# KERALA STATE ELECTRICITY REGULATORY COMMISSION NOTIFICATION

No.2076/F&T/2017/KSERC/

Dated, Thiruvananthapuram 05.10.2018

**Preamble.-** In exercise of the powers conferred under Section 61 read with Section 181 of the Electricity Act, 2003 (Central Act 36 of 2003) and all other powers enabling it in this behalf and after previous publication, the Kerala State Electricity Regulatory Commission hereby makes the following regulations, namely:-

# Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2018

# CHAPTER – I PRELIMINARY

- 1. Short title, commencement, extent and applicability. (1) These Regulations may be called the Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2018.
- (2) These Regulations shall come into force from the date of its publication in the official Gazette of Kerala.
- (3) These Regulations shall extend to the whole of the State of Kerala.
- (4) These Regulations shall be applicable to, -
  - (a) all businesses relating to generation, transmission and distribution of the Kerala State Electricity Board Limited (KSEB Ltd) and its successors;
  - (b) all other generating companies, transmission licensees and distribution licensees, if any;
  - (c) State Load Despatch Centre (SLDC); and
  - (d) the determination of,-
    - (i) tariff for supply of electricity by a generating business/ company to a distribution business/licensee;
    - (ii) tariff for intra-State transmission of electricity;
    - (iii) tariff for intra-State wheeling of electricity;
    - (iv) tariff for retail supply of electricity;
    - (v) surcharge in addition to the charges for wheeling;
    - (vi) additional surcharge on the charges for wheeling; and
    - (vii) fuel surcharge.

- **2. Definitions.** In these Regulations, unless the context otherwise requires,
- (1) "Act" means the Electricity Act, 2003 (Central Act 36 of 2003), as amended from time to time;
- (2) "Aggregate Revenue Requirement" means the annual revenue requirement comprising of allowable expenses and return on equity share capital / return on net fixed assets as the case may be pertaining to the regulated/licensed business of the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre, for recovery through tariffs, in accordance with these Regulations;
- (3) "Allocation Statement" means a statement for each financial year, in respect of generating company or transmission licensee or distribution licensee or each of the separate businesses of the integrated utility, showing the amounts of any common revenue, cost, asset, liability, reserve or provision, which has been either,-
  - (i) charged from or to each such separate business together with a description of the basis of that charge; or
  - (ii) determined by apportionment or allocation between the separate businesses of the regulated entity including the licensed business, together with a description of the basis of the apportionment or allocation;
- (4) "applicant" means the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre who has made a petition for determination of Aggregate Revenue Requirement and tariff in accordance with the Act and these Regulations and includes a generating business/company or transmission business/licensee or distribution business/licensee whose tariff is the subject of determination as a part of the truing-up or a review by the Commission;
- (5) "audited accounts" means Financial Statements as audited by statutory auditors and/or Comptroller and Auditor General as the case may be;
- (6) "auxiliary energy consumption" of a generating station or a generating unit means the quantum of energy consumed by auxiliary equipment of the generating station or generating unit including switchyard of the generating station and the transformer losses within the generating station or generating unit and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the units of that generating station:

Explanation: The auxiliary energy consumption of a generating station or a generating unit shall not include energy consumed by the station's housing colony or such other facilities at the generating station and the energy consumed for new projects at the generating station, which shall be metered separately;

(7) "auxiliary energy consumption" of a transmission sub-station means the quantum of energy consumed by auxiliary equipment of the transmission sub-station and transformer losses within the transmission sub-station and shall be expressed as a percentage of the sum of gross energy injected at the incoming terminals of the transmission substation:

Explanation: The auxiliary energy consumption of a transmission sub-station shall not include energy consumed for supply of electricity to housing colony and such other facilities at the transmission substation and the energy consumed by the station's housing colony or such other facilities at the transmission sub-station, which shall be metered separately;

### (8) "availability",-

- (i) of a thermal generating station for any given period means the average of the daily average declared capacities as certified by State Load Despatch Centre for all the days during that period expressed as a percentage of the installed capacity of the generating station minus normative auxiliary consumption in MW, as specified in these Regulations and shall be computed as provided in Annexure- II to these Regulations;
- (ii) of a transmission system for any given period means the time in hours during that period in which the transmission system is capable of transmitting electricity at its rated voltage, expressed in percentage of the total hours in the given period as certified by SLDC and shall be calculated as provided in Annexure-II to these Regulations;
- (9) "bank rate" means the standard rate notified by the Reserve Bank of India as per Section 49 of the Reserve Bank of India Act, 1934 (Central Act 2 of 1934), at which it is prepared to buy or re-discount bills of exchange or other commercial paper eligible for purchase thereunder;
- (10) "base load" means the average of monthly minimum system load in MW during the financial year of a distribution business/licensee in its area of supply, defined in terms of system demand in MW, or as decided by the Commission from time to time;
- (11) "base rate" means the Marginal Cost of funds based Lending Rate (MCLR) declared by the State Bank of India as applicable on first day of April of respective financial year for a tenor of one year;
- (12) "beneficiary" in relation to a generating station means the person purchasing electricity generated at such generating station and sharing the charges under these Regulations;
- (13) "block" in relation to a combined cycle thermal generating station includes combustion turbine-generator, associated waste heat recovery boiler, connected steam turbine- generator and auxiliaries;

- (14) "capacity charge" means the charges computed as per Regulation 47 and Regulation 48(1) of these Regulations
- (15) "change in law" means the occurrence of any of the following events,-
  - (i) the enactment, bringing into effect, adoption, promulgation, amendment, modification or repeal of any Central or State law; or
  - (ii) change in interpretation of any Central or State law by any authority having competent jurisdiction which is the final authority under law for such interpretation; or
  - (iii) change by any competent statutory authority, in any consent, approval or licence; or
  - (iv) coming into force of or change in any bilateral or multilateral agreement/treaty between the Government of India and any other Sovereign Government having implication for the generating station/business or the transmission system regulated under these Regulations;
- (16) "Collection Efficiency" means payment received against the current demand raised in the bills of the distribution business/licensee, excluding the payment of arrears, as aggregated for a financial year
- (17) "Commission" means the Kerala State Electricity Regulatory Commission;
- (18) "Conduct of Business Regulations" means the Kerala State Electricity Regulatory Commission (Conduct of Business) Regulations, 2003, as amended from time to time;
- (19) "cut-off date" means the thirty first day of March of the financial year after two years of commercial operation of whole or part of the project and in case the whole or part of the project is declared under commercial operation in the last quarter of a financial year, the cut-off date shall be the thirty first day of March of the financial year after three years of commercial operation:

Provided that the cut-off date may be extended by the Commission if it is proved on the basis of documentary evidence that the capitalisation could not be made within the cut-off date for reasons beyond the control of the project developer;

**Illustration**: If the commercial operation of the project is declared before the first day of January, 2016, then the cut-off date shall be the thirty first day of March, 2018. If the commercial operation of the project is declared during January, 2016, i.e., last quarter of financial year 2015-16, then the cut-off date shall be the Thirty first day of March, 2019;

(20) "day" means a day consisting of the period of twenty four hours starting at 00:00 hour;

- (21) "declared capacity" means, the capability of a generating station to deliver ex-bus electricity in MW declared by the generating station in relation to any time-block of the day as defined in the State Grid Code or whole of the day, duly taking into account the availability of fuel or water and subject to further qualification in the relevant provisions in these Regulations;
- (22) "design energy" means the quantum of energy, which can be generated in a ninety percent dependable year with ninety-five percent installed capacity of the hydro-electric generating station;
- (23) "distribution business" means the business of operating and maintaining a distribution system for supplying electricity in the area of supply of the distribution business/licensee;
- (24) "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;
- (25) "escalation rates" means a composite rate used for calculation of escalation based on the Consumer Price Index (CPI) and Wholesale Price Index (WPI) at 70:30 basis respectively for a financial year;
- (26) "expected revenue from tariff and charges" means the revenue estimated to accrue to the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre at the prevailing tariffs;
- (27) "existing generating unit/station or transmission system or distribution system" means a generating unit/station or transmission system or distribution system, which has declared commercial operation on or before the thirty first day of March 2018;
- (28) **Financial Statements. -** The Financial Statements of a licensee or a company shall include the following statements together with notes and such other supporting statements and information as may be required by the Commission from time to time, for each financial year, namely:-
  - (a) balance sheet, prepared in accordance with the relevant provisions of the Companies Act, 2013 (Central Act 18 of 2013), as amended from time to time and as applicable for the respective financial year;
  - (b) profit and loss account, prepared in accordance with the relevant provisions of the Companies Act, 2013(Central Act 18 of 2013), as amended from time to time and as applicable for the respective financial year;
  - (c) cash flow statement, prepared in accordance with the Accounting Standard on cash flow statement (Ind AS-7)of the Accounting Standards Board and notified by the Ministry of Corporate Affairs;
  - (d) report of the statutory auditors;

- (e) cost records of electricity utility as prescribed by the Central Government under the relevant provisions of the Companies Act, 2013 as amended from time to time, for the respective financial year
- (f) in case of licensees or generating entities other than those covered under the Companies Act 1956 or Companies Act 2013, the financial statements prepared as per the provisions of the of law under which they are established.
- (29) "financial year" means a period commencing on the first day of April of a Gregorian calendar year and ending on the thirty first day of March of the subsequent Gregorian calendar year;
- (30) "force majeure" means the event or circumstance or combination of events or circumstances or both, which partly or fully prevents the generating business/company or the transmission business/licensee or distribution business/licensee from completing the project or station within the time specified in the investment approval given by the Commission or for performing its duties and obligations and only if such event or circumstance are not within the control of the generating business/company or the transmission business/licensee or distribution business/licensee and could not have been avoided, had the generating business/company or the transmission business/licensee or distribution business/licensee taken reasonable care or complied with prudent utility practices, including those stated below,-
  - (i)act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
  - (ii) any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action;
- (31) "generating unit" in relation to a hydro-electric generating station means turbine-generator and its auxiliaries and in relation to a thermal generating station, means generator, engine and its auxiliaries;
- (32) "generation business" means the business of production of electricity from a generating station or generating unit for the purpose of giving supply to any beneficiary or enabling supply to be so given;
- (33) "gross calorific value" in relation to a thermal generating station means the heat produced in kilocalories by complete combustion of one kilogram of solid fuel or one litre of liquid fuel or one standard cubic metre of gaseous fuel, as the case may be;
- (34) "gross station heat rate" means the heat energy input in kilocalories required to generate one kilowatt hour of electrical energy at the generator terminals;

- (35) "**infirm power**" means electricity injected into the grid prior to the commercial operation date of a unit of the generating station;
- (36) "**installed capacity**" means the sum of rated capacities of all the units of the generating station or the capacity of the generating station reckoned at the generator terminals as approved by the Commission from time to time:
- (37) "intra-State transmission system (InSTS)" means the system for conveyance of electricity by transmission lines within the area of the State and includes all transmission lines, sub-stations and associated equipment in the State, but excluding assets forming part of inter-State transmission system;
- (38) "**licensee**" means a person who has been granted a licence under Section 14 of the Act and includes a person deemed to be a licensee under Section 14 of the Act:
- (39) "Master Trust" means the Master Trust as defined in the Kerala Electricity Second Transfer (Re-vesting) Scheme, 2013 notified vide G.O(P) No.46/2013/PD dated 31-10-2013;
- (40) "maximum continuous rating" in relation to a generating unit of the thermal generating station means the maximum continuous output at the generator terminals, guaranteed by the manufacturer at rated parameters; and "maximum continuous rating" in relation to a block of a combined cycle thermal 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;
- (41) "new generating unit/station" means a generating unit/station which declared its commercial operation on or after the first day of April 2018;
- (42) "non-tariff income of the regulated business" means income other than those obtained from tariff such as income from wheeling, receipts on account of cross-subsidy surcharge and additional surcharge on charges of wheeling, reactive energy charges, meter rent, rental from electric plants or lines, testing fee, late payment surcharge, prompt payment incentives, recovery from theft and pilferage of energy or such other charges;
- (43) "normative loan" means (a) the amount of actual equity employed more than thirty percent of the approved capital cost excluding grants and/or contribution or (b) in case where actual equity employed is less than thirty percent of the approved capital cost after adjusting adjusting for grants and/or contribution, the balance amount of approved capital cost excluding such equity;
- (44) "operation and maintenance expenses" or "O&M expenses",-
  - (i) in relation to a generating business/company, means the expenditure incurred on operation and maintenance of the

- generating station or generating unit, or part thereof and includes the expenditure on manpower, repairs, spares (excluding capital spares), consumables, insurance costs/premium and administrative and general expenses, but excludes fuel expenses; and
- (ii) in relation to a transmission business/licensee or distribution business/licensee or State Load Despatch Centre means the expenditure incurred on operation and maintenance of the system by the transmission business/licensee or distribution business/ licensee or State Load Despatch Centre respectively and includes the expenditure on manpower, repairs, spares (excluding capital spares), consumables, insurance costs and administrative and general expenses;
- (45) "original project cost" means the capital expenditure incurred by the generating business/company or the transmission business/licensee or distribution business / licensee or State Load Despatch Centre as the case may be, within the original scope of the project up to the cut-off date as approved by the Commission;
- (46) "other business" means any business undertaken by the generation business or the transmission business/licensee under Section 41 of the Act for the optimum utilization of its electricity business assets or by the distribution business/licensee under Section 51 of the Act for the optimum utilization of its electricity business assets, other than the businesses regulated by the Commission;
- (47) "Other income" means income other than those from tariff and non-tariff sources and as enumerated in Regulations 46, 60 and 82;
- (48) "peak load" means the average of monthly maximum system load in MW of a distribution business/licensee in its area of supply during the financial year, defined in terms of system demand in MW, as decided by the Commission from time to time;
- (49) "plant availability factor(PAF)" in relation to a generating station for any given period means the average of the daily declared capacities for all the days as certified by the State Load Despatch Centre during that period expressed as a percentage of the installed capacity in MW, reduced by the normative auxiliary consumption;
- (50) "plant load factor", in relation to a thermal generating station for a given period, means the total energy sent out during such period, expressed as a percentage of energy generated corresponding to installed capacity during that period and shall be computed in accordance with the formula specified in the Annexure-V to these Regulations;
- (51) "**project**" means a generating station or the transmission system or the distribution system, as the case may be before the date of commercial operation and in the case of a hydro-electric generating station it includes all components of generating facility such as penstocks, head and tail works, main and regulating reservoirs, dams and other hydraulic

- works, intake structures, water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;
- (52) "prudence check" means the scrutiny by the Commission on the reasonableness of expenditure incurred or proposed to be incurred, in terms of financing plan, use of efficient technology, cost control, cost and time over-run and such other factors as may be considered appropriate by the Commission for determination of tariff, with a view to ensuring that the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre has been careful and vigilant in its decisions in incurring the expenditure;
- (53) "pumped storage hydro-electric generating station" means a hydro station which generates power through energy stored in the form of water energy, pumped from a lower elevation reservoir to a higher elevation reservoir;
- (54) "rated voltage" means the voltage at which the transmission system or distribution system is designed to operate or any lower voltage at which the line is charged, for the time being, in consultation with the users;
- (55) "**regulated business**" means the electricity business, which is regulated by the Commission in accordance with the Act, Rules and the Regulations made there under;
- (56) "**Regulations**" means Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2018;
- (57) "renewable energy sources" mean the new and renewable electricity generating sources such as wind, solar, biomass, bio-fuel, urban or municipal waste, small, mini and micro hydro-electric sources and include such other sources as approved by the Ministry of New and Renewable Energy, Government of India;
- (58) "**retail supply business**" means the business of sale of electricity by a distribution business/licensee to its consumers in accordance with the terms and conditions of its licence;
- (59) "run-of-the-river generating station" means a hydro-electric generating station, which does not have an upstream pondage;
- (60) "scheduled date of commercial operation" means the date of commercial operation of a generating station or generating unit thereof or transmission system or element thereof, as declared by the generating company/transmission licensee or as indicated in the power purchase agreement or transmission service agreement, as the case may be, whichever is earlier;
- (61) "State Grid Code" means the "Kerala State Electricity Grid Code, 2005" as amended from time to time:

- (62) "State Load Despatch Centre" or "SLDC" means the centre established by the Government of Kerala for the purpose of exercising the powers and discharging the functions under Section 31 of the Act or any such centre carrying out such functions located within the State of Kerala;
- (63) "storage type power station" means a hydro-electric power generating station associated with large storage capacity to enable variation in generation of electricity according to demand;
- (64) "tariff" means the schedule of charges for generation, transmission, wheeling or supply of electricity together with the terms and conditions for application thereof proposed by the licensee or generating company or approved by the appropriate Commission;
- (65) "**time block**" means a continuous block of 15 minutes starting from 00:00 hours, unless the context otherwise requires;
- (66) "transmission business" means the business of establishing or operating transmission system;
- (67) "transmission service agreement" means an agreement, contract, or any such covenant, entered into between the transmission licensee and the user of the transmission service/lines;
- (68) "transmission system" means a transmission line or a group of lines with or without associated sub-stations and includes equipment associated with transmission lines and sub-stations:
- (69) "useful life" in relation to a unit of a generating station, transmission system or distribution system from the date of the commercial operation shall have the same meaning as specified in Annexure-I to these Regulations;
- (70) "user" means a licensee, or a generating company, or a person who has set up a captive generating plant, or a consumer availing open access, utilizing the transmission system of the transmission business/licensee or the distribution system of the distribution business/licensee.

### CHAPTER – II GENERAL PRINCIPLES

- **3. Determination of tariff.-** The Commission shall determine the tariff in accordance with the provisions of the Act and these Regulations for the supply of electricity by a generating business/company to a distribution business/licensee, transmission of electricity, wheeling of electricity, retail sale of electricity, load despatch, and such other charges incidental thereto for the period applicable thereto.
- **4. Prudence check by the Commission.**-The Commission shall conduct prudence check with due diligence while determining the Aggregate Revenue Requirement and the revenue from tariff and charges of a generating business/company, transmission licensee, distribution licensee or State Load Despatch Centre.
- **5. Norms of operation to be the ceiling norms.** -The norms of operation specified under these Regulations are the ceiling norms and this shall not preclude the generating business/company or the transmission business/licensee or the distribution business/licensee and the beneficiaries thereof, as the case may be, from agreeing to improved norms of operation and in case the improved norms are agreed to, such improved norms shall be applicable for the determination of tariff.
- **6.** Adoption of tariff under Section 63 of the Act.- 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, as envisaged under Section 63 of the Act:

Provided that the applicant shall provide such information as the Commission may require to satisfy itself that the guidelines issued by the Central Government have been duly complied with .

- **7. Determination of date of commercial operation.—** (1) The date of commercial operation of a generating station or generating unit or a transmission system or distribution system shall be determined as specified in the following sub-regulations.
- (2) (a) Date of commercial operation, in relation to a generating unit of hydro-electric generating station shall be the date declared by the generating company from 00:00 hour in accordance with the scheduling process specified in the State Grid Code; 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;

- (b) Where the beneficiaries have entered into an agreement for purchase of power from a generating station the demonstration of peaking capability corresponding to installed capacity of the generating station through a successful trial run shall commence after a notice of seven days by the generating company to the beneficiaries and scheduling shall commence from 00:00 hour after completion of trial run;
- (c) Where the beneficiaries have entered into an agreement for purchase of power from a generating station, the scheduling process for a generating unit of the generating station shall commence after a notice of seven days by the generating company to the beneficiaries and scheduling shall commence from 00:00 hour after completion of successful trial run;
- (d)The generating company shall certify to the effect that the generating station/unit meets the provisions relating to the technical standards as specified in the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010, Central Electricity Authority(Measures relating to safety and Electric supply) Regulations 2010, the Indian Electricity Grid Code and State Grid Code;
- (e) The certificate shall be signed by the Chief Executive Officer of the company in the format specified at Annexure-III (a) and a copy of the certificate shall be submitted to the State Load Despatch Centre before declaring the date of commercial operation;
- (f) In case a hydro-electric generating station with pondage or storage is not able to demonstrate peaking capability corresponding to the installed capacity for the reasons of insufficient reservoir or pond level, the date of commercial operation of the last unit of the generating station shall be considered as the date of commercial operation of the generating station as a whole and it will be mandatory for such hydro-electric 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;
- (g) If a run-of-the-river hydro-electric generating station or a generating unit thereof declares commercial operation during periods of lean inflow, when the water inflow is insufficient for such demonstration of peaking capability, it shall be mandatory for such hydro-electric generating station or generating unit to demonstrate peaking capability equivalent to installed capacity as and when sufficient water inflow is available.
- (3) (a) Date of commercial operation, in relation to a unit of the thermal generating station shall be 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, if any and in the case of the generating station as a whole, the date of commercial operation of the last generating unit of the generating station;

- (b) Where the beneficiaries have entered into an agreement for the purchase of power from the generating station, the trial run shall commence after seven days notice by the generating company to the beneficiaries and scheduling shall commence from 00:00 hour of the day after completion of the successful trial run;
- (c) The generating company shall certify to the effect that the generating station meets the provisions of the technical standards as specified in the Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010, the Indian Electricity Grid Code and in the State Grid Code;
- (d) The certificate shall be signed by the Chief Executive Officer of the company in the format specified at Annexure-III (b) and a copy of the certificate shall be submitted to the State Load Despatch Centre before declaring the date of commercial operation;
- (4) (a) Date of commercial operation, in relation to a transmission system shall be the date declared by the transmission licensee from 00:00 hour of the day on which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from the sending end to the receiving end:
- (b) Where the transmission line or substation is dedicated for evacuation of power from a particular generating station, the generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate implementation agreement:
- (c) In case a transmission system or an element thereof is prevented from regular service for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system, the transmission licensee shall approach the Commission through an appropriate petition for approval of the date of commercial operation of such transmission system or an element thereof;
- (5) Date of commercial operation, in relation to a distribution system shall be the date of charging the electric line or substation of a distribution licensee to its rated voltage level or seven days after the date on which it is declared ready for charging by the distribution licensee, but not able to charge for reasons not attributable to its suppliers or contractors:
- (6) The date of commercial operation shall not be a date prior to the scheduled date of commercial operation mentioned in the power purchase agreement or the implementation agreement or the transmission service agreement or wheeling agreement, as the case may be, unless mutually agreed to by all the parties to such agreement.

#### **CHAPTER - III**

#### **MULTI-YEAR TARIFF PRINCIPLES**

- **8. Multi-year tariff (MYT) framework. –** (1) The multi-year tariff framework under these Regulations shall be applicable for determination of tariff for a generating business/company, transmission business/licensee, distribution business/licensee and the State Load Despatch Centre.
- (2) The multi-year tariff framework for the generating business/company, transmission business/licensee, distribution business/licensee and State Load Despatch Centre shall, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges, be based on the following elements:
- (a) Forecast of Aggregate Revenue Requirement (ARR) for the Control Period along with the expected revenue from existing and proposed tariffs and charges separately for each year of the Control Period;
- (b) Truing up of expenses and revenue of the respective year based on audited accounts of the business/licensee vis-à-vis the Commission approved forecast and variation caused by controllable factors and uncontrollable factors, as specified in Regulation 15 of these Regulations;
- (c) The mechanism for pass-through of approved gains or losses on account of uncontrollable factors as specified by the Commission in Regulation 13 of these Regulations;
- (d) The mechanism for sharing of approved gains arising out of controllable factors as specified by the Commission in Regulation 14 of these Regulations;
- (e) Approval of the Aggregate Revenue Requirement of the business/licensee by the Commission for the Control Period along with the determination of tariff for each year of the Control Period;
- (f) Mid-term Performance Review (MPR) in the year 2019-20 which shall comprise the truing up of the year 2018-19 and annual performance review upto September 2019 on account of uncontrollable parameters and for the variations in performance on account of controllable parameters for the Control Period vis-à-vis the ARR approved for the Control Period and the revised forecast for the years 2020-21 and 2021-22 on account of un anticipated variations if any on controllable and uncontrollable parameters;
- **9. Control Period. –** (1) The Control Period is the period for which the principle and norms specified under these Regulations shall be applicable.
- (2) The Control Period shall be a block of four financial years starting from the First day of April, 2018 and ending on the Thirty First day of March 2022.

Provided that the Commission may if considered necessary, through an Order extend the validity of these Regulations beyond the Thirty First day of March 2022 to such period or periods as deemed appropriate

- **10.** Filing under multi-year tariff (MYT) framework. (1) Every generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre shall file, on or before the thirty first day of October 2018, the following petitions for the Control Period:
- a) Petition for approval of Aggregate Revenue Requirement and determination of tariff for each year of the Control Period
- b) Petition for truing up of Aggregate Revenue Requirement for the financial years till 2016-17:

Provided that the truing up for the respective financial years shall be carried out under the relevant Regulations applicable to the respective years.

Provided further that every generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre shall on or before the first day of January, 2019 file the petition for Truing up of Aggregate Revenue Requirement for the financial year 2017-18 and shall file on or before the Thirtieth day of November of every subsequent financial years during the Control Period, the petition for Truing up of Aggregate Revenue Requirement for the financial years subsequent to 2017-18.

- (2) Every generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre shall file, on or before the Thirtieth day of November 2019, the Mid-term Performance Review (MPR) which shall comprise the truing up for the financial year upto 2018-19 and mid year performance review for the year 2019-20 and the revised forecast for the year 2020-21 and 2021-22 on account of unexpected variations if any on controllable and uncontrollable parameters;
- (3) All petitions shall be filed in the manner as specified in the Kerala State Electricity Regulatory Commission (Conduct of Business) Regulations, 2003, as amended from time to time.
- (4) The applicant shall submit the forecast of Aggregate Revenue Requirement and proposal for revision of tariff, if required, for the financial year or years in this Control Period, in such manner and within such time limit as specified in these Regulations
- (5) The formats for furnishing information for calculating expected revenue and expenditure and for determining tariff shall be as per Annexure-XII to these Regulations.

