Commission from time to time;

“Licensee” means any person or persons granted license under Section 14 or exempted under Section 13 of the Act including deemed licensee.

“Licensed Business” means the functions and activities, which the licensee(s) are required to undertake in terms of the license granted by the Commission or as a deemed Licensee(s) under the Act;

“Long-term Transmission Consumer” means a distribution licensee or a person having a long-term lien for a period of twenty five years or more or as defined in the open access regulations notified by the Commission from time to time, over an intra-State transmission system by paying all applicable charges for which appropriate agreement has been entered into with the transmission licensee;

“Maximum Continuous Rating” or **‘MCR’** in relation to a unit of the thermal power generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters, and in relation to a block of a combined cycle gas based thermal power generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer with water or steam injection, (if applicable) and corrected to 50 Hz grid frequency and specified site conditions;

“Medium-term Transmission Consumer” means a person having a medium-term lien for a period exceeding three months and up to three years or as defined in the open access regulations notified by the Commission from time to time over an intra- State transmission system by paying all applicable charges;

(a) **“New generating station”** means generating station declared under commercial operation on a date after the date of effectiveness of these regulations;

(b) **“New transmission system”** means the transmission system declared under commercial operation on a date after the date of effectiveness of these regulations;

“Other Business” means any business undertaken by the Generating Company, Transmission Licensee or Distribution Licensee, other than the businesses regulated by the Commission;

“Operation and Maintenance Expenses” or **“O&M expenses”** mean the expenditure incurred on operation and maintenance of the generating plant or transmission system or distribution system, as the case may be, including part thereof, and includes the following expenditure:

- a. Employee cost (EC)
- b. Repair and Maintenance (R & M) expenses;
- c. Administration and General (A & G) expenses;

“Plant Availability Factor” or **‘PAF’** in relation to a thermal 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 of the generating station reduced by the normative auxiliary energy consumption in MW, and shall be computed in accordance with the following formula:

$$\text{Plant Availability Factor} = \frac{10000 \times \sum DC_i}{\{N \times IC \times (100 - AUX_n)\}} \%$$

Where:

IC = Installed Capacity of the generating station in MW

DC_i = Average declared ex-bus capacity for the ith day in such period in MW.

N = Number of days during the period,

AUX_n = Normative Auxiliary Energy Consumption expressed as a percentage of gross generation,

Σ = Summation from i = 1 to N;

“Plant Load Factor” or '**PLF**' for a given period, means the total sent out energy corresponding to actual 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:

$$\text{Plant Load Factor} = \frac{10000 \times \sum G_i}{\{N \times IC \times (100 - AUX_n)\}} \%$$

Where:

- IC = Installed Capacity of the generating station in MW,
G_i = Actual ex-bus Generation in MW for the ith time block in such a period,
N = Number of Time Blocks during the period,
AUX_n = Normative Auxiliary Energy Consumption expressed as a percentage of gross consumption
Σ = Summation from i = 1 to N;

“Project”

- (a) In relation to generation business means a generating station and includes all components of generating facility such as power generating station and generating units of the scheme, as apportioned to power generation;
- (b) In relation to transmission business means a transmission system comprising specified transmission lines, sub-stations and associated equipment.
- (c) In relation to a distribution business means a distribution system comprising specified distribution lines, sub-stations and associated equipment.

“Rated Voltage” means the manufacturer's design voltage at which the transmission/distribution system is designed to operate or such lower voltage at which the line is charged, for the time being, in consultation with supplier and receiver of electricity.

“Retail Supply Business” means the business of sale of electricity by a Distribution Licensee(s) to the various categories of consumers within the

area of supply in accordance with the terms of the License for distribution and retail supply of electricity;

“Revenue” means the amount billed or assessed to be billed at the applicable tariff including any fuel price adjustments in the case of a Generating Company and in the case of distribution licensees shall be inclusive of MMC, FSA or any other charges i.e. power factor surcharge, load / demand surcharge etc. for sale of power.

“Run-of-river Generating Station” means a hydro generating station, which does not have upstream pondage;

“Run-of-river Generating Station with Pondage” means a hydro generating station with sufficient pondage for meeting the diurnal variation of power demand;

“Scheduled Generation” for any given time or time block means the quantum of ex-bus energy scheduled by the State Load Dispatch Centre to be injected into the grid by a generating plant.

“Short-term Transmission Consumer” in the context of usage of Transmission System means a person having short-term lien for a period less than three months or as defined in the open access regulations notified by the Commission from time to time over an intra-State Transmission System by paying all applicable charges;

“State” means State of Sikkim.

“State Load Dispatch Centre” or **‘SLDC’** means the center established by the State Government under section 31 of the Act for purposes of exercising the powers and discharging the functions under Section 32 of the Act;

“Storage Type Power Station” means a hydro power generating station associated with large storage capacity to enable variation in generation of electricity according to demand;

“Tariff” means the schedule of charges for generation, transmission and distribution & retail supply of electricity with terms and conditions applicable thereof;

“Transmission Service Agreement” or **‘TSA’** means an agreement, contract, memorandum of understanding, or any such covenant, entered into between the transmission licensee and the long-term transmission consumer(s), as approved by the commission, for the use of transmission system.

“Transmission system” means a transmission line or a group of transmission lines inter-connected together with or without associated sub-stations including equipment associated with transmission lines and sub-stations;

“Unit” in relation to a thermal power generating station means steam generator, turbine-generator and auxiliaries, or in relation to a combined cycle gas based thermal power generating station, means turbine-generator, waste heat recovery plant and auxiliaries;

“Unscheduled Interchange” or ‘UI’ means the unscheduled interchange of energy as mentioned in the Indian Electricity Grid Code;

“Useful life” in relation to a unit of a generating station, transmission system and distribution system from the date of commercial operation shall mean the following, namely:

- i. Coal/Lignite based thermal generating: 25 years;
- ii. Gas/Liquid fuel based thermal generating station: 25 years;
- iii. Hydro generating station : 35 years;
- iv. AC and DC sub-station : 25 years;
- v. Transmission line : 35 years;
- vi. Distribution line : 35 years;

“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;

“Wheeling Business” means the business of operating and maintaining a distribution system for conveyance of electricity in the area of supply of the distribution licensee;

“Year” means the financial year i.e. a period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year;

The words and expressions used in these regulations and not defined herein but defined in the Act shall have the same meaning assigned to them under the Act.

3. Scope of Application

These regulations shall be applicable to all existing and future Generating Companies, Transmission Licensees and Distribution Licensees and their

successors/assignees, if any, and shall apply where the Commission determines tariff: -

- (i) for supply of electricity by a Generating Company to a Distribution Licensee,
- (ii) for transmission of electricity by a Transmission Licensee to a Distribution Licensee or to open access consumers
- (iii) for wheeling & retail supply of electricity by a Distribution Licensee and
- (iv) in all other cases where the Commission has the jurisdiction for tariff determination under the Act.

These regulations shall not apply for tariff determination of renewable energy generation projects. The tariff for such generation projects shall be determined as per Sikkim State Electricity Regulatory Commission (Terms & Conditions for determination of Tariff for Generation from Renewable Energy Sources) Regulations, 2012.

These regulations supersede the “Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013”, “Sikkim State Electricity Regulatory Commission (Multi Year Tariff) (First Amendment) Regulations, 2015” and “Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017

CHAPTER-2: MULTI YEAR TARIFF FRAMEWORK AND GUIDING PRINCIPLES

4. Multi-Year Tariff Framework

The Commission shall determine the tariff for matters covered under clauses (i), (ii), (iii) and (iv) of Regulation 3.1 above, under a Multi Year Tariff framework with effect from April 1, 2021:

Provided that the Commission may, upon application made to it by an applicant, exempt the determination of tariff of a Generating Company or Transmission Licensee or Distribution Licensee under the Multi-Year Tariff framework for such period as may be contained in the order granting such an exemption.

The Commission shall adopt Multi-Year Tariff framework for determination of ARR/tariff of the second Control Period of three years commencing from 1st April, 2021 to 31st March, 2024. However, there shall be annual determination of ARR/Tariff for the utilities for FY 2020-21 i.e. till the commencement of the second control period as per Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 and "Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017"

4.2

The Commission shall determine the ARR for each year of the control period and tariff for the first year of the control period.

The tariff applicable in each of the remaining years of the control period shall be notified by the Commission through a separate order.

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, Transmission Licensee, Distribution Wires Business and Retail Supply Business:

- (i) A detailed Business Plan based on the principles specified in these regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval:

Provided that the performance parameters, whose trajectories

have been specified in the regulations, shall form the basis of projection of these performance parameters in the Business Plan.

- (ii)) Based on the Business Plan, the applicant shall submit the forecast of Aggregate Revenue Requirement (ARR) for the entire Control Period and expected revenue from existing tariffs for the first year of the Control Period, and the Commission shall determine ARR for the entire Control Period and the tariff for the first year of the Control Period for the Generating Company, Transmission Licensee, Distribution Wires Business and Retail Supply Business;
- (iii) Truing up of previous year's expenses and revenue based on Audited Accounts vis-à-vis the approved forecast and categorization of variation in performance as those caused by factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (uncontrollable factors), shall be undertaken by the Commission:
- (iv) The mechanism for pass-through of approved gains or losses on account of uncontrollable factors as specified by the Commission in these Regulations;
- (v) The mechanism for sharing of approved gains or losses on account of controllable factors as specified by the Commission in these Regulations;
- (vi) Annual determination of tariff for Generating Company, Transmission Licensee, Distribution Wires Business and Retail Supply Business, for each financial year within the Control Period, based on the approved forecast and results of the truing up exercise.

5. Accounting statement and filing under MYT

The filing under MYT by the Generating Company, Transmission Licensee, and Distribution Licensee, shall be done as per the timelines specified in these Regulations and in compliance with the principles for determination of ARR as specified in these regulations, in such form as may be prescribed by the Commission from time to time.

The filing for the Control Period under these regulations shall be as under:

- a) MYT Petition shall comprise of:
 - i. Truing up for FY 2019-20 to be carried out under Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 and Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017;
 - ii. Annual Performance Review for FY 2020-21 to be carried out under Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 and Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017;
 - iii. Multi-year Aggregate Revenue Requirement for the entire Control Period with year-wise details under these regulations;
 - iv. Revenue from the sale of power at existing tariffs and charges and projected revenue gap, for the first year of the second Control Period under these regulations,
 - v. Application for determination of tariff for FY 2021-22.
- b) From the first year of the Control Period and onwards, the Petition shall comprise of:
 - i. Truing Up for FY 2020-21 to be carried out under Sikkim State Electricity Regulatory Commission (Terms and Conditions for

Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2013 and Sikkim State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) (Second Amendment) Regulations, 2017;

- ii. Revenue from the sale of power at existing tariffs and charges for the ensuing year;
- iii. Revenue gap for the ensuing year calculated based on ARR approved in the Tariff Order or MYT Order and truing up for the previous year;
- iv. Application for determination of tariff for the ensuing year.

The Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Wires Business and Retail Supply Business, shall file separate audited accounting statements with the application for determination of tariff and truing up under Regulation 8:

Provided that in case complete accounting segregation has not been done between the Wires Business and Supply Business, the ARR of the Distribution Licensee shall be apportioned between Wires Business and Retail Supply Business in accordance with the allocation matrix specified in Chapter-6 of these regulations.

In case of a vertically integrated business, the Utility shall be required to file separate applications for determination of ARR and tariff for Generation Business, Transmission Business and Distribution Business:

Provided further that in case complete accounting segregation has not been done between the various Businesses, the Utility shall have to do so within one year of notification of these regulations. Till such time there is a complete segregation of audited accounts between Generation, Transmission, Wheeling and Supply Businesses, the application for determination ARR and tariff and truing up for each Business shall be supported by an Allocation Statement that contains the apportionment of costs and revenues to that Business. The Allocation Statement shall also contain the methodology that has been used for the apportionment.

6. Tariff Determination Principles

1 The Commission, while determining the tariff shall be guided by the following principles contained in Section 61 of the Act, namely –

- (a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to Generating Companies and Transmission Licensees as may be enforced from time to time.
- (b) The National Electricity Policy and Tariff policy as laid down by the Government of India. And as may be in force from time to time.
- (c) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- (d) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
- (e) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- (f) The principles rewarding efficiency in performance;
- (g) Multi-Year Tariff principles;
- (h) The tariff progressively reflects the cost of supply of electricity and also, reduces cross-subsidies in the manner.
- (i) The promotion of co-generation and generation of electricity from renewable sources of energy;

The Commission shall subject to the provisions of Regulation 6.3 given below, determine the tariff in accordance with the provisions of the Act, and these regulations, for;

- (a) Supply of electricity by a generating company to a distribution licensee;
- (b) Transmission of electricity;
- (c) Wheeling of electricity;
- (d) Retail sale of electricity;

In case it is not possible or practicable to determine tariff separately for (a) to (d) above, the Commission may fix combined tariff for more than one of these activities as per requirement.

Where the Commission has permitted open access to any category of consumers under sub section (2) of Section 42 of the Act, such consumers, notwithstanding the provisions of clause (d) of sub-section (1) of Section 62 of the Act, may enter into an agreement with any person for supply/ purchase of

electricity for this purpose on such terms and conditions (including tariff) as may be agreed upon by them, subject to the payment of various wheeling charges cross subsidy surcharge, additional surcharge and other open access related charges as determined by the Commission.

The Commission while determining the tariff, shall not show undue preference to any consumer of electricity, but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.

7. Capital Investment Plan and Business Plan Filings

The Generating Company, the Transmission Licensee and the Distribution Licensee shall file by 1st September of the year preceding the first year of the control period or any other date as directed by the Commission an application containing the following elements for the approval of the Commission:

- (a) Capital Investment Plan as specified in clause 7.1 below;
- (b) Business Plan as per details specified in clause 7.2 below;

Capital Investment Plan:

(a) The Generating Company and the Licensees, in respect of their respective businesses, shall file for approval of the Commission a capital investment plan for a period covering at least the entire control period. The capital investment plan shall be project/scheme wise and for each scheme/project shall include:

- (i) Purpose of investment
- (ii) Capital Structure;
- (iii) Capitalization Schedule;
- (iv) Financing Plan including identified sources of investment;
- (v) Details of physical parameters / targets;
- (vi) Cost-benefit analysis and payback period;
- (vii) Envisaged reduction in O&M costs/losses;
- (viii) Ongoing projects that will spill into the year under review and new projects (along with justification) that will commence but may be completed within or beyond the control period.

(b) Purpose of investment shall include:

(i)	for a Generating company	Generating capacity growth replacement of assets, renovation and modernization, reduction in average per unit cost of generation etc;
(ii)	for a Transmission Licensee	Power evacuation, system augmentation, network expansion, replacement of assets, reduction in transmission losses, improvement in transmission service and reliability of supply, reduction in per MW transmission cost, IT related projects etc;
(iii)	for a Distribution Licensee	Meeting load growth/ sales forecast (MUs), distribution loss reduction, non- technical loss reduction, replacement of assets, meeting reactive energy requirements, improvement in metering, consumer services, collection efficiency, quality and reliability of supply etc.

- (c) The capital investment plan, in case of a generation company, will be commensurate with the generation capacity growth, renovation & modernization requirements etc.

In case of a transmission licensee, the capital investment plan will be commensurate with transmission capacity growth and will be linked to improvement in quality of transmission service, reliability, metering and reduction in transmission losses.

The capital investment plan in case of a distribution licensee shall be commensurate with sales forecast (MUs) / load growth of the state, distribution/non-technical loss reduction targets, improvements envisaged in metering, collection efficiency, reliability and quality of supply etc.

- (d) Capital Investment for renovation and modernization in case of a transmission licensee and a generation company shall be made through an application with a detailed project report (DPR) elaborating the following elements: (i) Complete scope and justification; (ii) Estimated life extension of the generation/transmission asset; (iii) Improvement in performance parameters; (iv) Cost-benefit analysis; (v) Phasing of expenditure; (vi) Milestones/Time lines (vii) Schedule of completion; (viii) Estimated completion cost; (ix) Other aspects.
- (e) Capital investment plan shall incorporate list of schemes in order of priority so as to enable the Commission to approve the schemes in that or-

der and in case lesser amount of capital expenditure is to be approved then the schemes of lower priority could be disapproved.

- (f) In the normal course, the Commission shall not revisit the approved capital investment plan during the control period. However, during the performance review and true-up, the Commission shall monitor the year wise progress of the actual capital expenditure incurred by the generating company or the licensee vis-à-vis the approved capital expenditure and in case of significant difference between the actual expenditure vis-à-vis the approved expenditure, the Commission may true up the capital expenditure, subject to prudence check, as a part of annual true up exercise on or without an application to this effect by the generation company/licensee. The generating company and the licensee shall submit the scheme-wise actual capital expenditure incurred along with the mid-year performance review and true-up filing.

- (g) In case the capital expenditure is required due to Force Majeure events for works which have not been approved in the capital investment plan or for works that may have to be taken up to implement new schemes approved by the State/Central Govt., the generating company or the licensee shall submit an application containing all relevant information along with reasons justifying emergency nature of the proposed work seeking approval by the Commission. In the case of works or schemes, other than those required on account of Force Majeure events, the Commission shall consider to give approval only in those cases where in view of the Commission, shall benefit a large mass of consumers of the State. The generating company or the licensee may take up the work prior to the approval of the Commission only in case the delay in approval will cause undue loss intimated to the Commission:

Provided that the generating company or the licensee shall submit the requisite details, as required as per clause 7.1(a) above, within 10 days of the submission of the application for approval of emergency work;

Provided further that such approved capital expenditure shall be treated as a part of actual capital expenditure incurred by the licensee as well as the capital expenditure approved by the Commission.