- (6) The applicant shall provide all details supporting the forecast, including but not limited to the details of past performance, proposed initiatives for achieving efficiency or productivity gains, technical studies, contractual arrangements and/or secondary research and such other details as required by the Commission, to enable it to assess the reasonableness of the forecast.
- (7) The applicant shall prepare the Aggregate Revenue Requirement based on the actuals and reasonably forecast the individual variables that constitute the Aggregate Revenue Requirement during the Control Period.
- (8) The applicant shall prepare the forecast of expected revenue from existing tariff and charges based on the following:-
- (a) In the case of generating business/company, the generation capacity allocated to distribution business/licensees and expected electricity generation by each unit/station for each financial year of the Control Period;
- (b) In the case of transmission business/licensee, the transmission capacity allocated to users of the transmission system and energy expected to be transmitted for each financial year of the Control Period;
- (c) In the case of distribution business/licensee, the contracted demand and the quantum of electricity to be supplied to consumers and to be wheeled on behalf of users of the distribution system for each financial year of the Control Period;
- (d) Prevailing tariffs and charges as on the date of preferring the petition.
- (9) Based on the forecast of Aggregate Revenue Requirement and expected revenue from the existing tariff and charges, the generating business/company or transmission business/licensee or distribution business/licensee shall submit the sources for meeting the revenue gap if any including efficiency gains, tariff increase or any other means, with complete details of such measures, in the Aggregate Revenue Requirement.
- (10) The Petition shall include among other things the following:-
  - (a) A statement of the existing Schedule of Tariff and Terms and conditions of Tariff and expected revenue from the existing tariff and charges for each of the year of the Control Period
  - (b) If any revision in tariff is proposed, a statement of the proposed schedule of tariff and terms and conditions of tariff and expected revenue from the proposed tariff and charges for the relevant year of the Control Period:
  - (c) A statement showing the full details of subsidy received, or due from the State Government, if any, the consumer to whom it pertains and

- showing how the subsidy is reflected in the existing and proposed tariff applicable to those consumers;
- (d) A statement of the estimated change in annual revenues that would result from the proposed changes in tariff for the period for which they are to be implemented;
- (e) The audited Financial Statements for the financial year 2016-17 and in case the audited Financial Statements for the financial year 2016-17 are not available, the audited Financial Statements for the financial year 2015-16 along with the unaudited Financial Statements for the financial year 2016-17:

Provided that separate audited Financial Statements shall be submitted by the applicant for each separate regulated business units (ie., generation, transmission and distribution business and State Load Despatch Centre)

- (f) In the case of distribution business/licensee, if the proposed tariff is to be introduced after the commencement of a financial year, a statement of the proportion of revenue expected and quantities of electricity supplied under each periods of the proposed tariff modification including the remaining months of the financial year shall be included;
- (g) A statement showing calculations of the amount of cross subsidy in the existing tariff and in the proposed changes in tariff in respect of each category of consumer;
- (h) An explanatory note giving the rationale for the proposed tariff changes;
- (i) If the transmission business/licensee or distribution business / licensee is engaged in any other business, as specified under Regulations 61 and 83; the transmission business/licensee or distribution business/licensee shall submit the following information:
  - (i) Name and description of all other businesses that the licensee is engaged in;
  - (ii) For each such other business, amount of revenue generated in the financial year 2017-18, estimates for the financial year 2018-19 and projections for the rest of the Control Period;
  - (iii) Assets and resources of the licensed business used by the licensee, to generate the above revenue;
  - (iv) Expenses incurred to generate the above revenue, separately for each business:

- (v) Proportion of such expenses included in the Aggregate Revenue Requirement of the licensee, if any, basis of apportionment and justification for the basis of apportionment.
- (j) Any other information, as required by the Commission.
- (11) If a person holds more than one licence, he shall submit separate details as above in respect of each of the licences.
- (12) In the case of a licensee having more than one area of supply, it shall submit separate details for each area of supply.
- (13) The generating business/ company shall submit generation station-wise details, except for small hydro-electric generating stations, in whose case it may be combined.
- (14) In case the distribution licensee owns and operates a generating station, it shall maintain and submit separate accounts of generation, its licensed business and other businesses
- (15) The tariff determined for a particular financial year shall remain applicable only till the end of such financial year, unless the Commission approves the continuation of such tariff for subsequent periods.
- (16) Digitally signed electronic copy of the petition for approval of Aggregate Revenue Requirement and determination of tariff as well as financial models with linkages in spreadsheet shall also be submitted along with the petition to the Commission.
- (17) If any licensee has more than one business, the common expenses relating to such businesses shall be apportioned among the businesses on appropriate basis and full justification shall be given in writing along with the petition.
- (18) In case the generation business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre does not file the petition under these Regulations within one month of stipulated date, the Commission may, on its own initiate proceedings under Section 142 of the Act.
- **11. Specific trajectory for certain variables.** –The Commission may stipulate trajectories for certain variables such as transmission losses, supply availability, distribution losses or collection efficiency over the Control Period, while issuing orders on the petition for approval of the Aggregate Revenue Requirement and determination of tariff, in addition to the norms specified in these Regulations.
- **12. Uncontrollable and Controllable factors. –** (1) For the purpose of these Regulations, the term "uncontrollable factors" shall include the following

factors which are beyond the control of and cannot be mitigated by the applicant, as determined by the Commission,-

- (i) force majeure events;
- (ii) change in law, judicial pronouncements and orders of the Central Government, the Kerala State Government or the Commission;
- (iii) economy wide influences such as unforeseen changes in inflation rate, taxes and statutory levies;
- (iv) variation in prices of coal, oil and all primary/secondary fuel;
- (v) variation in the cost of power purchase due to additional short-term power purchase for some special circumstances specified in Regulation 77;
- (vi) taxes on income;
- (vii) variation in interest rates;
- (viii) variation in number of consumers or mix of consumers or quantities of electricity supplied to the consumers.
- (2) The controllable factors include, but are not limited to, the following:-
  - variations in capital expenditure on account of time and/or cost overruns/ inefficiencies in the implementation of a project not approved by the Commission in the scope of such project, change in statutory levies or due to *force majeure* events;
  - (ii) capital cost over-run due to delay by equipment supplier;
  - (iii) variations in capital expenditure on account of time and/or cost over-runs on account of land acquisition issues;
  - (iv) gross station heat rate;
  - (v) secondary fuel oil consumption;
  - (vi) auxiliary energy consumption;
  - (vii) operation and maintenance expenses;
  - (viii) variation in supply availability;
  - (ix) variation in performance parameters;
  - (x) variation in distribution loss:
  - (xi) variation in collection efficiency:
  - (xii) provision for bad debts.
- **13.** Mechanism for pass through of gains or losses on account of uncontrollable factors. (1)The aggregate gain or loss to the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre, as approved by the Commission during the truing up process, on account of uncontrollable factors shall be adjusted through tariff of the generating business/company or transmission business/licensee or distribution business/licensee over such period as may be stipulated in the order of the Commission passed under these Regulations.

- (2) The generating business/company or transmission business/licensee or distribution business/licensee shall submit details of the variation between expenses incurred and revenue earned and the figures approved by the Commission, in the format specified in Annexure XII, along with the detailed computations and supporting documents as may be required for verification by the Commission.
- (3) Nothing contained in this Regulation shall apply in respect of any gain or loss arising out of variation in the cost of fuel for the generation of electricity in the generating stations owned by the distribution business/licensee and of variation in the power purchase cost on account of change in cost of fuel, which shall be dealt with as specified in sub-regulation (3) of Regulation 48 and Regulation 86 of these Regulations.
- **14. Mechanism** for sharing of gains or losses on account of controllable factors. (1) The aggregate gain to the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre, as approved by the Commission, 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 to consumers as a rebate in tariffs;
- (b) the remaining two-third of the amount of such gain, may be utilised at the discretion of the generating business/company or transmission business/licensee or distribution business/licensee:

Provided that the net gain or loss to the generating business/company on account of normative operational parameters specified in sub-regulations (5), (6), (7), (8), and (9) of Regulation 42 shall be shared as specified in Regulation 40 of these Regulations.

- (2) The aggregate loss to the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre, as approved by the Commission, on account of controllable factors shall be borne by such generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre and shall not be passed on to the consumers in any manner.
- (3) Expenses relating to pay revision, if any, during the control period for the same level of employees as admitted in the truing up of accounts for the year 2016-17 of the Generation business/company or Transmission business/licensee or distribution business/licensee may be considered for pass through after due prudence check
- **15.** Truing up of Aggregate Revenue Requirement and expected revenue from tariff and charges. (1) The Aggregate Revenue Requirement and expected revenue from tariff and charges of a generating

business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre shall be subject to truing up of expenses and revenue in accordance with the provisions in this Regulation.

(2) The generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre shall file a petition for truing up the Aggregate Revenue Requirement and expected revenue from tariff and charges of the financial years till 2017-18, within the time limit specified in these Regulations:

Provided that the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre, as the case may be, shall submit to the Commission, the information for the respective year and for the previous year in such form as specified in Annexure-XII *mutatis mutandis*, together with the audited accounts and such other details as the Commission may require to assess the reasons for and the extent of variation in financial performance if any, from the Aggregate Revenue Requirement and expected revenue from tariff and charges as approved by the Commission:

Provided further that the petition for truing up shall be with reference to figures approved for the respective financial years.

- (3) The truing up shall be a comparison after prudence check, of the financial and operational performance of the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre with the approved forecast of Aggregate Revenue Requirement and expected revenue from charges and operational performance, which shall comprise of the following steps:-
  - (a) comparison of the performance of the applicant with the corresponding figures approved by the Commission,;
  - (b) computation of the gains and losses on account of controllable and uncontrollable factors for the relevant financial year;
  - (c) review of compliance with the directives issued by the Commission from time to time; and
  - (d) other relevant details, if any and
  - (e) the Order of the Commission relating to adjustment of the resultant revenue gap/surplus
- (4) The order issued by the Commission on truing up shall comprise of,-
  - (a) the aggregate gain or loss to the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre on account of controllable factors, as approved by the Commission and the amount of such gains or

- such losses that may be shared in accordance with Regulation 14 of these Regulations;
- (b) components of cost pertaining to the uncontrollable factors as approved by the Commission, which were not recovered and hence have to be approved for recovery through tariffs as per Regulation 13 of these Regulations;
- (c) the revenue gap or revenue surplus if any after truing up is to be carried forward to the Aggregate Revenue Requirements of subsequent financial years as decided by the Commission.

# CHAPTER – IV PROCEDURE FOR DETERMINATION OF TARIFF

- **16. Petition for determination of tariff.-.** A petition for determination of tariff shall be made in such form and in such manner as specified in these Regulations and accompanied by such fees as specified by the Commission.
- **17. Determination of generation tariff. –** (1) The Commission shall determine the tariff for supply of electricity by the generating business/company to the distribution business/licensee, in accordance with the terms and conditions contained in Chapter VI of these Regulations.
- (2) In the case of existing generating stations,-
- (a) where the Commission has, at any time prior to the date of coming into effect of these Regulations, approved a power purchase agreement or arrangement between a generating business/company or a licensee and a distribution business/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 business/company to the distribution business/licensee shall be in accordance with such agreement / arrangement and for such period as approved or adopted by the Commission or the tariff mentioned in such power purchase agreement, as the case may be;
- (b) where, as on the date of coming into effect of these Regulations, the power purchase agreement or arrangement between a generating business/company or a licensee and a distribution business/licensee for supply of electricity has not been approved by the Commission or the tariff contained therein has not been adopted by the Commission under Section 63 of the Act or where there is no power purchase agreement or arrangement, the supply of electricity by such generating business/company to such distribution business/licensee after the date of coming into effect of these Regulations, shall be in accordance with the power purchase agreement or arrangement to be approved by the Commission:
- (c) a petition for approval of such power purchase agreement or arrangement shall be made by the distribution business/licensee to the Commission within a period of three months from the date of notification of these Regulations:
- (d) the supply of electricity shall be allowed to continue under the present agreement or arrangement, until such time as the Commission approves such power purchase agreement or arrangement and shall be discontinued forthwith by the distribution licensee if the Commission rejects

the petition for approval of such power purchase agreement or arrangement, for reasons to be recorded in writing:

Provided that as on the date of coming into force of these Regulations, in the case of purchase of power based on central allocation of generation capacity of central generating stations to the State or in the case of purchase of power from generating stations/units at tariffs approved by Central Electricity Regulatory Commission though not under the central allocation of generation capacity to the State or in the case of purchase of power from generating stations/units at tariffs approved by other State Electricity Regulatory Commissions, separate approval of the Commission for the power purchase agreement or arrangement shall not be required till the expiry of the period of the such agreement or arrangement. Any modification or extension of such arrangement or agreement during the period or on the expiry of the period of its validity, separate approval of the Commission is necessary for such agreement or arrangement.

- (3) In the case of new generating stations or a new arrangement or a new source of power, for the supply of electricity to the distribution business/licensee, the tariff for such supply shall be in accordance with the power purchase agreement or arrangement to be approved by the Commission.
- (4) In the case of the generating stations owned by the distribution licensee,-
- (a) the transfer price at which electricity is supplied by the generation business to its distribution business shall be determined by the Commission
- (b) the distribution business/licensee shall maintain separate accounts and records pertaining to their 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 capital employed in such business
- (c) the distribution business/licensee shall submit, a petition for determination of tariff, furnishing the information required under chapter VI of these Regulations relating to its generation business, if any.
- 18. Determination of tariff for transmission business/licensee, distribution business/licensee and State Load Despatch Centre charges.—(1) The Commission shall determine the tariff for the transmission business/licensee, distribution business/licensee and the State Load Despatch Centre charges based on a petition made by the respective business/licensee and the State Load Despatch Centre in accordance with the procedure specified in these Regulations.

- (2) The Commission shall determine the tariff for:-
- (a) transmission business/licensee, in accordance with the terms and conditions specified in chapter VII of these Regulations;
- (b) distribution business/licensee, in accordance with the terms and conditions specified in chapter IX of these Regulations; and
- (c) State Load Despatch Centre charges in accordance with the terms and conditions specified in chapter VIII of these Regulations.
- (3) The applicant shall provide, along with the petition to the Commission, such forms as specified in Annexure-XII to these Regulations, containing full details of the calculation of the Aggregate Revenue Requirement and expected revenue from tariff and charges pursuant to the terms of his licence and thereafter shall submit such further information or particulars or documents as the Commission may reasonably require to verify such calculations.
- (4) Wherever necessary, the petition shall be accompanied by a detailed proposal including but not limited to revision of tariff for bridging the revenue gap in any financial year of the Control Period or gap or surplus if any arising out of the truing up of accounts
- (5) The Commission may, from time to time, stipulate additional/alternative formats for the submission of details by the applicant, as it may reasonably require for assessing the Aggregate Revenue Requirement, truing up of accounts and for determining the tariff.
- 19. Procedure for admission of petition, publishing of notice, filing of suggestions and objections and hearing.— Upon receipt of a complete petition accompanied by all requisite information, particulars and documents in compliance with all the requirements specified in these Regulations, the Commission shall thereafter, subject to exigencies and practicability follow, the procedure specified in the Kerala State Electricity Regulatory Commission (Conduct of Business) Regulations, 2003 for publication and hearing of the petition before passing the orders thereon.
- **20.** Orders on the petition. (1) The Commission shall, within one hundred and twenty days from the date of admission of a complete petition and after considering all suggestions and objections received from all the stakeholders including the public,-
  - issue an order accepting the petition with such modifications or such conditions as may be specified in that order;

or

(b) reject the petition for reasons to be recorded in writing, if such petition is not in accordance with the provisions of the Act and the rules and Regulations made thereunder or the provisions of any other law for the time being in force;

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

- (2) The tariffs if any determined by such an order shall be in 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 stipulated therein.
- **21.** Adherence to tariff order.—(1) No tariff or part of any tariff may ordinarily be amended more frequently than once in any financial year, except in the manner as specified in Regulation 86 of these Regulations..
- (2) If the generating business/company or transmission business/licensee or distribution business/licensee recovers a price or charge exceeding the tariff determined in accordance with these Regulations, under Section 62 of the Act the excess amount so collected shall be payable back to the person who has paid such price or charge, along with interest equivalent to the bank rate and without prejudice to any other liability incurred by such generating business/company or transmission business/licensee or distribution business/licensee.
- (3) The generating business/company or transmission business/licensee or distribution business/licensee shall submit quarterly returns, containing data relating to operational and financial details in respect of such tariff to enable the Commission to monitor the implementation of its Order.

# CHAPTER - V FINANCIAL PRINCIPLES

- **22.** Capital cost and capital structure. (1) In the case of existing generating units/station or transmission system or distribution system, the capital cost approved by the Commission prior to the First day of April 2018, including additional capitalisation if any and the expenditure projected for the respective financial years of the Control Period, shall form the basis for determination of tariff.
- (2) Capital cost for a project shall include,-
  - (a) the expenditure incurred or projected to be incurred during the Control Period, including the borrowing cost and any gain or loss on account of foreign exchange rate variation on the loan if any during construction up to the date of commercial operation of the project, as approved by the Commission after prudence check;
  - (b) capitalised initial spares subject to the ceiling rates specified in Annexure –VI as may be revised by the Commission from time to time; and
  - (c) additional capitalisation determined under Regulation 23:

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

- (3) The capital cost approved by the Commission after prudence check shall form the basis for determination of tariff.
- (4) If sufficient justification is provided by the generation business/company, transmission business/licensee or the distribution business/licensee for any escalation in the capital cost, the same may be considered by the Commission subject to prudence check:

Provided that in case the actual capital cost is lower than the capital cost approved by the Commission, then the actual capital cost shall be considered for determination of tariff of the generating business/company or transmission business/licensee or distribution business/licensee.

- (5) Where power purchase agreement or Transmission Service Agreement provides for a ceiling of capital cost, the capital cost to be considered for determination of tariff shall not exceed such ceiling.
- (6) The capital cost may include capitalised initial spares as a percentage of the cost of plant and machinery upto cut-off date, subject to the ceiling norms specified in Annexure-VI, as may be revised by the Commission from time to time

Provided that where the generating station has any transmission equipment forming its part, the ceiling norms for initial spares for such equipment shall be as per the ceiling norms specified for transmission system under these Regulations:

Provided further that once the transmission system has commenced commercial operation, the cost of initial spares shall, at the time of truing up, be restricted on the basis of the cost of plant and machinery corresponding to the transmission project:

Provided also that for the purpose of computing the cost of initial spares, the cost of plant and machinery shall be considered as project cost as on the cut-off date excluding interest during construction, cost of land and cost of civil works.

(7) Any expenditure on replacement, renovation and modernization or extension of life of old fixed assets, as applicable to generating business/company, transmission business/licensee and distribution business/licensee, shall be considered after writing off the net value of such old fixed assets from the original capital cost and shall be calculated as follows:

Net Value of Replaced Assets = OCRA - (AD + CC);

Where,

OCRA =original capital cost of replaced assets;

AD =accumulated depreciation pertaining to the replaced assets;

CC =total consumer contribution pertaining to the replaced assets if any:

- **23. Additional capitalization. –** (1) The Commission may, subject to prudence check, approve the capital expenditure actually incurred after the date of commercial operation and up to the cut-off date, on the following counts, provided such expenditure is duly audited and is within the original scope of work,-
  - (i) due to un-discharged liabilities;
  - (ii) on approved works deferred for execution;
  - (iii) to meet any award of arbitration or compliance of final and unappealable order or decree of a court;
  - (iv) on account of any change in law;
  - (v) on procurement of initial spares included in the original project costs subject to the ceiling norm laid down in Annexure-VI to these Regulations;
  - (vi) 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.

- (2) The details of the work included in the original scope of work and the estimates of expenditure shall be submitted for approval of additional capitalization along with the petition for tariff.
- (3) All particulars of the un-discharged liabilities and works deferred for execution shall be submitted with detailed justification for the deferment along with the petition for final tariff after the date of commercial operation of the generating unit/station or transmission system or distribution system:
- (4) The assets forming part of the project cost but not put to use, shall not be approved for determination of tariff.

#### Note 1

Any expenditure approved on account of un-discharged liabilities within the original scope of work and the expenditure deferred on technoeconomic grounds but falling within the original scope of work shall be serviced in the debt: equity ratio specified in Regulation 26.

#### Note 2

Any expenditure approved by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced in the same debt: equity ratio as specified in Regulation 26.

#### Note 3

Any expenditure approved by the Commission for determination of tariff on renovation, modernization, life extension or restoration of assets damaged due to natural calamities shall be serviced in the debt-equity ratio specified in Regulation 26 after writing off the original amount of the original assets from the original cost.

- (5) Impact of additional capitalization on tariff, if any, shall be considered at the time of truing up for each financial year.
- **24. Interest during construction (IDC).**–(1) Interest during construction shall be computed corresponding to the loan from the date of infusion of debt funds or when the actual work has been commenced whichever is later and after taking into account the prudent phasing of funds upto the scheduled date of commercial operation.
- (2) In the case of additional liability on account of interest during construction due to delay in achieving the commercial operation within the scheduled date, the generating business/company or the transmission business/licensee or the distribution business/licensee shall be required to furnish detailed justification with supporting documents for such delay including the details regarding prudent phasing of funds.
- (3) If the delay is not attributable to the generating business/company or the transmission business/licensee or the distribution business/licensee and is

due to uncontrollable factors as specified in Regulation 13 of these Regulations, interest during construction may be allowed after due prudence check.

- (4) Interest during construction on the actual loan may be allowed beyond the date of commercial operation, only if the delay is found to be beyond the control of the generating business/company or the transmission business/licensee or the distribution business/licensee, after taking into account the prudent phasing of funds and after prudence check.
- 25. Consumer contribution, deposit work, capital subsidy or grant. -
- (1) Works of the following nature carried out by the generation business/company, transmission business/licensee or distribution business/licensee shall be classified under the categories of consumer contribution, deposit work, capital subsidy or grant,-
- (a) capital works undertaken after obtaining a part or all of the funds from the users/consumers:
- (b) capital works undertaken by utilising capital subsidies or grants received from the State and/or Central Governments or any other sources;
- (c) any other capital subsidy or grant of similar nature received without any obligation to return the same and with no interest costs attached to such subvention.
- (2) The expenses on such capital assets created out of contribution or grants or deposit works or capital subsidy shall be treated as follows:-
  - (a) O&M expenses as specified in these Regulations shall be allowed;
- (b) provisions for depreciation, as specified in Regulation 27, shall not be allowed to the extent of financial support provided through consumer contribution, deposit work, capital subsidy or grant; and
- (c) provisions related to return on equity share capital or net fixed assets as applicable, as per Regulation 28 shall not be allowed to the extent of financial support provided through consumer contribution, deposit work, capital subsidy or grant.
- **26. Debt-equity ratio.**–(1) For the purpose of determination of tariff, debt-equity ratio as on the date of commercial operation in the case of a new generating station, transmission line and distribution line or substation commissioned or capacity expanded on or after the First day of April 2018, shall be 70:30 of the capital cost approved by the Commission:

Provided that the debt-equity ratio shall be applied only to the balance of such approved capital cost after deducting the financial support provided through consumer contribution, deposit work, capital subsidy or grant, if any.

(2) Where equity employed is more than thirty percent of the approved capital cost, the amount of equity for the purpose of tariff shall be limited to thirty percent and the balance amount shall be considered as normative loan

and interest on the same may be allowed at the weighted average rate of interest of the actual loan portfolio.

- (3) Where actual equity employed is less than thirty percent of the capital cost, the actual equity shall be considered and the balance of the Commission approved capital cost after adjusting for grants and/or contribution shall be treated as normative loan.
- (4) If any fixed asset is capitalised on account of capital expenditure incurred prior to the First day of April, 2018, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending the Thirty First day of March, 2018 shall be considered.
- (5) The equity invested in foreign currency if any shall be designated in equivalent Indian rupees at the exchange rate specified by Reserve Bank of India as on the date of each such investment.
- (6) In the case of retirement or replacement of assets, the equity capital approved as mentioned above, shall be reduced to the extent of thirty percent or actual equity component based on documentary evidence, if it is lower than thirty percent of the original cost of the retired or replaced asset.
- (7) (a) Swapping of foreign currency loans shall be permitted provided it does not have the effect of increasing the tariff;
- (b) Cost of swapping and interest expenses thereon, shall be allowed by the Commission only after prudence check;
- (c) The generating business/company or transmission business/licensee or distribution business/licensee shall provide full particulars of the swapped loans.
- (8) (a) Restructuring of capital in terms of relative share of equity and loan shall be permitted during the life of the project provided it does not have the effect of increasing the tariff.
- (b) Any benefit from such restructuring shall be shared in the ratio 1:1 among,-
  - (i) the generating business/company and the persons sharing the capacity charge; or
  - (ii) transmission business/licensee and long-term intra-State open access customers including distribution business/licensee; or
  - (iii) distribution business/licensee and consumers.
- **27. Depreciation.** (1) The value base for the purpose of depreciation shall be the original capital cost of the asset as approved by the Commission:

Provided that no depreciation shall be allowed on increase in the value of assets on account of revaluation of assets.

Provided further that depreciation shall not be allowed on assets funded through consumer contribution, deposit works, capital subsidies and grants.

- (2) The generation business/company or transmission business/licensee or distribution business/licensee shall be permitted to recover depreciation on the value of fixed assets used in their respective business, computed in the following manner:-
- (a) depreciation shall be computed annually based on the straight line method at the rates specified in the Annexure-I to these Regulations for the first twelve financial years from the date of commercial operation;
- (b) the remaining depreciable value as on the Thirty First day of March of the financial year ending after a period of twelve financial years from the date of commercial operation shall be spread over the balance useful life of the assets as specified in Annexure- I;
- (c) the generating business/company or transmission business / licensee or distribution business/licensee, shall submit all such details and documentary evidence, as may be required under these Regulations and as may be required by the Commission from time to time, to substantiate the above claims:
- (d) the salvage value of the asset shall be ten per cent of the allowable capital cost as approved by the Commission excluding cost of assets created out of contributions and grants and depreciation shall be a maximum of ninety per cent of such approved capital cost of the asset.
- (3) In the case of existing assets, the balance depreciable value as on the First day of April, 2018, shall be worked out by deducting the cumulative depreciation approved by the Commission upto the Thirty First day of March, 2018, from the gross depreciable value of the assets.
- (4) Depreciation shall be chargeable from the first financial year of commercial operation:

Provided that in the case of commercial operation of the asset for part of the financial year, depreciation shall be charged on pro-rata basis:

Provided further that depreciation shall be re-calculated for assets capitalised during the financial year at the time of truing up, based on documentary evidence for capitalisation of assets submitted by the applicant, subject to the prudence check of the Commission, in such a way that the depreciation is calculated proportionately from the date of capitalisation.

(5) In case a single tariff needs to be determined for all the units of the generating station, the depreciation shall be computed from the effective date

of commercial operation of each of the unit taking into consideration the depreciation of individual generating units thereof.

**28.** Return on Equity Share capital or Net Fixed Assets. – (1) Return on equity shall be computed in rupee terms, on the paid up equity share capital determined in accordance with the Regulation 26 and shall be allowed at the rate of fourteen percent for generating business/companies, transmission business/licensee, distribution business/licensee and State Load Despatch Centre:

Provided that, at the time of approving Aggregate Revenue Requirements return on equity share capital for generating business/company, transmission business/licensee, distribution business/licensee and State Load Despatch Centre, shall be allowed on the amount of equity share capital approved by the Commission for the assets put to use at the commencement of the financial year and on fifty percent of equity share capital portion of the approved capital cost for the investment put to use during the financial year:

Provided further that at the time of truing up for the generating business/company, transmission business/licensee, distribution business/licensee and State Load Despatch Centre, return on equity share shall be allowed on monthly pro-rata basis, taking into consideration the documentary evidence provided for the assets put to use during the financial year.

Provided also that if the equity or any portion of it, is invested in the generating business/company, transmission business /licensee or distribution business/licensee is part of the scheme or programme funded by the Central Government or State Government for which no return is payable, such portion of the equity shall not be eligible for any form of return.

(2) If there is no equity invested in the business or equity invested in the regulated business of the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre is not clearly identifiable, return at the rate of three percent shall be allowed on the net fixed assets at the beginning of the financial year for such regulated business:

Provided that net fixed assets shall be exclusive of the assets created out of consumer contribution, deposit works, capital subsidy or grants.

- **29. Interest and finance charges. –** (1) (a)The loans arrived at in the manner indicated in Regulation 26 shall be considered as gross normative loan for calculation of interest on the loans.
- (b) The interest and finance charges on capital works in progress shall be excluded from such consideration and not be considered in the ARR and truing up processes.

- (c) In the case of retirement or replacement of assets, the loan amount approved by the Commission shall be reduced to the extent of outstanding loan component of the original cost of the retired or replaced assets, based on documentary evidence.
- (2) The normative loan outstanding as on the First day of April, 2018, shall be worked out by deducting the amount of cumulative repayment as approved by the Commission up to the Thirty First day of March, 2018, from the normative loan.
- (3) Notwithstanding any moratorium period availed by the generating business/company or the transmission business/licensee or the distribution business/licensee, the repayment of loan shall be considered from the first financial year of commercial operation of the project and shall be equal to the depreciation allowed for that financial year.
- (4) The rate of interest allowed shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each financial year applicable to the generating business/company or the transmission business/licensee or the distribution business/licensee or State Load Despatch Centre:

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

Provided further that if the regulated business of the generating business/company or the transmission business/licensee or the distribution business/licensee or State Load Despatch Centre does not have actual loan, but normative loan is outstanding, then interest shall be allowed at the base rate.

- (5) The interest on loan shall be calculated average loan as per the norms approved by the Commission for the financial year by applying the weighted average rate of interest.
- (6) The generating business/company or the transmission business/licensee or the distribution business/licensee or the State Load Despatch Centre, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and any benefit from such refinancing shall be shared in the ratio 1:1 among,-
  - (i) the generating business/company and the persons sharing the capacity charge; or

- (ii) transmission business/licensee and long-term intra-State open access customers including distribution business/licensee; or
- (iii) distribution business/licensee and consumers.
- (7) The changes to the terms and conditions of the loans during the financial year, if any, shall be effective from the date of coming into force of such changes.
- (8) Interest shall be allowed on the amount held as security deposit in cash from users of the transmission system or distribution system and consumers at the bank rate as on the First day of April of the financial year in respect of in which the petition is filed:

Provided that interest on security deposit actually paid to the users of the transmission system or distribution system and to the consumers during the financial year, shall only be considered at the time of truing up for the financial year.

- **30.** Interest on bonds issued by KSEB Limited to service the terminal liabilities of its employees. (1) The interest on the bonds issued by KSEB Limited to service the terminal liabilities of its employees shall be allowed for recovery through tariffs, at the rates stipulated in the relevant orders issued by the Government of Kerala.
- (2) The bonds shall be amortised at the same rate as prescribed in the Transfer Scheme notified by the Government of Kerala.
- (3) The funds required for repayment of the bonds issued by KSEB Limited to service the terminal liabilities of its employees shall not be allowed for recovery through tariffs.
- **31. Tax on returns.** –(1) The Commission shall provisionally approve Income Tax payable for the appropriate years of the Control Period, if any, based on permissible return on equity share capital or return on net fixed assets, as approved by the Commission relating to the generating business/company or transmission business/licensee or distribution business/licensee or the State Load Despatch Centre, as the case may be and included in the Aggregate Revenue Requirements:

Provided that no Income Tax on the amount of efficiency gains or incentive earned by the generating business/company or transmission business/licensee or distribution business/licensee or State Load Despatch Centre shall be approved for recovery through tariff or charges from the consumers or beneficiaries:

(2) The difference between the Income Tax on regulated business actually paid and that approved by the Commission in the Aggregate Revenue Requirement of the generating business/company or transmission

business/licensee or distribution business/licensee or the State Load Despatch Centre shall, subject to prudence check, be adjusted in the truing up process in the respective years.

- (3) The tax on any income other than from the regulated business, shall not in any circumstances be allowed to be recovered through Aggregate Revenue Requirements.
- (4) Changes if any in taxes other than income tax otherwise allowed as a pass through in tariff, shall be considered for determination of aggregate revenue requirements after prudence check
- **32.** Interest on working capital. –(1) The generation business/company or transmission business/licensee or distribution business/licensee or the State Load Despatch Centre shall be allowed interest on the normative level of working capital for the financial year, computed as under,-
- (a) In the case of liquid fuel based generating stations the working capital shall comprise of,-
  - (i) cost of liquid fuel for one month corresponding to approved generation; plus
  - (ii) operation and maintenance expenses for one month; plus
  - (iii) cost of maintenance spares at one per cent of the historical cost of plant and equipments; plus
  - (iv) receivables equivalent to fixed charges and energy charges for sale of electricity for one month calculated at the approved generation:

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

- (b) In the case of gas turbine/combined cycle generating stations the working capital shall comprise of,-
  - (i) cost of gas and liquid fuel for one month corresponding to approved generation; plus
  - (ii) operation and maintenance expenses for one month; plus
  - (iii) cost of maintenance spares at one per cent of the historical cost of plant and equipments; plus
  - (iv) receivables equivalent to fixed charge and energy charge for sale of electricity for one month calculated at approved generation:

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

- (c) In the case of hydro-electric generating stations the working capital shall comprise of,-
  - (i) operation and maintenance expenses for one month; plus
  - (ii) cost of maintenance spares at one per cent of the historical cost of plant and equipments; plus
  - (iii) receivables equivalent to fixed cost of one month:

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

- (d) In the case of transmission business/licensee the working capital shall comprise of,-
  - (i) operation and maintenance expenses for one month; plus
  - (ii) cost of maintenance spares at one per cent of the historical cost of plant and equipment; plus
  - (iii) receivables equivalent to transmission charges for one month calculated at target availability:

Provided that the amount, if any, held as security deposits except the security deposits held in the form of bank guarantee from users of the transmission system shall be reduced while computing the working capital requirement.

- (e) In the case of distribution business/licensee the working capital shall comprise of,-
  - (i) operation and maintenance expenses for one month; plus
  - (ii) cost of maintenance spares equivalent to one-twelfth of the average of the book value of stores, materials and supplies at the beginning and end of the financial year; plus
  - (iii) receivables equivalent to the expected revenue from sale of electricity for two months at the prevailing tariff:

Provided that the amount, if any, held as security deposits except the security deposits held in the form of Bank Guarantee from users of the distribution system and consumers shall be reduced while computing the working capital requirement;

Provided further that for distribution business/licensees who supply electricity to their consumers on prepaid metering system, no interest on working capital shall be allowed.

- (f) In the case of the State Load Despatch Centre the working capital shall comprise of,-
  - (i) operation and maintenance expenses for one month; plus
  - (ii) cost of maintenance spares at one per cent of the historical cost of plant and equipments; plus
  - (iii) receivables equivalent to State Load Despatch Centre charges for one month.
- (2) Interest on normative level of working capital as per this Regulation shall be allowed at a rate equal to two percent higher than the base rate as on the First day of April of the financial year in respect of which the petition for approval of Aggregate Revenue Requirement and determination of tariff is filed.
- **33. Decommissioning of assets .-** (1)The generation business / company or the transmission business / licensee or the distribution business/licensee or the State Load Despatch Centre shall submit to the Commission, along with the petition for approval of the Aggregate Revenue Requirement, the written value and such other details of the assets decommissioned if any, during the financial years of previous control period beginning 2015-16.
- (2) The Commission may consider such details and take appropriate decisions while computing the Aggregate Revenue Requirement.
- **34.** Principles for adoption of Transfer Scheme under Section 131 of the Act.- The Commission may, for the purpose of approval of Aggregate Revenue Requirements and determination of tariff, adopt the changes in the balance sheet, due to the re-organisation of the erstwhile Kerala State Electricity Board as per the provisions of the Transfer Scheme published by the Kerala State Government under Section 131 of the Act, subject to the following principles,-
- (a) Increase in the value of assets consequent to the revaluation of assets shall not qualify for computation of depreciation or for return on net fixed assets;
- (b) The equity of the Government of Kerala as per the above Transfer Scheme published under Section 131 of the Act will be considered for computation of return on equity.

- (c) The reduction of the contribution from consumers, grants and such other subventions for creation of assets, made as a part of Transfer Scheme, shall not be considered while computing the depreciation or return on net fixed assets;
- (d) Only the payment of interest on the bonds issued to the Master Trust will be approved for computation of Aggregate Revenue Requirement and the amount of repayment of such bonds shall not be reckoned for computation of Aggregate Revenue Requirement.
- (e) The Commission subject to the petition by KSEB Ltd may take appropriate decision on the other issues relating to the Transfer Scheme and its implementation on a case to case basis.

### CHAPTER – VI GENERATION

**35. Applicability.** – (1) The Regulations specified in this Chapter shall apply to the determination of tariff for supply of electricity to the distribution business/licensee by a generating company from conventional sources of generation such as coal, gas, liquid fuel and medium as well as large scale hydro-electric plants:

Provided that determination of tariff for supply of electricity to the distribution business/licensee from cogeneration plants, solar plants, small hydro-electric projects, wind energy projects and other renewable energy sources of generation shall be governed by separate Regulations specified by the Commission from time to time:

- (2) The Commission shall determine the tariff for supply of electricity by the generating business/company to the distribution business/licensee in accordance with the terms and conditions specified in the following cases:-
  - (i) where such tariff is to be determined pursuant to a power purchase agreement or arrangement entered into subsequent to the date of coming into effect of these Regulations; or
  - (ii) where such tariff is pursuant to a power purchase agreement or arrangement entered into, without previous approval of the Commission, prior to the date of coming into effect of these Regulations; or
  - (iii) where the distribution licensee is engaged in the business of generation of electricity, for determination of the transfer price at which electricity is supplied by the generation business to the distribution business/licensee.
- **36.** Capital cost. (1) Capital cost for a new project shall subject to prudence check include the following:
  - a) the expenditure incurred or proposed to be incurred;
  - b) Interest during construction and financing charges on the loan component considered in accordance with the debt-equity ratio specified under Regulation 26;
  - c) 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 approved by the Commission;
  - d) Increase in cost of contract packages as approved by the Commission:

- e) capitalised cost of initial spares subject to the ceiling rates specified in Annexure-VI;
- f) additional capitalisation approved under Regulation 23;
- g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation:

Provided that the cost of common assets forming part of the project shall be approved based on suitable allocation and such allocated cost shall form part of the capital cost.

- (2) The capital cost of an existing generating unit/station shall include the following:-
  - a) the capital cost approved by the Commission prior to the First day of April 2018 duly trued up by excluding liability, if any, as on the First day of April 2018;
  - b) additional capitalization if required for the respective financial year as determined in accordance with Regulation 23; and
  - c) expenditure on account of renovation and modernisation as approved by the Commission in accordance with Regulation 38.
- (3) The capital cost in the case of a new generating station shall also include,-
  - a) cost of approved rehabilitation and resettlement plan of the project in conformity with national rehabilitation and resettlement policy and rehabilitation and resettlement package as approved; and
  - b) the contribution of the generating company towards the cost of development activities, if any, in the project affected area, as may be approved by the Commission.
- (4) In relation to multi-purpose hydro-electric projects, with irrigation, flood control and power components, the capital cost chargeable to the power component of the project shall only be considered for determination of tariff.
- **37. Prudence check of capital cost.** –The Commission shall adopt the following principles for prudence check of capital cost of the new projects:-
- (a) In the case of the thermal generating station, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified by the Central Electricity Regulatory Commission from time to time;
- (b) In the case where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, etc., for its reasonableness, use of efficient

- technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff;
- (c) In the cases where benchmark norms have been specified, the generating company, which exceeds the benchmark norms, shall submit the reasons for exceeding the capital cost vis-a-vis benchmark norms to the satisfaction of the Commission for allowing cost above benchmark norms;
- (d) The Commission may engage an independent agency or an expert to scrutinize the capital cost of any hydro-electric generation project and in that case the capital cost vetted by such agency or expert may be considered by the Commission while determining the tariff for the hydroelectric generation project:

Provided that the Commission shall hear the concerned applicant and other stakeholders before taking a final decision on the report of such agency or expert.

- 38. Renovation, modernisation or uprating.-(1) The generating business/company shall, for meeting the expenditure on renovation. modernization or uprating of the generating station or a generating unit thereof, prefer a petition before the Commission for approval of the proposal with a detailed project report giving the complete scope, justification, costbenefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, record of consultation with beneficiaries and any other information considered to be relevant by the generation business/company.
- (2) Where the generating business/company makes a petition for approval of its proposal for renovation, modernisation or uprating, the approval shall be granted after due prudence check of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis and such other factors as may be considered relevant by the Commission.
- (3) Any expenditure incurred and approved or projected to be incurred and approved by the Commission after prudence check of the estimates for renovation, modernization or uprating and after deducting the accumulated depreciation already recovered from the original project cost, shall form the basis for determination of tariff.

**39.** Petition for determination of generation tariff for existing and new generating station or generating unit.—(1) Tariff in respect of a generating station under these Regulations may be determined stage-wise, unit-wise or for the whole generating station or group of stations:

Provided that the terms and conditions for determination of tariff for generating stations specified in this chapter shall apply in like manner to stages or units, as the case may be, as in the case of such generating stations.

- (2) (a) Where the tariff is being determined for stage or generating 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 generating units, as the case may be:
- (b) the generation business/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 petition for determination of tariff.
- (3) In the case of an existing generating unit/station, the petition for determination of generation tariff shall be made not later than one hundred and eighty days from the date of notification of these Regulations, based on the approved capital cost including any additional capital expenditure already approved up to the Thirty First day of March 2018, based either on actual or on projected additional capital expenditure and estimated additional capital expenditure for the Control Period.

Provided that the generation business/company shall continue to bill the beneficiaries at the tariff approved by the Commission and applicable as on the Thirty First day of March 2018 for the period starting from the First day of April 2018 till approval of tariff by the Commission in accordance with these Regulations.

- (4) The generation business/company shall file the petition for determination of provisional tariff for new generating station, one hundred and eighty days prior to the anticipated date of commercial operation of generating unit or stage or generating station as a whole, as the case may be.
- (5) The generation business/company shall make a petition for determination of tariff based on capital expenditure incurred or projected to be incurred up to the date of commercial operation and additional capital expenditure incurred, duly certified by the statutory auditors:

Provided that the petition shall contain details of underlying assumptions for the projected capital cost and additional capital cost, wherever applicable.

- (6) In the case of new projects, the generating company may be allowed provisional tariff by the Commission from the anticipated date of commercial operation, based on the projected capital expenditure.
- (7) If the date of commercial operation is delayed beyond one hundred and eighty days from the date of issue of tariff order, the tariff granted shall be deemed to have been withdrawn and the generation business/company shall be required to file after the date of commercial operation of the project, a fresh petition for determination of tariff.
- (8) The generation business/company shall file the petition for determination of final tariff for new generating station within one hundred and eighty days from the date of commercial operation of generating unit or stage or generating station as a whole, as the case may be, based on the audited capital expenditure and capitalisation as on the date of commercial operation.
- (9) Truing up of the capital cost for the new generating station shall be done by the Commission based on prudence check of the audited capital expenditure and capitalisation as on the date of commercial operation.
- (10) Where the actual capital cost incurred on year to year basis is lesser than the capital cost approved for determination of tariff by the Commission on the basis of the projected capital cost as on the date of commercial operation or on the basis of the projected additional capital cost, by five percent or more, the generation business/company shall refund to the beneficiaries as approved by the Commission, the excess tariff realised corresponding to excess capital cost, along with interest at 1.20 times of the weighted average rate of interest approved by the Commission, for the respective financial year.
- (11) Where the actual capital cost incurred on year to year basis is higher than the capital cost approved for determination of tariff by the Commission on the basis of the projected capital cost as on the date of commercial operation or on the basis of the projected additional capital cost, by five percent or more, the generation business/company shall, subject to the approval of the Commission, be entitled to recover from the beneficiaries the shortfall in tariff corresponding to such decrease in capital cost along with interest at 0.80 time of weighted average rate of interest approved by the Commission for the respective financial year.
- **40.** Sharing of gains or losses on account of controllable and uncontrollable factors.—(1)Notwithstanding anything contained in these Regulations, the financial gains or losses on account of controllable factors, computed as per following formulae in the case of generating station on account of normative operational parameters specified in sub-regulations (5), (6), (7), (8), and (9) of Regulation 42 of these Regulations

shall be shared in the ratio of 2:1 between the generating station and beneficiaries,-

Net Gain =  $(ECR_N - ECR_A)$  x actual energy generated, where  $ECR_N$  is greater than  $ECR_A$ 

Net loss = (ECR $_A$ - ECR $_N$ ) x actual energy generated, where ECR $_A$  is greater than ECR $_N$ 

Where  $ECR_N$  is the normative rate of energy charge computed on the basis of norms specified for gross station heat rate and auxiliary consumption for the month;

ECR<sub>A</sub> is the actual rate of energy charge computed on the basis of actual gross station heat rate and auxiliary consumption for the month.

- (2) The financial gains of the generation business/company on account of controllable parameters computed under sub-regulation (1) above shall be shared between the generation business/company and the beneficiaries on monthly basis with annual reconciliation.
- (3) The aggregate loss to the generating business/company on account of controllable parameters computed under sub-regulation (1) above shall be borne by the generating business/company and shall not be passed on to the consumer in any manner.
- (4) The financial gains or losses by the generation business/company on account of uncontrollable parameters shall, subject to approval by the Commission, be passed on to the beneficiaries of the generation business/company after prudence check.
- **41.** Norms of operation for hydro-electric generating stations. (1) Normative annual plant availability factor (NAPAF) for recovery of full annual capacity charges and incentive shall be as specified hereunder:-
  - (a) The NAPAF for the following existing storage and pondage type hydroelectric generating stations of KSEB Limited, where the variation in head between full reservoir level (FRL) and minimum draw down level (MDDL) is of and below eight percent of their respective design heads, shall be as specified in the table below:

**Table** 

SI.	Station	Туре	NAPAF
No.		(Pondage/Storage)	
(i)	Idukki	Storage	90%
(ii)	Kuttiady	Storage	90%
(iii)	Pallivasal	Storage	90%
(iv)	Sengulam	Pondage	90%

Provided that the Commission may revise the NAPAF for the above mentioned generating stations in the case of their renovation, modernisation and uprating:

Provided further that the generating station shall be allowed deemed generation over and above the actual generation for the period during which the generating station is backed down on the instruction of the State Load Despatch Centre:

Provided also that the deemed generation shall not be reckoned for the purposes of calculating the incentive.

(b) NAPAF for the following existing storage and pondage type hydroelectric generating station where the variation in head between full reservoir level and minimum draw down level is more than eight percent of their respective design heads, shall be as specified in the table below:

**Table** 

SI.	Station	Туре	NAPAF
No.		(Pondage/Storage)	
(i)	Idamalayar	Storage	77%
(ii)	Kakkad	Storage	88%
(iii)	Panniar	Storage	89%
(iv)	Poringalakuthu	Storage	89%
(v)	Sabarigiri	Storage	90%
(vi)	Sholayar	Storage	89%

Provided that the Commission may revise the NAPAF for the above mentioned generating stations in the case of their renovation, modernisation and uprating:

Provided further that the generating station shall be allowed deemed generation over and above the actual generation for the period during which the generating station is backed down on the instruction of the State Load Despatch Centre:

Provided also that the deemed generation shall not be reckoned for the purposes of calculating the incentive.

(c) The NAPAF for new storage and pondage type hydro-electric generating stations where the variation in head between full reservoir level (FRL) and minimum draw down level (MDDL) is of and below 8 percent of their respective design heads and where plant availability is not affected by silt shall be ninety percent;

- (d) For new storage and pondage type hydro-electric generating stations where the variation in head between full reservoir level and minimum draw down level is more than eight percent of their respective design heads and where plant availability is not affected by silt, the monthwise peaking capability as provided by the project authorities in the detailed project report, approved by Central Electricity Authority or by the State Government, shall form the basis for fixation of NAPAF;
- (e) The NAPAF for new run-of-the-river type hydro-electric generating stations shall be determined station-wise, based on ten day design energy data, moderated by past experience if available;
- (2) Auxiliary energy consumption including transformation losses for existing and new hydro-electric generating stations shall be as specified in the table below:

**Table** 

SI. No.	Type of station	Auxiliary
		consumption
(i)	Surface hydro-electric generating stations with rotating	0.7 Percent
	exciters mounted on the generator shaft	
(ii)	Surface hydro-electric generating stations with	1 percent.
	static excitation system	
(iii)	Underground hydro-electric generating station with 0.9 percent	
	rotating exciters mounted on the generator shaft	
(iv)	Underground hydro-electric generating station with 1.2 perce	
	static excitation system	

- (3) Actual energy consumed for pumping water for the pumped storage hydroelectric generating station shall be treated as auxiliary consumption after prudence check
  - **42. Norms of operation for thermal generating stations.**–(1) Normative annual plant availability factor (NAPAF) for the full recovery of annual fixed charges for liquid fuel based generating stations of KSEB Limited shall be as specified in the table below:

**Table** 

SI. No.	Station	NAPAF
(i)	Brahamapuram Diesel Power Plant (BDPP)	80%
(ii)	Kozhikode Diesel Power Plant (KDPP)	80%

Note: Above NAPAF shall be worked out only based on availability during the peak hours from 18:00 hours to 22:00 hours so long as their scheduling is restricted to the peak hours:

Provided that the Commission may revise the NAPAF in the case of renovation, modernisation or uprating of the above generating stations.

- (2) The norms for operation of other new thermal generating stations shall be decided by the Commission on a case to case basis.
- (3) The normative annual plant load factor (NAPLF) for allowing incentive to the liquid fuel based generating stations of Kerala State Electricity Board Limited shall be eighty five percent.
- (4) The normative annual plant load factor (NAPLF) for allowing incentive to other new thermal generating stations shall be determined by the Commission on a case to case basis.
- (5) The normative gross station heat rate for the liquid fuel based generating stations of KSEB Limited shall be as specified in the table below:-

#### **Table**

SI. No.	Station	Heat Rate (kcal/kWh)
1	Brahamapuram Diesel Power Plant (BDPP)	2000
2	Kozhikode Diesel Power Plant (KDPP)	2100

Provided that the Commission may revise the gross station heat rate in the case of renovation, modernisation or uprating of the above generating stations.

Provided further that the Commission may consider revision in gross station heat rate in case the loading of such generating station/unit is below the minimum threshold level.

(6) The normative gross station heat rate of gas based/liquid fuel based generating station achieving commercial operation on or after the First day of April, 2018 shall be as specified in the table below:

**Table** 

Ī	SI. No.	Type of fuel used in the	Gross station heat rate
		plant	(kcal/kWh)
ĺ	(i)	Natural gas and re-gasified	1.05 x design heat rate of the
		liquefied natural gas	unit/block
ĺ	(ii)	Liquid fuel	1.071 x design heat rate of the
			unit/block

Explanation: The design heat rate of a unit shall mean the guaranteed heat rate for a unit at one hundred percent maximum continuous rating (MCR) and at site ambient conditions; and the design heat rate of a block

- shall mean the guaranteed heat rate for a block at one hundred percent maximum continuous rating (MCR) at site ambient conditions, zero percent make up and design cooling water temperature/back pressure.
- (7) The normative gross station heat rate of other thermal generating stations shall be determined by the Commission on a case to case basis.
- (8) The normative auxiliary consumption for liquid fuel based generating stations of KSEB Limited shall be as specified in the table below:-

Table

SI. No.	Station	Auxiliary Energy Consumption (%)
(i)	Brahamapuram Diesel Power Plant (BDPP)	5%
(ii)	Kozhikode Diesel Power Plant (KDPP)	2.5%

Provided that the Commission may revise the auxiliary consumption for the above mentioned generating stations in the case of renovation, modernisation or uprating.