- (h) In case the capital expenditure incurred for approved schemes exceeds the amount as approved in the capital expenditure plan, the generating company or the transmission or the distribution licensee, as the case

may be, shall file an application with the Commission at the end of control period for truing up the expenditure incurred over and above the approved amount. After prudence check, the Commission shall pass an appropriate order on case-to-case basis. The true-up application shall contain all the requisite information and supporting documents.

- (i) The generating company, transmission and the distribution licensees shall also provide a copy of their respective capital investment plans to each other at the time of filing of the same with the Commission so as to enable them to carry out planning and network augmentation/ strengthening activities in a coordinated manner.
- (j) The Commission shall approve the capital investment plan within a period of 45 days from the date of its filing or submission of complete information, whichever is later.

Business Plan

- (a) The Generating Company, Transmission Licensee and Distribution Licensee, in respect of their respective businesses, shall file for approval of the Commission a business plan for a period covering the entire control period from April 2021 to March 2024.
- (b) The business plan for a Generating Company shall be based on planned generation capacity growth and shall contain among other things the following (i) generation forecasts; (ii) future performance targets; (iii) proposed efficiency improvement measures; (iv) saving in operating costs; (v) Plan for reduction in per unit/per MW cost of generation (vi) financial statements (which include balance sheet, profit and loss statement and cash flow statement) - current and projected (at least for the control period duration) along with basis of projections; (vii) any other new measures to be initiated by the Generating Company e.g. IT initiatives, third party energy audit etc.
- (c) The business plan for Transmission Licensee shall be based on proposed generation capacity addition and future load forecasts of the state and should contain among other things the following: (i) future plans/ performance targets of the company including efficiency improvement measures proposed to be introduced (ii) plans for meeting reactive power requirements; (iii) plan for reduction in transmission losses; (iv) plan for improvement in quality of transmission service and reliability; (v) metering

- arrangements; (vi) Plan for reduction in per MW transmission cost, (vii) financial statements (which include balance sheet, profit and loss statement and cash flow statement)- current and projected (at least for the period of control period duration) along with basis of projections; (viii) any other new measures to be initiated by the Licensee e.g. IT initiatives etc.
- (d) The business plan for Distribution Licensee shall be based on sales forecast (MUs)/load growth and should contain among other things the following: (i) future plans/ performance targets of the company including efficiency improvement measures proposed to be introduced (ii) plan for reduction in distribution and non-technical losses;(iii) plan for improvement in quality of supply and reliability; (iv) metering arrangements; (v) plan for improvement in collection efficiency (vi) plan for improvement in consumer services/new consumer services (vii) Plan for reduction in O & M cost per MU of energy sales (viii) MIS; (ix) scheme for third party energy audit (x) plan for improvement in metering and billing; (xi) financial statements (which include balance sheet, profit and loss statement and cash flow statement)- current and projected (at least for the period of control period duration) along with basis of projections; (xii) Power Purchase Requirement; (xiii) RPO Obligations; (xiv) any other new measure to be initiated by the Licensee(s) e.g. IT initiatives, development of distribution franchisee, periodical business satisfaction surveys etc.
- (e) The Generation Company and the Licensee shall submit all information / data as required by the Commission for necessary approval of the business plan. The Commission shall scrutinize the business plan taking into consideration the additional information provided by the applicant, if any.
- (f) The Commission shall approve the business plan within a period of 45 days from the date of its filing or submission of complete information, whichever is later. While approving the Business plan, the Commission shall stipulate a trajectory of the variables, which shall include, but not limited to operation & maintenance expenses, target Plant Load Factor and distribution losses.

8. Multi Year Tariff Application

The applicant shall submit the forecast of Aggregate Revenue Requirement for the entire Control Period and tariff proposal for the first year of the Con-

trol Period, in such manner, and within such time limit as provided in these regulations and accompanied by such fee payable, as may be specified by the Commission.

The applicant shall develop the forecast of Aggregate Revenue Requirement using the assumptions relating to the behavior of individual variables that comprise the Aggregate Revenue Requirement during the Control Period.

The applicant shall develop the forecast of expected revenue from tariff and charges based on the following:

- (a) In the case of a Generating Company, estimates of quantum of electricity to be generated by each Unit/Station for ensuing financial year within the Control Period;
- (b) In the case of a Transmission Licensee, estimates of transmission capacity allocated to Transmission System Users for ensuing financial year within the Control Period;
- (c) In the case of a Distribution Licensee, estimates of quantum of electricity to be supplied to consumers and to be wheeled on behalf of Distribution System Users for ensuing financial year within the Control Period;
- (d) Prevailing tariffs as on the date of making the application.

Based on the forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges, the Generating Company, Transmission Licensee, and Distribution Licensee for the Distribution Wires Business and Retail Supply Business, shall propose the tariff that would meet the gap, if any, in the Aggregate Revenue Requirement.

The applicant shall provide full details supporting the forecast, including but not limited to details of past performance, proposed initiatives for achieving efficiency or productivity gains, technical studies, contractual arrangements and/or secondary research, to enable the Commission to assess the reasonableness of the forecast.

On receipt of application, the Commission shall either:

- (a) issue an Order approving the ARR for the entire Control Period and the tariff for the first year of the Control Period, subject to such modifications and conditions as it may specify in the said Order; or
- (b) reject the application for reasons to be recorded in writing, as the Commission may deem appropriate:

Provided that the applicant shall be given a reasonable opportunity of being heard before rejecting his application.

9. Truing Up

Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a Generating Company or Transmission Licensee or Distribution Licensee is covered under a Multi-Year Tariff framework, then such Generating Company or Transmission Licensee or Distribution Licensee, as the case may be, shall be subject to truing up of expenses and revenue during the Control Period in accordance with these regulations.

The Generating Company or Transmission Licensee or Distribution Licensee shall file an Application for truing-up of the previous year and determination of tariff for the ensuing year, within the time limit specified in these regulations:

Provided that the Generating Company or Transmission Licensee or Distribution Licensee, 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, 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 of Aggregate Revenue Requirement and expected revenue from tariff and charges.

The scope of the truing up shall be a comparison of the performance of the Generating Company or Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of the following:

- (a) a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year, subject to the prudence check including pass-through of impact of uncontrollable factors;
- (b) Review of compliance with directives issued by the Commission from time to time;
- (c) Other relevant details, if any.

In respect of the expenses incurred by the Generating Company, Transmission Licensee and Distribution Licensee during the year for controllable and uncontrollable parameters, the Commission shall carry out a detailed review of performance of an applicant vis-a-vis the approved forecast as part of the truing up.

Upon completion of the truing up under Regulation 9.4 above, the Commission shall attribute any variations or expected variations in performance for variables specified under Regulation 10 below, to factors within the control of the applicant (controllable factors) or to factors beyond the control of the applicant (uncontrollable factors):

Provided that any variations or expected variations in performance, for variables other than those specified under Regulation 10.1 below shall be attributed entirely to controllable factors.

Upon completion of the Truing Up, the Commission shall pass an order recording:

- (a) The approved aggregate gain or loss to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors, and the amount of such gains or such losses that may be shared in accordance with these regulations;
- (b) Components of approved cost pertaining to the uncontrollable factors, which were not recovered during the previous year, shall be pass through as per these regulations;
- (c) Tariff determined for the ensuing year.

10. Controllable and Uncontrollable factors

For the purpose of these regulations, the term “uncontrollable factors” shall comprise of the following factors, which were beyond the control of the applicant, and could not be mitigated by the applicant:

- (a) Force Majeure events;
- (b) Change in law, judicial pronouncements and Orders of the Central Government, State Government or Commission;
- (c) Variation in the price of fuel and/ or price of power purchase according to the FPPPA formula approved by the Commission from time to time;
- (d) Variation in the number or mix of consumers or quantities of electricity supplied to consumers:

Provided further that if any consumer or category of consumers within the area of supply of the applicant is eligible for open access under sub-section (3) of Section 42 of the Act, then any variation in the number or mix of such consumers or quantities of electricity supplied to such eligible consumers shall be attributable to controllable factors;

- (e) Transmission Loss;
- (f) Variation in market interest rates;
- (g) Taxes and Statutory levies;
- (h) Taxes on Income:

Provided that where the applicant or any interested or affected party believes, for any variable not specified above, that there is a material variation or expected variation in performance for any financial year on account of uncontrollable factors, such applicant or interested or affected party may apply to the Commission for inclusion of such variable at the Commission's discretion, under this Regulation for such financial year.

Some illustrative variations or expected variations in the performance of the applicant, which may be attributed by the Commission to controllable factors include, but are not limited to, the following:

- (a) Variations in capitalization on account of time and/or cost overruns/efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project change in statutory levies or force majeure events;
- (b) Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalization, as specified in clause (a) above;
- (c) Variations in technical and commercial losses of Distribution Licensee;
- (d) Variations in performance parameters;
- (e) Variations in working capital requirements;
- (f) Failure to meet the standards specified in the standards prescribed in Sikkim State Electricity Regulatory Commission (Standard of Performance for the Distribution and Transmission Licensee) Regulations 2012, except where exempted in accordance with those Regulations;
- (g) Variations in labour productivity;
- (h) Variation in operation & maintenance expenses;
- (i) Variation in Wires Availability.

11. Mechanism for pass through of gains or losses on account of uncontrollable factors

The approved aggregate gain or loss to the Generating Company

or Transmission Licensee or Distribution Licensee on account of uncontrollable factors shall be passed through as an adjustment in the tariff of the Generating Company or Transmission Licensee or Distribution Licensee over such period as may be specified in the Order of the Commission passed under these regulations.

The Generating Company or Transmission Licensee or Distribution Licensee shall submit such details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the prescribed format to the Commission, along with the detailed computations and supporting documents as may be required for verification by the Commission.

Nothing contained in this Regulation shall apply in respect of any gain or loss arising out of variations in the price of fuel and power purchase, which shall be dealt with as specified by the Commission from time to time.

12. Mechanism for sharing of gains or losses on account of controllable factors

The approved aggregate gain to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

- (a) One-third of the amount of such gain shall be passed on as a rebate in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 9.6.
- (b) The balance amount, which will amount to two-thirds of such gain, may be utilized at the discretion of the Generating Company or Transmission Licensee or Distribution Licensee.

The approved aggregate loss to the Generating Company or Transmission Licensee or Distribution Licensee on account of controllable factors shall be dealt with in the following manner:

- (a) One-third of the amount of such loss may be passed on as an additional charge in tariffs over such period as may be stipulated in the Order of the Commission under Regulation 9.6; and
- (b) The balance amount of loss, which will amount to two-thirds of such loss, shall be absorbed by the Generating Company or Transmission Licensee or Distribution Licensee.

13. Determination of Tariff

The proceedings to be held by the Commission for determination of tariff shall be in accordance with the SSERC (Conduct of Business) Regulations, 2012, as amended from time to time.

Notwithstanding anything contained in these regulations, the Commission shall at all times have the authority, either on *suo moto* basis or on a Petition filed by any interested or affected Party, to determine the tariff, including terms and conditions thereof, of any Generating Company or Transmission Licensee or Distribution Licensee:

Notwithstanding anything contained in these Regulations, the Commission shall adopt the tariff, if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government:

14. Determination of Generation Tariff

The Commission shall determine the tariff for generation of electricity, in accordance with the terms and conditions contained in **Chapter-4** of these regulations.

Existing generating station:

Where the Commission has, at any time prior to the date of effectiveness of these regulations, approved a power purchase agreement or arrangement between a Generating Company and a Distribution Licensee or has adopted the tariff contained therein for supply of electricity from an existing generating Unit/Station, the tariff for supply of electricity by the Generating Company to the Distribution Licensee shall be in accordance with tariff mentioned in such power purchase agreement or arrangement for such period as may be so approved or adopted by the Commission.

Where, as on the date of effectiveness of these regulations, the power purchase agreement or arrangement between a Generating Company and a Distribution Licensee for supply of electricity from an existing generating station has not been approved by the Commission or the tariff contained therein has not been adopted by the Commission or where there is no power purchase agreement or arrangement, the supply of electricity by such Generating Company to such Distribution Licensee after the date of effectiveness of these Regulations shall be in accordance with a power purchase agreement approved by the Commission:

Provided that an application for approval of such power purchase agreement or arrangement shall be made by the Distribution Licensee to the Commission within a period of three (3) months from the date of notification of these regulations:

Provided further that the supply of electricity shall be allowed to continue under the present agreement or arrangement, as the case may be, until such time as the Commission approves of such power purchase agreement and shall be discontinued forthwith if the Commission rejects, for reasons recorded in writing, such power purchase agreement or arrangement.

New generating stations:

- 14.3.1 the tariff for the supply of electricity by a Generating Company to a Distribution Licensee from a new generating Unit/Station shall be in accordance with tariff as per power purchase agreement approved by the Commission.

Own generating stations:

Where the Distribution Licensee also undertakes the business of generation of electricity; the transfer price at which electricity is supplied by the Generation Business of the Distribution Licensee to his Retail Supply Business shall be determined by the Commission.

The Distribution Licensee shall maintain separate records for the Generation Business and shall maintain an Allocation Statement so as to enable the Commission to clearly identify the direct and indirect costs relating to such business and return on equity accruing to such business:

15. Determination of Tariff for Transmission, Distribution Wires Business and Retail Supply Business

The Commission shall determine the tariff for Transmission Business, Distribution Wires Business and Retail Supply Business based on an application made by the Licensee in accordance with the procedure contained in these regulations.

The Commission shall determine the tariff for:

- (a) Transmission of electricity, in accordance with the terms and conditions contained in **Chapter-5** of these regulations; and
- (b) Distribution Wires Business and Retail Supply Business in accordance with the terms and conditions contained in **Chapter-6** of these regulations; and

16. Filing of Tariff Application

Each Generating Company, Transmission Licensee and Distribution Licensee shall file an application with the Commission for truing up of previous year, review of current year, Aggregate Revenue Requirement for the respective years(s) of the control period in five (5) sets on or before 30th November each year, which shall include statements containing calculation of the expected aggregate revenue from charges under it, currently approved tariff and the Aggregate Revenue Requirement (ARR) during the previous year, current year and each year of the ensuing control period based on the approved Business Plans and thereafter, shall furnish such further information or particulars or documents as the Commission or any officer designated for the purpose by the Commission may require to assess such calculation. The information for the previous year should be based on audited accounts and in case audited accounts are not available, audited accounts for the year immediately preceding the previous year should be filed along with un-audited accounts for the previous year.

The Tariff Application shall be accompanied, where relevant, by a detailed tariff revision proposal showing category-wise tariff and how such revision would meet the gap, if any, in Aggregate Revenue Requirement for the respective year of the Control Period.

The Generating Company, Transmission Licensee and Distribution Licensee shall file information in the following formats for the previous year, current year and each year of the Control Period along with their application.

- a) Formats for Generating Company as provided in Appendix A-(A) & Appendix D.
- b) Formats for Hydro Generating Company as provided in Appendix A-(B) & Appendix D.
- c) Formats for Transmission Licensee as provided in Appendix B & Appendix D.
- d) Formats for Distribution Licensee as provided in Appendix C & Appendix D.

Each application shall be accompanied by such fee as specified by the Commission in the SSERC (Conduct of Business) Regulations, 2012.

The application shall be supported with an affidavit by an authorized person or a person who is acquainted with all facts, stated in the application.

The application shall be sent by registered post with acknowledgement due or by hand delivery. In addition to the hard copies, the information shall nec-

essarily be submitted in such electronic form, as the Commission may require.

In case a generating company or the licensee does not submit the Tariff Application within the time allowed by the Commission, the Commission may consider taking up the matter sou-moto.

Upon receipt of a complete application accompanied by all requisite information, particulars and documents, the application shall be deemed to be received and the Commission or the designated officer shall intimate the applicant that the application is registered and ready for publication.

17. Publication of Tariff Application

The applicant shall, within 7 days after registration of application, publish a notice of his application in such abridged form and manner as may be specified by the Commission, in at least two daily newspapers, one in English and the other in local language having wide circulation in the area of supply inviting objections / suggestions within the specified date from general public and stake holders.

The applicant shall, within 7 days of publication of the notice as aforesaid, submit an affidavit to the Commission with details of the notice published and also file copies of the newspapers where in the notice has been published.

The copies of the application with all enclosures shall be made available for sale at a reasonable cost at such offices of the applicant as may be directed by the Commission. The copies of application shall also be made available for reference in specified offices for reference by the public. Facility, for procuring the copy of the petition by post shall also be provided. The petition with all enclosure in full shape shall be posted at the applicant's website in downloadable format.

The suggestions and objections in response to the public notice shall be sent to the Secretary of the Commission at its head quarters office in five (5) sets with a copy to the applicant within the date given in the public notice.

The applicant shall file his response on the suggestions and objections received within 15 days from the last date of receipt of such suggestions and objections with the Commission in five (5) sets along with a copy to the objector.

18. Hearing on the application

The Commission shall initiate a proceeding on the expenses, revenue calculations and tariff proposals given by the applicant and may hold public hearing(s) on the tariff application to decide on such expenses revenue calculations and tariff proposals.

The procedure for public hearing(s) on the tariff application shall be in the manner as specified by the Commission.