(9) The normative auxiliary consumption for gas turbine/combined cycle generating stations shall be as specified in the table below:

**Table** 

SI. No.	Type of plant	Auxiliary consumption
(i)	Combined Cycle	2.5 percent
(ii)	Open Cycle	1.0 percent

- (10) The normative auxiliary consumption for other thermal generating stations shall be determined by the Commission on a case to case basis.
- **43.** Components of tariff. (1) The tariff for sale of electricity from a hydroelectric generating station shall comprise of two parts, namely, fixed charge and energy charge as detailed below:.
- (a) The fixed charge of a hydro-electric generating station shall be computed on annual basis, based on the norms specified under these Regulations and recovered on monthly basis inclusive of incentive. Fixed charge shall be payable by the respective beneficiaries in proportion to their respective share of allocation in the total saleable capacity of the generating station.
- (b) Energy charge of a hydro electric generating station shall be shall be payable by the beneficiaries in proportion to the energy availed by them.
- (2) The tariff for sale of electricity from a liquid fuel or gaseous fuel based thermal generating station shall comprise of two parts, namely, annual fixed charge and energy charge. as detailed below,-

- (a) The annual fixed charge of a liquid fuel or gaseous fuel based thermal generating station shall be computed on annual basis, based on the norms specified under these Regulations and recovered on monthly basis as fixed charge (inclusive of incentive), which shall be payable by the beneficiaries in proportion to their respective share of allocation in the total saleable capacity of the generating station.
- (b) The energy charge of a liquid fuel or gaseous fuel based thermal generating station shall be computed based on the norms specified under these Regulations and shall be payable by the beneficiaries in proportion to the energy availed by them.
- (3) Notwithstanding anything contained in this Regulation, annual fixed charges of generation business of KSEB Ltd shall be on a composite basis for all generating stations together based on the actual NAPFM consists of fixed charges only. There shall be no energy charges payable for the hydro electric stations and the energy charges relating to diesel stations of generation business of KSEB Ltd shall be as provided in these Regulations.
- (4) In case PAFM in the months in a year or PAFY is more than NAPAF in a year, the recovery of total monthly fixed charges shall be limited to AFC only.
- **44. Annual fixed charges.–** (1) The annual fixed charges of a hydroelectric generating station or of a liquid fuel or gaseous fuel based thermal generating station, shall comprise of the following components:-
  - (i) Operation &maintenance expenses;
  - (ii) Depreciation;
  - (iii) Interest and finance charges
  - (iv) Interest on working capital;
  - (v) Return on equity;
  - (vi) deficit or surplus if any on account of truing up of accounts for previous years as approved by the Commission for recovery through tariff

Provided that the non-tariff income and other income if any, shall be reduced while computing the annual capacity / fixed charges.

**45. Operation and maintenance expenses.** – (1) (a)In the case of existing generating stations of the generation business of KSEB Limited shall be allowed to recover operation and maintenance expenses for each financial year of the Control Period, as per the norms specified in Annexure-VII to these Regulations:

Provided that in the case of one time maintenance of special nature, not in the form of routine repair and maintenance if any is required and is undertaken for the generating stations/unit, expenses for such maintenance may be allowed by the Commission after prudence check considering the details and justification furnished by the Generating business/company for incurring such an expenditure to the satisfaction of the Commission.

- (b) The generation business of KSEB Limited shall, subject to prudence check by the Commission, be allowed to recover, in addition to the above specified normative operation and maintenance expenses, the annual pension contribution payable by KSEB Limited to the Master Trust, based on actuarial valuation in respect of the personnel allocated to the generation business of KSEB Limited.
- (2) In the case of new generating stations, the generating company shall be allowed to recover during the Control Period, the operation and maintenance expenses as specified hereunder,-
  - a) the operation and maintenance expenses in the first year of operation shall be four percent of the original project cost (excluding cost of rehabilitation and resettlement works); and
  - b) the operation and maintenance expenses for each subsequent financial year of the Control Period shall be determined using the escalation rate on the operation and maintenance expenses for the first year as determined above.
- (3) The Commission may revise the norms for operation and maintenance expenses applicable to subsequent Control Periods.
- **46. Other income. -** (1) The amount of Other income of the generation business/company as approved by the Commission shall be deducted from the annual fixed charges while determining the annual fixed charges of the generation business/company.
- (2) The indicative list of items to be considered as Other income are as specified hereunder:-
  - (i) interest on staff loans and advances:
  - (ii) income from statutory investments;
  - (iii) income from sale of ash/rejected coal;
  - (iv) income from rent of land or buildings;
  - (v) income from sale of scrap;
  - (vi) income from staff welfare activities;
  - (vii) rental from staff quarters;
  - (viii) excess found on physical verification;
  - (ix) interest on investments, fixed and call deposits and bank balances;
  - (x) interest on advances to suppliers/contractors;
  - (xi) income from hire charges from contractors and others;
  - (xii) income from advertisements, etc.;
  - (xiii)miscellaneous receipts;
  - (xiv) interest on delayed or deferred payment on bills;
  - (xv) rebate from fuel suppliers; and.
  - (xvi) Any other revenue

- (3) The generation business/company shall submit full details of its forecast of non-tariff income and other income to the Commission along with its petition for determination of tariff.
- (4) The interest earned from investments made out of return on investment by the generation business/company shall not be included in Other income.
- **47.** Recovery of fixed charge and energy charge for hydro-electric generating station. (1) The Annual Fixed charges of storage and pondage type hydro-electric generating stations shall be recovered in the following manner
- (a) 50% of the annual fixed charges, inclusive of incentive, payable for a calendar month shall be:-

Where.

AFC = annual fixed charges specified for the financial year, in Rupees.

NAPAF = normative annual plant availability factor in percentage

NDM = number of days in the month

NDY = number of days in the financial year

PAFM= plant availability factor achieved as certified by SLDC during the month, in percentage. The PAFM for storage and pondage type hydroelectric generating stations shall be computed in accordance with the following formula:-

- (b) 50% of the annual fixed charges shall be recovered in the form of energy charges. The energy charge for storage and pondage type hydro-electric generating stations 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.
- (c) Energy charge rate (ECR) in rupees per kWh on ex-power plant basis, for storage and pondage type hydro-electric generating stations, shall be determined up to three decimal places based on the following formula, subject to provisions of sub-regulation (6):-

Where,

DE = annual design energy of the hydro-electric generating station, in kWh

- (d)In case the actual total energy generated by a storage and pondage type hydro-electric generating station during a financial year is less than the design energy for *reasons beyond the control of the generating station*, the following treatment shall be applied on a rolling monthly basis on a petition filed by the generation business/company:-
  - (i) In case the energy shortfall occurs within ten financial years from the date of commercial operation of a generating station:- the energy charge rate (ECR) for the financial year following the financial year of energy shortfall shall be computed based on the formula specified in sub-regulation (1) (c) with the modification that the design energy shall be considered as equal to the actual energy generated during the financial year of the shortfall, till the shortfall in energy charge of the previous financial year has been made up, after which normal energy charge rate (ECR) shall be applicable:

Provided that in case actual generation from a hydro-electric generating station is less than the design energy for a continuous period of four financial years on account of hydrology factor, the generating station may approach Central Electricity Authority (CEA)or the State Government as the case may be with relevant hydrology data for revision of design energy of the station.

(ii) In case the energy shortfall occurs after ten financial years from the date of commercial operation of a generating station:-

If the specified annual design energy for the station is DE kWh and

the actual energy generated during the concerned (first) and the following (second) financial years is A1 and A2 kWh, respectively with, A1 being less than DE, then, the design energy to be considered in the formula in sub-regulation (1) (c) of this regulation for calculating the energy charge rate (ECR) for the third financial year shall be moderated as (A1 + A2 - DE) kWh, subject to a maximum of DE kWh and a minimum of A1 kWh.

- (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 AUX).
- (iv) In case the energy charge rate (ECR) for a storage and pondage type hydro-electric generating station, computed as per sub-regulation (1) (c) exceeds one hundred paise per kWh and the actual saleable energy in a financial year exceeds { DE x ( 100 AUX ) ÷ 100 } kWh, the energy charge for the energy in excess of the above shall be billed at one hundred paise per kWh only:

Provided that in a financial year following a financial year in which total energy generated was less than the design energy for reasons beyond the control of the generation business/company, the energy charge rate shall be reduced to one hundred paise per kWh after the energy charge shortfall of the previous financial year has been made up.

- (2) The State Load Despatch Centre shall finalise the schedules for the hydro-electric 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 allocation of capacity of the generating station.
- (3) The State Load Despatch Centre shall certify the declared capacity of the generating stations on daily basis and shall also issue a certificate at the end of the financial year, validating the PAFM during the financial year, to the generation business/company.
- (4) The energy charge for run of the river type hydro-electric generating stations 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.
- (5) Energy charge rate (ECR) in rupees per kWh on ex-power plant basis, for run of the river type hydro-electric generating stations, shall be determined up to three decimal places based on the following formula:-

DE = annual design energy of the hydro-electric generating station, in kWh

- (6) In case the energy charge rate (ECR) for run of the river type hydroelectric generating station, computed as per sub-regulation (5) exceeds one hundred paise per kWh and the actual saleable energy in a financial year exceeds { DE x (100 – AUX) ÷ 100 } kWh, the energy charge for the energy in excess of the above shall be billed at one hundred paise per kWh only.
- **48.** Computation of fixed charge and energy charge for thermal generating stations,-(1)(a) The fixed charge payable to a thermal generating station for a calendar month shall be calculated in accordance with the following formulae:-
  - $CC_1 = (AFC \div 12)(PAF_1 \div NAPAF)$  subject to ceiling of  $(AFC \div 12)$
  - $CC_2 = ((AFC \div 6)(PAF_2 \div NAPAF))$  subject to ceiling of  $(AFC \div 6) CC_1$
  - $CC_3 = ((AFC \div 4) (PAF_3 \div NAPAF)$  subject to ceiling of  $(AFC \div 4)) (CC_1 + CC_2)$
  - $CC_4 = ((AFC \div 3) (PAF_4 \div NAPAF) \text{ subject to ceiling of } (AFC \div 3)) (CC_1 + CC_2 + CC_3)$
  - $CC_5 = ((AFC \times 5 \div 12) (PAF_5 \div NAPAF)$  subject to ceiling of (AFC  $\times 5 \div 12)) (CC_1 + CC_2 + CC_3 + CC_4)$
  - $CC_6 = ((AFC \div 2) (PAF_6 \div NAPAF) \text{ subject to ceiling of } (AFC \div 2)) (CC_1 + CC_2 + CC_3 + CC_4 + CC_5)$
  - $CC_7$ = ((AFC x 7÷12) (PAF<sub>7</sub>÷ NAPAF) subject to ceiling of (AFC x 7÷12)) –( $CC_1$ + $CC_2$ + $CC_3$ + $CC_4$ + $CC_5$ + $CC_6$ )
  - $CC_8 = ((AFC \times 2 \div 3) (PAF_8 \div NAPAF) \text{ subject to ceiling of } (AFC \times 2 \div 3)) (CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7)$
  - $CC_9 = ((AFC \times 3 \div 4) (PAF_9 \div NAPAF) \text{ subject to ceiling of } (AFC \times 3 \div 4))$  $-(CC_1 + CC_2 + CC_3 + CC_4 + CC_5 + CC_6 + CC_7 + CC_8)$
  - $CC_{10}$ = ((AFC x 5÷6) (PAF<sub>10</sub>÷ NAPAF) subject to ceiling of (AFC x 5÷6)) -(CC<sub>1</sub>+CC<sub>2</sub>+CC<sub>3</sub>+CC<sub>4</sub>+CC<sub>5</sub>+CC<sub>6</sub>+CC<sub>7</sub>+CC<sub>8</sub>+CC<sub>9</sub>)
  - CC11 = ((AFC x 11÷12) (PAF11 ÷ NAPAF) subject to ceiling of (AFC x 11÷12)) (CC<sub>1</sub>+CC<sub>2</sub>+CC<sub>3</sub> +CC<sub>4</sub> + CC<sub>5</sub> + CC<sub>6</sub> + CC<sub>7</sub> + CC<sub>8</sub> + CC<sub>9</sub> + CC<sub>10</sub>)
  - $CC_{12} = ((AFC) (PAF_{Y} \div NAPAF) \text{ subject to ceiling of } (AFC)) (CC_{1} + CC_{2} + CC_{3} + CC_{4} + CC_{5} + CC_{6} + CC_{7} + CC_{8} + CC_{9} + CC_{10} + CC_{11}):$

Where,-

AFC = annual fixed cost for the financial year, in Rupees;

NAPAF = normative annual plant availability factor in percentage;

PAF<sub>n</sub> = percent plant availability factor achieved up to the end of the n<sup>th</sup> month;

PAFY = percent plant availability factor achieved during the financial year;

CC<sub>1</sub>, CC<sub>2</sub>, CC<sub>3</sub>, CC<sub>4</sub>, CC<sub>5</sub>, CC<sub>6</sub>, CC<sub>7</sub>, CC<sub>8</sub>, CC<sub>9</sub>, CC<sub>10</sub>, CC<sub>11</sub> and CC<sub>12</sub> are the fixed charges of the first, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh and twelfth months respectively:

Provided that in the case of generating station or generating unit thereof under shutdown due to renovation, modernisation or uprating the generation business/company shall be allowed to recover part of annual fixed cost (AFC), which shall include O&M expenses and interest on loan only:

Provided further that the repairs and maintenance charges in respect of the unit under renovation, modernisation or uprating shall be reduced while computing O&M expenses as specified in the first proviso.

(b) The PAFM upto the end of a particular month and PAFY shall be computed in accordance with the following formula:

$$\sum_{DC_{i}}^{N} DC_{i}$$
=1

PAFM or PAFY = 10000 X ------ %
$$\{ N \times IC \times (100 - AUX) \}$$

Where.-

AUX=normative auxiliary consumption in percentage;

 $DC_i$  = average declared capacity (in ex-bus MW), for the i<sup>th</sup> day of the period, i.e., the month or the financial year as the case may be, as certified by the State Load Despatch Centre after the day is over;

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

N = Number of days during the period.

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

(2) Incentive to a generating station or generating unit thereof shall be payable at a flat rate of 50 paise/kWh for ex-bus energy generated in excess of ex-bus energy corresponding to normative annual plant load factor

(NAPLF) as specified in sub Regulation (3) and sub Regulation (4) of Regulation 42.

(3) (a) The energy charge shall cover the cost of landed fuel and shall be computed as follows:-

Energy charges 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 actual generation.

(b) Energy charge rate (ECR) in Rs/kWh shall be the equal to the cost of normative quantity of fuel for delivering ex-bus one kWh of electricity and shall be computed as under:-

Where,-

AUX = normative auxiliary consumption

GSHR = gross station heat rate in kcal per kWh;

LPPF = weighted average landed price of primary fuel, in rupees per kg, per litre or per standard cubic metre, as applicable during the month. (In the case of blending of fuel from different sources, the weighted average landed price of primary fuel shall be arrived in proportion to blending ratio);

CVPF = weighted average gross calorific value of primary fuel as received, in kcal per kg, per litre per standard cubic metre, as applicable for liquid fuel based and gas based stations.

- (c) Any variation in price and/or gross calorific value of liquid fuel or gas vis-a-vis approved values shall be adjusted on month to month basis. This shall be based on the average gross calorific value of liquid fuel consumed which shall be calculated based on the fuel or gas in stock, quantity received, closing stock and the and the weighted average landed cost incurred for the procurement of liquid fuel or gas for a power station. In its bills, the generation business/company shall indicate the energy charge rate at base price of primary fuel approved by the Commission and the estimated fuel surcharge to it separately. The generation business/company should submit the computation of fuel surcharge to the Commission on six-monthly basis for post-facto approval of adjustment of energy charge rate.
- **49. Demonstration of declared capacity. –** (1) The generation business/company shall demonstrate the declared capacity of its generating stations as and when asked to do so by the State Load Despatch Centre.

- (2) In case, the generation business/company fails to demonstrate the declared capacity as and when required by the State Load Despatch Centre, the capacity charges due to the generation business/company shall be reduced as specified in sub-regulation (3).
- (3) (a) The quantum of reduction in the capacity charges for the first wrong declaration for the duration of a time block in a day, shall be the charges corresponding to two days capacity charges.
- (b) For the second wrong declaration, the quantum of reduction in capacity charges shall be equivalent to capacity charges for four days and for subsequent wrong declarations, the quantum of reduction in the capacity charges shall be increased in geometrical progression.
- (4) The operating logbooks of the generating station shall contain the record of operation and maintenance of machine, reservoir level, operation of spillway gate and such other relevant details as applicable and they shall be made available for scrutiny as and when required by the State Load Despatch Centre.
- **50.** Tariff for sale of infirm power. (1) The tariff for sale of infirm power from the hydro-electric generating station to the distribution business/licensee shall be equivalent to the energy charge rate for the first financial year and revenue recovered from sale of infirm power shall be deducted from the capital cost.
- (2) The tariff for sale of infirm power from a thermal generating station to the distribution business/licensee shall be fixed by the Commission in such a way that the fuel cost for generating the infirm power is recovered.
- **51. Billing and payment of charges.** –Billing and payment of charges shall be done on a monthly basis in the following manner:-
  - (a) Billing and payment of annual fixed charges and energy charges for generating stations shall be done on a monthly basis subject to adjustments at the end of the financial year;
  - (b) The distribution business/licensee and persons having power purchase agreement for firm power for more than one year shall pay the fixed/capacity charges in proportion to their shares or allocations in the installed capacity of a generating station;
  - (c) For payment of bills through a letter of credit on presentation, the generation business/company and distribution business/licensee may mutually agree to a maximum rebate of two percent of the bill amount;
  - (d) If the payments are made within one week of presentation of the bill, the generating business/company and distribution licensee may

- mutually agree to a maximum rebate of 1.25 percent of the bill amount;
- (e) In case the payment of bills is delayed beyond a period of two (2) months from the date of billing a late payment surcharge at the rate of 1.25 percent per month shall be allowed to be levied by the generation business/company:

Provided that in the case of agreements or arrangements for purchase of power entered into before the First day of April, 2018, the billing and payment of charges shall be in accordance with the terms and conditions of such agreement or arrangement.

### CHAPTER – VII TRANSMISSION

- **52. Applicability.** The Regulations specified in this Chapter shall apply to.-
  - (i) the determination of tariff for access and use of the transmission system of the transmission business/licensee;
  - (ii)the determination of rates, charges and terms and conditions for the use of intervening transmission facilities pursuant to a petition made under the proviso to Section 36 of the Act.
- **53.** Capital cost.— (1) The capital costs from the date of commencement of each capital project till the date of its commercial operation, as approved by the Commission after prudence check, shall be the Original Capital Cost of such project for the purpose of determination of tariff.
- (7) In determination of the original capital cost of projects and/or original cost of fixed assets capitalised, the provisions of the Accounting Standards (Ind AS) applicable for accounting of the Property, Plant and Equipments (PP&E), issued by Ministry of Corporate Affairs shall apply, to the extent not inconsistent with these Regulations.
- **54.** Capital investment plan. (1) The transmission business/licensee shall along the petition for Aggregate Revenue Requirements for the Control Period submit to the Commission for its approval, a detailed capital investment plan, financing plan and physical targets. Such investments may be undertaken for strengthening and augmenting the intra-State transmission system for meeting the requirement of power evacuation, load growth, reduction in transmission losses, improvement in quality of supply, reliability, metering, etc., for the Control Period, in accordance with the 'Guidelines for In-principle Clearance of Capital Investment' specified at Annexure-IV.
- (2) The Capital Investment Plan of the transmission business/licensee shall be consistent with the Transmission System Plan for the intra-State transmission system.
- (3) The transmission business/licensee shall be required to ensure optimum investments to enhance efficiency and productivity.
- (4) (a) The Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required to substantiate the need and to justify the proposed investments based on load flow studies.
  - (b) The investment plan shall also include capitalisation schedule and financing plan.

(5) The Commission may approve the Capital Investment Plan of the transmission business/licensee, with appropriate modifications, if required or reject the same, based on the prudence check:

Provided that the Commission shall afford to the transmission licensee, a reasonable opportunity of being heard, before rejecting the proposal for approval of the capital investment plan.

- (6) The costs corresponding to the projects which are commissioning in a given financial year as part of the approved investment plan shall only be considered for its revenue requirement for the said financial year.
- **55.** Prudence check of capital cost.—(1)The principles specified in the following sub-regulations shall be adopted for prudence check of capital cost of the projects.
- (2) In the case of the transmission projects, prudence check of capital cost may be carried out taking into consideration the benchmark norms specified by the Central Electricity Regulatory Commission from time to time as the ceiling norms.
- (3) In the cases where benchmark norms have not been specified, prudence check may include scrutiny of the capital expenditure, financing plan, interest during construction, etc., for its reasonableness, use of efficient technology, cost over-run and time over-run, competitive bidding for procurement and such other matters as may be considered appropriate by the Commission for determination of tariff.
- (4) In cases where benchmark norms have been specified and the capital cost proposed by the transmission business/licensee exceeds such norms, the transmission business/licensee shall submit the justification with all relevant documents for exceeding the benchmark capital cost to the satisfaction of the Commission.
- (5) The Commission may engage an independent agency or an expert to scrutinize the capital cost of any transmission project and in such cases the capital cost vetted by such agency or expert may be considered by the Commission while determining the tariff for the transmission project:

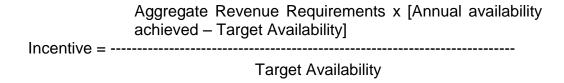
Provided that the Commission shall hear the concerned applicant and other stakeholders before taking a final decision on the report of such agency or expert.

**56.** Norms for operation.—(1) Target availability for full recovery of annual transmission charges for alternating current (AC) system shall be 98 per cent:

Provided that the recovery of annual transmission charges below the level of target availability shall be on pro-rata basis and that no transmission charges shall be payable at zero availability:

Provided further that the availability shall be calculated in accordance with the procedure specified in the Annexure-II to these Regulations and shall be certified by the State Load Despatch Centre.

(2) The transmission licensee shall be entitled to incentive on achieving annual availability above the target availability, in accordance with the following formula:-



Provided that no incentive shall be payable for the availability above 99.75 percent for AC system.

- (3) The computation of reduction in transmission charges as per the first proviso under sub-regulation (1) and the computation of incentive as per sub-regulation (2) shall be undertaken during truing up for each financial year.
- **57.** Components of Aggregate Revenue Requirement.—The Aggregate Revenue Requirement shall comprise of the following items of expenditure:-
  - (i) operation and maintenance expenses;
  - (ii) interest and finance-charges;
  - (iii) depreciation;
  - (iv) interest on working capital and deposits from users of the transmission system;
  - (v) contribution to contingency reserves; and
  - (vi) return on Equity
  - (vii) deficit or surplus on account of truing up of accounts for previous years as approved by the Commission for recovery through tariff

Provided that the following items, if any, shall be deducted from the gross amount of Aggregate Revenue Requirement computed as specified above:-

- (i) non-tariff income;
- (ii) other income
- (iii) revenue from short-term transmission charges from open access customers, if not already considered; and
- (iv) income from other business, to the extent specified in these Regulations.

**58. Operation and maintenance expenses.**—The transmission business/licensee shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-VIII to these Regulations for each financial year of the Control Period:

Provided that in case one time maintenance of special nature not in the form of routine repair and maintenance if any is required and is undertaken for transmission system, expenses for such maintenance may be allowed by the Commission after prudence check considering the details and justification furnished by the Transmission business/licensee for incurring such an expenditure to the satisfaction of the Commission

Provided further that the transmission business of KSEB Limited shall be allowed to recover the annual pension contribution to the Master Trust, based on actuarial valuation, in respect of the personnel allocated to the transmission business of KSEB Limited, in addition to the above specified normative operation and maintenance expenses.

#### Explanation:-

- (i) For the purpose of deriving normative O&M expenses, 'bay' shall mean a set of accessories that are required to connect an electrical equipment at 66 kV and above voltages such as transmission line, bus section breakers, potential transformers, power transformers, capacitors and transfer breaker and the feeders emanating from the bus at sub-station of the transmission business/licensee.
- (ii) For the purpose of deriving normative O&M expenses, 'ckt km' means the length in circuit kilometres, of the transmission lines at voltages of and above 66 kV.
- **59.** Contribution to contingency reserves, investments and its utilisation.— (1) Where the transmission business/licensee has made a provision to the contingency reserve, a sum not more than 0.25 percent of the original cost of fixed assets shall be allowed annually towards such provision in the calculation of Aggregate Revenue Requirement:

Provided that where the cumulative amount of such contingency reserve exceeds five percent of the original cost of fixed assets, no such appropriation shall be allowed.

Provided further that the amount so appropriated shall be invested in securities authorised under the Indian Trust Act, 1882 (Act 2 of 1882) within a period of six months of the close of the financial year.

(2) The contingency reserve shall not be drawn during the term of the licence except to meet the following charges as may be approved by the Commission,-

- (a) expenses or loss of profit arising out of accidents, strikes or circumstances which the transmission business/licensee could not have prevented;
- (b) 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 amount that may have been received by the transmission business/licensee as a part of insurance cover.

- **60. Other income.—** (1) The indicative list of items to be considered as Other income are as under:
  - interest on staff loans and advances;
  - (ii) income from statutory investments;
  - (iii) income from rent of land or buildings;
  - (iv) income from sale of scrap;
  - (v) income from staff welfare activities;
  - (vi) rental from staff quarters;
  - (vii) excess found on physical verification;
  - (viii) interest on investments, fixed and call deposits and bank balances;
  - (ix) interest on advances to suppliers/contractors;
  - (x) income from hire charges from contractors and others;
  - (xi) income due to right of way granted for laying fibre optic cables/co-axial cables on transmission system;
  - (xii) income from advertisements, etc.;
  - (xiii) miscellaneous receipts;
  - (xiv) interest on delayed or deferred payment on bills; and
  - (xv) Any other revenue.
- (2) The transmission business/licensee shall submit all details of its forecast of non-tariff income and Other income to the Commission along with its petition for determination of tariff.
- (3) The interest earned from investments made out of return on investment of the transmission business/licensee shall not be included in other income.
- **61. Income from other business.**—Where the transmission business/licensee has engaged in any other business for optimum utilisation of the assets of its electricity business, an amount equal to one-third of the revenue 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 while calculating the annual transmission charges of the transmission business/licensee:

Provided that the transmission business/licensee shall follow a reasonable basis for allocation of all joint and common costs between the transmission business and the other businesses and shall submit the allocation statement to the Commission along with its petition for determination of tariff:

Provided further that where the sum total of the direct and indirect costs of such other business exceeds the revenues from such other business, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the transmission business/licensee on account of such other business.