19. Order of the Commission

The Commission shall, within a period of one hundred and twenty (120) days from the date of registration of the ARR and tariff application and after considering the proceedings of the hearing(s) as well as suggestions and objections received in response to the public notice:

- (a) Issue a Tariff Order accepting the application with such modifications or such conditions as may be specified in that order; or
- (b) Reject the application for reasons to be recorded in writing if such application is not in accordance with the provisions of the Act and the rules and regulations made there- under or the provisions of any other law for the time being in force:

Provided that the applicant shall be given a reasonable opportunity of being heard before rejecting his application.

The Tariff shall come into force from the date specified in the said order and shall, unless amended or revoked, continue to be in force for such period as may be specified there in.

The Commission shall forward within 7 days of passing the order, a copy of the order to the State Government, the Central Electricity Authority, the concerned generating company or licensee and other authorities, as may be necessary.

The Commission shall post the Tariff Order in its website.

20. Publication of Tariff Order

The Generating Company, Transmission Licensee and Distribution Licensee shall publish the tariff approved by the Commission in two newspapers having wide circulation in the area of supply.

Copies of the tariff order shall be made available by generating company or licensee to any person on payment of an amount fixed by the Commission.

21. Review of Tariff Order

All applications for the review of tariff shall be in the form of petition accompanied by the prescribed fee. A petition for review of tariff can be admitted by the Commission under the following conditions:

- a) The review petition is filed within sixty days from the date of the Tariff Order, and / or
- b) There is an error apparent on the face of the record.

On being satisfied that there is a need to review the tariff of any Generating Company, Transmission Licensee and the Distribution Licensee, the Commission may on its own initiate process of review of the tariff of any Generating Company or the licensee. The Commission may also, in its own motion review any Tariff Order to correct any clerical error or any error apparent on the face of the record.

22. Adherence to Tariff

The tariff determined and notified as above may not be ordinarily amended, more frequently than once in any financial year, except that tariff rates shall be adjusted in accordance with any adjustment formulae, including variable cost adjustment formula, incorporated in the Tariff Order or in any order of the Commission.

Provided that the consequential orders, which the Commission may issue to give effect to the subsidy by the State Government shall not be construed as amendment of the tariff notified.

The Commission may, after satisfying itself for reasons to be recorded in writing, allow revision of tariff.

23. Annual determination of tariff

The Commission shall determine the tariff of a Generating Company or Transmission Licensee or Distribution Licensee covered under a Multi-Year Tariff framework for each financial year during the Control Period, at the commencement of such financial year, having regard to the following:

- (a) The approved forecast of Aggregate Revenue Requirement including the incentive available for the Generating Company or Transmission Licensee or Distribution Licensee and expected revenue from tariff and charges for such financial year, including modifications approved

- at the time of mid- term review, if any; and
- (b) Approved gains and losses to be passed through in tariffs, following the Truing Up of previous year.

24. Subsidy Mechanism

If the State Government provides the grant of any subsidy to any consumer or class of consumers in the tariff determined by the Commission, the State Government shall, notwithstanding any direction which may be given under Section 108 of the Act, pay in advance the amount to compensate the Distribution Licensee/person affected by the grant of subsidy, as a condition for the Licensee or any other person concerned to implement the subsidy provided for by the State Government, in the manner specified in these Regulations:

Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in these Regulations and the tariff fixed by the Commission shall be applicable from the date of issue of orders by the Commission in this regard.

CHAPTER 3: FINANCIAL PRINCIPLES FOR DETERMINATION OF ARR

25. Capital Cost

Capital cost to be allowed by the Commission for the purpose of determination of tariff for Generating Company, Transmission Licensee and Distribution Licensee for their respective businesses will be based on the capital investment plan prepared by the Generating Company, Transmission Licensee or Distribution Licensee.

Capital cost for a project shall include:

- (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange rate variation on the loan during construction up to the date of commercial operation of the project, as admitted by the Commission after prudence check;
- (b) capitalized initial spares subject to the ceiling rates specified in these Regulations; and
- (c) additional capitalization determined under Regulation 26:

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

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 the reasonableness of the capital expenditure, financing plan, interest during construction, 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.

The approved Capital Cost shall be considered for determination of tariff and if sufficient justification is provided for any escalation in the Capital Cost, the same may be considered by the Commission subject to the prudence check:

Provided that in case the actual capital cost is lower than the approved capital cost, then the actual capital cost will be considered for determination of tariff of the Generating Company or Transmission Licensee or Distribution Licensee.

The actual capital expenditure on date of completion, for the original scope of work based on audited accounts of the Company, limited to original cost, may be considered subject to the prudence check by the Commission.

Where the power purchase agreement or bulk power transmission agreement

provides for a ceiling of capital cost, the capital cost to be considered shall not exceed such ceiling.

The capital cost may include capitalized initial spares:

- (a) Upto 2.5% of original capital cost in case of coal based/lignite fired generating stations;
- (b) Upto 4.0% of original capital cost in case of gas turbine/combined cycle generating stations;
- (c) Upto 1.5% of original capital cost in case of hydro-generating stations; and
- (d) Upto 1.5% of original capital cost in case of Transmission Licensee and Distribution Licensee.

The amount of any contribution or deposit made by the consumers and Government grant, towards works for connection to the distribution system or transmission system of the Distribution Licensee or Transmission Licensee, shall be deducted from the original cost of the project for the purpose of calculating the amount under debt and equity under Regulation, 28.

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 net value of such replaced assets from the original capital cost and will be calculated as follows:

Net Value of Replaced Assets = OCFA – AD – CC;

Where;

OCFA : Original Capital Cost of Replaced Assets;

AD : Accumulated depreciation pertaining to the Replaced Assets;

CC : Total Consumer Contribution pertaining to the Replaced Assets.

26. Additional Capitalization

The following capital expenditure, actually 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 the prudence check:

- (a) Due to Un-discharged liabilities within the original scope of work;
- (b) On works within the original scope of work, deferred for execution;
- (c) To meet award of arbitration and compliance of final and unappeasable

- order or decree of a court arising out of original scope of works;
- (d) On account of change in law;
 - (e) On procurement of initial spares included in the original project costs subject to the ceiling norm laid down in Regulation 25.7;
 - (f) Any additional works/services, which have become necessary for efficient and successful operation of a generating station or a transmission system or a distribution system but not included in the original capital cost:
- Provided that original scope of work along with estimates of expenditure shall be submitted as a part of Business Plan:
- Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the generating Unit/Station or transmission system or distribution system.
- Provided further that the assets forming part of the project but not put to use shall not be considered.
- Impact of additional capitalization on tariff, as the case may be, shall be considered during Truing Up of each financial year of the Control Period.

27. Consumer contribution, Deposit Work and Grant

The following nature of work carried out by the Transmission Licensee and Distribution Licensee shall be classified under this category:

- (a) Works after obtaining a part or all of the funds from the users in the context of deposit works;
- (b) Capital works undertaken by utilizing grants received from the State and Central Governments, including funds under RGGVY, APDRP, etc;
- (c) 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.

28. Debt - Equity ratio

For the purpose of determination of tariff, debt-equity ratio as on the date of commercial operation in case of a new generating station, transmission or distribution line or substation commissioned or capacity expanded after 01.04.2021, shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is

less than 30%, the actual equity shall be considered:

Provided that in case of the Generating Company, Transmission Licensee and Distribution Licensee, if any fixed asset is capitalized on account of capital expenditure on the project prior to April 1, 2021, debt-equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2021 shall be considered:

Provided further that in case of retirement or replacement of assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of the retired or replaced asset:

Provided further that for the Generating Company or the Transmission Licensee or the Distribution Licensee formed as a result of a transfer scheme, the date of the transfer scheme shall be the effective date for the determination of equity capital.

29. Return on Equity

Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 28 relatable to the Generating Company or Transmission Licensee or Distribution Licensee as the case may be and shall be allowed at the rate of 14% for Generating Companies, including hydro generation stations above 25 MW, Transmission Licensee, and Distribution Licensee:

Provided that for Generating Company, Transmission Licensee and Distribution Licensee, Return on Equity shall be allowed on the amount of allowed equity capital for the assets put to use at the commencement of each financial year and on 50% of equity capital portion of the allowable capital cost for the investments put to use during the financial year:

Provided further that for the purpose of truing up for the Generating Company, Transmission Licensee and Distribution Licensee, return on equity shall be allowed on pro-rata basis based on documentary evidence provided for the assets put to use during the year.

The premium raised by the Generating Company or the Transmission Licensee or Distribution Licensee while issuing share capital and investment of internal resources created out of free reserve, if any, shall also 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 capi-

tal expenditure.

Equity invested in foreign currency shall be converted to rupee currency based on the exchange rate prevailing on the date(s) it is subscribed.

30. Interest and finance charges on loan capital

The loans arrived at in the manner indicated in Regulation 28 shall be considered as gross normative loan for calculation of interest on loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of retirement or replacement of assets, the loan capital approved as mentioned above, shall be reduced to the extent of outstanding loan component of the original cost of the retired or replaced assets, based on documentary evidence.

The normative loan outstanding as on April 1, 2021, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan.

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 Generating Company or the Transmission Licensee or the Distribution Licensee:

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 Company or the Transmission Licensee or the Distribution Licensee, as the case may be, does not have actual loan, then the weighted average rate of interest of the Generating Company or the Transmission Licensee or the Distribution Licensee, as a whole shall be considered.

The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

The above interest computation 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 Transmission Licensee or Distribution Licensee or Generating Company, as the case may be.

The Generating Company or the Transmission Licensee or the Distribution 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 as-

sociated 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 Transmission Licensee or the Distribution Licensee, as the case may be, in the ratio of 2:1.

Interest shall be allowed on the amount held as security deposit held in cash from Transmission System Users, Distribution System Users and Retail consumers at the Bank Rate as on 1st April of the financial year in which the Petition is filed.

31. Depreciation

The value base for the purpose of depreciation shall be the Capital Cost of the asset admitted by the Commission.

The Generation Company or Transmission Licensee or Distribution Licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective Business computed in the following manner:

- (a) The approved original cost of the project/fixed assets shall be the value base for calculation of depreciation;
- (b) Depreciation shall be computed annually based on the straight-line method at the rates specified in the **Annexure I** to these regulations;
- (c) The salvage value of the asset shall be considered at 10 per cent of the allowable capital cost and depreciation shall be allowed upto a maximum of 90 per cent of the allowable capital cost of the asset:

Provided that in the case of hydro generating station, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government.

Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

In case of the existing projects, the balance depreciable value as on April 1, 2021, shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto March 31, 2021, from the gross value of the assets.

In case of projected commercial operation of the asset for part of the year, depreciation shall be calculated based on the average of opening and closing value of asset, approved by the Commission:

Provided that depreciation will be re-calculated during truing-up for assets capitalized at the time of Truing Up of each year of the Control Period, based on documentary evidence of asset capitalized by the applicant, subject to the prudence check of the Commission, such that the depreciation is calculated proportionately from the date of capitalization.

32. Interest on Working Capital

Generation:

- (a) In case of coal based/oil-based/lignite-fired generating stations, working capital shall cover:
 - (i) Cost of coal or lignite for one and half (1½) month for pit-head generating stations and two (2) months for non-pit-head generating stations, corresponding to target availability; plus
 - (ii) Cost of oil for two (2) months corresponding to target availability; plus
 - (iii) Cost of secondary fuel oil for two (2) months corresponding to target availability; plus
 - (iv) Operation and Maintenance expenses for one (1) month; plus
 - (v) Maintenance spares at one (1) per cent of the Gross Fixed Assets at the beginning of the year; plus
 - (vi) Receivables for sale of electricity equivalent to two (2) months of the sum of annual fixed charges and energy charges calculated on target availability:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.

- (b) In case of Gas Turbine/Combined Cycle generating stations, working capital shall cover:
 - (i) Fuel cost for one (1) month corresponding to target availability factor, duly taking into account the mode of operation of the generating station on gas fuel and /or liquid fuel; plus
 - (ii) Liquid fuel stock for fifteen (15) days corresponding to target availability; plus
 - (iii) Operation and maintenance expenses for one (1) month; plus
 - (iv) Maintenance spares at one (1) per cent of the Gross Fixed Assets at

the beginning of the year; plus

- (v) Receivables equivalent to two (2) months of capacity charge and energy charge for sale of electricity equivalent calculated on normative plant availability factor, duly taking into account mode of operation of the generating station on gas fuel and liquid fuel:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.

- (c) In case of hydropower generating stations, working capital shall cover:
 - (i) Operation and maintenance expenses for one (1) month;
 - (ii) Maintenance spares at one (1) per cent of the Gross Fixed Assets at the beginning of the year; and
 - (iii) Receivables equivalent to two (2) month of fixed cost:

Provided that in case of own generating stations, no amount shall be allowed towards receivables, to the extent of supply of power by the Generation Business to the Retail Supply Business, in the computation of working capital in accordance with these Regulations.

- (d) Interest on working capital shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

Transmission:

- (a) The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:
 - (i) Operation and maintenance expenses for one month; plus
 - (ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
 - (iii) Receivables equivalent to two (2) months of transmission charges calculated on target availability level; minus
 - (iv) Amount, if any, held as security deposits except the security deposits held in the form of Bank Guarantee from Transmission System Users.
- (b) Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

Distribution

- (a) The Distribution Licensee shall be allowed interest on the estimated level

of working capital for the Distribution Wires Business for the financial year, computed as follows:

- (i) Operation and maintenance expenses for one month; plus
 - (ii) Maintenance spares at one (1) per cent of the historical cost escalated at 6% from the date of commercial operation; plus
 - (iii) Receivables equivalent to two (2) months of the expected revenue from charges for use of Distribution Wires at the prevailing tariffs; minus
 - (iv) Amount, if any, held as security deposits under clause (b) of subsection (1) of Section 47 of the Act from Distribution System Users except the security deposits held in the form of Bank Guarantees.
- (b) Interest shall be allowed at a rate equal to the State Bank Advance Rate (SBAR) as on 1st April of the financial year in which the Petition is filed.

33 Tax on Income

Income Tax shall be treated as an expense and shall be recoverable from beneficiaries through tariff.

The Commission in its MYT Order shall provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid as per latest Audited Accounts available for the applicant, subject to prudence check.

Variation between Income Tax actually paid and approved, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees and Distribution Licensees shall be reimbursed to/recovered from the Generating Companies, Transmission Licensees and Distribution Licensees, based on the documentary evidence submitted at the time of truing up of each year of the Control Period, subject to prudence check.

Under-recovery or over-recovery of any amount from the beneficiaries or the consumers on account of such tax having been passed on to them shall be adjusted every year on the basis of income-tax assessment under the Income- Tax Act, 1961, as certified by the statutory auditors. The Generating Company, or the Transmission Licensee or Distribution Licensee, as the case may be, may include this variation in its truing up Petition:

Provided that 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 the Distribution Licensee, as the case may be.

34. Rebate

For payment of bills of generation tariff or transmission charges through Letter of Credit or otherwise, within 7 days of presentation of bills, by the Generating Company or the Transmission Licensee, as the case may be, a rebate of 2% on billed amount, excluding the taxes, cess, duties, etc., shall be allowed. Where payments are made subsequently through opening of Letter of Credit or otherwise, but within a period of one month of presentation of bills by the Generating Company or the Transmission Licensee, as the case may be, a rebate of 1% on billed amount, excluding the taxes, cess, duties, etc., shall be allowed.

35. Delayed Payment Surcharge

In case the payment of bills of generation tariff or transmission charges by the beneficiary or beneficiaries is delayed beyond a period of 30 days from the date of billing, late payment surcharge at the rate of 1.25% per month on billed amount shall be levied for the period of delay by the Generating Company or the Transmission Licensee, as the case may be.

CHAPTER 4: GENERATION - DETERMINATION OF TARIFF AND NORMS OF OPERATION

36. Applicability

The regulations specified in this chapter shall apply for determining the tariff for supply of electricity to a Distribution Licensee from conventional sources of generation and hydro generation stations of capacity more than 25 MW: Provided that determination of tariff for supply of electricity to a Distribution Licensee from Renewable Energy sources of generation shall be in accordance with terms and conditions as stipulated in the relevant regulations/orders of the Commission.

The Commission shall be guided by regulations in this chapter in determining the tariff for supply of electricity by a Generating Company to a Distribution Licensee in the following cases:

- a) where such tariff is pursuant to a power purchase agreement or arrangement entered into subsequent to the date of effectiveness of these regulations; or
- b) where such tariff is pursuant to a power purchase agreement or arrangement entered into prior to the date of effectiveness of these regulations and either the Commission has not previously approved such agreement/arrangement or the agreement/arrangement envisages that the tariff shall be based on the SSERC Tariff regulations; or
- c) where the Distribution Licensee is engaged in the business of generation of electricity, in determining the transfer price at which electricity is supplied by the Generation Business of the Distribution Licensee to its Retail Supply Business:

The Commission may deviate from the norms contained in this Chapter or specify alternative norms for particular cases, where it so deems appropriate, having regard to the circumstances of the case:

Provided further that the reasons for such deviation(s) shall be recorded in writing.

Notwithstanding anything contained in this Chapter 4, the Commission shall adopt the tariff, if such tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government.

37. Petition for determination of generation tariff

A Generating Company is required to file a Petition for determination of tariff for supply of electricity to Distribution Licensees in accordance with the provisions of Chapter 2 of these regulations.

Tariff in respect of a Generating Station under these regulations may be determined Stage-wise, Unit-wise or for the whole Generating Station. The terms and conditions for determination of tariff for Generating Stations specified in this part shall apply in like manner to Stages or Units, as the case may be, as to Generating Stations.

Where the tariff is being determined for a Stage or Unit of a Generating Station, the Generating Company shall adopt a reasonable basis for allocation of capital cost relating to common facilities and allocation of joint and common costs across all Stages or Units, as the case may be:

Provided that the Generating Company shall maintain an Allocation Statement providing the basis for allocation of such costs, which shall be duly audited and certified by the statutory auditors, and submit such audited and certified statement to the Commission along with the application for determination of tariff.

A Generating Company may file a Petition for determination of provisional tariff in advance of the anticipated Date of Commercial Operation of the Unit or Stage or Generating Station as a whole, 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 certified by the statutory auditors and the provisional tariff shall be charged from the date of commercial operation of such Unit or Stage or Generating Station, as the case may be.

A Generating Company shall file a fresh Petition in accordance with these Regulations, for determination of final tariff based on actual capital expenditure incurred up to the date of commercial operation of the Generating Station duly certified by the statutory auditors based on Annual Audited Accounts.

Any difference in provisional tariff and the final 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 as directed by the Commission.

In relation to multi-purpose hydroelectric Projects, with irrigation, flood control and power components, the capital cost chargeable to the power component of the Project only shall be considered for determination of tariff.

38. Components of Tariff

The tariff for sale of electricity from a thermal Power Generating Station shall comprise of two parts, namely,

- (a) Annual Fixed Charges
- (b) Energy (variable) Charges (for recovery of primary and secondary fuel cost).

The tariff for sale of electricity from a Hydro Generating Station shall comprise of two parts, namely,

- (a) Capacity Charge
- (b) Energy Charge.

Both the above components will be worked out in the manner provided in these regulations.

39. Annual Fixed Charges

Components of Annual Fixed charges:

The Annual Fixed Charges/Capacity Charges of generating station (thermal or hydro) shall comprise of the following elements:

- (a) Depreciation;
- (b) Return on Equity;
- (c) Interest and Finance Charges on Loan Capital;
- (d) Interest on Working Capital;
- (e) Operation & Maintenance Expenses;
- (f) All Statutory levies and taxes;

Minus:

- (g) Non-Tariff Income:

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 these regulations.

40. Capital cost

Capital Cost for a project shall be allowed as specified in Regulation 25 of these regulations.

Additional Capitalization: The additional capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be allowed by the Commission for inclusion in the original cost of project, as specified in Regulation 26 of these regulations.

Renovation & Modernization:

- (i) The Generating Company, 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, shall file 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, record of consultation with beneficiaries and any other information considered to be relevant by the Generating Company:
- (ii) Where the Generating Company files 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, schedule of completion, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission.
- (iii) Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on the estimates of Renovation and Modernization expenditure and life extension, and after deducting the accumulated depreciation and corresponding equity contribution, already recovered from the original project cost, shall be considered for determination of tariff.

41. Sale of Infirm Power

The tariff for sale of infirm power from a thermal generating station to the Distribution Licensee shall be equivalent to the actual fuel cost, including the secondary fuel cost, as the case may be, incurred during that period subject to prudence check:

Provided that any revenue other than the recovery of fuel cost earned by the Generating Company from sale of infirm power shall be used for reduction in capital cost and shall not be treated as revenue.

42. Non-Tariff Income

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 Company:

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.

The indicative list of various heads to be considered for Non-Tariff Income shall be as under:

- a) Income from rent of land or buildings;
- b) Income from sale of scrap;
- c) Income from statutory investments;
- d) Income from sale of Ash/rejected coal;
- e) Interest on delayed or deferred payment on bills;
- f) Interest on advances to suppliers/contractors;
- g) Rental from staff quarters;
- h) Rental from contractors;
- i) Income from hire charges from contractors and others;
- j) Income from advertisements, etc.:

Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income.

43. Norms of operation for Thermal Generating Stations

The norms of operation as given hereunder shall apply:

Plant Availability Factor:

Normative Annual Plant Availability Factor (NAPAF) for recovery of full Capacity (Fixed) charges for new thermal generating stations:

- (a) Normative Annual Plant Availability Factor for full recovery of annual fixed charges shall be 85 per cent for all thermal generating stations.

Provided that the Commission may revise the norms for availability for the above mentioned Generating Stations in case of Renovation & Modernization undertaken by the Generating Station.

Gross Station Heat Rate:

For Generating Units or stations achieving COD after the effectiveness of these regulations:

- a) **Coal and lignite based thermal power Generating Units or Stations** = $1.065 \times \text{Design Heat Rate (kcal/kWh)}$;

Where the Design Heat Rate of a Unit means the Unit heat rate guaranteed by the supplier at conditions of 100% Maximum Continuous Rating (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:

SHR for New Generating Stations for the Control Period

Pressure Rating (Kg/cm²)	150	170	170	247	247
SHT/RHT(C)	535/535	537/537	537/565	537/565	565/593
Type of BFP	Electrical Driven	Turbine Driven	Turbine Driven	Turbine Driven	Turbine Driven
Max Turbine Cycle Heat Rate (kCal/kWh)	1955	1950	1935	1900	1850
Min. Boiler Efficiency					
Sub-Bituminous Indian Coal	0.85	0.85	0.85	0.85	0.85
Bituminous Imported Coal	0.89	0.89	0.89	0.89	0.89
Max Design Unit Heat Rate (kCal/kWh)					
Sub-Bituminous Indian Coal	2300	2294	2276	2235	2176
Bituminous Imported Coal	2197	2191	2174	2135	2079

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

Provided further 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:

Provided further that if one or more Units are declared under commercial operation prior to the date of effectiveness of these Regulations, the heat rate norms for those Units as well as Units declared under commercial operation on or after the effectiveness of these Regulations shall be lower of the heat rate norms arrived at by the above methodology and the norms in accordance with these Regulations:

Provided also that in case of lignite-fired generating stations (including stations based on Circulating Fluidized Bed Combustion [CFBC] technology), maximum design heat rates shall be increased using factor for moisture content given below:

For lignite fired power plants, the multiplying factors, depending upon the moisture content in the lignite, for deriving the gross Station Heat Rate from that applicable for coal based thermal power plants, are as under:

- (i) For lignite having 50% moisture: Multiplying factor of 1.10;
- (ii) For lignite having 40% moisture: Multiplying factor of 1.07;
- (iii) For lignite having 30% moisture: Multiplying factor of 1.04;
- (iv) For other values of moisture content, multiplying factor shall be prorated for moisture content between 30-40% and 40-50% depending upon the rated values of multiplying factor for the respective range given under sub-clauses (i) to (iii) above.

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 boiler feed pumps.

b) Gas-based/Liquid-based Thermal Generating Unit(s):

= 1.05 x Design Heat Rate of the Unit for Natural Gas and RLNG
(kcal/kWh);

= 1.071 x Design Heat Rate of the Unit for Liquid Fuel
(kcal/kWh);

Where the Design Heat Rate of a Unit shall mean the guaranteed heat rate for a Unit at 100% MCR, site ambient conditions, zero percent make up, and design cooling water temperature/back pressure.

Secondary fuel oil consumption:

For New Generating Stations:

- a) Coal-based Generating Stations: 1.0 ml/kWh;

- b) Lignite-Fired Generating Stations except stations based on CFBC technology: 2.0 ml/kWh;
- c) Lignite-Fired Generating Stations based on CFBC technology: 1.25 ml/kWh.

Lime Stone consumption:

Lime Stone consumption for Lignite based stations using CFBC Technology: 0.05 kg/ kWh.

Auxiliary Energy Consumption:

(a) Coal-based Generating Stations:

Auxiliary Energy Consumption for the Control Period

Auxiliary Energy Consumption	With Natural Draft cooling tower or without cooling tower
(i) 200 MW Series	8.50%
(ii) 500 MW Series & above	
(a) Steam driven boiler feed pumps	6.00%
(b) Electrically driven boiler feed pumps	8.50%

Provided further that for the thermal generating stations with induced draft cooling towers, the norms shall be higher by 0.50%, as compared to the above norms.

(b) Gas Turbine/Combined Cycle generating stations (Existing and New):

(i) Combined cycle: 3.00%;

(ii) Open cycle: 1.00%.

(c) Lignite-fired thermal generating stations:

(i) All generating stations with below 200 MW sets: 12%;

(ii) All generating stations with 200 MW sets and above: 0.50% percentage point more than that allowed for coal based generating stations under above Table:

Provided that for the lignite-fired stations using CFBC technology, the auxiliary energy consumption norms shall be 1.50 percentage point more than the auxiliary energy consumption norms of coal based generating stations as specified above.

43.6. Transit and handling Losses:

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

- (a) Coal or lignite-based Generating Stations,
 - (i) Pit head generating stations: 0.20%;
 - (ii) Non-pit head generating stations: 0.80%;

44. Operation and Maintenance expenses for thermal Generating Stations

Generating Stations

a) For coal based generating Units/Stations:

O&M Expense Norms of Coal based Generating Stations for the Control Period

(Rs. Lakh/MW)

Years	O&M Expense Norms
FY 2020-21	34.12
MYT Control Period	
FY 2021-22	35.31
FY 2022-23	36.56
FY 2023-24	37.84

Provided that the above norms shall be multiplied by the following factors for the additional Units whose COD occurs on or after 01.04.2021 in the same Station:

Additional 4th & 5th Units : 0.90

Additional 6th & more Units : 0.85

b) For lignite based generating stations:

O&M Expense Norms of New Lignite based Generating Stations for the Control Period

(Rs. Lakh/MW)

Particulars	O&M Expense Norms
FY 2020-21	32.24
MYT Control Period	
FY 2021-22	33.37
FY 2022-23	34.54
FY 2023-24	35.76

c) Gas Turbine/Combined Cycle generating stations:

O&M Expense Norms of Gas Turbine/Combined Cycle generating stations for the Control Period

(Rs. Lakh/MW)

Year	Gas Turbine/ Combined Cycle Generating stations
FY 2020-21	18.20

MYT Control Period	
FY 2021-22	18.84
FY 2022-23	19.50
FY 2023-24	20.19

45. Norms of operation for Hydro Generating Stations

The Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations for recovery of annual fixed charges, shall be as under:

Normative Annual Plant Availability Factor for new Hydro Generating Stations

Particulars	Normative Annual Plant Availability Factor
Storage and Pondage type plants with head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of up to 8%, and where plant availability is not affected by silt	90%
Storage and Pondage type plants with head variation between FRL and MDDL of more than 8%, where plant availability is not affected by silt	Plant-specific allowance to be provided in NAPAF for reduction in MW output capability as reservoir level falls over the months. As a general guideline the allowance on this account in terms of a multiplying factor may be worked out from the projection of annual average of net head, applying the formula: $(\text{Average head} / \text{Rated head}) + 0.02$ Alternatively, in case of a difficulty in making such projection, the multiplying factor may be determined as: $(\text{Head at MDDL} / \text{Rated head}) \times 0.5 + 0.52$
Pondage type plants where plant availability is significantly affected by silt	85%
Run-of-river type plants	To be determined plant-wise, based on 10-day design energy data, moderated by past experience where available/relevant

Auxiliary Energy Consumption:

- (a) Surface hydroelectric power generating stations:
 - (i). With rotating exciters mounted on the generator shaft: 0.70%;
 - (ii). With static excitation system: 1.00%;
- (b) Underground hydro generating station:
 - (i). With rotating exciters mounted on the generator shaft: 0.90%;
 - (ii). With static excitation system: 1.20%.

Transformation losses:

Transformation losses from generation voltage to transmission voltage shall be 0.5% of the energy generated.

46. Operation and Maintenance Expenses for Hydro Generating Stations**For Existing Stations:**

- a) The Operation and Maintenance expenses including insurance shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2020, subject to prudence check by the Commission.
- b) The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2020 and shall be escalated at the escalation factor of 6% to arrive at operation and maintenance expenses for FY 2020-21.
- c) The O&M expenses for each subsequent year will be determined by escalating the base expenses determined above for FY 2020-21, at the escalation factor of 6% to arrive at permissible O&M expenses for each year of the Control Period.

For New Stations:

- (1) O&M expenses for the first year of operation will be 2% of the original project cost (excluding cost of rehabilitation and resettlement works).
- (2) The O&M expenses for each subsequent year will be determined by escalating the base expenses determined above, at the escalation factor of 6%.

47. Computation and Payment of Annual Fixed Charges and Energy Charges for Thermal Generating Stations**A. Annual Fixed Charges:**

The total Annual Fixed Charges shall be computed based on the norms specified under these regulations 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.

The capacity charge (inclusive of incentive) payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:

(a) **Generating stations in commercial operation for less than ten (10) years on 1st April of the financial year:**

$AFC \times (NDM/NDY) \times (0.5 + 0.5 \times PAFM / NAPAF)$ (in Rupees);

Provided that in case the plant availability factor achieved during a financial year (PAFY) is less than 70%, the total capacity charge for the year shall be restricted to:

$AFC \times (0.5 + 35 / NAPAF) \times (PAFY/70)$ (in Rupees).

(b) **For generating stations in commercial operation for ten (10) years or more on 1st April of the year:**

$AFC \times (NDM/NDY) \times (PAFM / NAPAF)$ (in Rupees).

Where,

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

NAPAF = Normative annual plant availability factor in percentage;

NDM = Number of days in the month;

NDY = Number of days in the year;

PAFM = Plant availability factor achieved during the month, in percent;

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

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

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

Where,

AUX = Normative auxiliary energy consumption in percentage;

- DCi = Average declared capacity (in ex-bus MW), subject to Regulation 47.4 below, for the i^{th} day of the period, i.e., the month or the year as the case may be, as certified by the concerned load dispatch center 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.

In case of fuel shortage in a thermal generating station, the generating company may propose to deliver a higher MW during peak-load hours by saving fuel during off-peak hours. The State Load Despatch Centre may then specify a pragmatic day-ahead schedule for the generating station to optimally utilize its MW and energy capability, in consultation with the beneficiaries. DCi in such an event shall be taken to be equal to the maximum peak-hour ex-power plant MW schedule specified by the concerned Load Despatch Centre for that day.

B. Energy Charges:

The Energy (variable) Charges shall cover landed fuel costs and shall be computed as follows:

Energy (variable) Charges shall cover fuel costs and shall be worked out on the basis of ex-bus energy sent out from the generating station as per the following formula:

Energy Charges (Rs) = Energy Charge Rate in Rs/kWh x Energy (ex-bus) for the month in kWh corresponding to scheduled generation.

Energy Charge Rate (ECR) in Rs/kWh shall be the sum of the cost of normative quantities of primary fuel, secondary fuel, and limestone consumption, if any, for delivering ex-bus one kWh of electricity and shall be computed as under:

$$ECR = \frac{100\{P_p \times (Q_p)n + P_s \times (Q_s)n\}}{(100-(AUXn))} \text{ (in Rs/kWh);}$$

Where;

P_p = Price of primary fuel namely coal or lignite or gas or liquid fuel and lime stone, if applicable, in Rs/kg or Rs/cum or Rs/litre, as the case may be;

$(Q_p)_n$ = Quantity of primary fuel required for generation of one kWh of electricity at generator terminals in kg or litre or cum, as the case may be, and shall be computed on the basis of normative Gross Station Heat Rate (less heat contributed by secondary fuel oil and limestone for coal/lignite based generating stations) and gross calorific value of coal/lignite or gas or liquid fuel or limestone as fired;

P_s = Price of Secondary fuel oil in Rs./ml or limestone in Rs/kg;

$(Q_s)_n$ = Normative Quantity of Secondary fuel oil in ml/kWh or limestone in kg/kWh as specified in these Regulations;

AUX_n = Normative Auxiliary Energy Consumption as % of gross generation as specified in these Regulations).

Energy Charges, for the purpose of billing/Fuel Surcharge will be worked out station-wise based on weighted average rate for scheduled generation from the Units of each Station.

Fuel Price Adjustment:

Adjustment of Energy Charge Rate (ECR) [Fuel Price Adjustment] on account of variation in price or heat value of fuels shall be computed and charged as stipulated by the Commission from time to time.

Landed Cost of fuel:

The landed cost of fuel shall include price of fuel corresponding to the grade/quality/calorific value of fuel inclusive of royalty, taxes and duties as applicable, transportation cost by rail/road/gas pipe line or any other means, and, for the purpose of computation of energy charges, shall be arrived at after considering normative transit and handling losses as percentage of the quantity of fuel dispatched by the fuel supply company during the month as specified in these Regulations.

48. Computations and Payment of Capacity Charges and Energy Charges for Hydro Generating Stations

The Annual Fixed (capacity) Charges of a Hydro Generating Station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of in-

centive) and Energy Charge, which shall be payable by the beneficiaries in proportion to their respective share in the capacity of the generating station. The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be:

$$\text{AFC} \times 0.5 \times \text{NDM/NDY} \times (\text{PAFM/NAPAF}) \text{ (in Rupees);}$$

Where;

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

NAPAF = Normative plant availability factor in percentage;

NDM = Number of days in the month;

NDY = Number of days in the year;

PAFM = Plant availability factor achieved during the month, in Percentage.

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

$$\text{PAFM} = 10000 \times \frac{\sum_{i=1}^N \text{DC}_i}{N \times \text{IC} \times (100 - \text{AUX})} \%$$

Where;

AUX= Normative auxiliary energy consumption in percentage;

DC_i = Declared capacity (in ex-bus MW) for the ith day of the month which the station can deliver for at least three (3) hours; as certified by the Sikkim State Load Despatch Centre after the day is over.

IC = Installed capacity (in MW) of the complete generating station;

N = Number of days in the month.