- **62. Determination of transmission charges.-**(1) The transmission charges for access to and use of the transmission system of the transmission business/licensee shall comprise of the following:
  - a) transmission system access charges; and
  - b) transmission charges.
- (2) The annual transmission charges shall be determined by the Commission in such a way that the Aggregate Revenue Requirement of the transmission business/licensee for the financial year as approved by the Commission, is recovered.
- (3) The annual transmission charges of the transmission business/licensee shall be determined by the Commission on the basis of a petition made by the transmission business/licensee, for the determination of tariff, in accordance with chapter IV of these Regulations.
- (4) Any person who is eligible to apply for access to the transmission system of the transmission business/licensee shall be entitled to obtain such access in accordance with the Kerala State Electricity Regulatory Commission (Connectivity and Intra-State Open Access) Regulations, 2013 and shall be liable to pay the charges for obtaining such access as specified in such Regulations.
- **63. Sharing of annual transmission charges.—** (1) The Aggregate Revenue Requirement of the transmission business of KSEB Limited, as approved by the Commission, shall be shared by all long-term users and medium-term users of the transmission system on monthly basis in the ratio of their respective contracted transmission capacities to the total contracted transmission capacity, in accordance with the following formula:-

Transn	nission ARR	x CC <sub>n</sub>
ATC <sub>n =</sub>		
	SCC	<del></del>
Where,-		
$ATC_n$		= annual transmission charges payable by the
		nth long-term user or medium-term user of the
		transmission system;

Transmission ARR	= Annual Aggregate Revenue Requirement of the
	transmission business of KSEB Limited,
	determined in accordance with regulation 57 of
	these Regulations;
$CC_n$	= capacity contracted in MW by the n <sup>th</sup> long-term
	user or medium-term user of the transmission
	system;
SCC	= sum of capacities contracted in MW by all
	long-term users and medium-term users of the transmission system:

Provided that the ATC<sub>n</sub> shall be payable on monthly basis by each long-term user or medium-term user of the transmission system and shall be collected by the transmission business of KSEB Limited in its capacity as the State Transmission Utility (STU):

(2) The short-term users of the transmission system shall pay transmission charges on Rs/MW/day basis, in accordance with the following formula:-

TCn	Transmission ARF	R ÷ 365
	SCC	÷ 505
	Where,-	
	TC (Rs/MW/day)	= transmission charges payable per day by the short-term user of the transmission system;
	Transmission ARR	= Aggregate Revenue Requirement of the transmission business of KSEB Limited, determined in accordance with regulation 57 of these Regulations;
	SCC	= sum of capacities contracted in MW by all long-term users and medium-term users of the transmission system:

(3) For short-term collective transactions through power exchanges, transmission charges shall be denominated in Rs/kWh terms, in accordance with the following formula:-

TC (Rs/kWh) = Transmission ARR ÷ Total units in kWh estimated to be wheeled,

Where.-

TC (Rs/kWh) = Transmission charges payable in the case of short-term collective transactions through power exchanges;

Transmission ARR = Aggregate Revenue Requirement of the transmission business of KSEB Limited, determined in accordance with regulation 57 of these Regulations;

Total units wheeled = total energy units in kWh estimated to be wheeled through the intra-state transmission system during the financial year.

- **64. Transmission losses.-**The energy losses in the transmission system, as determined by the State Load Despatch Centre and approved by the Commission, shall be borne by the users of the transmission system in proportion to their usage of the transmission system.
- **65.** Reactive energy charges, incentives and disincentives.—(1) A generating station shall, as and when directed by the State Load Despatch Centre, inject the reactive energy into the grid on the basis of the capability of the generating machine to supply reactive power.
- (2) The users of the transmission system shall be subjected to the following incentive/disincentive for maintaining the reactive energy balance in the transmission system:-
  - a) The person responsible for reactive energy compensation shall be the distribution licensee/Open Access user directly connected to the State transmission network;
  - b) The maximum reactive energy drawal at each interchange point shall be limited, corresponding to the power factor of 0.95;
  - c) The incentive/disincentive for maintaining reactive energy balance in the transmission system shall be as specified below:-
    - (i)If the voltage at interchange point (Vp) exceeds the nominal voltage (Vn) by more than three percent, the incentive payable shall be at the rate of ten paise per RkVAh for additional drawal;
    - (ii) If the voltage at interchange point (Vp) fall short of the nominal voltage (Vn) by more than three percent, the disincentive payable shall be at the rate of ten paise per RkVAh for additional drawal;
    - (iii) If the voltage at interchange point (Vp) is between ninety seven percent and one hundred and three percent of the nominal voltage (Vn), no incentive or disincentive shall be payable.
- (3) The above incentives/disincentives shall be made applicable, only after adequate metering, energy accounting and billing infrastructure covering all interchange points on the transmission system are put in place by the State Transmission Utility (STU) and the concerned persons.
- (4) The Commission may alter or modify the above incentive/disincentive scheme.

# CHAPTER – VIII STATE LOAD DESPATCH CENTRE CHARGES

- **66.** Aggregate revenue requirement of the State Load Despatch Centre.—(1) The Commission shall, after prudence check, determine the aggregate revenue requirement of the State Load Despatch Centre, which shall comprise of the following items of expenditure:-
  - (i) operation& maintenance expenses;
  - (ii) interest on working capital;
  - (iii) depreciation;
  - (iv) interest and finance charges; and
  - (v) return on investment.
- (2) The State Load Despatch Centre shall submit separate audited accounts of its business:

Provided that, in case separate accounts are not available, the Commission may approve as the Aggregate Revenue Requirement of State Load Despatch Centre, a portion of the approved Aggregate Revenue Requirement of the transmission business of KSEB Limited, based on the proposal submitted by it only for the first year of the Control Period:

- (3) The Commission may adopt the general and financial principles specified in these Regulations for the determination of Aggregate Revenue Requirement of the State Load Despatch Centre.
- **67. Determination and recovery of load despatch centre charges.-** (1) The load despatch centre charges shall be levied from the Transmission business/licensees and generating companies in such a way that the Aggregate Revenue Requirement of the State Load Despatch Centre for the financial year as approved by the Commission, is recovered.
- (2) The State Load Despatch Centre charges shall be recovered on a monthly basis and shall be included in the Aggregate Revenue Requirement of Transmission business/licensees and generating companies

# CHAPTER – IX DISTRIBUTION

- **68. Applicability.–(1)**The Regulations contained in this chapter shall apply to:-
- (i) the determination of tariff for retail sale of electricity by the distribution business/licensee to its consumers:
- (ii) the determination of tariff payable for bulk supply by KSEB Limited to other distribution licensees in the State of Kerala; and.
- (iii) the determination of tariff payable for wheeling of electricity by a user of the distribution system who has been allowed open access to the distribution system of the distribution business/licensee in accordance with the Kerala State Electricity Regulatory Commission (Connectivity and Intra-state Open Access) Regulations, 2013.
- (2) In the case of new distribution licensees and licensees who have not commenced operation as on the date of commencement of these Regulations, the Commission shall approve an interim tariff and thereafter Commission shall decide the tariff based on the principles as per these Regulations and on the filing of such licensees.
- **69.** Capital cost. –(1) The capital costs from the date of commencement of each capital project till the date of its commissioning, as approved by the Commission after prudence check, shall be the original capital cost of such project for the purpose of determination of tariff.
- (2)The provisions of the Accounting Standard (IndAS) of the Ministry of Corporate Affairs, applicable to accounting of the fixed assets, shall apply, to the extent not inconsistent with these Regulations in determining the original cost of capital projects
- **70.** Capital investment plan. –(1) The distribution business/licensee shall ensure optimum capital expenditure in its projects to enhance economy, efficiency and productivity and to meet the Performance Standards specified by the Commission.
- (2) The distribution business/licensee shall, along with the petition for determination of aggregate revenue requirements the Control Period, submit to the Commission for its approval, a detailed capital investment plan, financing plan and physical targets for meeting the requirement of load growth, reduction in distribution losses, improvement in quality of supply, reliability, metering, consumer services, etc., in accordance with the 'Guidelines for In-principle Clearance of Capital Investment' specified at Annexure-IV.

- (3) (a) The Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required to substantiate the need and to justify the proposed investments.
  - (b) The Capital Investment Plan shall also include capitalisation schedule and financing plan.
- (4) The Commission may approve the capital investment plan of the distribution business/licensee, with appropriate modifications, if required or reject the same.,

Provided that the Commission shall afford to the distribution business/licensee, a reasonable opportunity of being heard, before rejecting the proposal for approval of the Capital Investment Plan.

- (5) The costs corresponding to the capital investments which are completed as per the approved Capital Investment Plan of the distribution business/licensee for a given financial year shall be considered for its revenue requirement.
- **71. Sales forecast. –**(1) The distribution business/licensee shall submit, along with the petition for approval of Aggregate Revenue Requirement and determination of tariff, a forecast of expected demand and sale of electricity to different categories of consumers and to each consumption slab within each tariff category, in its area of supply for the Control Period.
- (2) Sale of electricity, if any, to electricity traders or other distribution licensees shall be separately indicated.
- (3) The Commission shall examine the forecasts for its reasonableness based on the growth in number of consumers and consumption per consumer, the demand of electricity in the preceding financial years, anticipated growth in the succeeding financial years and any other factor, which the Commission may consider relevant and approve forecast of sale of electricity to the consumers with such modifications as deemed appropriate.
- **72. Distribution losses.–**(1) (a) The distribution business/licensee shall carry out proper studies for the estimation of distribution losses, in order to set a realistic base line of the estimates of losses at different voltage levels and to segregate commercial and technical losses in the system:
- (b) The distribution business/licensee shall submit separate details of loss at different voltages, while computing its total energy requirement.
- (2) (a) The distribution business/licensee shall submit, along with the petition for approval of Aggregate Revenue Requirement for the Control Period, the information on actual total distribution losses and voltage-wise distribution losses in the preceding four financial years and estimates for each

year of the Control Period and the basis on which such losses have been worked out.

- (b) The distribution business/licensee shall also propose the loss reduction targets for each financial year of the Control Period, along with absolute loss levels:
- (c) The distribution business/licensee shall substantiate, the proposed loss levels with necessary studies and their results.
- (3) The Commission shall approve the target of distribution loss for each financial year of the Control Period considering the opening loss levels, filings of the distribution business/licensee, submissions and objections raised by stakeholders and findings of the Commission.
- (4) Any variation between the actual level of distribution losses and the approved level of distribution losses shall be dealt with, as part of the truing up of the respective financial year in the Control Period, in the following manner:-
  - (a) If the actual distribution loss is higher than the approved level of distribution loss for any particular financial year of the Control Period, then the quantum of power purchased corresponding to the excess distribution loss for that financial year, shall be disallowed at the average cost of power purchase for the respective financial year;
  - (b) If the actual distribution loss is lower than the approved level of distribution loss for any particular financial year of the Control Period, then the savings in power purchase cost corresponding to the difference in distribution loss for that financial year at the average cost of power purchase for the respective financial year, shall be shared between the distribution business/licensee and the consumers in the ratio of 2:1.
  - (c) Export of power to other states if any and the revenue thereof shall be considered by the Commission appropriately while determining the disallowance on account of excess distribution loss.
- **73. Power Procurement Plan.–**(1) The distribution business/licensee shall prepare an annual plan for procurement of power to meet the demand in its area of supply and submit such plan to the Commission for its approval, along with the petition for approval of Aggregate Revenue Requirement for the Control Period:

Provided that the Power Procurement Plan submitted by the distribution business/licensee shall include details of long-term, medium-term and shortterm sources of power, as the case may be.

- (2) The Power Procurement Plan shall be consistent with sales forecast in accordance with Regulation 71 of these Regulations and shall be based on past data and reasonable assumptions regarding the future.
- (3) The Power Procurement Plan of the distribution business/licensee shall be based on the following:-
  - (a) a quantitative forecast of the unrestricted demand for electricity within its area of supply, from each tariff category over the financial year;
  - (b) approved level of transmission and distribution losses: Provided that for purchase of electricity from sources outside the State, the transmission loss level agreed to in the power purchase agreement, if any, or worked out from energy accounts of RLDC/SLDC shall be considered:
  - (c) an estimate of the quantities of electricity supply from the approved sources of generation and power purchase;
  - (d) an estimate of availability of power to meet the base load and peak load requirement:
    - Provided that the estimate should be monthly estimation of demand and supply both in Mega-Watt (MW) as well as in million units (MU);
  - (e) standards to be maintained with regard to quality and reliability of supply, in accordance with the Kerala State Electricity Regulatory Commission (Licensees' Standards of Performance) Regulations, 2015, as amended from time to time;
  - (f) measures proposed to be implemented as regards energy conservation and energy efficiency;
  - (g) minimum share of renewable energy purchase as specified by the Commission:
  - (h) the new sources of power generation if any including augmentation of generation capacity and identified new sources of supply and procurement, based on clauses (a) to (g) above;
  - (i) the forecast/estimate contained in the power procurement plan shall be separately stated for peak and off-peak periods, in terms of quantities of power to be procured (in millions of units of electricity) and maximum demand (in MW / MVA);
  - (j) the forecasts/estimates prepared for each month of the financial year;
  - (k) proposed short-term power procurement; and
  - merit order despatch.
- (4) The distribution business/licensee shall also submit cost estimates for power procurement along with the annual power procurement plan, which

shall be based on the following principles and subject to the provision under Regulation 76:-

- a)The cost of power proposed to be purchased from generating companies and cost of transmission shall be worked out based on tariff determined or adopted by the appropriate Commission, as the case may be;
- b) The cost of power proposed to be purchased from nuclear power stations of Nuclear Power Corporation of India Limited (NPCIL) shall be worked out on the basis of tariff notified by Department of Atomic Energy, Government of India.
- c) The estimates of the cost of short-term power purchase from traders, power exchange and other licensees shall be based on past trends.
- d)Cost of power generated by the distribution business/licensee and sold by it to consumers shall be worked out based on generation tariff determined by the Commission under chapter-VI of these Regulations.
- **74.** Collection efficiency.—(1) The distribution business/licensee shall furnish actual category-wise collection efficiency based on the details of current bills raised during the financial year excluding arrears and details of its payment during the same financial year in the four preceding financial years and estimate for each financial year of the Control Period and the basis on which such collection efficiency has been worked out.
- (2) The distribution business/licensee shall also propose a target for collection efficiency for each financial year of the Control Period, giving details of the measures proposed to be taken for achieving the targets proposed, along with the petition for approval of Aggregate Revenue Requirement for the Control Period.
- (3) The Commission shall approve a target of improvement in collection efficiency for the Control Period based on the opening level of collection efficiency, filings of the distribution business/licensee, submissions and objections raised by stakeholders and the findings of the Commission.
- (4) The impact on revenue due to the difference between the actual level of collection efficiency and the approved level of collection efficiency shall be dealt with, as part of the truing up of the respective financial year, in accordance with the mechanism provided in these Regulations and by suitably adjusting the provision for bad debts.
- **75.** Components of Aggregate Revenue Requirement.— The Aggregate Revenue Requirement of the distribution business/licensee shall comprise of the following items of expenditure:-

- (i) cost of own power generation;
- (ii) cost of power purchase;
- (iii) transmission charges;
- (iv) NLDC/RLDC/SLDC charges if any;
- (v) operation and maintenance expenses;
- (vi) interest and finance charges;
- (vii) depreciation;
- (viii) interest on working capital and on consumer security deposits and deposits from users of the distribution system;
- (ix) contribution to contingency reserves if any;
- (x) actual write off, if any approved by the Commission;
- (xi) return on equity/net fixed assets;
- (xii) revenue surplus or revenue gap on account of truing up of accounts of previous years and carrying costs if any approved by the Commission

Provided that the incentive or disincentive for overall performance as per Kerala State Electricity Regulatory Commission (Licensees' Standards of Performance) Regulations, 2015, as amended from time to time, shall be suitably included in the annual revenue requirements for each financial year

Provided further that the following items, if any, shall be deducted from the gross amount of Aggregate Revenue Requirement computed as specified above.

- (i) Other income and non-tariff income;
- (ii) income from wheeling charges recovered from open access consumers;
- (iii) income from other business, to the extent specified in these Regulations;
- (iv) receipts on account of cross subsidy surcharge on wheeling charges from open access consumers; and
- (v) receipts on account of additional surcharge on wheeling charges from open access consumers:
- **76. Approval of power purchase agreement. –**(1) Every agreement for procurement of power by the distribution business/licensee from the generating business/company or licensee or from other sources of supply

entered into after the date of commencement of these Regulations shall come into effect only with the approval of the Commission:

Provided that the approval of the Commission shall also be required in accordance with this Regulation for any change to an existing agreement for power procurement, whether or not such existing agreement was approved by the Commission.

- (2) The Commission shall examine a petition for approval of Power Purchase Agreement having regard to the approved Power Procurement Plan of the distribution business/licensee and the following factors:-
  - (a) requirement of power under the approved Power Procurement Plan;
  - (b) adherence to a transparent process of bidding in accordance with guidelines issued by the Central Government under Section 63 of the Act;
  - (c) adherence to the terms and conditions for determination of tariff specified under Chapter VI of these Regulations where the process specified in clause (b) above has not been adopted;
  - (d) availability (or expected availability) of capacity in the intra-State transmission system for evacuation and supply of power procured under the agreement; and
  - (e) need to promote co-generation and generation of electricity from renewable sources of energy.
- (3) Where the terms and conditions specified under chapter VI of these Regulations are proposed to be adopted, the approval of the power purchase agreement between the generating business/company and the distribution business/licensee for supply of electricity from a new generating station may comprise of the following two steps, at the discretion of the applicant:-
  - (a) approval of a provisional tariff, on the basis of a petition made to the Commission at any time prior to the petition made under clause (b) below; and
  - (b) approval of the final tariff, on the basis of a petition made not later than three months from the cut-off date.
- 77. Additional short-term power procurement.—(1) The distribution business/licensee may undertake additional short-term power procurement during the financial year, over and above the power procurement plan approved by the Commission, in accordance with this Regulation.
- (2) (a) Where there has been a shortfall or failure in the supply of electricity from any approved source of supply during the financial year, the distribution

business/licensee may enter into an agreement for additional short-term procurement of power.

- (b) If the total power purchase cost for any quarter including such short-term power procurement exceeds by five percent of the power purchase cost approved by the Commission for the respective quarter, the distribution business/licensee shall have to obtain approval of the Commission.
- (3) The distribution business/licensee may enter into a short-term power procurement agreement or arrangement under the following circumstances subject to the ceiling tariff approved by the Commission:
  - (a) where the distribution business/licensee is able to source new shortterm source of supply from which power can be procured at a tariff that reduces its approved total power procurement cost;
  - (b) when faced with emergency conditions that threaten the stability of the distribution system or when directed to do so by the State Load Despatch Centre to prevent grid failure
  - (c) where the tariff for power procured under such agreement or arrangement is in accordance with guidelines for short-term procurement of power by distribution licensees through tariff based bidding process issued by the Central Government:
  - (d) when there is any contingency situation and power purchase price is within such ceiling price;
  - (e) procurement of short-term power through power-exchange; and
  - (f) procurement by way of exchange of energy under 'banking' transactions.

Provided that prior approval of the Commission and the ceiling rate shall not be applicable to the short term purchases under sub regulation (b) and (e) above

- (4) The Commission may stipulate the ceiling quantum and ceiling rate for purchase of power from short-term sources.
- (5) Within fifteen days from the date of entering into an agreement or arrangement for short-term power procurement for which prior approval has not been obtained, the distribution business/licensee shall obtain the approval of the Commission by submitting full details of such agreement or arrangement, including quantum, tariff calculations, duration, supplier details, method for supplier selection and such other details as the Commission may require to assess that the conditions specified in this Regulation have been complied with:

Provided that where the Commission has reasonable grounds to believe that the agreement or arrangement entered into by the distribution business/licensee does not meet the criteria specified in this Regulation, the Commission may disallow from the annual revenue requirements, the net increase in the cost of power on account of such procurement.

#### 78. Transmission charges and State Load Despatch Centre charges.-

- (1) Transmission and wheeling charges to be paid by the distribution business/licensee for transmission or wheeling of power purchased by it shall be considered as per tariff determined by the appropriate Commission.
- (2) National Load Despatch Centre (NLDC)/ Regional Load Despatch Centre (RLDC)/State Load Despatch Centre (SLDC) charges as determined by the appropriate Commission shall be allowed as expenses.
- (3) The distribution business/licensee shall be allowed to recover transmission charges payable for the access to and the use of the intra—State transmission system and the State Load Despatch Centre charges in accordance with the tariff approved by the Commission for the transmission business/licensee under chapter VII and chapter VIII of these Regulations.
- **79. Operation and maintenance expenses.–** (1) The distribution business of KSEB Limited shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period:

Provided that the distribution business of KSEB Limited shall be allowed to recover the annual pension contribution paid to the Master Trust, based on actuarial valuation, in respect of the personnel allocated to the distribution business of KSEB Limited, in addition to the above specified normative operation and maintenance expenses:

- (2) The distribution business of Cochin Special Economic Zone Authority (CSEZA) shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (3) The distribution business of Technopark shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (4) Kinesco Power & Utilities Pvt. Ltd. (KPUPL) shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.

- (5) The distribution business of Rubber Park of India (P) Ltd (RPIL) shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (6) The distribution business of Kanan Devan Hills Plantation Company Private Ltd. (KDHPCL) shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (7) The distribution business of Cochin Port Trust (CPT) shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (8) The distribution business of Thrissur Corporation shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (9) The distribution business of Infopark shall be allowed to recover operation and maintenance expenses as per the norms specified in Annexure-IX to these Regulations for each financial year of the Control Period.
- (10) The one time maintenance of special nature not in the form of routine repair and maintenance if any is required and is undertaken for the distribution system, expenses for such maintenance may be allowed by the Commission after prudence check considering the details and justification furnished by the Distribution business/licensee for incurring such an expenditure to the satisfaction of the Commission.
- (11) In case any distribution licensee obtains licence for a new area of supply, the operation and maintenance expenses for such area shall be allowed separately based on the details furnished by the such licensee and after due prudence check by the Commission.
- **80.** Contribution to contingency reserves, investment and its utilization.—(1) Where the distribution business/licensee has made a provision to the contingency reserve, a sum not more than 0.25 percent of the original cost of fixed assets shall be allowed annually towards such provision in the calculation of Aggregate Revenue Requirement:

Provided that where the cumulative amount of such contingency reserve exceeds five per cent of the original cost of fixed assets, no such appropriation shall be allowed:

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

- (2) The Contingency Reserve shall not be drawn during the term of the licence except to meet the following charges as may be approved by the Commission:-
  - (a) expenses or loss of profits arising out of accidents or circumstances, which the licensee could not have prevented;
  - (b) expenses on replacement or removal of plant or works arising out of contingent situation; and
  - (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 amounts that may have been received by the distribution business/licensee as part of an insurance cover.

- **81. Bad debts.–**(1) The distribution business/licensee shall furnish the age wise schedule of sundry debtors and an assessment of the recoverability of the debtors as certified by the audit committee:
- (2) The Commission may allow the actual write off of bad debts only after assessing prudency and requirement of such write off.
- **82.** Other income.—(1) The receipts of Other income of the distribution business/licensee as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining the tariff of the distribution business/licensee.
- (2) The indicative list of items to be considered as Other Income includes:
  - interest on staff loans and advances;
  - (ii) income from statutory investments;
  - (iii) income from trading;
  - (iv) income from rent of land or buildings;
  - (v) income from sale of scrap;
  - (vi) income from staff welfare activities;
  - (vii) rental from staff quarters;
  - (viii) excess found on physical verification;
  - (ix) interest on investments, fixed and call deposits and bank balances;
  - (x) interest on advances to suppliers/contractors;
  - (xi) income from hire charges from contractors and others;
  - (xii) income due to right of way granted for laying fibre optic cables/coaxial cables on distribution system;
  - (xiii) income from advertisements, etc.;
  - (xiv) miscellaneous receipts;
  - (xv) commission for collection of electricity duty;
  - (xvi) interest on delayed or deferred payment on bills;
  - (xvii) rebate from central generating stations; and

#### (xviii) Any other receipts

- (3) The distribution business/licensee shall submit full details of its forecast of non-tariff income and Other Income to the Commission along with its petition for approval of Aggregate Revenue Requirements.
- (4) The interest earned from investments made out of return on investment by the distribution business/licensee shall not be included in other Income.
- **83. Income from other business.–**(1)Where the distribution business/licensee has engaged in any other business for optimum utilisation of the assets of its electricity 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 of the distribution business/licensee.
- (2) Where the sum total of the direct and indirect costs of such other business exceeds the revenues from such other business, no amount shall be allowed to be added to the Aggregate Revenue Requirement of the distribution business/licensee on account of such other business:
- (3) The distribution business/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 with justification to the Commission, duly audited and certified by the statutory auditors, along with its petition for determination of tariff.
- **84. Determination of tariff.—** (1)The bulk supply tariff, retail supply tariff and wheeling charges of the distribution licensee shall be determined by the Commission on the basis of a petition for determination of tariff made by the distribution licensee in accordance with chapter IV of these Regulations.
- (2) The retail supply tariff shall be uniform for the same category of consumers of all distribution business/licensees in the State of Kerala and shall be same as the retail supply tariff determined by the Commission for the distribution business of KSEB Limited.
- (3) The bulk supply tariff for supply of electricity by KSEB Limited to other distribution licensees in the State of Kerala shall be determined by the Commission in accordance with principles laid down from time to time in the orders of the Commission with regard to such distribution licensees.
- (4) The Commission may categorize consumers on the basis of their 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.

- (5) The retail supply tariff for different consumer categories shall be determined on the basis of the average cost of supply. The average cost of supply shall be computed as the ratio of the aggregate revenue requirements of the distribution business/licensee for each financial year calculated in accordance with Regulation 75 to the total sale of the distribution business/licensee for the respective financial year.
- (6) The Commission shall endeavour to reduce gradually the cross-subsidy among consumer categories with respect to the average cost of supply in accordance with the provisions of the Act and the provisions of the Kerala State Electricity Regulatory Commission (Principles for Determination of Roadmap for Cross-subsidy Reduction for Distribution Licensees) Regulations, 2012.
- (7) The wheeling charges may be denominated in terms of Rupees/kWh or Rupees/kW/month, or any such basis, for the purpose of recovery from the user of distribution system, as stipulated by the Commission from time to time.
- (8) Any revenue subsidy/grant received from the State Government other than the subsidy under Section 65 of the Act shall be treated in the manner as indicated by the State Government:

Provided that if no such manner is indicated, the subsidy/grant shall be used to reduce the overall gap between the Aggregate Revenue Requirement and actual revenue of the distribution business/licensee.