The Energy Charge shall be payable by every beneficiary for the total energy supplied to the beneficiary during the calendar month on ex-power plant basis, at the computed Energy Charge rate. Total Energy Charge payable to the Generating Company for a month shall be:

(Energy Charge Rate in Rs./kWh) x {Energy (ex-bus)} for the month in kWh
Energy Charge Rate (ECR) in Rupees per kWh on ex-power plant basis, for a Hydro Generating Station, shall be determined up to three decimal places based on the following formula:

$$\text{ECR} = \text{AFC} \times 0.5 \times 10 / \{\text{DE} \times (100 - \text{AUX})\};$$

Where;

DE = Annual Design Energy specified for the hydro generating station, in MWh, subject to the provision in Regulation 48.6 below.

In case actual total energy generated by a Hydro Generating Station during a year is less than the Design Energy for reasons beyond the control of the

Generating Company, the following treatment shall be applied on a rolling basis:

(i) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in these Regulations with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the Energy Charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;

(ii) in case the energy shortfall occurs after ten years from the date of commercial operation of a generating station, the following shall apply:

Suppose the specified annual Design Energy (DE) for the station is DE MWh, and the actual energy generated during the relevant (first) and the following (second) financial years are A1 and A2 MWh, respectively, A1 being less than DE. Then, the Design Energy to be considered in the formula in these Regulations for calculating the ECR for the third financial year shall be moderated as $(A1 + A2 - DE)$ MWh, subject to a maximum of DE MWh and a minimum of A1 MWh;

(iii) Actual energy generated (e.g., A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by $100 / (100 - \text{AUX})$.

In case the Energy Charge Rate (ECR) for a hydro generating station, as computed in Regulation 48.5 above, exceeds eighty paise per kWh, and the actual saleable energy in a year exceeds $\{DE \times (100 - \text{AUX}) / 10000\}$ MWh, the Energy Charge for the energy in excess of the above shall be billed at eighty paise per kWh only:

Provided that in a year following a year in which the total energy generated was less than the design energy for reasons beyond the control of the Generating Company, the Energy Charge Rate shall be reduced to eighty paise per kWh after the energy charge shortfall of the previous year has been made up.

The Sikkim State Load Despatch Centre shall finalise the schedules for the hydro generating stations, in consultation with the beneficiaries, for optimal utilization of all the energy declared to be available, which shall be scheduled for all beneficiaries in proportion to their respective allocations in the generating station.

49. Demonstration of declared capacity

The Generating Company may be required to demonstrate the declared capacity of its generating station as and when asked by the Sikkim State Load Despatch Centre. In the event of the Generating Company failing to demonstrate the declared capacity, the capacity charges due to the Generating Company shall be reduced as a measure of penalty.

The quantum of penalty for the first mis-declaration for any duration/block in a day shall be the charges corresponding to two days fixed charges. For the second mis-declaration, the penalty shall be equivalent to fixed charges for four days and for subsequent mis-declarations in the year, the penalty shall be multiplied in the geometrical progression.

The operating logbooks of the generating station shall be available for review by the Sikkim State Load Despatch Centre. These books shall keep record of machine operation and maintenance.

50. Billing and Payment of Charges

The Billing and Payment of Annual Fixed Charges, Energy Charges and Fuel Surcharge Adjustments shall be done on a monthly basis subject to adjustments at the end of the year.

The Billing and Payment of Capacity Charges and Energy Charges for Hydro Generating Stations shall be done on a monthly basis.

51. Reactive Energy Charges

A generating station shall inject/absorb the reactive energy into the grid as per the directions of State Load Despatch Centre. Such injection/absorption may be undertaken on the basis of machine capability and in accordance with the directions issued by SLDC. Reactive energy exchange, only if made as per the directions of State Load Despatch Centre, for the applicable duration (injection or absorption) shall be compensated to the generating station at the rate of 10.00 paise/kVArh for FY 2021-22 escalated at 0.5 paise/kVArh annually in subsequent years of the Control Period, unless otherwise revised by Commission.

52. Sharing of CDM Benefits

The proceeds of carbon credits from approved Clean Development Mechanism (CDM) projects shall be shared between Generating Company and the beneficiaries concerned in the following manner, namely:

100% of the gross proceeds on account of CDM benefit to be retained by the project developer in the first year after the date of commercial operation of the generating station;

In the second year, the share of the beneficiaries shall be 10% which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the Generating Company and the beneficiaries.

CHAPTER 5 : TRANSMISSION - DETERMINATION OF TARIFF AND NORMS OF OPERATION

53. Applicability

The regulations contained in this chapter shall apply to determination of tariff for access and use of the intra-State transmission system in the State of Sikkim: Provided that the Commission may deviate from the norms contained in this part or stipulate alternative norms for particular cases, where it so deems appropriate, having regard to the circumstances of the case:

Provided further that the reasons for such deviation shall be recorded in writing.

The Commission shall be guided by the regulations contained in this chapter in specifying the rates, charges, terms and conditions for use of intervening transmission facilities pursuant to an application made in this regard by a Licensee under the provision to Section 36 of the Act.

54. Components of tariff

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 for the respective financial year of the Control Period, as reduced by the amount of Non-Tariff Income, income from Other Business and short-term transmission charges of the previous year, as approved by the Commission:

Provided that in case of competitively awarded transmission system projects in pursuance of Section 63 of the Act and in accordance with guidelines for competitive bidding for transmission, the annual transmission charges shall be as per the annual Transmission Service Charges (TSC) quoted by such competitively awarded transmission projects.

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 these regulations.

55. Capital Cost

For the purpose of determination of tariff, the Capital Cost for a Transmission Project and additional capitalization thereof, shall be allowed in accordance

with the provisions outlined under Regulation 25 and Regulation 26, respectively.

56. Norms for operation

Target availability for full recovery of annual transmission charges shall be 98 per cent;

Note 1:

Recovery of annual transmission charges below the level of target availability shall be on pro rata basis. At zero availability, no transmission charges shall be payable.

Note 2:

The actual availability shall be calculated in accordance with the procedure provided in **Annexure-II** to these regulations and shall be certified by the State Load Despatch Centre.

Auxiliary energy consumption in the substations

The charges for auxiliary energy consumption in the sub-station for the purpose of air conditioning, lighting and consumption in other equipment shall be borne by the transmission licensee and will be included as part of the administrative and general expenses.

57. Calculation of Aggregate Revenue Requirement

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

- (a) Return on Equity (ROE);
- (b) Interest and Finance Charges on Loan Capital;
- (c) Depreciation;
- (d) Interest on working capital and deposits from Transmission System Users;
- (e) Operation and maintenance expenses;
- (f) Contribution to contingency reserve, if any;

Minus:

- (g) Non-Tariff Income;
- (h) Revenue from short-term transmission charges projected on the basis of latest audited figures; and
- (i) Income from Other Business, to the extent specified in these regulations.

Return on Equity:

57.2.1 The Transmission Licensee shall be allowed a return on equity as specified in Regulation 29 of these regulations.

Interest and Finance Charges on Loan Capital:

57.3.1 The Transmission Licensee shall be allowed Interest and Finance Charges on loan capital as specified in Regulation 39 of these Regulations.

Depreciation:

57.4.1 The Transmission Licensee shall be permitted to recover depreciation on the value of fixed assets as specified in Regulation 40 of these Regulations.

Interest on working capital:

57.5.1 The Transmission Licensee shall be allowed interest on the estimated level of working capital, as specified in Regulation 32 of these Regulations.

Operation and Maintenance expenses

- 57.6.1 a) The Operation and Maintenance expenses including insurance shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2020, subject to prudence check by the Commission.
- b) The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2020 and shall be escalated at the escalation factor of 6% to arrive at operation and maintenance expenses for FY 2020-21.
- c) The O&M expenses for each subsequent year will be determined by escalating the base expenses determined above for FY 2020-21, at the escalation factor of 6% to arrive at permissible O&M expenses for each year of the Control Period.

Contribution to contingency reserve:

Where the Transmission Licensee has made an appropriation to the Contingency Reserve, a sum not more than 0.5 per cent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of aggregate revenue requirement:

Provided that where the amount of such Contingency Reserve exceeds five (5) per cent of the original cost of fixed assets, no such appropriation shall be allowed, which would have the effect of increasing the reserve beyond the said maximum:

Provided further that the amount so appropriated shall be invested in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year.

The Contingency Reserve shall not be drawn upon during the term of the license except to meet such charges as may be approved by the Commission as being:

- (a) Expenses or loss of profits arising out of accidents, natural calamities or circumstances which the management could not have prevented;
- (b) Expenses on replacement or removal of plant or works other than expenses requisite for normal maintenance or renewal;
- (c) Compensation payable under any law for the time being in force and for which no other provision is made:

Provided that such drawal from Contingency Reserve shall be computed after making due adjustments for any other compensation that may have been received by the Licensee as part of an insurance cover.

No diminution in the value of contingency reserve as mentioned above shall be allowed to be adjusted as a part of tariff.

58. 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.

The indicative list of various heads to be considered for Non-Tariff Income shall be as under:

- a) Income from rent on land or buildings;
- b) Income from sale of scrap;
- c) Income from statutory investments;
- d) Interest on delayed or deferred payment on bills;
- e) Interest on advances to suppliers/contractors;
- f) Rental from staff quarters;
- g) Rental from contractors;
- h) Income from hire charges from contractors and others;
- i) Income from advertisements, etc.;
- j) Miscellaneous receipts;

- k) Excess found on physical verification;
- l) Interest on investments, fixed and call deposits and bank balances;
- m) Prior period income.

Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated business of the Transmission Licensee shall not be included in Non-Tariff Income.

59. Income from Other Business

Where the Transmission Licensee has engaged in any Other Business, an amount equal to one-third of the revenues from such Other Business after deduction of all direct and indirect costs attributed to such Other Business shall be deducted from the Aggregate Revenue Requirement in calculating the annual transmission charges of the Transmission Licensee:

Provided that the Transmission Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Transmission Business and the Other Business and shall submit the Allocation Statement, duly audited and certified by the Statutory Auditor, to the Commission along with his application for determination of tariff:

Provided further that where the sum total of the direct and indirect costs of such Other Business exceed the revenues from such Other Business, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the Transmission Licensee on account of such Other Business.

60. Sharing of charges for intra-State Transmission Network

Determination of Monthly Transmission Tariff:

The aggregate of the yearly revenue requirement for the Transmission Licensee, less the deductions, as approved by the Commission over the Control Period, shall form the "Total Transmission Cost" (TTC) of the Intra-State transmission system, to be recovered from the Long term and Medium term Transmission System Users for the respective year of the Control Period, in accordance with the following Formula:

$$TTC = (ARR - NT - O) - STR$$

Where,

TTC = Total Transmission Cost of year of the Control Period;

- ARR = Aggregate Revenue Requirement approved by the Commission for Transmission Licensee for the yearly period of the Control Period
- NT = Approved level of non-tariff income for Transmission Licensee for the yearly period of the Control Period
- O = Approved level of income from other business of the Transmission Licensee for the yearly period of the Control Period
- STR = Revenue from short term open access charges earned during previous yearly period:

Provided that the revenue from short-term open access charges for each yearly period of Control Period shall be taken to be same as that prevalent during the yearly period one year before the commencement of the Control Period. However, the adjustments due to variation in actual revenue from short-term open access charges shall be undertaken during annual truing up:

Provided further that ARR of the Transmission Licensee in case of competitively bid transmission projects shall be Transmission Service Charge (TSC) for relevant yearly period as adopted by the Commission in accordance with Section 63 of the Act.

The Total Transmission Cost (TTC) as determined by the Commission as per Regulation 60.1.1 above, shall be shared by all long-term and medium-term open access customers on monthly basis (including existing Distribution Licensees) in the ratio of their allotted capacities, in accordance with the following formula:

Monthly Transmission Tariff (MTT) = $TTC / (ACs * 12)$ (in Rs/MW/month);

Where;

TTC = Total Transmission Cost determined by the Commission for the transmission system for the relevant year (in Rs), and

ACs = sum of capacities allocated to all long-term and medium-term open access customers in MW.

Provided that Monthly Transmission Tariff shall also be shared by a Generating Company if power from such Generating Company is sold to a consumer outside the State of Sikkim, to the extent of capacity contracted outside the State:

Provided further that the transmission tariff payable by any long-term or medium-term open access customer utilizing the transmission system for part of a month shall be determined as under:

$$\text{Transmission Tariff} = \text{TTC}/(\text{ACs} \times 8760) \text{ (in Rs./MWh);}$$

Where;

TTC = Total Transmission Cost determined by the Commission for the transmission system for the relevant year (in Rs), and

ACs = sum of capacities allocated to all long-term and medium-term open access customers in MW.

61. Incentive

The Transmission Licensee shall be entitled to incentive for increase in annual availability beyond the target availability prescribed under Regulation 56, in accordance with the following formula:

$$\text{Incentive} = \frac{\text{ATC} * [\text{Annual availability achieved} - \text{Target Availability}]}{\text{Target Availability}}$$

Where;

ATC= Annual Transmission Charges determined by the Commission for the transmission system of the Transmission Licensee for the concerned year.

Incentive shall be shared by the long-term and medium-term customers in the ratio of their average allotted transmission capacity for the year.

62. Transmission losses

The energy losses in the transmission system of the Transmission Licensee, as determined by the State Load Despatch Centre, shall be borne by the Transmission System Users in proportion to their usage of the intra-State transmission system.

CHAPTER-6: DISTRIBUTION - DETERMINATION OF TARIFF AND NORMS OF OPERATION

63. Applicability

The regulations contained in this chapter shall apply to the determination of tariff payable for usage of distribution wires of a Distribution Licensee by a Distribution System User and for retail supply of electricity by a Distribution Licensee to its consumers.

64. Components of Tariff and Aggregate Revenue Requirement

For Distribution Licensee, the Commission shall determine:

- (i) retail supply tariff for their Retail Supply Business i.e. sale of electricity to its consumers which will be inclusive of wheeling charges and ;
- (ii) wheeling tariff for their Wheeling Business which shall be for the purpose of recovering wheeling charges from Open Access consumers in its area of supply.

The wheeling charges and tariff for retail supply by the Distribution Licensee shall be determined by the Commission on the basis of an application for determination of tariff made by the Distribution Licensee in accordance with Chapter-2 of these regulations.

The wheeling charges and tariff for retail supply by a Distribution Licensee shall be determined by the Commission on the basis of segregated accounts for Distribution Wires Business and Retail Supply Business:

Provided that where the Distribution Licensee is not able to submit audited and certified separate accounts for Distribution Wires Business and Retail Supply Business, the allocation matrix given in the clause 64.4 below shall be applicable.

ALLOCATION MATRIX:

Particulars	Retail Supply Business (%)	Wires Business (%)
Power Purchase Expenses	100%	0%
Employee Expenses	40%	60%
Administration & General Expenses	50%	50%
Repair & Maintenance Expenses	10%	90%
Depreciation	10%	90%
Interest on Long-term Loan Capital	10%	90%
Interest on Working Capital and on consumer security deposits	90%	10%
Bad Debts Written off	100%	0%
Income Tax	10%	90%
Transmission Charges intra-State	100%	0%
Contribution to contingency reserves, if any	0%	100%
Return on Equity	10%	90%
Non-Tariff Income	90%	10%

The ARR of the Distribution Licensee for Retail Supply Business and Wheeling Business shall comprise the following components:

ARR for Retail supply business	ARR for Wheeling business
A - Expenses a) Return on Equity (RoE) b) Interest and financing charges on Loan Capital. c) Interest on working capital d) Depreciation e) Operation and maintenance expenses f) All statutory levies, and taxes including taxes on income, if any g) Bad and doubtful book debt allowed to be written off. h) Cost of Power Purchase i) Transmission Charges j) Any other expenses not mentioned above. Total expenses – A	A - Expenses a) Return on equity b) Interest and financing charges on loan capital c) Interest on working capital d) Depreciation e) Operation and maintenance expenses g) All statutory levies and taxes, if any, excluding taxes on income, h) Any other expenses not mentioned above. Total expenses – A
B - Income / receipts: a) Non-Tariff Income including revenue from various surcharges b) Income from other business c) Income from cross subsidy surcharge from open access consumers	B - Income / receipts: a) Non – tariff income b) Income from other business, to the extent specified for wheeling tariff

d) Income from additional surcharge from open access consumers e) Income from wheeling of electricity from open access consumers f) Any grant, subvention, subsidy etc provided by the State Government Total Income / receipts – B ARR for Retail Supply Business = (A – B)	Total Income / receipts – B ARR for Wheeling Business = (A – B)
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The wheeling charges shall provide for recovery of the Aggregate Revenue Requirement for Distribution Wire Business of the Distribution Licensee as provided in Regulation 64.5 above.

The tariff for retail supply shall provide for recovery of the Aggregate Revenue Requirement of the Distribution Licensee for the financial year as approved by the Commission.

65. Capital cost

The approved Business Plan of the Distribution Licensee shall be the basis for determining the annual allowable capital cost for each financial year for any capital expenditure project initiated on or after April 1, 2021.

For each capital expenditure project, the sum total of annual allowable capital cost from the date of commencement of such project till the date of commissioning shall be the original cost of such project.

The capital cost shall be allowed as specified in Regulation 25.

66. Norms of Operation

Distribution Losses

The Distribution loss shall be equal to the difference between the energy injected into the distribution system and the sum of the energy sold to all its consumers.

The Distribution Licensee shall file the distribution loss trajectory in the Business Plan commensurate with the capital investment plan. The Commission after verification and evaluation of the same shall approve the loss trajectory for each year of the Control Period.

Any variation between the actual level of distribution losses and the approved level shall be dealt with, as part of the truing up exercise.

67. Sales Forecast and Power Purchase Requirement

The Distribution Licensee shall forecast sales for each customer category and sub-categories for all years of the Control Period in their business plan and ARR filings, for review and approval by the Commission.

The Distribution Licensee shall develop a reliable database of each of the consumer category such as their demand, energy consumption etc., so as to facilitate accurate forecasting for energy sales for ensuing years.

The Distribution Licensee shall access or estimate sales to unmetered category of consumers, if any, on the basis of the consumption norm, sample study or on any other basis found reasonable.

The Commission shall examine the forecast for their reasonableness based on growth in the number of consumers, pattern of consumption, losses and demand of electricity in previous years and anticipated growth in the subsequent years and any other factor, which the Commission may consider relevant and approve the sales forecast with such modifications as deemed fit;

Sale of electricity, if any, to electricity traders or other distribution licensees or outside state sales through banking etc. shall be separately indicated;

The Distribution Licensee shall also indicate consumer category-wise open access consumers. The demand and energy wheeled for them shall be shown separately for:

- (i) Supply within its area of supply; and
- (ii) Supply outside its area of supply;

Based on the above, the Distribution Licensee shall project month-wise and source-wise power purchase requirement for each year of the control period.

The Commission shall scrutinize and approve the requirement for purchase of power with such modifications as deemed fit, for each year of the control period;

68. Calculation of Aggregate Revenue Requirement

Cost of Power Purchase:

The Distribution Licensee shall be allowed to recover the cost of power it procures from all sources including the power procured from the State owned generating stations, independent power producers, Central generating stations, renewable energy sources and others, for supply of power to consumers, based on the sales forecast and losses for the Distribution Licensee approved by the Commission for each year of the control period;

Approved retail sales level shall be grossed up by normative level of T&D losses as specified by the Commission in the approved loss trajectory for the purpose of arriving at the quantity of power to be purchased;

While approving the cost of power purchase, the Commission shall determine the quantum of power to be purchased from various sources in accordance with the principles of merit order schedule and despatch based on a ranking of all approved sources of supply in the order of their variable cost of power. All power purchase costs will be considered legitimate unless the Commission comes to the conclusion that the merit order principle has been violated or power has been purchased at unreasonable rates except for marginal purchases of transient nature beyond the control of the licensee;

The cost of power purchased by the Distribution Licensees from Sikkim State generating stations shall be worked out based on the tariff determined by the Commission. The cost of power purchase from Central Generating Stations and Inter-state generating stations shall be worked out based on the tariff determined by the CERC. Similarly the cost of power purchased from nuclear power stations of Nuclear Power Corporation of India Ltd. (NPCIL) shall be worked out on the basis of tariff notified by the Department of Atomic Energy under the Atomic Energy Act, 1961. In case of bilateral transactions, the rates as per PPAs approved by the Commission shall be considered. The cost of power purchase from other generating companies / sources shall be worked out based on invoices raised by the generators during the previous year. In absence of above, rates based on bills of energy purchased during the previous 3 months shall be considered by the Commission.

The cost of power purchase from non-conventional energy sources shall be based on the tariff determined by the Commission as per renewable energy regulations notified by the Commission and as amended from time to time or as per the PPAs approved by the Commission.

Any variation in cost of fuel and power purchase at the allowed transmission loss level, for reasons beyond the control of the Distribution Licensee, shall be allowed to be recovered by the Distribution Licensee by way of Fuel and Power Purchase Adjustment (FPPA), as per the formula approved by the Commission and as amended from time to time.

No Tariff or any part thereof shall ordinarily be amended more frequently than once in any financial year, except in respect of any changes expressly

permitted by the Commission in accordance with the following Fuel and Power Purchase Cost Adjustment formula:

FORMULA FOR FUEL AND POWER PURCHASE COST ADJUSTMENT

The Fuel and Power Purchase Cost Adjustment (FPPCA) formula is given below:

$$\text{FPPCA (Ps. /kWh)} = \frac{Q_c (RC_2 - RC_1) + Q_o (RO_2 - RO_1) + Q_{pp} (R_{pp2} - R_{pp1}) + V_z + A}{(Q_{pg1} + Q_{pp1} + Q_{pp2}) \times \left[1 - \frac{L}{100} \right]} \times 100$$

Where,

Q_c = Quantity of coal consumed during the adjustment period in Metric Tons (MT).

= (SHR X Q_{pg}) (1+TSL) X 1000/GCV, or actual whichever is less.

R_{c1} = Weighted average base rate of coal supplied ex-power station coal yard as approved by the Commission for the adjustment period in Rs. /MT

R_{c2} = Weighted average base rate of coal supplied ex-power station coal yard for the adjustment period in Rs./MT

Q_o = Actual Quantity of oil (in KL) consumed during the adjustment period or normative oil consumption as per Tariff order whichever is less.

R_{o1} = Weighted average base rate of oil ex-power station (Rs. / KL) approved by the Commission for the adjustment period.

R_{o2} = Weighted average actual rate of oil ex-power station supplied (Rs./ KL) during the adjustment period.

Q_{pp} = Total power purchased from different sources (kWh) = $Q_{pp2} + Q_{pp3}$

$Q_{pp1} = Q_{pp3} \times \frac{[1 - TL]}{100}$ in kWh

TL = Transmission loss (CTU) (in percentage terms).

Q_{pp2} = Power Purchase from sources with delivery point within the state transmission or distribution system (in kWh)

- Q_{pp3} = Power Purchase from sources on which CTU transmission loss is applicable (in kWh)
- R_{pp1} = Average rate of Power Purchase as approved by the Commission (Rs./kWh)
- R_{pp2} = Average rate of Power Purchase as approved by the Commission (Rs./kWh)
- Q_{pg} = Own power generation (kWh)
- Q_{pg1} = Own Power generation (kWh) at generator terminal – approved auxiliary Consumption
- L = Percentage T&D loss as approved by the Commission or actual, whichever is lower.
- SHR = Station Heat Rate as approved by the Commission (Kcal/kWh)
- TSL = Percentage Coal Transit and Stacking Loss as approved by the Commission
- GCV = Weighted average gross calorific value of coal as fired basis during the adjustment period (Kcal/ Kg)
- V_z = Amount of variable charges on account of change of cost of unknown factors like water charges, taxes or any other unpredictable and unknown factors not envisaged at the time of Tariff fixation subject to prior approval of the Commission (Rs.)
- A = Adjustment, if any, to be made in the current period to account for any excess/ shortfall in recovery of fuel of Power Purchase cost in the past adjustment period, subject to the approval of the Commission (Rs.)

Note: The distribution Licensee shall

- (a) Pass on adjustments, due to changes in the cost of power generation and power procured due to changes in fuel cost, through the Fuel and Power Purchase Cost Adjustment Cost (FPPCA) formula, as specified above.
- (b) The FPPCA charge shall be applicable on the entire sale of Power excluding the power utilized for BPL and Agriculture.
- (c) The FPPCA charge shall be computed and charged on the basis of actual variation in fuel costs relating to power procured during any month subsequent to such costs being incurred.

- (d) The Distribution Licensee shall submit details in the stipulated format to the Commission on a quarterly basis for the FPPCA charged and, for this purpose, shall submit such details of the FPPCA incurred and the FPPCA charged to all consumers for each month in such quarter, along with the detailed computations and supporting documents as may be required for verification by the Commission:

Provided that where the FPPCA is being charged for the first time subsequent to the notification of these Regulations, the Distribution Licensee shall obtain the approval of the Commission prior to levying the FPPCA.

Provided further that the FPPCA applicable to each tariff category of consumers shall be displayed prominently at the cash collection centre and on the internet website of the Distribution Licensee:

Provided that the Distribution Licensee shall put up on its internet website such details of the FPPCA incurred and the FPPCA charged to all consumers for each month along with detailed computations.

- (e) The monthly FPPCA charge shall not exceed 10% of the variable component of tariff, or such other ceiling as may be stipulated by the Commission from time to time.
- (f) Provide that any excess in the FPPCA over the above ceiling shall be carried forward by the Distribution Licensee and shall be recovered over such future period as may be directed by the Commission.
- (g) The FPPCA charge shall be allowed only in respect of approved power purchase of the Distribution Licensee.
- (h) The total FPPCA recoverable, as per the formula specified above, shall be recovered from the actual sales in “Rupees per kilowatt-hour” terms:

Provided that in case of unmetered consumers, FPPCA shall be recoverable based on estimated sales to such consumers, calculated in accordance with such methodology as may be stipulated by the Commission.

The Renewable Purchase Obligation (RPO) of the Distribution Licensee shall be as per the RPO regulations notified by the Commission as amended from time to time.

Transmission and SLDC Charges:

The Distribution Licensee shall be allowed to recover transmission charges payable for access and use of inter-state transmission system and intra-state transmission system in accordance with the tariff approved by CERC and by SSERC respectively.

SLDC charges if paid separately in addition to intra-state transmission charges shall be considered as allowable expenses.

Return on Equity:

- 68.3.1 The Distribution Licensee shall be allowed a return on equity for Distribution Wires Business, and Retail Supply Business as specified in Regulation 29 of these regulations.

Interest and Finance Charges on Loan Capital:

- 68.4.1 The Distribution Licensee shall be allowed Interest and Finance Charges on loan capital for Distribution Wires Business and Retail Supply Business as specified in Regulation 30 of these regulations.

Depreciation:

- 68.5.1 The Distribution Licensee shall be permitted to recover depreciation on the value of fixed assets used in the Distribution Wires Business and in the Retail Supply Business as specified in Regulation 31 of these regulations.

Operation and Maintenance expenses:

- a) The Operation and Maintenance expenses shall be derived on the basis of the average of the actual Operation and Maintenance expenses for the three (3) years ending March 31, 2020, subject to prudence check by the Commission.
- b) The average of such operation and maintenance expenses shall be considered as operation and maintenance expenses for the financial year ended March 31, 2020 and shall be escalated at the escalation factor of 6% to arrive at operation and maintenance expenses for FY 2020-21.
- c) The O&M expenses for each subsequent year will be determined by escalating the base expenses determined above for FY 2020-21, at the escalation factor of 6% to arrive at permissible O&M expenses for each year of the Control Period:

Interest on working capital:

68.7.1 The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires Business and Retail Supply Business as specified in Regulation 32 of these Regulations.

Bad debts written off:

68.8.1 The Commission may allow bad debts actually written off as a pass through in the aggregate revenue requirement, subject to prudence check.

Contribution to contingency reserve:

Where the Distribution Licensee has made an appropriation to the Contingency Reserve, a sum not more than 0.5 per cent of the original cost of fixed assets shall be allowed annually towards such appropriation in the calculation of aggregate revenue requirement:

Provided that where the amount of such Contingency Reserve exceeds five (5) per cent of the original cost of fixed assets, no such appropriation shall be allowed, which would have the effect of increasing the reserve beyond the said maximum:

Provided further that the amount so appropriated shall be invested in securities authorized under the Indian Trusts Act, 1882 within a period of six months of the close of the financial year.

The Contingency Reserve shall not be drawn upon during the term of the license except to meet such charges as may be approved by the Commission as being:

- (a) Expenses or loss of profits arising out of accidents, natural calamities or circumstances which the management could not have prevented;
- (b) Expenses on replacement or removal of plant or works other than expenses requisite for normal maintenance or renewal;
- (c) Compensation payable under any law for the time being in force and for which no other provision is made:

Provided that such drawal from Contingency Reserve shall be computed after making due adjustments for any other compensation that may have been received by the Licensee as part of an insurance cover.

No diminution in the value of contingency reserve as mentioned above shall be allowed to be adjusted as a part of tariff.

69. Non-Tariff Income

The amount of Non-Tariff Income relating to Distribution Wires business and Retail Supply Business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges of Distribution Wires Business and tariff for Retail Supply of electricity of the Distribution Licensee:

Provided that the Distribution Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of wheeling charges and tariff for retail supply.

The indicative list of various heads to be considered for Non-Tariff Income shall be as under:

- a) Income from rent of land or buildings;
- b) Income from sale of scrap;
- c) Income from statutory investments;
- d) Interest on delayed or deferred payment on bills;
- e) Interest on advances to suppliers/contractors;
- f) Rental from staff quarters;
- g) Rental from contractors;
- h) Income from hire charges from contractors and others;
- i) Income from advertisements, etc.;
- j) Meter/Metering equipment rentals;
- k) Revenue from late payment charges;
- l) Recovery for theft and pilferage of energy
- m) Miscellaneous receipts;
- n) Interest on advances to suppliers;
- o) Excess found on physical verification;
- p) Prior period income.

Provided that the interest earned from investments made out of Return on Equity corresponding to the Distribution Wires Business and Retail Supply Business of the Distribution Licensee shall not be included in Non-Tariff Income.

70. Income from Other Business

Where the Distribution Licensee has engaged in any Other Business, an amount equal to one-third of the revenues from such Other Business after

deduction of all direct and indirect costs attributed to such Other Business shall be deducted from the Aggregate Revenue Requirement in determining the wheeling charges and tariff for retail supply of electricity by the Distribution Licensee.

Provided that the Distribution Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Distribution Business and the Other Business and shall submit the Allocation Statement to the Commission, duly audited and certified by the statutory auditors, along with his application for determination of wheeling charges:

Provided further that where the sum total of the direct and indirect costs of such Other Business exceed the revenues from such Other Business, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the Distribution Licensee on account of such Other Business:

71. Wheeling Charges

The Commission shall specify the wheeling charges of Distribution Wires Business of the Distribution Licensee in its Order passed under sub-section (5) of Section 64 of the Act:

The wheeling charges payable by a Distribution System User, other than the retail consumers getting electricity supply from the same Distribution Licensee, may comprise any combination of fixed/demand charges, and variable charges, as may be stipulated by the Commission in such Order.

The revenue from wheeling charges paid by the Distribution System Users shall be used to reduce the Aggregate Revenue Requirement of the Distribution Licensee to be recovered from the retail consumers of the Distribution Licensee.

72. 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 Sikkim State Electricity Commission (Terms and Condition of Intra-State Open Access) regulations, 2012 as applicable and as amended from time to time, shall be deducted from the Aggregate Revenue Requirement in calculating the tariff supply of electricity by such Distribution Licensee at the time of truing up.

73. Additional Surcharge

The amount received by the Distribution Licensee by way of additional surcharge on charges of Distribution Wires Business, as approved by the Commission in accordance with the Sikkim State Electricity Commission (Terms and Condition of Intra-State Open Access) Regulations, 2012 as applicable and as amended from time to time, from consumers connected to wires of the Distribution Licensee, shall be deducted from the Aggregate Revenue Requirement in calculating the wheeling charges from such Distribution Licensee.

CHAPTER-7: MISCELLANEOUS

74. Issue of Orders and Directions

Subject to the provision of the Act and these regulations, the Commission may, from time to time, issue orders and directions in regard to the implementation of these regulations and procedure to be followed on various matters, which the Commission has been empowered by these regulations. Notwithstanding anything contained in these regulations, the Commission shall have the authority, either sou-moto or on a petition filed by any interested or affected party, to determine the tariff of any applicant.

75. Power to Remove Difficulties.

If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, by a general or special order, not being inconsistent with the provisions of these regulations or the Act, do or undertake to do things or direct the Generating Company or the Transmission Licensee or the Distributor or the Licensee to do or undertake such things which appear to be necessary or expedient for the purpose of removing the difficulties.

76. Power to Relax

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

77. Interpretation

If a question arises relating to the interpretation of any provision of these regulations, the decision of the Commission shall be final.

78. Saving of Inherent Power of the Commission

Nothing in these regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary to meet ends of justice or to protect consumers' interest or to prevent the abuse of the process of the Commission.

Nothing contained in these regulations shall limit or otherwise affect the inherent powers of the Commission from adopting a procedure, which is at variance with any of the provisions of these regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these regulations.

Nothing in these regulations shall, expressly or by implication, bar the Commission to deal with any matter or exercise any power under the Act for which no regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

79. Enquiry and Investigation

All enquiries, investigations and adjudications under these Regulations shall be done by the Commission through the proceedings in accordance with the provisions of the Sikkim State Electricity Regulatory Commission (Conduct of Business) Regulations, 2012 as amended from time to time.

80. Power to Amend

The Commission, for reasons to be recorded in writing, may at any time vary, alter or modify any of the provisions of these regulations after following the due process.