- (9) While determining the tariff the Commission may also keep in view the cost of supply at different voltage levels and the need to minimise tariff shock to any category of consumers.
- **85. Determination of wheeling charges.–**(1) The wheeling charges of the distribution business/licensee may be determined by the Commission on the basis of segregated accounts for distribution wires business:
- (2) (a) Where the distribution business/licensee is not able to submit audited/ certified separate accounts for the distribution wires business and retail supply business, the distribution business/licensee shall submit to the Commission for its approval, an allocation matrix for segregation of expenses between the distribution wires business and the retail supply business with proper justification.
- (b)The Commission may take appropriate decision on such allocation matrix for segregation of expenses between the distribution wires business and the retail supply business
- (3) The wheeling charges payable by a user of the distribution system of the distribution business/licensee may comprise demand charges or variable

charges or any combination thereof, as may be stipulated by the Commission in such order.

- **86.** Fuel surcharge formula.—(1) The tariff or part of any tariff determined in accordance with these Regulations, shall not ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted by the Commission under the terms of fuel surcharge formula specified in this Regulation.
- (2) Fuel surcharge is the amount approved by the Commission in terms of the formula specified under Annexure X, by way of recovery from or refund to the consumer, so as to enable the distribution business/licensee to pass through to the consumer additional expenditure or savings due to:
  - (i) the difference between the actual cost of fuel and the cost of fuel approved in Aggregate Revenue Requirement by the Commission for the generation of electricity in the generating stations owned by the distribution business/licensee; and
  - (ii) the difference on account of the change in cost of fuel, between the actual cost of power purchase and the cost of power purchase as approved by the Commission in the Aggregate Revenue Requirement.
- (3) The distribution business/licensee may be allowed by the Commission to adjust the fuel surcharge on a quarterly basis at the rate and the period of adjustment, as approved by the Commission based on the petition submitted by the distribution business/licensee specifically for this purpose.
- (4) (a) The amount of fuel surcharge to be adjusted shall be determined by the Commission in accordance with the formula specified in Annexure X.
- (b) The difference between the actual cost of fuel and the approved cost of fuel for own generation shall be computed for each quarter with respect to the month wise quantity of generation as approved by the Commission in the Aggregate Revenue Requirement of the distribution business/licensee, based on merit order.
- (c) The difference between the actual cost of power purchase and the approved cost of power purchase on account of change in cost of fuel shall be computed for each quarter with respect to the month wise quantity of power purchase as approved by the Commission in the Aggregate Revenue Requirement of the distribution business/licensee, based on merit order.
- (5) Every distribution business/licensee shall, within thirty days after the close of each quarter, submit to the Commission a petition with all relevant details required for the approval of the amount of fuel surcharge to be adjusted from the consumers and the rate and period of such adjustment:

Provided that distribution licensees who purchase electricity from KSEB Limited in bulk for retail sale, are exempted from the above requirement.

- (6) The Commission may, after prudence check, approve with modifications if any, the amount of fuel surcharge to be adjusted from the consumers and stipulate the rate and the period of such adjustment.
- (7) The rate of adjustment of fuel surcharge shall be expressed as paise per kWh and it shall be adjusted in the energy charges as per the existing tariff for the energy billed to each consumer, on a monthly or bi-monthly basis, as the case may be.
- (8)The adjustment on account of fuel surcharge as approved by the Commission shall be effected from the third month of the subsequent quarter onwards or as directed by the Commission.
- (9) The fuel surcharge adjustment shall be uniformly applicable to all consumers in the State except the domestic consumers with connected load of and below 500 W and having monthly consumption of and below 20 units.
- (10) The Commission may decide appropriate rate and period of adjustment of the amount of fuel surcharge, considering the impact on the tariff of consumers.
- (11) (a) The distribution business/licensee shall submit to the Commission, the month-wise details of the changes in the cost of fuel with respect to the approved cost for all its generating stations using liquid fuel or gas or coal, for each quarter separately.
- (b) The distribution business/licensee shall submit to the Commission, the source wise and month-wise details of the changes in the cost of power purchase with respect to the approved cost of power purchase on account of change in cost of fuel, for each quarter separately.
- (c)The month-wise details as specified in clauses (a) and (b) above, shall be submitted in the Form-I as specified in Annexure-X to these Regulations, on a quarterly basis.
- (12) (a) Distribution licensees who purchase electricity from KSEB Limited in bulk for retail sale, shall within fifteen days of the close of each month, provide to KSEB Limited with a copy to the Commission, the month-wise details of retail sale of energy to facilitate the estimation of fuel surcharge.
- (b) KSEB Limited shall consolidate the details of such retail sales and indicate with calculations, the provisional amount and rate of fuel surcharge to be adjusted along with the details in Annexure X.

- (13) The distribution licensees who purchase electricity in bulk from KSEB Limited shall promptly adjust with KSEB Limited on a monthly basis, the amount of fuel surcharge adjusted from their consumers.
- (14) The Commission may seek additional information or any documents, if any, required from the distribution business/licensee and the distribution business/licensee shall submit the details within the time limit stipulated by the Commission.
- **87.** Adjustment of cost due to change in hydro-thermal mix.—(1) The distribution business/licensee shall, within thirty days from the close of every financial year, file separately the particulars relating to change in cost, if any, due to change in hydro-thermal mix on account of change in rainfall and consequent change in cost of purchase of power.
- (2) The Commission may, approve the change in cost of power purchase on account of change in hydro-thermal mix, after prudence check of all the relevant information submitted by the distribution business/licensee and make appropriate decision on the adjustment of such amount.
- **88.** Cross subsidy surcharge.—(1) The consumers who are permitted open access shall pay to the distribution business/licensee in whose area the consumer is located, a cross subsidy surcharge as per the formula specified in the Annexure-XI to these Regulations.
- (2) The cross subsidy surcharge shall be levied in the manner specified with the Kerala State Electricity Regulatory Commission (Connectivity and Intra state Open Access) Regulations, 2013, as amended from time to time.
- **89.** Receipts on account of cross subsidy surcharge.—The amount received by the distribution business/licensee by way of cross-subsidy surcharge, as approved by the Commission, shall be deducted from the Aggregate Revenue Requirement while calculating the tariff for distribution business/licensee.
- **90.** Receipts on account of additional surcharge.—The amount received by the distribution business/licensee by way of additional surcharge on charges of wheeling, as approved by the Commission in accordance with the Kerala State Electricity Regulatory Commission (Connectivity and Intra state Open Access) Regulations, 2013, as amended from time to time, shall be deducted from the Aggregate Revenue Requirement while calculating the tariff for distribution business/licensee.
- **91.** Norms for operation.—(1) (a) At all times, it shall be the duty of the distribution business/ licensee to ensure one hundred percent supply of electricity to its consumers.
- (b) The distribution business/ licensee shall make necessary and sufficient arrangements to ensure availability of electricity, either by own generation or

by purchase of electricity or both, to meet the requirement of one hundred percent supply of electricity in its area of supply at all times.

- (2) (a) The gross availability of electricity for supply shall be computed based on the availability of electricity to meet the base load and the peak load.
- (b) The availability of electricity to meet the base load shall be computed in accordance with the following formula:-

Availability of electricity to meet the base load = sum of electricity in MW generated and contracted for purchase to meet the base load  $\div$  the base load in MW.

(c) The availability of electricity to meet the peak load shall be computed in accordance with the following formula:-

Availability of electricity to meet the peak load = sum of electricity in MW generated and contracted for purchase to meet the peak load ÷ the peak load in MW:

Provided that the peak load shall be calculated based on un-restricted demand of the distribution business/licensee.

(d) The gross availability of electricity for supply shall be computed in accordance with the following formula giving seventy five percent weightage to the availability of electricity to meet the base load and twenty five percent weightage to the availability of electricity to meet the peak load:-

Gross availability of electricity for supply = Availability of electricity to meet base load X 0.75 + Availability of electricity to meet peak load X 0.25.

- (3) For every one percent under achievement by the distribution business/licensee in the gross availability of electricity for supply, the rate of return on equity or the rate of return on net fixed assets as the case may be shall be reduced by 0.1 percent.
- (4) The distribution business/licensee shall submit to the Commission monthly reports along with the calculation of availability of electricity for supply.

#### CHAPTER -X

#### **MISCELLANEOUS**

- **91.Power to remove difficulties.-**If any difficulty arises in giving effect to any of the provisions of these Regulations, the Commission may, by general or specific order, for reasons to be recorded in writing, make such provisions not inconsistent with the provisions of the Act, as may be necessary for removing the difficulty.
- **92.Power of relaxation.**-The Commission, for reasons to be recorded in writing, may relax, in public interest, any of the provisions of these Regulations on its own motion or on a petition made before it by an interested person.
- **93.Interpretation.-**(1)The words and expressions used in these Regulations and not defined herein, but defined in the Act, shall have the meanings assigned to them under the Act.
- (2) If a question arises relating to the interpretation of any provision of these Regulations, the decision of the Commission shall be final.
- **94.Inquiry and investigation.-**All inquiries, investigations and adjudications under these Regulations shall be done by the Commission through proceedings in accordance with the provisions of the Kerala State Electricity Regulatory Commission (Conduct of Business) Regulations, 2003, as amended from time to time.
- **95.Power to amend.-**The Commission, for reasons to be recorded in writing, may at any time vary, alter or modify any of the provision of these Regulations by amendment:

Provided that the Commission may by order, for the purpose of obtaining data or information for taking decisions or for reviewing performance, vary, alter or modify any form specified in the annexures or stipulate new form in the annexures for collection of data or information, without following the procedures for amendment of Regulations.

- **96.Repeal and savings.—** (1) Save as otherwise provided in these Regulations, the "Kerala State Electricity Regulatory Commission (Terms and conditions for determination of Tariff) Regulations, 2014", is hereby repealed.
- (2) Notwithstanding such repeal,-
  - (a) any proceedings before the Commission pertaining to the period till March 31, 2018, including determination of tariff or truing up or review matters pertaining to the period upto 31<sup>st</sup> March 2018, shall be governed by the Kerala State Electricity Regulatory Commission (Terms and conditions for Determination of Tariff) Regulations, 2014, the Kerala State Electricity Regulatory Commission (Terms and

- Conditions of Tariff for Retail Sale of Electricity) Regulations, 2006 and the Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Distribution and Retail Sale of Electricity under MYT Framework) Regulations, 2006, including amendments thereto as the case may be.
- (b) anything done or any action taken or purported to have been done or taken including any order or declaration made or any licence, permission, authorisation or exemption granted or any document or instrument executed or any direction given under the repealed Regulations shall, in so far as it is not inconsistent with the provisions of these Regulations, be deemed to have been done or taken under the corresponding provisions of these Regulations.

By order of the Commission

Santhosh Kumar K. B Secretary Kerala State Electricity Regulatory Commission

#### **Explanatory Note**

(This does not form part of the notification, but is intended to achieve its general purport)

Section 61 of the Electricity Act, 2003 authorises the State Electricity Regulatory Commission to specify the terms and conditions for the determination of tariff for the supply of electricity by a generating company to a distribution licensees, transmission of electricity, wheeling of electricity and for retail sale of electricity and such other charges incidental thereto. The said section further stipulates that in specifying the terms and conditions for determination of tariff, the Commission shall be guided by certain principles laid down therein. Sub section (3) of Section 32 of the Act authorises the Commission specify fees and charges that many be levied by the State Load Despatch Centre. Consequently, the Kerala State Electricity Regulatory Commission had formulated the draft Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations 2018 for the control period 2018-19 to 2021-22 and had previously published it in the website of the Commission on 30-11-2017 for eliciting the opinion and suggestions of the stakeholders and the general public. Many suggestions and objections were received from stakeholders and the public. Further public hearing on the draft was held at Ernakulam on 3-1-2018 and on 10-1-2018 at Thiruvananthapuram. After considering the suggestions and opinions of the stakeholders and public, the draft was revised and published in the website of the Commission on 18-9-2018 for eliciting opinions, suggestions and objections from stakeholders and the public. A public hearing was conducted at Thiruvananthapuram on 1-10-2018. After considering all the suggestions and objections received directly and in the public hearing, the Commission approved the final Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations 2018 and decided to publish the same in the official gazette.

This notification is intended to achieve the above purpose				

#### Annexure-I Depreciation schedule

	Description of Assets	Depreciation (Straight line) (%)
A.	Land owned under full title	0.00%
В	Land under lease	
(a)	For investment in 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 NHRS &Waste Heat Recovery Boilers/Plants	5.28
	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 kutcha 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

		Description of Assets	Depreciation (Straight line) (%)
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	5.28
		disconnected boxes	
	ii)	Cable duct system	5.28
i.		Overhead lines including cable supports:	
	i)	Lines on fabricated steel operating at terminal voltages higher than 66 kV	5.28
	ii)	Lines on steel supports operating at terminal voltages higher than 13.2 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
I.		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
0.		Communication equipment:	
	i)	Radio and high frequency carrier system	6.33
	ii)	Telephone lines and telephones	6.33
p.		I.T. equipments including software	15.00
q.		Assets purchased second hand and assets not otherwise provided for in the Schedule	5.28

#### <u>Useful life</u>

(i) Ga	as/ Liquid fuel based thermal generating station:	25 years
(ii)	Coal/Lignite based thermal generating station:	25 years
(iii)	Hydro generating station:	35 years
(iv)	AC and DC sub-station:	25 years
(v)	Gas Insulated sub-station (GIS):	25 years
(vi)	Transmission line and transmission system	
	(including HVAC and HVDC):	35 years
(vii)	Distribution lines and distribution system:	35 years
(viii)	Communication system	15 years

#### **Annexure-II**

#### Procedure for calculation of availability for any period

#### (i) For thermal generating station

Availability in relation to a thermal generating station for any period means the average of the daily average declared capacities as certified by State Load Despatch Centre for all the days during that period expressed as a percentage of the installed capacity of the generating station minus normative auxiliary consumption in MW, as specified in these Regulations and shall be computed in accordance with the following formula:

Availability = 
$$10000 \times \Sigma DC_i / \{ N \times IC \times (100 - AUX_n) \} \%$$
  
i=1  
where - N = number of time blocks in the given period  
 $DC_i$  = Average Declared Capacity in MW for the i<sup>th</sup> time  
block in such period

IC = Installed Capacity of the generating station in MW  $AUX_n$  = Normative Auxiliary Consumption in MW, expressed as a percentage of gross generation

#### (ii) For transmission system

- 1.Transmission system availability shall be calculated separately for each transmission system. The transmission elements shall be grouped into following categories for the purpose of calculation of availability of transmission systems:
  - i) <u>AC transmission lines</u>: Each circuit of AC transmission line shall be considered as one element.
  - ii) <u>Inter-Connecting Transformers (ICTs)</u>: Each ICT bank (three single phase transformer together) shall form one element.
  - iii) <u>Static VAR Compensator (SVC)</u>: SVC along with SVC transformer shall form one element. However, 50% credit to inductive and 50% to capacitive rating shall be given.
  - iv) <u>Switched Bus Reactor</u>: Each switched Bus Reactor shall be considered as one element.

2. The Availability of AC portion of transmission system shall be calculated as under:

% System Availability for AC system

$$o X AV_o + p X AV_p + q X AV_q + r X AV_r$$
= ------ X 100
$$o + p + q + r$$

Where

o is Total number of AC lines.

AV<sub>o</sub> is Availability of o number of AC lines.

p is Total number of switched bus reactors.

AV<sub>p</sub> is Availability of p number of switched bus reactors.

q is Total number of ICTs.

 $AV_{\alpha}$  is Availability of q number of ICTs.

r is Total number of SVCs.

AV<sub>r</sub> is Availability of r number of SVCs.

- 3. The weightage factor for each category of transmission elements shall be as under:
  - For each circuit of AC line Surge Impedance Loading for Uncompensated line (SIL) multiplied by Circuit Km.
  - ii) SIL rating for various voltage level and conductor configuration is given in Appendix-II to this Annexure. However, for the voltage levels and/or conductor configurations not listed in Appendix-II, appropriate SIL based on technical considerations may be used for availability calculation under intimation to the Commission.
  - iii) For each ICT bank The rated MVA capacity.
  - iv) For SVC The rated MVAR capacity (inductive & capacitive).
  - For switched Bus reactor The rated MVAR capacity.
- 4.The availability for each category of transmission elements shall be calculated based on the weightage factor, total hours under consideration and non-available hours for each element of that category. The formulae for calculation of availability of each category of the transmission elements are as per Appendix-I to this Annexure -II.
- 5.The transmission elements under outage due to following reasons not attributable to the transmission licensee shall be deemed to be available:
  - Shut down of transmission elements availed by STU for Transgrid works and other agency/agencies for maintenance or construction of their transmission system.

- ii) Manual tripping of line due to over voltage and manual tripping of switched bus reactor as per the directions of State Load Despatch Centre.
- 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 Commission or any such other forum/agency as specified by the Commission that element outage was due to aforesaid events and not due to design failure shall rest on the A reasonable restoration time for the transmission licensee. element shall be allowed by Commission or any such other forum/agency as specified by the Commission 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. Commission or any such other forum/agency as specified by the Commission may consult the transmission licensee or any expert for estimation of restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available.
  - ii) 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 licensee's elements, tripping of lines, ICTs, etc. due to grid disturbance. However, if the element is not restored on receipt of direction from State Load Despatch Centre while normalising the system following grid incident/disturbance within reasonable time, the element will be considered not available for whole period of outage and outage time shall be attributable to the transmission licensee.
- 7.If the outage of any element causes loss of generation at a in-state generation stations then the outage period for that element shall be deemed to be twice the actual outage period for the day(s) on which such loss of generation has taken place.

## Appendix-I Formulae for calculation of availability of each category of transmission element

AV<sub>o</sub>(Availability of o no. of AC lines) 
$$= \sum \frac{\nabla W i(Ti-T_{NA}i)}{i=1} / \sum_{i=1}^{O} Wi$$

AV<sub>q</sub>(Availability of q no. of ICTs) = 
$$\sum_{k=1}^{q} \frac{Wk(Tk - T_{NA}k)}{Tk} / \sum_{k=1}^{q} Wk$$

AV<sub>r</sub>(Availability of r no. of SVCs) = 
$$\begin{bmatrix} r & r \\ \sum 0.5 \underline{W_l I (T_l I - T_{NAl} I)} + \sum 0.5 \underline{W_C I (T_C I - T_{NAC} I)} \\ T_l I & l = 1 \end{bmatrix}$$

$$\begin{bmatrix} r & r \\ \sum 0.5 \, W_I I + \sum 0.5 \, W_C I \\ I=1 & I=1 \end{bmatrix}$$

AV<sub>s</sub>(Availability of s no. of Switched 
$$= \sum_{m=1}^{S} \frac{Wm(Tm-T_{NA}m)}{Tm} / \sum_{m=1}^{S} Wm$$
Bus reactors)

Where  $Wi = Weightage factor for i^{th} transmission line$ 

 $Wk = Weightage factor for k^{th} ICT$ 

 $W_I / W_C / = Weightage factors for inductive & capacitive operation of / W_C / Weightage factors for inductive & capacitive operation of$ 

Maintana factor for with horse re

 $Wm = Weightage factor for <math>m^{th}$  bus reactor Ti, Tk,  $T_II$ , The total hours of  $i^{th}$  AC line,  $k^{th}$  ICT,  $I^{th}$  SVC (Inductive

 $T_{C}I$ , Tm&Tn

Operation), I<sup>th</sup> SVC (Capacitive Operation),  $m^{th}$  Switched Bus Reactor &  $n^{th}$  HVDC back-to-back block during the period under consideration (excluding time period for outages not attributable to transmission licensee for

reasons given in Para 6 of the procedure)

 $T_{NA}i,T_{NA}k$ , The non-availability hours (excluding the time period for outages not attributable to transmission licensee taken as  $T_{NA}m$  deemed availability as per Para 5 of the procedure) for i<sup>th</sup>AC

deemed availability as per Para 5 of the procedure) for i<sup>th</sup>AC line,  $k^{\text{th}}$ ICT, I<sup>th</sup> SVC (Inductive Operation), I<sup>th</sup> SVC

(Capacitive Operation), mth Switched Bus Reactor.

#### Appendix-II

#### Surge impedance loading (SIL) of AC lines

SI.	Line voltage	Conductor	SIL
No.	(kV)	Configuration	(MW)
1	765	Quad Bersimis	2250
2	400	Quad Bersimis	691
3	400	Twin Moose	515
4	400	Twin AAAC	425
5	400	Quad Zebra	647
6	400	Quad AAAC	646
7	400	Triple Snowbird	605
8	400	ACKC(500/26)	556
9	400	Twin ACAR	557
10	220	Kundah	128
11	110	Wolf	32
12	66	Mink	14

#### Annexure-III

#### Format for certificate to be issued by generating business/company

#### a) For hydro-electric generating stations

It is to certify that the (Name of the Station) has fulfilled all the key provisions as prescribed below in accordance with Regulation 8 of Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff), Regulations, 2018.

- 1.All documents as prescribed in regulation 3(8) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 have been retained at site and are available at site.
- 2.All requirements as per regulation 30(1), 30(2) and 30(5) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 have been complied.
- 3. The unit operating capability shall be in conformity to Regulation 32 (1), 32(3), 32(4), 32(6) and 32(8) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010.
- 4.All requirements as per Regulation 33(6), 33(7), 33(8) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 have been complied for the hydraulic Turbine.

Name: (CMD/CEO/MD)

#### b) For gas-based generating stations

It is to certify that the (Name of the Station) has fulfilled all the key provisions as prescribed below in accordance with Regulation 8 of Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff), Regulations, 2018.

- 1.All documents as prescribed in regulation 3(8) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 have been retained at site and are available at site.
- 2.All requirements as per Regulation 5 of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 have been complied.
- 3. The unit operating capability shall be in conformity to Regulation 14 (2), 14(3), 14(4), 14(5) and 14(7) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010.
- 4. All requirements as per Regulation 17 and Regulations 9(2), 9(4), 9(9), 9(15), 9(16), 9(18) of the Central Electricity Authority (Technical Standards for Construction of Electric Plants and Electric Lines) Regulations, 2010 have been complied for the Steam Turbine.

Name: (CMD/CEO/MD)

#### Annexure-IV

#### **Guidelines for in-principle clearance of investment schemes**

These Guidelines shall be adhered to by all generating businesses/companies, transmission businesses/licensees, distribution businesses/licensees, and State Load Despatch Centre, while submitting their capital investment plan. The methodology and evaluation criteria for evaluation of these capital investment schemes, are detailed below:

#### **Methodology**

#### A. Submission of capital investment plan

The generating businesses/companies, transmission businesses/licensees, distribution businesses/licensees, and State Load Despatch Centre shall submit the capital investment plan outlining the major schemes proposed, in the manner directed by the Commission. Such plan shall be uniform and consistent with other relevant proposals, and supporting information as desired by the Commission shall be included in the submission.

#### B. Capital investment schemes

- (a) For the purpose of these guidelines, a capital investment scheme means:
  - i) Any capital expenditure programme of the transmission business/licensee, distribution business/licensee, and State Load Despatch Centre for the acquisition, construction or improvement of permanent facility in the respective business
  - ii) Capital investment scheme involving replacement, renovation and modernization or life extension of existing fixed assets of the generating business/company.
- (b) The schemes shall be planned considering the four year investment horizon
- (c) The scope of investments included in each scheme shall be any of the following:

#### (i) Works of a similar or related nature

For example, new receiving stations proposed at different locations within the licence area must be clubbed together and presented as a scheme for new receiving stations, schemes for modernization/augmentation of the transmission cables must be presented together, information technology schemes, SCADA and

communication equipment at the region/State level, schemes for major replacement of old equipment, etc.

- (ii) <u>Different types of works within a geographical area, say in a district</u>
  For example, all capital investments covered under a District Integrated Scheme can be presented together as a Scheme.
- (iii) An independent identifiable project as would be submitted to a financial institution like Rural Electrification Corporation, Power Finance Corporation, etc., or for funding under Revised Accelerated Power Development & Reform Programme.

(iv)

#### C. Submission of Detailed Project Reports

For the capital investment schemes exceeding the amount of Rs. 10 crore in the case of KSEB Ltd and Rs.5 lakh in the case of distribution licensees other than KSEB Ltd, detailed project report shall be submitted for the Commission's in-principle approval with a broad cost-benefit analysis. The capital investment plans shall constitute a least cost plan.

The detailed project reports shall necessarily include the scope and objective of the proposed scheme and elaborate how the scheme meets the evaluation criteria mentioned herein.

## D. Evaluation of the detailed project reports Stages of approval process

In-principle clearance: During this stage, the scheme would be given clearance considering primarily its scope and objective, while keeping in view the following criteria:

#### (i) Statutory requirements:

- a. Whether the proposed capital investment is necessary to discharge the duties and obligations of the generating businesses/companies, transmission businesses/licensees, distribution businesses/licensees, and State Load Despatch Centre, as per the Electricity Act, 2003 and rules and Regulations made thereunder?
- b. Whether the proposed capital investment is in line with such provisions, Rules and Regulations?

#### (ii) Need for investment:

- a. Whether the proposed capital investment is necessary to set-up the infrastructure
  - 1. To strengthen the system to meet the normal load growth
  - 2. To supply to new consumers
  - 3. For improving the quality of supply to consumers
- b. Whether equipments are operating close to their rated capacities and the proposed capital investment is necessary?

- 1. To increase the reliability of the system
- 2. For life extension of the equipment.
- 3. To facilitate the creation of back-up facilities

#### (iii) Technical justification:

- a) Whether the scheme confirms to the technical design criteria?
- b) Whether the replacement of old equipment is necessary for equipments, which have outlived their normal life-span?
- c) Whether the useful life of the proposed equipment is reasonable?
- d) What is the average rate of technology obsolescence for the proposed equipment?
- e) Whether the proposed investment would improve the reliability of supply?
- f) Whether the investment is necessary for a reduction in transmission or distribution losses?