By Order of the Commission

Sd/-

**Secretary
Sikkim State Electricity Regulatory Commission**

Annexure-I

Depreciation Schedule

Description of Assets		Depreciation (Straight line) (%)
A.	Land owned under full title	--
B.	Land held under lease	
a)	for investment in the land	3.34
b)	for cost of clearing the site	3.34
c)	Land for reservoir in case of Hydro generating station	3.34
C.	Assets Purchased New:	
a.	Plant and machinery in generating stations including plant foundations	
	i) Hydro-electric	5.28
	ii) Steam electric	5.28
	NHRS & Waste Heat Recovery Boilers/Plants	
	iii) Diesel-electric and gas plant	5.28
b.	Cooling towers and circulating water systems	5.28
c.	Hydraulic works forming part of Hydro-electric systems including:-	
	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 other hydraulic works	5.28
d.	Building & civil engineering works of permanent character	
	i) Offices & showrooms	3.34
	ii) Containing thermo-electric generating plant	3.34
	iii) Containing hydro-electric generating plant	3.34
	iv) Temporary erection such as wooden structures	100
	v) Roads other than kutchha roads	3.34

	vi)	Others	3.34
e.		Transformers, transformer (Kiosk) sub-station equipment & other fixed apparatus (including plant foundations)	
	i)	Transformers (including foundations) having a rating of 100 kilo volt amperes and over	5.28
	ii)	Others	5.28
f.		Switchgear including cable connections	5.28
g.		Lightning arrestors	
	i)	Station type	5.28
	ii)	Pole type	5.28
	iii)	Synchronous condenser	5.28
h.		Batteries	5.28
	i)	Underground Cable including joint boxes and disconnected boxes	5.28
	ii)	Cable duct system	5.28
i.		Overhead lines including supports:	
	i)	Lines on fabricated steel operating at nominal volt-ages higher than 66 kV	5.28
	ii)	Lines on steel supports operating at nominal voltages higher than 13.2 kilovolts but not exceeding 66 kilovolts	5.28
	iii)	Lines on steel or reinforced concrete supports	5.28
	iv)	Lines on treated wood supports	5.28
j.		Meters	5.28
k.		Self propelled vehicles	9.50
l.		Air conditioning plants:	
	i)	Static	5.28
	ii)	Portable	9.50
m.	i)	Office furniture and fittings	6.33
	ii)	Office equipments	6.33

	iii)	Internal wiring including fittings and apparatus	6.33
	iv)	Street light fittings	5.28
n.		Apparatus let on hire	
	i)	Other than motors	9.50
	ii)	Motors	6.33
o.		Communication equipment:	
	i)	Radio and high frequency carrier system	6.33
	ii)	Telephone lines and telephones	6.33
p.		I.T. equipments	15
q.		Assets purchased second hand and assets not otherwise provided for in the Schedule	5.28

Annexure-II

Procedure for calculation of Transmission System Availability

1. Transmission system availability factor for a calendar month (TAFM) shall be calculated by the respective Transmission Licensee certified by the SLDC, separately for each AC and HVDC transmission system and grouped according to sharing of transmission charges.
2. TAFM, in percent, shall be equal to $(100 - 100 \times \text{NAFM})$, where NAFM is the non-availability factor in per unit for the month, for the transmission system / sub-system.
3. NAFM for A.C. systems / sub-systems shall be calculated as follows:

$$\text{NAFM} = \left[\sum_{l=1}^L (\text{OH } l \times \text{Cktkm } l \times \text{NSC } l) + \sum_{t=1}^T (\text{OH } t \times \text{MVA } t \times 2.5) \right. \\ \left. + \sum_{r=1}^R (\text{OH } r \times \text{MVAR } r \times 4) \right] \div \text{THM} \times \left[\sum_{l=1}^L (\text{Cktkm } l \times \text{NSC } l) \right. \\ \left. + \sum_{t=1}^T (\text{MVA } t \times 2.5) + \sum_{r=1}^R (\text{MVAR } r \times 4) \right]$$

Where

l	identifies a transmission line circuit
t	identifies a transformer / ICT
r	identifies a bus reactor, switchable line reactor or SVC
L	= total number of line circuits
T	= total number of transformers and ICTs
R	= total number of bus reactor, switchable line reactor and SVC
OH	= Outage hours or hours of non-availability in the month, excluding the duration of outages not attributable to the Transmission Licensee, if any, as per clause (5)
Ckt km	= Length of a transmission line circuit in km
NSC	= Number of sub-conductors per phase
MVA	= MVA rating of a transformer / ICT

MVAR = MVAR rating of a bus reactor, switchable line reactor or an SVC (in which case it would be the sum of inductive and capacitive capabilities) THM = Total hours in the month

4. NAFM for each HVDC system shall be calculated separately, as follows:

$$\text{NAFM} = [\Sigma (\text{TCR} \times \text{hours})] \div [\text{THM} \times \text{RC}]$$

Where,

TCR = Transmission capability reduction of the system in MW

RC = Rated capacity of the system in MW.

For the above purpose, the HVDC terminals and directly associated EHV / HVDC lines of an HVDC system shall be taken as one integrated system.

5. The transmission elements under outage due to following reasons shall be deemed to be available:

- i. Shut down availed for maintenance or construction of elements of another transmission scheme. If the other transmission scheme belongs to the Transmission Licensee, SLDC may restrict the deemed availability period to that considered reasonable for the work involved.
- ii. Switching off of a transmission line to restrict over voltage and manual tripping of switched reactors as per the directions of SLDC.

6. Outage time of transmission elements for the following contingencies shall be excluded from the total time of the element under period of consideration.

- i. Outage of elements due to acts of God and force majeure events beyond the control of the Transmission Licensee. However, onus of satisfying the SLDC that element outage was due to aforesaid events and not due to design failure shall rest with the Transmission Licensee. A reasonable restoration time for the element shall be considered by SLDC and any additional time taken by the Transmission Licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the Transmission Licensee. SLDC may consult the Transmission Licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available.

Outage caused by grid incident/disturbance not attributable to the Transmission Licensee, e.g. faults in substation or bays owned by other agency causing outage of the transmission licensees elements, and tripping of lines, ICTs, HVDC, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from SLDC while normalizing the system following grid incident/disturbance within reasonable time, the element shall be considered not available for the period of outage after issuance of SLDCs direction for restoration.

Appendix-A

Formats to be filled by Generating Company

(A) Thermal Generation

for the Control Period FY 2021-22 to FY 2023-24

TARIFF NORMS FOR ENERGY / VARIABLE CHARGES

1) Name of the Generating Station	
2) Date of Commercial Operation (COD)	
3) Type of Cooling System	

4) Fuel Details	Primary Fuel	Secondary Fuel	Alternate Fuel
Mention type of fuel			

S. No	Particulars	Unit	Ref	Derivation	Previous Year (Actual)	Current year (Estimated)	Control Period (Projected)		
							1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7	8	9	10
1	Installed Capacity	MW							
2	PLF	%							
3	Generation	MU	A	A					
4	Auxillary Consumption	% MU	B	B					
5	Generation (Ex-bus)	MU	C	(A-B)					
6	Station Heat Rate	Kcal / Kwh	D	Derivation					
7	Specific Oil Consumption	ML / KWH	E	E					
8	Calorific Value of Fuel Oil	Kcal / Litre	F	F					
9	Calorific Value of Coal	Kcal / Kg	G	G					

10	Overall Heat rate	Gcal	H	(A*D)					
11	Heat from oil	Gcal	I	(A*E*F)					
12	Heat from coal	Gcal	J	(H-I)					
13	Actual oil consumption	KL	K	(I*1000 / F) OR (A*E)					
14	Actual Coal consumption	MT	L	(J*1000 / G)					
15	Cost of Oil per KL	Rs. / KL	M	M					
16	Cost of Coal per MT (incl. LADT)	Rs. / MT	N	N					
17	Total Cost of Oil	Rs. Million	O	(M*K / 10) ^6					
18	Total Cost of Coal	Rs. Million	P	(N*L / 10) ^6					
19	Total Fuel Cost	Rs. Million	Q	(O+P)					
20	Fuel Cost / KWH	Rs. / KWH	R	(Q/C)					

Note: Separate statements to be furnished for each generating station.

Name of the Generating Company: _____

STATEMENT SHOWING THE CALCULATION OF TOTAL COST OF COAL (PRIMARY FUEL) FOR THERMAL GENERATING STATIONS

S.No	Name of the Station	Capacity	PLF	Generation in MU	Heat Rate K.Cal / kwh	(GCV) K.Cal / Kg.	Specific consumption of Coal (Kg / kwh)	Qty. of coal in lakh Tonns	Basic Cost Rs. / MT	Railway Freight Rs. / MT	Ocean Freight Rs. / MT	Handling Charges Rs. / MT	Total Rs. / MT	Total Cost Rs. in Lakhs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15= (9X14)

Note:

Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of control period.

Name of the Generating Company: _____

CALCULATION OF COST OF SECONDARY FUEL (OIL) FOR THERMAL STATIONS

S.No	Name of the Station	Generation in (MU)	HFO				HSD / LDO				Total Cost Rs. in Lakhs (7+11)
			Specific oil consumption (ml / kwh)	Qty (KL)	Rate (Rs. / KL)	Cost Rs. / Lakhs	Specific consumption (ml / kwh)	Qty (KL)	Rate (Rs. / KL)	Cost Rs. / Lakhs	
1	2	3	4	5	6	7	8	9	10	11	12

Note

:

Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of control period.

Name of the Generating Company: _____

Calculation of Total Cost of Gas for Gas based Thermal Generating Station

[illegible]

Note:

Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of control period.

Format - TG5

Name of the Generating Company: _____

TOTAL FUEL COST OF ALL GENERATING STATIONS

Rs. Lakhs

S.No	Name of the Station	Coal	Gas	Oil	Lubricants	Others	Total costs
1							
2							
3							
4							
5							
6							
7							

Note:

Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of control period.

Name of Generating Company : _____

ANNUAL REVENUE REQUIREMENT

S.No	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projected)		
				1 st Year	2 nd Year	3 rd Year
1	Gross Generation (MU)					
2	Auxiliary Consumption (MU)					
3	Net Generation (MU)					
4	Fuel Costs (Rs. Lakhs)					
5	Fixed Charges (Rs. Lakhs)					
	a) Interest on Loan capital (Rs. Lakhs)					
	b) Depreciation (Rs. Lakhs)					
	c) Advance against depreciation (Rs. Lakhs)					
	d) O&M Expenses (Rs. Lakhs)					
	e) Interest on working capital (Rs. Lakhs)					
	f) Details of Other Income (Rs. Lakhs)					
	g) Return on Equity (Rs. Lakhs)					
	h) Taxes (Rs. Lakhs)					
	Total fixed charges (Rs. Lakhs)					
6	Less: Other income (Rs. Lakhs)					
7	Total Expenses (4+5-6) (Rs. Lakhs)					

Formats to be filled by Generating Company

(B) Hydel Generation

For the Control Period FY 2021to FY 2023

Name of the Hydro Generating Station: _____

DETAILS OF COD, TYPE OF HYDRO STATIONS, NORMATIVE ANNUAL PLANT, AVAILABILITY FACTOR (NAPAF) & OTHER NORMATIVE PARAMETERS CONSIDERED FOR TARIFF CALCULATION

Sl. No.	Description	Unit	Previous year (Actuals)	Current year (Estimated)	Control Period (Projected)		
					1 st Year	2 nd Year	3 rd Year
1	Installed Capacity	MW					
2	Free power to home state	%					
3	Date of commercial operation						
	Unit-1						
	Unit-2						
	Unit-3						
4	Type of Station						
	a) Surface/underground						
	b) Purely ROR/ Pondage/Storage						
	c) Peaking/non-peaking						
	d) No. of hours of peaking						
	e) Overload capacity(MW) & period						
5	Type of excitation						
	a) Rotaing exciters on generator						

	b) Static excitation						
6	Design Energy (Annual) ¹	Gwh					
7	Auxiliary Consumption including Transformation losses	%					
8	Normative Plant Availability Factor (NAPAF)	%					
9.1	Maintenance Spares for WC	Rs. Lakh					
9.2	Receivable for WC	Rs. Lakh					
9.3	Base Rate of return on equity	%					
9.4	Tax Rate ²	%					
9.5	Prime lending Rate of SBI as on _____						

¹ Monthwise Design energy figures to be given separately with the petition.

2. Tax rate applicable to the company for the year should also be furnished.

3. Mention relevant date

Name of the Hydro Generating Station: _____

SALIENT FEATURES OF HYDROELECTRIC PROJECT

1. Location	
State/Distt.	
River	
2. Diversion Tunnel	
Size, shape	
Length	
3. Dam	
Type	
Maximum dam height	
4. Spillway	
Type	
Crest level of spillway	
5. Reservoir	
Full Reservoir Level (FRL)	
Minimum Draw Down Level (MDDL)	
Live storage (MCM)	
6. Desilting Arrangement	
Type	
Number and Size	
Particle size to be removed(mm)	
7. Head Race Tunnel	
Size and type	

Length	
Design discharge(Cumecs)	
8. Surge Shaft	
Type	
Diameter	
Height	
9. Penstock/Pressure shafts	
Type	
Diameter & Length	
10. Power House	
Type	
Installed capacity (No of units x MW)	
Peaking capacity during lean period (MW)	
Type of turbine	
Rated Head(M)	
Rated Discharge(Cumecs)	
11. Tail Race Tunnel	
Diameter, shape	
Length	
Minimum tail water level	
12. Switchyard	
Type of Switch gear	
No. of generator bays	
No. of Bus coupler bays	
No. of line bays	

Note: Specify limitations on generation, if any, during specific time period on water use due to irrigation, drinking water, industrial, environmental considerations etc.

Format - HG3

Name of the Hydro Generating Station: _____

DESIGN ENERGY AND MW CONTINUOUS (monthwise)- RUN OF RIVER TYPE STATIONS

Installed Capacity: No. of Units X. MW =

Year _____

S.No	Month	Design Energy (MUs) (Unit Wise)	MW Continuous
1	April	I	
		II	
		III	
2	May	I	
		II	
		III	
3	June	I	
		II	
		III	
4	July	I	
		II	
		III	
5	August	I	
		II	
		III	
6	September	I	
		II	
		III	
7	October	I	
		II	
		III	
8	November	I	

		II	
		III	
9	December	I	
		II	
		III	
10	January	I	
		II	
		III	
11	February	I	
		II	
		III	
12	March	I	
		II	
		III	
	Total		

Note:

Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of control period.

Format - HG4

Name of the Hydro Generating Station: _____

**DESIGN ENERGY AND PEAKING CAPABILITY (monthwise) -
PONDAGE / STORAGE TYPE STATIONS**

Installed Capacity: No. of Units X. MW =

S.No	Month	Design Energy (MUs) (Unit Wise)	MW Continuous
1	April	I	
		II	
		III	
2	May	I	
		II	
		III	
3	June	I	
		II	
		III	
4	July	I	
		II	
		III	
5	August	I	
		II	
		III	
6	September	I	
		II	
		III	
7	October	I	
		II	
		III	
8	November	I	
		II	

		III	
9	December	I	
		II	
		III	
10	January	I	
		II	
		III	
11	February	I	
		II	
		III	
12	March	I	
		II	
		III	
	Total		

Note:

**Specify the number of peaking hours for which station has been designed.
Separate statement to be furnished for Previous year (Actuals), Current year
(Estimated) and Projections for each year of control period.**

Name of Generating Company : _____

ANNUAL REVENUE REQUIREMENT

S.No	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projected)		
				1 st Year	2 nd Year	3 rd Year
1	Gross Generation (MU)					
2	Auxilliary Consumption (MU)					
3	Net Generation (MU)					
4	Free Energy to home state (MU)					
5	Royalty (Rs.Lakhs)					
6	Water Charges (Rs.Lakhs)					
7	Capacity Charges (Rs.Lakhs)					
	a) Interest on Loan capital (Rs.Lakhs)					
	b) Depreciation (Rs.Lakhs)					
	c) Advance against depreciation (Rs.Lakhs)					
	d) O&M Expenses (Rs.Lakhs)					
	e) Interest on working capital (Rs.Lakhs)					
	f) Return on Equity (Rs. Lakhs)					
	g) Income Taxes (Rs.Lakhs)					
8	Less: Other Income (Rs. Lakhs)					
9	Total fixed expenses (5+6+7-8) (Rs.Lakhs)					

Appendix- B

Formats to be filled by

TRANSMISSION LICENSEE

For the Control Period FY 2021-22 to FY 2023-24

Format- T1 (A)

Name of the Transmission Licensee: _____

DETAILS OF TRANSMISSION LINES

(A) Transmission Lines

S.No.	Name of the Line	S/C or D/C	Voltage level kV	Line Length Ckt.- kM	Date of Com-merical Operation
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Format- T1 (B)

Name of the Transmission Licensee: _____

DETAILS OF SUB-STATIONS

(B) Sub-Stations

S.No.	Name of Sub-Station	Type of Sub-station Conventional / GIS	Voltage Ratio	No. of Transformers (with capacity)	Date of Commercial Operation
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Format- T2 (A)

Name of the Transmission Licensee:

TRANSMISSION LINES (WORKS IN PROGRESS)

S.No.	Name of Line	Voltage level kV	Ckt.-kM	Approved Cost (Rs. in crores)	Financing Pattern (Grant: loan)	Year of Commencement	Schedule Date of Commissioning
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Format- T2 (B)

Name of the Transmission Licensee:

SUB-STATIONS (WORKS IN PROGRESS)

S.No.	Name of Sub-station	Capacity MVA	No. of Units	Total MVA	Approved Cost (Rs. in Crores)	Financing Pattern	Year of Commencement	Schedule Date of Commissioning
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Format- T3

Name of the Transmission Licensee: _____

NORMATIVE PARAMETERS TO BE CONSIDERED FOR TARIFF CALCULATIONS

S.No	Particulars	Unit	Previous Year (actuals)	Current Year (Estimated)	Control Period (Projections)		
					1 st Year	2 nd Year	3 rd Year
1	Target Availability	%					
2	Normative Operation and Maintenance per Ckt. Km	Rs. lakhs					
3	Normative Operation and Maintenance per bay of SS	Rs. lakhs					
4	Spares for working capital as % of O&M Costs	%					
5	Receivables in Months for working capital	months					
6	Rate of Return on Equity (%)	%					

Format - T4 (A)

Name of the Transmission Licensee:_____

ENERGY BALANCE

(A) Energy Received

S.No	Name of the Generating Station	Units Received (MU)
1		
2		
3		
	Total Energy Received	

Format - T4 (B)

Name of the Transmission Licensee:_____

(B) Energy Sent Out

S.No	Name of the licensee	Units Sent Out (MU)
1		
2		
3		
	Auxiliary Consumption	
	Gross Energy Sent Out	

Format - T4 (C)

Name of the Transmission Licensee:_____

(C) Transmission Losses

S.No	Name of the licensee	Units Sent Out (MU)
1	Total Energy Received	
2	Gross energy sent out	
3	Transmission loss (1-2)	
4	% Transmission losses ((3/1)x100)	

Name of the Transmission Licensee: _____

Format - T5 (A)

TRANSMISSION LOSSES

(A) Historical Data of Transmission Losses

S.No	Year	T ₁₋₄	T ₁₋₃	T ₁₋₂	T ₁₋₁	T ₁
1	% Transmission Losses					

Note: T₁ is previous year, T₁₋₁ is pre-previous year and so on.....