#### (iv) Timing of the investment:

- a) Whether the timing of the investment is optimum?
- b) Whether the investment planned is commensurate with the demand growth?

#### (v) Prudence of the Investment:

- a) Whether other alternatives schemes have been considered?
- b) Whether the proposed investment would result in duplication of existing infrastructure?
- c) Whether the proposed investment is a necessity for the conduct of business?

#### (vi) Cost-benefit analysis:

- a) Whether the cost estimates are reasonable?
- b) Whether it is in line with the cost rates approved by the Commission in the past, if any?
- c) Whether the least cost option has been considered?

## 2) Final approval after capitalization, while approving the Aggregate Revenue Requirement & expected revenue from charges

During this stage, the impact of the capital expenditure schemes will be included in the Aggregate Revenue Requirement, based on the approved capital expenditure and any cost over-run, if approved by the Commission.

## Annexure-V Formula for calculation of plant load factor

**Plant load factor** shall be computed in accordance with the following formula:

Plant load factor (%) = 10000 x  $\Sigma AG_i$ / {N x IC x (I00-AUX<sub>n</sub>) }%

i=1

where,

N = number of time blocks in the given period;

 $AG_i$  = Actual ex-bus generation in MW for the  $i^{th}$  time block in such period;

IC = Installed capacity of the generating station in MW;

 $AUX_n$  = Normative auxiliary consumption in MW, expressed as a percentage of gross generation;

## Annexure-VI Ceiling norms for capitalised initial spares

## Ceiling norms for the capitalised initial spares as a percentage of the cost of plant and machinery upto cut-off date

(a) (b) (c)	Gas tu	ased/lignite fired thermal generating stations rbine/combined cycle thermal generating stations generating stations	- 4.0%; - 4.0%; - 4.0%,	
(d)	,	nission system:	,	
(4)	(i)	Transmission Line	- 1.0%	
	(ii)	Transmission sub-station (green-field)	- 4.0%	
	(iii)	Transmission sub-station (brown-field)	- 6.0%	
	(iv)	Series compensation devices and HVDC Station	- 4.0%	
	(v) Gas Insulated switchgear sub-station (GIS)			
	(vi)	Communication system	- 3.5%	

# Annexure-VII O&M norms for existing generating stations of generation business of KSEB Limited

	Control period					
	2018-19	2018-19 2019-20 2020-21 2021-22				
	(Rs. crore) (Rs. crore) (Rs. crore)					
O&M Expenses	123.77 129.77 136.05 142.63					

# Annexure-VIII O&M norms for the transmission business of KSEB Limited and transmission licensee

		Control period				
	2018-19	2018-19 2019-20 2020-21 2021-22				
O&M cost for Bay						
(Rs.lakh/Bay)	10.71 11.23 11.77 12.34					
O&M cost per Circuit km						
(Rs.lakh/circuit km)	0.93	0.98	1.03	1.08		

**Explanation**: The O&M expenses for any year of the Control Period shall be allowed by multiplying the O&M norms for that year with the actual number of bays and transmission line length in ckt km for the previous year, i.e., the O&M expenses for FY 2018-19 shall be allowed by multiplying the O&M norms for FY 2018-19 with the actual number of bays and transmission line length in ckt km for FY 2017-18.

### Annexure-IX O&M norms for the distribution business/licensees

Table 1 (a): O&M norms (Employee expenses and Administration & General expenses) for distribution business of KSEB Limited

	Control period			
	2018-19	2019-20	2020-21	2021-22
No. of consumers (Rs. Lakh/'000 consumers)	4.80	5.03	5.27	5.53
No. of Distribution transformers (Rs.lakh/Distribution transformer)	0.64	0.67	0.70	0.73
Length of HT line (Rs.lakh/km of HT line)	0.79	0.83	0.87	0.91
Energy sales (Rs.per unit)	0.19	0.20	0.21	0.22

**Explanation**: The O&M expenses (Employee expenses and Administration & General expenses) for any year of the Control Period shall be allowed by multiplying the norms for that year with the actual number of consumers, distribution transformers, km of HT line and sales for the previous year, i.e., the O&M expenses (excluding R&M expenses) for FY 2018-19 shall be allowed by multiplying the norms for FY 2018-19 with the actual number of consumers, distribution transformers, km of HT line and sales for FY 2017-18.

### (b) Repair and Maintenance expenses of distribution business of KSEB Ltd:

- (i) 3% of Opening GFA (excluding value of land and land under lease) of distribution business of each year of the control period.
- (ii) Repair and Maintenance expenses for assets added during the year of the control period shall be allowed after prudence check by the Commission on a pro-rata basis subject to production of details of the assets.

Table 2: O&M norms for distribution business of Cochin Special Economic Zone Authority (CSEZA)

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	192.18	201.49	211.24	221.46

Table 3: O&M norms for distribution business of Technopark

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	265.08	277.91	291.36	305.47

Table 4: O&M norms for distribution business of Kinesco Power & Utilities Private Limited (KPUPL)

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	144.28	151.26	158.58	166.26

Table 5: O&M norms for distribution business of Rubber Park of India (P) Limited

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	106.94	112.12	117.55	123.24

Table 6: O&M norms for distribution business of Kanan Devan Hills Plantation Company Private Limited (KDHPCL)

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	176.65	185.20	194.17	203.56

Table 7: O&M norms for distribution business of Cochin Port Trust

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	435.22	456.29	478.37	501.52

Table 8: O&M norms for distribution business of Thrissur Corporation Electricity Department

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	1254.28	1314.98	1378.63	1445.36

Table 9: O&M Norms for distribution business of Infopark

	2018-19	2019-20	2020-21	2021-22
O&M Expenses (Rs.lakh)	42.96	45.04	47.22	49.50

### Annexure-X Fuel Surcharge Formula

The Formula for adjustment of fuel surcharge shall be as under:

The rate of fuel surcharge adjustment in paise per kWh =  $F \div E \times 100$ 

Where,-

F = The amount of fuel surcharge in rupees, which is the sum of Fg, Fp and A E = Energy billed for retail sale to the consumers other than the domestic consumers with connected load of and below 500 W and consumption of and below 20 kWh, inthe relevant quarter, based on the approved level of transmission and distribution loss

Fg = Change in the cost of fuel for generation of electricity from own stations

$$=\sum_{1}^{n}Qg\ X\left(R1-R2\right)$$

Fp = Change in cost of the energy purchased, due to the change in fuel cost

$$=\sum_{1}^{n}Qp\ X\left(P1-P2\right)$$

(Fg and Fp shall be calculated for each station month-wise and added up)

A = Balancing term to take care of difference, if any, in the energy sales

Qg = Quantity of fuel used for generation of electricity in own stations

(Approved station heat rate in kilo calories per kWh X
 Actual or approved energy whichever is less in MU X 1000) ÷
 Calorific value of the fuel in kilo calories per kilo gram

 $Q_p = Actual$  quantity of energy purchased or approved whichever is lesser

R1= Actual price of fuel in rupees per metric ton

R2= Approved price of fuel in rupees per metric ton

P1= Actual price of purchased energy in rupees per kWh

P2= Approved price of purchased energy in rupees per kWh

### Annexure-X Rate of Fuel Surcharge Adjustment (Form-I)

Name of distribution business/licensee \_\_ Approved Price of fuel (Rs./MT) Actual Quantity of fuel (MT) Approved Actual value of (kcal/kg) Calorific Approved Quarter Station heat rate (kcal/kWh) Actual Note:1)If more than one fuel is used, information may be provided separately for each fuel Energy generation (kWh) Aux. consumption (kWh) Net energy input (kWh) Approved Approved Approved Approved Energy input (kWh) format 2: Month wise details of generation from own sources & IPPs (Stationwise): Total Cost (Rs.) format 1: Details of month wise energy billed for retail sale for the quarter Actual Actual Actual Actual Month: Approved Approved Approved Approved Price Rs. /kWh T&D loss (%) 2) In the case of IPPs, norms as per PPA may be indicated ormat 4 : Source wise energy input for the quarter Format 3: Month wise details of purchase of energy Actual Actual Actual Actual Energy purchase (kWh) Approved Approved Approved Approved Retail Sales (kWh) Actual Actual Actual Actual Source Source Source Month

### Annexure-XI Formula for calculating cross subsidy surcharge

Cross subsidy surcharge shall be calculated as per following formula:

 $S = T - [C/(1 - L \div 100) + D + R]$ 

Where,

S is the Cross Subsidy Surcharge;

T is the tariff payable by the relevant category of consumers including reflecting the Renewable Purchase Obligation;

C is the per unit weighted average cost of power purchase by the Licensee including meeting the Renewable Purchase Obligation;

D is the aggregate transmission, distribution and wheeling charge applicable to the relevant voltage level;

L is the aggregate transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level;

R is the per unit cost of carrying regulatory assets.

Provided that if S is computed to be negative as per above Formula, S shall be considered as zero

Provided further that the surcharge shall not exceed 20% of the tariff applicable to the category of consumers seeking open access:

Provided also that the Commission may after recording the reason thereof, order the levy of the surcharge determined for consumers of a distribution licensee, from consumers of one or more other distribution licensees.

Provided also that the Commission in consultation with the Government may exempt levy of cross subsidy surcharge on railways, as defined in the Railways Act 1989 (Central Act No 24 of 1989) on electricity purchase for its own consumption.

#### **Annexure-XII**

Formats for filing petition for approval of Aggregate Revenue

Requirement and tariff

#### **NOTE**

(This does not form part of these Regulations, but is intended for explaining the methodology for computation of normative O&M costs)

# Methodology Adopted for Specifying Normative O&M Costs for the Businesses of KSEB Limited for the Second Control Period (2018-19 to 2021-22).

The objective of the tariff determination process taken up by the Commission for licensees and generating companies is to achieve the goals of promotion of investments in the sector, encouraging efficiency and optimization of cost, balancing the interest of the consumers and to ensure recovery of reasonable cost of electricity so as to sustain the utilities and for providing efficient service to the consumers. Certainty in regulatory decisions and providing appropriate signals for the consumers and producers/service providers is of paramount important in tariff determination process.

The basic rationale for MYT regime is to provide long term perspective for tariff determination and reducing the regulatory risk both for consumers and the licensees. The other benefits of the scheme include the provision of adequate incentive for encouraging performance and through disincentives for penalizing non-performance and insulating the licensees from factors which are beyond their control. The Commission in the second control period has proposed to specify the norms for the licensees and for the business of generation taking into consideration the basic principles of Multi Year Tariff regime compared to annual determinations.

While devising the norms for the second control period, the Commission has in fact had to consider many issues. Firstly, the Commission is of the view that the control period should be fairly long so as to enable the utilities to develop the practice of medium to long term planning. A capital intensive sector such as electricity has a fairly long gestation period and hence thre is a requirement for long term planning. Though this being the case, the control period should also be not too long that short term uncertainties appropriately addressed. Hence the Commission has proposed a four year control period from the present three year period.

The Commission while formulating the current four year Multi Year Tariff has considered the following judicial pronouncements: Order of the Hon'ble High Court of Kerala in the Writ Petition WPC No.465/2015(G) wherein KSEB Ltd had challenged the O&M norms for determining the expenditure specified in the 2014 Regulations as inadequate and resulting in under recovery of its expenses. Hon'ble High Court on 28-02-2018 issued the final judgment and disposed of the petition WP(C) 465/2015,

Orders of the Hon APTEL dated 10-11-2014 in Appeal No. 1 and 19 of 2013 and the Orders of Hon. High Court of Kerala dated 28-2-2018 in the Writ Petition WPC No.465/2015(G) has also been appropriately As per the Orders of Hon. APTEL the employee costs for the years from 2009-10 to 2013-14 has been revised and the Commission has issued truing up orders and consequential/remand orders for the said period, thereby revising the employee cost attributable to KSEB Ltd in line with APTEL orders. Further, as per the directions contained in the Orders of Hon. High Court, the Commission has issued orders on truing up of accounts of KSEB Ltd for the years 2015-16 and 2016-17. As the Commission has already completed the truing up of accounts for KSEB Ltd till 2016-17 (except for the year 2014-15, which is reserved as per the directions of Hon. Supreme Court of Kerala), the relevant data for the next control period has been taken as basis for the present Regulation.

Escalation factors have been appropriately to be considered for the control period considering the fact inflation is considered as an uncontrollable factor and the licensee has to be mitigated from inflation risk. The Commission during the first control period (2015-16 to 2017-18) has considered the escalation rates as allowed by CERC for the period from 2009-2014. The main feature of the CERC escalation indices is that it follows the actual increase in O&M expenses of the central utilities rather than actual inflation parameters. In order to address the issue, the Commission has decided to propose the average inflation linked to CPI and WPI at 70:30 weightage for the previous four years during this control period, which is expected to address the inflation risk. In this context it is to be pointed out that Government of India has revised the base year for WPI to 2011-12 and officially the indices are effective from 2017, Hence the old series data is no more available for the future years. However, Govt of India has also given

indices from 2012-13 to 2016-17 in the new format and the Commission has used the revised WPI data for the purpose of CPI:WPI indexation and for working out the four year average of CPI:WPI at 70:30 weightage from 2013-14 to 2016-17.

In the succeeding sections, the methodology employed for arriving at the norms for recovery of O&M expenses for the licensees and generating companies is dealt with.

### Common Steps Adopted for Generation, Transmission & Distribution Businesses.

1. For determining the norms for the second control period 2018-19 to 2021-22, the latest trued up orders for the year 2016-17 of KSEB Limited is used. The trued up O&M expenses for the year 2016-17 (net of capitalization, terminal benefits and electricity duty under section 3 of the Kerala Electricity Duty Act) for KSEB Ltd are as shown below:

Table

	SBU-G	SBU-T	SBU-D	KSEB Ltd
	(Rs. crore)	(Rs. crore)	(Rs. crore)	(Rs. crore)
Employee expense	81.89	233.76	1,606.72	1,922.37
R&M expenses	19.83	70.20	198.22	288.24
A&G expenses	4.59	16.53	90.82	111.94
O&M for new Stations	6.30	-	-	6.30
Total O&M expenses	112.61	320.48	1,895.76	2,328.85

2. **Escalation rates**: As mentioned earlier, escalation rates is based on the CPI:WPI indices at 70:30 weightage for the past four years is shown below:

Escalation Factors	2013-14	2014-15	2015-16	2016-17
CPI	236.00	250.83	265.00	275.92
CPI Increase (%)	9.68%	6.28%	5.65%	4.12%
WPI (2011-12 series)	112.50	113.90	109.70	111.60
WPI increase (%)	5.24%	1.24%	-3.69%	1.73%
CPI:WPI (70:30) increase	8.35%	4.77%	2.85%	3.40%
Average increase (2013-14 to 2016-17)				4.84%

Since the control period is four years, the average inflation for the past four years is 4.84% is used for the purpose of determination of norms.

### Normative O&M Costs for Generation Business of KSEB Limited for the Control Period.

3. The average employee costs, repair & maintenance costs and administrative & general costs for the generation business of KSEBL, as given above in para 2 for the financial year 2016-17, have been escalated based on the escalation rate of 4.84% per annum (based on the average escalation rate based on CPI:WPI for 2013-14 to 2016-17), for determining the O&M expenses if the Generation business for the control period as given in the following table:

Table
O&M Costs for Generation business

			Control period			
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
	(Rs. crore)	(Rs. crore)	(Rs. crore)	(Rs. crore)	(Rs. crore)	(Rs. crore)
O&M Expenses	112.61	118.06	123.77	129.77	136.05	142.63

## Normative O&M Costs for Transmission Business of KSEB Limited for the Control Period.

4. O&M expenses for Transmission business is allowed based on the normative number for Bays and Circuit kilometers of transmission lines. The data regarding the number of bays (66 kV and above) and circuit kilometers for the year 2015-16 and 2016-17 are available as shown below:

Table

Year	2015-16	2016-17
No. of Bays (66 kV and above)	2466	2488
Circuit length (Ckt-km)	9,377.03	9451

The employee costs, repair & maintenance costs and administrative & general costs for the transmission business of KSEB Limited (Rs.320.48 crore), as computed in para 2 above, for the financial year 2016-17, have been allocated amongst the number of bays and line length in circuit kilometer in the ratio of 75:25, respectively, for working out the normative O&M expenses for the transmission business for the financial year 2016-17

5. The above normative O&M expenses for the financial year 2016-17 have been escalated at 4.84% per annum for determining the normative O&M expenses for the control period, as given in the following table:

**Table** 

			Control period			
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
O&M cost for Bay (Rs.lakh/Bay)	9.75	10.22	10.71	11.23	11.77	12.34
O&M cost per Circuit km (Rs.lakh/circuit km)	0.85	0.89	0.93	0.98	1.03	1.08

6. The O&M expenses for any year of the control period shall be allowed by multiplying the normative O&M costs for that year with the actual number of bays and transmission line length in circuit kilometer at the end of the previous year, i.e., the O&M expenses for the financial year 2018-19 shall be allowed by multiplying the normative O&M costs for the financial year 2018-19 with the actual number of bays and transmission line length in circuit kilometer at the end of the previous financial year 2017-18.

## Normative O&M Costs for the Distribution Business of KSEB Limited for the Control Period.

- 7. The parameters used for allowing O&M expenses (employee costs and A&G expenses) for distribution is the number of consumers, number of distribution transformers, length of HT lines in kilometer and sales. R&M expense is benchmarked against the Distribution Gross Fixed Assets. These parameters for the distribution business at the end of the financial year 2017-18 have been considered as the output parameters for the financial year 2018-19, for the purpose of working out the normative O&M expenses.
- 8. The employee costs, and administrative & general costs for the distribution business of KSEB Limited (Rs. 1697.54 crore), as computed above in para 2 for 2016-17 have been allocated to the number of consumers, number of distribution transformers, length of HT lines in kilometer and the sales, in the ratio of 30:25:25:20, respectively, for working out the normative O&M costs for the

distribution business. The parameters for the distribution business for the year 2015-16 and 2016-17 is as shown below:

	2015-16	2016-17
No. of consumers	1,16,68,031	1,19,94,853
No. of Distribution Transformers	73,460	75,759
Length of HT lines (kms)	59,47.66	61,364
Energy Sales (MU)	19,325	20,055

9. The normative O&M costs (employee costs and A&G expenses) for the financial year 2016-17 have been escalated by the growth rate of 4.84% per annum for determining the normative O&M costs (employee costs and A&G expenses) for the financial years in the control period.

**Table** 

			Control period			
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
No. of consumers (Rs. Lakh/'000 consumers)	4.36	4.58	4.80	5.03	5.27	5.53
No. of Distribution transformers (Rs.lakh/Distribution transformer)	0.58	0.61	0.64	0.67	0.70	0.73
Length of HT line (Rs.lakh/km of HT line)	0.71	0.75	0.79	0.83	0.87	0.91
Energy sales (Rs.per unit)	0.18	0.18	0.19	0.20	0.21	0.22

10. The O&M expenses (excluding R&M expenses) for any year of the control period shall be allowed by multiplying the normative O&M costs for that year with the actual number of consumers, number of distribution transformers, length of HT line in kilometer, sales, and GFA for the previous year, i.e., the O&M expenses for the financial year 2018-19 shall be allowed by multiplying the normative O&M costs for the financial year 2018-19 with the actual number of number of consumers, number of distribution transformers, length of HT lines in kilometer and sales for the financial year 2017-18.

11. R&M expenses for distribution business (SBU-D) is allowed based on the 3% of opening level of GFA (excluding value of land and land under lease) for the respective years of Distribution business.

# Method Adopted for Specifying Normative O&M Costs for Distribution Licensees Other than KSEB Ltd

Methodology for arriving at the O&M expenses for the Control period 2018-19 to 2021-22

- The truing up of accounts for Cochin Port Trust (CoPT), Cochin Special Economic Zone Authority (CSEZA) and Kanan Devan Hill Plantations Company (P) Ltd (KDHPCL) have been completed till 2016-17, whereas in the case of Rubber Park India (P) Limited (RPL), Infopark and Thrissur Corporation (TCED), truing up of accounts were completed till 2015-16. In the case of KPUPL and Technopark truing up is completed only upto 2014-15.
- General methodology adopted for the purpose of arriving at the figures for the control period, is that the actual/approved figures for the period 2014-15 to 2016-17 is taken considering the appropriateness of the data (explained below) including the principles of efficiency and cost reduction. The selected figures were averaged and escalated to reach upto 2016-17 using on the escalation as per CPI:WPI index at 70:30 weightage for respective years. The figures for the four year control period are arrived at by escalating the figures in 2016-17 at average escalation rate of 4.84% (Average CPI:WPI index for the four year period 2013-14 to 2016-17).

Methodology for each item is given below:

#### **Employee cost**

- Cochin Port Trust The actual employee cost allocated by the licensee into the distribution business in the past years is excessive as a disproportionate number of the surplus employees in CPT has been assigned to distribution business. Hence approved figures are taken. Employee costs as approved in the trued up for 2016-17 (latest trued up) is taken as base figures and escalated using the escalation rates for arriving at the amount for the control period.
- CESZA Employee cost as approved in the trued up excluding the efficiency gains for the year 2016-17 is taken as base year.

- KPUPL Actual Employee cost for the year 2016-17 is appropriately adjusted and escalation rates as explained above is used for arriving at the amount of employee cost for the control period.
- KDHPCL Employee cost as approved in the trued up for 2016-17 (latest trued up) is taken as base figure. However, the apportioned cost of senior management is to be included and the apportionment of other employees in the estate and factory business is to be properly assigned. Considering the allocation required for the distribution business, an amount of Rs.115 lakh is arrived at for 2016-17. This amount is escalated for the control period appropriately.
- TCED Trued up figures for 2014-15 is taken and escalated using the escalation rates for the respective years upto 2016-17. This amount is escalated for the control period appropriately.
- RPL –Actual employee cost for 2015-16 is considered, as the approved figures in the previous years exclude the expenses of full time MD and other staff. The same is escalated using the escalation factors to arrive at the figures for 2016-17 and the amounts for the control period.
- Technopark- Actual employee cost for 2015-16 is escalated to 2016-17 and used as base figure.
- Infopark Trued up or 2015-16 is taken as there is limited past data available and the licensee is still expending the activities.

#### **Repairs and Maintenance expenses**

- Except for Technopark, KPUPL and Infopark, the actual R&M expenses for 2014-15 to 2016-17 were taken and averaged for 2015-16. This figure is escalated using the escalation rates for the year 2016-17. The figures arrived at for the year 2016-17 were escalated at the rate of 4.84% to arrive at the figures for the control period.
- In the case of Technopark, actual R&M expenses for 2012-13 to 2014-15 were averaged and escalated using the escalation rates to arrive at the figures for 2016-17.
- For KPUPL, actual for 2014-15 is taken and escalated using escalation rates for respective years for arriving at the figures for control period.
- In the case of Infopark, actual figures for 2015-16 were used.

#### **Administrative expenses**

 In all cases, the trued up figures for the year 2014-15 to 2016-17 as available were taken. This is because the actual figures given by the licensee include electricity duty, Rent and security charges which are required to be excluded. If the trued up figures are not available,

- figures for respective years were projected based on the escalation rates for respective years. In the case of Technopark, approved value for 2013-14 was escalated.
- The O&M expenses for the control period is the summation of the employee cost, R&M and A&G expenses arrived at.