Format - T5 (B)

Name of the Transmission Licensee: _____

(B) Proposed Transmission Loss Trajectory

S.No	Year	Current Year (T)	Control Period (Projections)		
			1 st Year	2 nd Year	3 rd Year
1	% Transmission Loss Trajectory				

Name of the Transmission Licensee: _____

OTHER INCOME DETAILS

Rs. Lakhs

S.No	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	Interest on Staff Loans and Advances					
2	Income from investments on deposits					
3	Interest on Advances to Others					
4	Interest from Banks (other than on Fixed Deposits)					
5	Income from Trading-Stores, Scrap etc.					
6	Income from staff welfare Activities					
7	Gain on sale of Fixed Assets					
8	Miscellaneous Receipts					
9	Contribution & Grants towards cost of capital Assets					
10	Total					

Name of the Transmission Licensee: _____

ANNUAL TRANSMISSION CHARGES

(Rs. in Lakhs)

S.No	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	Employees Cost					
2	Repairs & Maintenance					
3	Admin & General Expenses					
4	Depreciation					
5	Advance Against Depreciation					
6	Interest and Finance Charges					
7	Interest on Working Capital					
8	Return on Equity					
9	Income Tax					
10	Others (including ULDC charges)					
11	Total Fixed Costs					
12	Less: Expenses Capitalised					
13	Total Transmission Charges					
14	Less: Other Income					
15	Net Annual Transmission Charges					

Format - T8

Name of the Transmission Licensee: _____

PROPOSED TRANSMISSION TARIFF

Rs. in lakhs

S.No	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	Annual Transmission Charges (Rs. Lakhs)					
2	Total MW Allocation (MW)					
3	Transmission Tariff (Rs / MW / Day)					
4	Energy Transferred (MU)					
5	Transmission Tariff (Paise / Unit)					

Appendix-C

Formats to be filled by

DISTRIBUTION LICENSEE

For the Control Period FY 2021-22 to FY 2023-24

Name of the Distribution Licensee:_____

CONSUMER CATEGORY-WISE ENERGY SALES

[illegible]

10	Industrial (IHT)										
11	General Purpose including Domestic (DHT)										
12	Bulk Supply (HT)										
13	Commercial (CHT)										
	EHT CATEGORY										
14	Industrial										

Note:.

Consumer category classification may be suitably modified, if those in existence are different from the ones listed in the above format

Name of the Distribution Licensee: _____

ENERGY BALANCE

(MU)

S.No	Item	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
A)	ENERGY REQUIREMENT					
1	Energy sales within the State					
2	Sales Outside state					
3	Sales to other distribution licensees					
4	Total Sales					
5	Distribution Losses					
	i) MU					
	ii) %					
6	Total energy requirement (4+5(i))					
B	ENERGY AVAILABILITY					
1	Net thermal generation (own)					
2	Net hydel generation (own)					
3	Power Purchase from					
	a) Central Stations					
	b) Traders					
	c) Power Exchange					
	d) Others					
4	Net Power Purchase (a+b+c+d)					
5	Total energy availability (1+2+3)					

INFORMATION REGARDING DISTRIBUTION LOSS OF LICENSEE

S.No	Particulars	Calculation	Unit	Previous Years (Actuals)		Current Year	Control Period (Projections)		
							1 st Year	2 nd Year	3 rd Year
1	Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of DISCOM	A	MU						
2	Input energy (metered Import) received at interface points of DISCOM network	B	MU						
3	Input energy (metered Export) by the DISCOM at interface point of DISCOM network	C	MU						
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	$D=A+B-C$	MU						
5	Energy billed to metered consumers within the licensed area of the DISCOM	E	MU						
6	Energy billed to unmetered consumers within the licensed area of the DISCOM	F	MU						
7	Total energy	$G=E+F$	MU						
8	Distribution Loss (%)	$L=\{(D-G)/D\} \times 100$	%						

Name of the Distribution Licensee: _____

ENTITLEMENT FROM CENTRAL GENERATING STATIONS AND ENERGY PURCHASED

FOR THE YEAR _____

(MU)

[illegible]

	a)										
	b)										
	c)										
	d)										
	e)										
4	PTC										
	a)										
	b)										
	c)										
	d)										
	e)										
5	Other sources										
	a)										
	b)										
	c)										
	d)										
	e)										

Note:

Separate statements to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of 3 year control period.

Name of the Distribution Licensee: _____

Format –D4

POWER PURCHASE COST

FOR THE YEAR _____

(Rs. in Crores)								Unit Cost (Rs. / KWH)
S.N	Source	Energy received (MU)	Variable Cost (Ps. / Unit)	Total Variable Cost	Total Fixed Cost	Others	Total Cost (5+6+7)	
1	2	3	4	5	6	7	8	9
1	NTPC							
	a)							
	b)							
	c)							
	d)							
	e)							
2	NHPC							
	a)							
	b)							
	c)							
	d)							
	e)							
3	NEEPCO							
	a)							

	b)							
	c)							
	d)							
	e)							
4	Other sources	(Details to be furnished)						
	a)							
	b)							
	c)							
	d)							
	e)							
5	Other Charges	(Details to be furnished)						
	a)							
	b)							
	c)							
	d)							
	e)							

Note:

Separate statements to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of 3 year control period.

Name of the Distribution Licensee: _____

NON TARIFF INCOME

(Rs. in crores)

S.No	Source of loan	Previous year (Actuals)	Current year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Meter / Service rent					
2	Late payment surcharge					
3	Theft / pilferage of energy charges					
4	Misc. receipts					
5	Misc. charges					
6	Wheeling charges					
7	Interest on staff loans & advance					
8	Income from trading					
9	Income from welfare activities					
10	Excess on verification					
11	Investments & bank balances					
12	Total Income					
13	Add Prior period income *					
14	Total					

* Year wise details of prior period income may be provided

Format- D6

Name of the Distribution Licensee: _____

BAD AND DOUBTFUL DEBTS

For the year _____

(Rs. in Crores)

S.N	Particulars	Amount
1	2	3
1	Amount of receivable bad and doubtful debts (audited)	
2	Provision made for debts in ARR	

Format- D7 (A)

Name of the Licensee: _____

A. ESTIMATED REVENUE AT EXISTING TARIFF (LT)

[illegible]

Format- D7 (B)

Name of the Licensee: _____

B. ESTIMATED REVENUE AT EXISTING TARIFF (HT)

[illegible]

Format- D7 (c)

Name of the Licensee: _____

C. ESTIMATED REVENUE AT EXISTING TARIFF

S.No	Category	Contract Demand (KVA)	Billing Demand (KVA)	Sale of Energy (MU)	Existing Tariff	Total amount for the year (lakh)	Total amount for the category (Lakh)	Average tariff for the year (Paise per kwhr)
1					FC in Rs. per KVA			
2					EC in paise per Kwhr			
3								
4								
5								
6	Total (LT+HT+ EHT)							

Name of the Licensee: _____

D. ESTIMATED REVENUE AT EXISTING TARIFF

S.No	Category	Contract Demand (KVA)	Billing Demand (KVA)	Sale of Energy (MU)	Existing Tariff	Total amount for the year (lakh)	Total amount for the category (Lakh)	Average tariff for the year (Paise per kwhr)
1					FC in Rs. per KVA			
2					EC in paise per Kwhr			
3								
4								
5								
6	Grand Total							

Name of the Distribution Licensee: _____

ANNUAL REVENUE REQUIREMENT

(Rs. in Crores)

S.No	Item of expenditure	Previous Year (Actuals)	Current year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Cost of Power Purchase					
2	Employee costs					
3	O&M expenses					
4	Adm. & Gen. Expenses					
5	Depreciation					
6	Advance Against Depreciation					
7	Interest charges					
8	Working Capital					
9	Return on equity					
10	Income Tax					
11	Total revenue requirement					
12	Less: Non tariff income					
13	Net revenue requirement (9-10)					
14	Revenue from tariff					
15	Gap (13 - 14)					
16	Gap for FY _____					

17	Total gap (15+16)					
18	Revenue surplus carried over					
19	Additional revenue from proposed tariff					
20	Regulatory asset					
21	Energy sales (MU)					

Note:

Separate statements to be furnished for Previous year (Actuals), Current year (Estimated) and Projections for each year of 3 year of control period.

Appendix - D

ADDITIONAL COMMON FORMATS TO BE FILLED BY

- (1) GENERATING COMPANY**
 - (a) THERMAL GENERATION**
 - (b) HYDEL GENERATION**
- (2) TRANSMISSION LICENSEE**
- (3) DISTRIBUTION LICENSEE**

For the Control Period FY 2021-22 to FY 2023-24

Format-1

Name of the Licensee or: _____
 Name of the Generating Company: _____
 Name of the Generating Station: _____

EMPLOYEE COST
FOR THE YEAR

(Rs. in Crores)

S.N	Particulars	Previous Year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
	SALARIES & ALLOW- ANCES					
1	Basic Pay					
2	Dearness Pay					
3	Dearness Allowance					
4	House rent Allowance					
5	Fixed medical allowance					
6	Medical reimbursement charges					
7	Over time payment					
8	Other allowances (detailed list to be attached)					
9	Generation incentive					
10	Bonus					
11	Sub-Total					

	Terminal Benefits					
12	Leave encashment					
13	Gratuity					
14	Commutation of Pension					
15	Workman compensation					
16	Ex- gratia					
17	Sub-Total					
	Pension Payment					
18	Basic Pension					
19	Dearness Pension					
20	Dearness allowance					
21	Any other expenses					
22	Sub-Total					
23	Total (11+17+22)					
24	Amount capitalised					
25	Net amount					
26	Add prior period expenses *					
27	Grand Total					

* Year - wise details of prior period employees cost, if any, may be provided
Note:
 Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Format- 2.

Name of the Licensee: _____

TOTAL NUMBER OF EMPLOYEES

S.N	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Number of employees as on 1st April					
2	Number of employees on deputation / foreign service as on 1st April					
3	Total Number of employees (1+2)					
4	Number of employees retired / retiring during the year					
5	Number of employees at the end of the year (3-4)					

Note: Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Name of the Licensee: _____

EMPLOYEES PRODUCTIVE PARAMETERS

S.N	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Number of consumers in million					
2	Connected load in kW					
3	Line circuit in KM (LT+HT)					
4	Energy sold in MU					
5	Employees per MU of energy sold					
6	Employees per 1000 consumers					
7	Share of employees cost in total expenses					
8	Employees cost in paise / kWh of energy sold					
9	Line circuit KM (EHT Lines)					
10	Employees per KM of EHT line (Transmission related)					
11	Power station installed capacity own generation (MW)					
12	Employees per MW of capacity For generating company					

Note: Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Name of the Licensee: _____

REPAIRS AND MAINTENANCE EXPENSES

(Rs. in Crores)

S.N	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Plant & Machinery					
	-Plant and Apparatus					
	-EHV Sub-stations					
	- 33 kV Sub-stations					
	- 11 kV Sub-stations					
	-Switch gear and cable connections					
	- Others					
	Total					
2	Building					
3	Hydraulic works & Civil Works					
4	Line cable & Network					
	- EHV Lines					
	-33 kV Lines					
	-11 kV Lines					
	-LT Lines					

	-Meters and metering equipment					
	-Others					
	Total					
5	Vehicles					
6	Furniture & Fixtures					
7	Office equipments					
8	Operating expenses					
9	Total					
10	Add / Deduct share of other (To be specified)					
11	Total expenses					
12	Less capitalized					
13	Net expenses					
14	Add prior period *					
15	Total expenses charges to revenue as R&M expenses					

* Year - wise details of these charges may be provided

Note: Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Format - 5

Name of the Licensee: _____

ADMINISTRATION AND GENERAL EXPENSES

(Rs. in Crores)

S.N	Particulars	Previous year (Actuals)	Current Year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Rent, rates & taxes					
2	Insurance					
3	Telephone, postage & Telegrams					
4	Consultancy fees					
5	Technical fees					
6	Other professional charges					
7	Conveyance & travel expenses					
8	Electricity & Water charges					
9	Others					
10	Freight					
11	Other material related expenses					
12	Total expenses					
13	Less Capitalised					
14	Net expenses					
15	Add Prior period*					
16	Total expenses charged to revenue					

* Year-wise details of these charges may be provided.

Note: Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Name of the Licensee: _____

VALUE OF ASSETS AND DEPRECIATION**(Rs. Crores)**

S.No	Name of the Asset	Value of Assets at the beginning of the year	Addition during the year	Withdrawn during the year	Value of Assets at the end of year	Rate of Depreciation (%)	Depreciation charges for the year
1	2	3	4	5	6	7	8

Note: Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Name of the Licensee: _____

DETAILS OF LOANS FOR THE YEAR

(Rs. in lakhs)

S.N	Particulars	Opening balance	Rate of Interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest paid
1	2	3	4	5	6	7	8
1	SLR Bonds						
2	Non SLR Bonds						
3	LIC						
4	REC						
5	Commercial Banks						
6	Bills discounting						
7	Lease rental						
8	PFC						
9	GPF						
10	CSS						
11	Working capital loan						
12	Others (details to be given)						
13	Total						
14	Add State Govt. Loan						
15	Total (13 +14)						
16	Less capitalisation						
17	Net Interest						
18	Add prior period						
19	Total Interest						
20	Finance charges						
21	Total Interest and finance charges						

Note: Separate statement to be furnished for Previous year (Actuals), Current year (Estimated) and each year of 3 year control period.

Name of the Licensee: _____

INTEREST CAPITALISED

(Rs. in lakhs)

S.N.	Interest capitalized	Previous year (Actuals)	Current year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	WIP					
2	GFA at the end of the year					
3	WIP+GFA at the end of the year					
4	Interest (Excluding interest on WCL)					
5	Interest Capitalised					

WIP=Work -in - Progress
GFA=Gross Fixed Assets
WCL=Working Capital Loan

Format- 9

Name of the Licensee: _____

INFORMATION REGARDING RESTRUCTURING OF OUTSTANDING LOANS DURING THE YEAR

(Rs. in lakhs)

S.N	Source of loan	Amount of original loan	Old rate of interest (%)	Amount al-ready restructured	Revised rate of interest (%)	Amount now being re-structured	New rate of interest (%)
1	2	3	4	5	6	7	8

Format- 10

Name of the Licensee: _____

INFORMATION REGARDING REVENUE FROM OTHER BUSINESS

(Rs. in lakhs)

S.N	Particulars	Amount
1	2	3
1	Total Revenue from other business	
2	Income from other business to be considered for licenses business as per regulations	

Format- 11

Name of the Licensee: _____

**INFORMATION REGARDING WORKING CAPITAL FOR THE CURRENT
AND ENSURING YEAR**

(Rs. in lakhs)

S.N	Particulars	Amount
1	2	3
1	Fuel cost	
2	Power Purchase Cost	
3	One month employees cost and adm.& Gen. Expenses	
4	One month R&M Cost	
5	Two Months Receivables	
6	Total	

Format- 12

Name of the Licensee: _____

**INFORMATION REGARDING FOREIGN EXCHANGE RATE VARIATION
(FERV)**

(Rs. in lakhs)

S.N	Particulars	Amount
1	2	3
1	Amount of liability provided	
2	Amount recovered	
3	Amount adjusted	

Format- 13

Name of the Licensee: _____

INFORMATION REGARDING WHOLESALE PRICE INDEX (ALL COMMODITIES)
(TO BE SUPPLIED WITH DOCUMENTARY EVIDENCE)
(to be supplied with documentary evidence)

(Rs. in lakhs)

S.N	Period	WPI	Increase over previous year
1	2	3	4
1	As on April 1 of previous year		
2	As on April 1 of current year		
3	As on April 1 of ensuing year		

Name of the Licensee: _____

Investment Plan (Scheme - wise)**(Rs. in lakhs)**

S.N	Name of Scheme/ Project	Approved Outlay	Previous Year (Actuals)	Current Year	Control Period (Projections)			Progressive Expenditure upto End of control pe- riod
					1 st Year	2 nd Year	3 rd Year	
1	2	3	4	5	6	7	8	9

Note: i) Information for previous year to be given in columns 1 to 4

Note: ii) Information for the current year to be given in columns 1 to 5

iii) Schemes costing Rs. Ten lakhs and above to be shown.

For others lumpsum provision may be indicated.

Format- 15

Name of the Licensee: _____

Investment Plan (Year - wise)

(Rs. in lakhs)

[illegible]

Name of the Licensee: _____

WORKS-IN-PROGRESS

(Rs. in lakhs)

S.N	Particulars	Previous year (Actuals)	Current year (Estimated)	Control Period (Projections)		
				1 st Year	2 nd Year	3 rd Year
1	2	3	4	5	6	7
1	Opening balance					
2	Add: New investments					
3	Total					
4	Less investment capitalised					
5	Closing balance					