#### **Employee cost (Rs. Lakh)**

Name of the licensee	Approved/ Actuals	Escalated WPI:CPI	Control Period			
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Cochin Port Trust	331.55	347.60	364.42	382.06	400.55	419.94
CSEZA	143.60	150.55	157.84	165.48	173.49	181.88
KDHPCL	115.00	120.57	126.40	132.52	138.93	145.66
KUPUL	34.74	36.42	38.18	40.03	41.97	44.00
RPL	46.35	48.59	50.94	53.41	55.99	58.70
TCED	994.05	1,042.16	1,092.60	1,145.48	1,200.92	1,259.05
Technopark	27.28	28.60	29.98	31.43	32.95	34.55
Infopark	10.56	11.07	11.60	12.17	12.75	13.37

#### R&M Expenses (Rs. Lakh)

Name of the licensee		Actuals			Escala CPI:	ated at WPI
	2014-15	2015-16	2016-17	Mid year (2015-16)	2016-17	2017-18
Cochin Port Trust	19.02	12.18	22.58	17.93	18.54	19.43
CSEZA	17.26	0.22	2.70	6.73	6.96	7.29
KDHPCL	22.05	43.47	30.83	32.12	33.21	34.82
KUPUL	58.95	60.63	62.69	60.76	62.83	65.87
RPL	29.52	31.91	31.35	30.93	31.98	33.53
TCED	64.29	69.00	83.19	72.16	74.62	78.23
Technopark	183.42	160.90		160.90	166.38	174.43
Infopark		17.70		17.70	18.30	19.18

### R&M Expenses for the control period (Rs. lakh)

Name of the licensee		Control Period					
	2017-18	2018-19	2019-20	2020-21	2021-22		
Cochin Port Trust	19.43	20.37	21.36	22.39	23.48		
CSEZA	7.29	7.65	8.02	8.40	8.81		
KDHPCL	34.82	36.50	38.27	40.12	42.06		
KUPUL	65.87	69.05	72.40	75.90	79.57		
RPL	33.53	35.15	36.85	38.63	40.50		
TCED	78.23	82.01	85.98	90.15	94.51		
Technopark	174.43	182.87	191.72	201.00	210.73		
Infopark	19.18	20.11	21.09	22.11	23.18		

### A&G expenses (Rs.lakh)

Name of the licensee		Approved		Mid year	Escalated	at CPI:WPI
	2014-15	2015-16	2016-17	2015-16	2016-17	2017-18
Cochin Port Trust	44.40	35.10	53.60	44.37	45.88	48.10
CSEZA	21.06	24.68	24.74	23.49	24.29	25.47
KDHPCL	13.20	13.91	9.18	12.10	12.51	13.11
KUPUL	31.62	32.52	33.63	32.59	33.70	35.33
RPL	18.39	18.02	18.63	18.35	18.97	19.89
TCED	62.83	72.49	74.96	70.09	72.48	75.99
Technopark	44.59	45.86	47.42	45.95	47.52	49.82
Infopark		9.89		9.89	10.23	10.72

### A&G expenses for the control period (Rs.lakh)

Name of the licensee			Control period			
	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Cochin Port Trust	45.88	48.10	50.43	52.87	55.42	58.11
CSEZA	24.29	25.47	26.70	27.99	29.35	30.77
KDHPCL	12.51	13.11	13.75	14.41	15.11	15.84
KUPUL	33.70	35.33	37.04	38.83	40.71	42.68
RPL	18.97	19.89	20.85	21.86	22.92	24.03
TCED	72.48	75.99	79.66	83.52	87.56	91.80
Technopark	47.52	49.82	52.23	54.76	57.41	60.19
Infopark	10.23	10.72	11.24	11.78	12.35	12.95

O&M expenses for the Control Period are specified in a composite manner as a sum of employee expenses, R&M expenses and A&G expenses

#### O&M expenses for the control period (Rs.lakh)

Name of the licensee	2018-19	2019-20	2020-21	2021-22
Cochin Port Trust	435.22	456.29	478.37	501.52
CSEZA	192.18	201.49	211.24	221.46
KDHPCL	176.65	185.20	194.17	203.56
KUPUL	144.28	151.26	158.58	166.26
RPL	106.94	112.12	117.55	123.24
TCED	1254.28	1314.98	1378.63	1445.36
Technopark	265.08	277.91	291.36	305.47
Infopark	42.96	45.04	47.22	49.50

#### ARR and Tariff Formats Distribution Business

#### **INDEX**

S.No.	Form No.	Particulars
1	2	3
1	Form D 1.1	Summary of Aggregate Revenue Requirement
2	Form D 2.1	Revenue from Sale of Power
3	Form D 2.2	Income from Wheeling Charges
4	Form D 2.3	Income from sale of surplus power
5	Form D 2.4	Other Income
6	Form D 2.5	Subsidy provided by the State Govt under Section 65 of EA 2003
7	Form D 2.6	Revenue Subsidy and Grant
8	Form D 2.7	Consumer Contribution, Capital Subsidy and Grant
9	Form D 3.1	Power Purchase Expenses
10	Form D 3.2	Transmission Charges
11	Form D 3.3	Load Despatch Charges
12	Form D 3.4	Operations and Maintenance Expenses
13	Form D 3.4(a)	Employee Expenses
14	Form D 3.4(b)	Administrative & General Expenses
15	Form D 3.4(c)	Repair & Maintenance Expenses
16	Form D 3.5	Fixed assets & depreciation
17	Form D 3.6(a)	Calculation of Weighted Average Rate of Interest on Actual Loans
18	Form D 3.6(b)	Calculation of Interest on Normative Loan
19	Form D 3.6(c)	Interest on Bonds to meet Terminal Liabilities
20	Form D 3.7	Interest on Working Capital
21	Form D 3.8	Return on Equity/Return on Net Fixed Assets
22	Form D 3.9	Tax on R.O.E.
23	Form D 4.1	Project-wise / Scheme-wise Capital Expenditure
24	Form D 4.2	Consolidated report on additions to Fixed Assets during the year
25	Form D 4.3	General (Other debits, write offs or any other items)
26	Form D 5.1	Consumer category wise Existing Tariff
27	Form D 5.2	Consumer category wise Proposed Tariff
28	Form D 5.3 (a)	Revenue from existing Tariff
	Form D 5.3 (b)	Revenue from existing Tariff
	Form D 5.3 (c)	Revenue from proposed tariff
29	Form D 6.1	Improvement in performance
30	Form D 6.2	Appropriation of Distribution loss
31	Form D 7.1	Category-wise Sales
32	Form D 7.2	Distribution Losses
33	Form D 7.3	Collection Efficiency
34	Form D 8	Deviation Analysis
35	Form D 9	Consumer category-wise cross-subsidy

Other In	Other Information/Documents									
1	Form D P&L	Profit & Loss Account								
2	Form D BS	Distribution Business Balance sheet								
3	Form D CF	Cash Flow for the year								
4	Form KSEBL SBU- wise P&L	KSEB Limited SBU-wise Profit & Loss Account								
5	Form Small Lic Distr P&L	Small Distribution Licensees - Distribution business Profit & Loss Account								
6	SBU-BS	SBU wise Balance sheet of KSEB Ltd								
7	BS-Other	Balance sheet of Other licensees								

8. Corporate audited/unaudited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the relevant years.

	Form D 1.1						
	Summary of Aggregate Revenue Requirement						
Name of Distribution Business/Licensee							
Licensed Area of Supply							

								(Rs Cr)						
				201	6-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
S.No.	Particulars	Reference form no.	Approved in Tariff Order	Audited	Normative	Truing Up	Approved in Tariff Order	Audited	Truing Up requirement	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Cost of own power generation/power purchase													
2	Transmission Charges													
3	NLDC/RLDC/SLDC Charges													
4	Operation & Maintenance Expenses													
4.1	Employee Expenses													
4.2	Annual Contribution for Terminal Liabilities based on actuarial valuation													
4.3	Administration & General Expenses													
4.4	Repair & Maintenance Expenses													
5	Depreciation													
6	Interest and finance charges on long term loans													
7	Interest on Bonds to meet Terminal Liabilities													
8	Interest on Working Capital													
9	Interest on consumer security deposits and deposits from Users of the distribution system													
10	Any other item (to be specified)													
11	Contribution to contingency reserves													
12	Provisioning for Bad debts, if any													
13	Adjustment for profit/loss on account of controllable/uncontrollable factors													
14	Total Revenue Expenditure													
15	Return on Equity /Net Fixed Assets													
16	Tax on ROE													
17	Aggregate Revenue Requirement (13+15)													
18	18 Less: Other Income & non-Tariff income													
19	Net Aggregate Revenue Requirement from Retail Tariff													
20	Revenue from sale of power													
21	Net Revenue gap/Surplus (20-19)													

#### Revenue from Sale of Power

Name of Distribution Business/Licensee

Licensed Area of Supply

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

S.No	Particulars	Number of consumers	Number of consumers billed	Connected Load of consumers	Units Sold (MU)	% of total Unit sold	Demand/ fixed charges@
				KW	MU		
1	2	3	4	5	6	7	8
	Revenue from sale of Electricity						
	to consumers (categories as per						
	Tariff for supply of Electricity)						
	LT Categories						
a)	•••						
b)							
	HT Categories						
a)							
b)	<b></b>						
	Extra High Tension (EHT)						
a)	•••						
b)	<b></b>						
	Bulk Consumers/ Licensees						
a)							
b)							
	Revenue from sale of power outside the State						
	Sale through power exchange						
	Sale to other States						
c)	Sale through Traders						
	Total of items not shown categorywise						
	Electricity Duty Recovery						
	Other state Levies Recovery						
	Total Duty & Levies						
	Reactive Energy Charges						
b)	Wheeling charges Recoveries						
	Revenue from late payment surcharge						
	Recovery for theft and pilferage of energy						
	Meter/metering equipment/service line rentals						
(1	Miscellaneous Charges from consumers						
<b>—</b>							
<b>—</b>	Cross Barrange From Cale of Barran						
20	Gross Revenue From Sale of Power						
30	Less: i) Electricity Duty Payable to Govt. (Contra)						
-	ii)Other State Levies Payable to Govt. (Contra)						
<u> </u>	Net Revenue from Sale of Power (A29-A30)						
		Note:-					

- \* Note: To be furnished separately for each year commencing from 2016-17 to 2021-22 year.

  1. Information at Column 3,4 & 5 will be for the end of the year.
- 2. Inapplicable items may be ommitted.
- $3.\ Electricity\ duties\ \&\ State\ Govt.\ levies,\ wheeling\ charges,\ Recoveries\ for\ theft\ \&\ malpractices,\ which$
- 4. @ to be indicated where applicable.
- $5.\ consumer\ categories\ in\ forms\ are\ indicative\ only.\ Distribution\ Business/Licensee\ should\ indicate\ a$
- 6. Detailed data should be submitted for all categories, sub-categories, and consumption slabs, as app

#### Revenue from Sale of Power

Name of Distribution Business/Licensee Licensed Area of Supply

Gross Revenue From Sale of Power

30 Less: i) Electricity Duty Payable to Govt. (Contra)

ii)Other State Levies Payable to Govt. (Contra)

Net Revenue from Sale of Power (A29-A30)

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-2

Excess Load/ Energy Charges @ Fuel Adjustment S.No Average Adjustment of **Particulars** Total excess demand rate/kwh past billing charges@ charges@ paisa/kwh 8+9+10 10 13 14 11 A) Revenue from sale of Electricity to consumers (categories as per Tariff for supply of Electricity) LT Categories b) HT Categories a) b) Extra High Tension (EHT) a) b) Bulk Consumers/ Licensees a) b) B Revenue from sale of power outside the State a) Sale through power exchange b) Sale to other States c) Sale through Traders Total of items not shown categorywise a) Electricity Duty Recovery Other state Levies Recovery Total Duty & Levies Reactive Energy Charges b) Wheeling charges Recoveries c) Revenue from late payment surcharge d) Recovery for theft and pilferage of energy e) Meter/metering equipment/service line rentals f) Miscellaneous Charges from consumers

can not be indicated categorywise may be shown against Item C, in Column 23

ctual consumer categories as per existing tariff schedule licable

Revenue from Sale of Power
Name of Distribution Business/Licensee Licensed Area of Supply

S.No	Particulars	Power factor surcharge/ince ntive	voltage rebate	load factor penalty/incenti ve	Other charges if any@	DPS/LPS @	Sub-total	Other Rentals
							(13) to (19)	
1	2	15	16	17	18	19	20	21
	Revenue from sale of Electricity							
	to consumers (categories as per							
	Tariff for supply of Electricity)							
	LT Categories							
a)								
b)	•••							
	HT Categories							
a)								
b)								
	Extra High Tension (EHT)							
a)								
ŕ								
b)								
	Bulk Consumers/ Licensees							
a)								
- /								
b)	:							
В	Revenue from sale of power outside the State							
	Sale through power exchange							
	Sale to other States							
c)	Sale through Traders							
-/-								
C	Total of items not shown categorywise							
	Electricity Duty Recovery							
	Other state Levies Recovery							
	Total Duty & Levies							
	Reactive Energy Charges							
b)	Wheeling charges Recoveries							
	Revenue from late payment surcharge							
	Recovery for theft and pilferage of energy							
	Meter/metering equipment/service line rentals							
	Miscellaneous Charges from consumers							
	Gross Revenue From Sale of Power							
30	Less: i) Electricity Duty Payable to Govt. (Contra)							
	ii)Other State Levies Payable to Govt. (Contra)							
	Net Revenue from Sale of Power (A29-A30)							

### Revenue from Sale of Power

Name of Distribution Business/Licensee Licensed Area of Supply

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-2

S.No	Particulars	Misc. recoveries@	Sub-total (11)+(20)+(21)+(22)	Avg. realisation per KWh (Excluding ED & Govt.levies@)	Remarks
1	2	22	23	24	25
	Revenue from sale of Electricity	22	23	24	23
A)	•				
	to consumers (categories as per Tariff for supply of Electricity)				
	LT Categories				
- u)	···				
b)					
-7					
	HT Categories				
a)					
b)		_			
	Extra High Tension (EHT)				
a)					
b)					
	n ii C				
\	Bulk Consumers/ Licensees				
a)					
b)					
D)					
В	Revenue from sale of power outside the State				
	Sale through power exchange				
b)	Sale to other States				
c)	Sale through Traders				
	-				, The state of the
	Total of items not shown categorywise				
	Electricity Duty Recovery				
	Other state Levies Recovery				
	Total Duty & Levies				
	Reactive Energy Charges				
	Wheeling charges Recoveries Revenue from late payment surcharge				
	Recovery for theft and pilferage of energy				
	Meter/metering equipment/service line rentals				
	Miscellaneous Charges from consumers				
- 2)					
	Gross Revenue From Sale of Power				
30	Less: i) Electricity Duty Payable to Govt. (Contra)				
	ii)Other State Levies Payable to Govt. (Contra)				
	Net Revenue from Sale of Power (A29-A30)				

	Form D 2.2
	Income from Wheeling Charges
Name of Distribution Business/Licens Licensed Area of Supply	
** *	

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

S.No	Open Access Consumer	Open Access Contracted Capacity (kW)	Fixed Charge (Rs/kW/month)	Energy Wheeled	Energy Charge (Rs/kWh)	Any Other Charge as approved by Commission (Please specify)	Revenue from Fixed Charge	Revenue from Energy Charge	Revenue from Other Charge	Total Revenue
	<u>1</u>	2	3	4	5	6	7	8	9	10=7+8+9
1										
2										
	Total									

<sup>\*</sup> Note:1. To be furnished separately for each year commencing from 2016-17 and 2017-18 (actuals)

<sup>2.</sup> In case of Income from Wheeling Charges , it is mandatory for Distribution business/licensee to indicate the 'Total Revenue' (10), whereas others details may be furnished, if available

Income from sale of surplus power

Name of Distribution Business/Licensee \_\_\_\_\_\_ Licensed Area of Supply

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

Rs. Crore/Lak

Month	Name of buyer	Transaction No.	Nature of transaction- Bilateral /Exchange	Volume	e of trading in	Sale Price	Income
				MU	Contracted MW	Rs/Unit	
1	2	3	4	5	6	7	8
April							
May							
-							
June							
т.1							
July							
August							
riugusi		•••					
September							
September							
October							
November							
December		•••					
		•••					
January							
February							
		•••					
March							

#### \* Note :1. To be furnished separately for each year for 2016-17 and 2017-18 (Actuals)

3. In case of bilateral transaction, sale contract copy should be submitted

<sup>2.</sup> For the financial years in the control period (2018-19 to 2021-22), it is mandatory for Distribution business/licensee to indicate the Volume (6), Sale Price (8), and 'Income' (9), whereas others details may be furnished, if available.

	Form D 2.4	
	Other Income	
Name of Distribution Rusiness / Licensee	-	

							Rs. Crore/Lakh					
S. No.	Particulars		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up requirement	(Projected)	(Projected)	(Projected)	(Projected)	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Interest on staff loans and advances											
2	Income from statutory investments											
3	Income from trading											
4	Income from rent of land or buildings											
5	Income from sale of scrap											
6	Income from staff welfare activities											
7	Rental from staff quarters											
8	Excess found on physical verification											
9	Interest on investments, fixed and call deposits and bank balances											
10	Interest on advances to suppliers/contractors											
11	Income from hire charges from contractors and others											
12	Income due to right of way granted for laying fibre optic cables/co-axial cables on distribution system											
13	Income from advertisements, etc.											
14	Miscellaneous receipts											
15	Commission for collection of electricity duty											
	Interest on delayed or deferred payment of bills											
	Rebate from Central Generating Stations											
18												
19												
20												
-												
	Total											

	Form D 2.5									
	Subsidy provided by the State Govt under Section 65 of EA 2003									
Name of Distribution Business/Licensee Licensed Area of Supply										

S.No.	Consumer Category			20	16-17					2017-	-18		
	g ý	Tariff approved by Commission	Reference of Government directives	Relaxtion/ Subsidy committed by Government	Subsidy assessed	Reference of finance department order releasing subsidy amount	Subsidy actually received	Tariff as per Commission	Reference of Government directives	Relaxtion/ Subsidy committed by Government	Subsidy assessed	Reference of finance department order releasing subsidy amount	Subsidy actually received
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Domestic Category (LT - 1(a))												

Form D 2.6	
Revenue Subsidy and Grant	
Name of Distribution Business/Licensee	
Licensed Area of Supply	

			2016-17			207-18		2018-19	2019-20	2020-21	2021-22	
Sr. No.	Particulars											Remarks
51. IVO.	ramculars	Approved in Tariff Order	Actually received	Balance Receivable	Approved in Tariff Order	Actually received	Balance Receivable	Projected	Projected	Projected	Projected	Kemarks
1	2	3	4	5 = 4 - 3	6	7	8=6-7	9	10	11	12	13
A)	Revenue Subsidies & Grants											
	Revenue Subsidy from State Government other than S.65 subsidy											
2	State Govt. Grant											
4	Any Other item										·	
	Total											

	Form D 2.7									
	Consumer Contribution, Capital Subsidy and Grant									
Name of Distribution Business/Licensee										
Licensed Area of Supply										

			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Rs. Clore/ Lakii
S. No.	. Particulars	Approved in Tariff	Actually received	Balance Receivable	Approved in	Actually received	Balance	Projected	Projected	Projected	Projected	Remarks
		Order			Tariff Order		Receivable	-	-	-		
1	2	3	4	5 = 4 - 3	6	7	8=6-7	9	10	11	12	13
1	Consumers Contribution for service connection lines and associated works											
2	Any other contribution by consumers under any scheme.											
a)												
b)												
c)												
	Sub-Total											
3	Capital Subsidies from appropriate Government towards cost of Capital Assets											
4	Receipts from appropriate Government under any scheme as Grants											
5	Any Other item(to be specified)											
	Total											
	TOTAL											

Form D 3.1

Power Purchase Expenses	
Name of Distribution Business/Licensee	
Licensed Area of Supply	

Year: 2016-17/2017-18 (Actual) //2018-19/2019-20/2020-21/2021-22 (Projections)

S. No.	Source of Power (Station wise)		share (%)	share	Total Energy Sent Out (ESO) from the station (MU)	State (%)	Received at	within the	received by licensee (%)	Annual Fixed charges (Rs	Charges paid/ payable by Utility (Rs	per unit including Fuel	Total Variable Charges (Rs Crore)	,	Charges (Please specify the type	Received (Rs	energy
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	1 Station/Source 1																
	2 Station/Source 2																
	Total																

<sup>\*</sup> Note: To be furnished separately for each year commencing from 2016-17 till end of the control peirod (2021-22)

FormD 3.2	
Transmission Charges	
Name of Distribution Business/Licensee	
Licensed Area of Supply	
Transmission Charges	

Year: 2016-17/2017-18 (Actual) //2018-19/2019-20/2020-21/2021-22 (Projections)

S. No.	Name of Transmission/Distribution Network Provider	Transmission/Distribution Capacity Tariff Char				
1	2	3	4	5	6	
Total						

S. No.	Name of Transmission/Distribution	Contracted Capacity	Transmission Tariff	Transmission Charges	Sources of power for which Network is
	Network Provider	(MW)	<units></units>	(Rs. Crore)	used
1	2	3	4	5	6
Total					

#### NLDC/ RLDC/ SLDC Charges

Year: 2016-17/2017-18 (Actual) //2018-19/2019-20/2020-21/2021-22 (Projections)

S. No.	Particular	Contracted Capacity	Annual fee	Any other fee	Total
		(MW)	(Rs. Crore)	(Rs. Crore)	(Rs. Crore)
1	2	3	4	5	6
	NLDC Charges				
	RLDC Charges				
	<specify region=""></specify>				
	SLDC Charges				
Total	Total				

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 till end of the control peirod (2021-22)

Form D 3.3 Load Despatch Charges

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 till end of the control peirod (2021-22)

Form D 3.4

Operations and Maintenance Expenses Name of Distribution Business/Licensee Distribution Business of KSEB Limited

Licensed Area of Supply

1 Employee Expenses

(Rs. Crore)

	Particulars		2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	
S. No		Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up requirement	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Number of Consumers ('000)												
	Norms (Rs. Lakh/'000 consumers)												
2	Distribution Transformers (no.)												
	Norms (Rs. Lakh/Distribution Transformer)												
3	HT line (km)												
	Norms (Rs. Lakh/km of HT line)												
4	Sales (kWh)												
	Norms (Rs./unit of sales)												
5	Employee Expense (as per norms)												
6	Employee Expense (actuals)	3.4(a)											

2 Administrative and General Expenses

(Rs. Crore) 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 S. No. Particulars Remarks Reference Approved in Tariff Order Approved in Tariff Order Audited/Normativ Truing Up Audited Truing Up requirement Projected Projected Projected Projected 14 10 11 12 13 1 Number of Consumers ('000) Norms (Rs. Lakh/'000 consumers) 2 Distribution Transformers (no.) Norms (Rs. Lakh/Distribution Transformer) 3 HT line (km) Norms (Rs. Lakh/km of HT line) 4 Sales (kWh) Norms (Rs./unit of sales) 4 A&G Expense (as per norms) 5 A&G Expense (actuals) 3.4(b)

3 Repair and Maintenance Expense

(Rs. Crore) 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 S. No. Particulars Reference Remarks Approved in Tariff Order Approved in Tariff Order Truing Up Truing Up requirement Projected Projected Projected Projected 7 2 3 5 8 10 11 12 13 14 1 Opening GFA (Rs. Crore) As per the provisions of Regulations Norms (% of opening GFA) 2 R&M Expense (as per norms) 3 R&M Expense (actuals)

(CSEZ, Technopark, KPUPL, RPIL, KDHPCL, CPT, Thrissur Corporation, and Infopark) B Name of Distribution Business/Licensee Licensed Area of Supply

	1	O&M Expenses												
				2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	
S. No.	. No.	. Particulars	Reference	Approved in Tariff Order	Audited/Normative	Truing Up	Approved in Tariff Order	Audited/ Normative	Truing Up requirement	Projected	Projected	Projected	Projected	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	1	Employee Expenses (as per norms)												
	2	R&M Expenses (as per norms)												
	3	A&G Expenses (as per norms)						ı						
	4	O&M Expense (as per norms) (1+2+3)												
	2	O&M Expense (actuals)	3.4(a),3.4(b), 3.4(c)											

Form D 3.4(a)
Employee Expenses

Name of Licensee

			2016-17	20	017-18	2018-19	2019-20	2020-21	2021-22	Rs. Crore/Lakh
S. No.	Particulars	Reference	Audited	Audited	Approved by the Commission	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	7	8	9	10	11	12
1	Basic Salary									
	Dearness Allowance (DA)									
	House Rent Allowance									
	Conveyance Allowance									
5	Leave Travel Allowance									
6	Earned Leave Encashment									
7	Other Allowances									
8	Medical Reimbursement									
9	Overtime Payment				1					
10	Bonus/Ex-Gratia Payments									
11	Interim Relief / Wage Revision									
12	Staff welfare expenses									
13	VRS Expenses/Retrenchment Compensation									
14	Commission to Directors									
15	Training Expenses									
16	Payment under Workmen's Compensation Act									
17	Net Employee Costs									
18	Terminal Benefits									
18.1	Provident Fund Contribution									
18.2	Provision for PF Fund									
18.3	Pension Payments				1					
18.4	Gratuity Payment				1					
19	Others				1					
20	Gross Employee Expenses				1					
21	Less: Expenses Capitalised				1					
22	Net Employee Expenses									

#### Form D 3.4(b)

#### Administrative & General Expenses

Name of Licensee

Rs. Crore/Lakh 2016-17 2018-19 2019-20 2020-21 2021-22 S. No. Particulars Reference Remarks Approved by the Audited Audited Projected Projected Projected Projected Commission 2 3 5 10 1 4 8 11 Rent Rates & Taxes 1 2 Insurance Telephone & Postage, etc. 3 Legal charges 4 Audit Fees Consultancy charges 7 Other Professional charges 8 Conveyance Vehicle Running Expenses Truck / Delivery Van 9 Vehicle Hiring Expenses Truck / Delivery Van 11 Electricity charges Water charges 12 Entertainment 13 Fees & subscription 14 Printing & Stationery 15 Advertisements, exhibition publicity 16 17 Contribution/Donations 18 Training expenses Miscellaneous Expenses 19 DSM activities 20 21 SRPC expenses Sports and related activities 22 23 Freight Purchase Related Advertisement Expenses 24 25 Bank Charges 26 Office Expenses License Fee and other related fee 27 Cost of services procured 28 29 Outsourcing of metering and billing system V-sat, Internet and related charges 30 31 Security arrangements 32 Books & periodicals Computer Stationery 33 Others 34 Gross A&G Expenses 35 36 Ele. Duty u/s 3(I), KED Act Less: Expenses Capitalised 37 Net A&G Expenses 38

Form D 3.4(c)
Repair & Maintenance Expenses

Name of Licensee

			2016-17		2017-18	2018-19	2019-20	2020-21	2021-22	
S. No.	Particulars	Reference	Audited	Audited	Approved by the Commission	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	7	8	9	10	11	12
1	Plant & Machinery									
2	Buildings									
3	Civil Works									
4	Hydraulic Works									
5	Lines & Cable Networks									
6	Vehicles									
7	Furniture & Fixtures									
8	Office Equipment									
9	Gross R&M Expenses									
10	Less: Expenses Capitalised									
11	Net R&M Expenses									

	Form D 3.5	
	Fixed assets & depreciation	
Name of Distribution Business/Licensee		
Licensed Area of Supply		

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

			ı								(Figures in Rs Cr / lakh	
	Asset Group (as per notification in respect of depreciation)		Gross fixed assets					Provision for		4	Net Fixed Assets	
S. No.		Rate of depreciation (%)	At the beginning of the year	Additions during the year	Adjustment & deducitons	At the end of the year	Cumulative upto the begining of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year	Net fixed assets at the beginning of the year	at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights											
2	Other Civil works											
3	HV Distribution system											
a)	Distribution lines											
b)	Sub-station equipments											
i)	Transformers											
ii)	Switchgears, Control gear & Protection											
iii)	Batteries											
iv)	Others											
4	LT Distribution system											
a)	Distribution lines											
b)	Sub-station equipments											
i)	Transformers											
ii)	Switchgears, Control gear & Protection											
iii)	Batteries											
iv)	Others											
5	Communication equipment											
6	Meters											
7	Vehicles											
8	Furniture & fixtures											
9	Office Equipments											
10	Assets of Partnership projects etc.											
11	Capital spares of HV & LT transmisison											
12	Assets taken over & pending final valuation											
	IT Equipments											
	Any other items											
	Gross Asset (Total (1) to (15))											
17	Less: Consumer contribution											
	Less: Government grants											
	Less: Deposit Works											
	Less: Capital Subsidies											
	Net Asset considered for depriciation (16-17-18-19-20)											

<sup>\*</sup> Note: To be furnished separately for each year commencing from 2016-17 to 2021-22 year.

#### Note:

- 1. The figures at the begining of the year & that at the end of previous year will be the same
- 2. The write off of depreciated price of unserviceable assets & assets not in use/lost/damaged in natural calamity or assets sold or cost of buy back of asssets are to be included in this schedule.

# Form D 3.6 (a) Calculation of Weighted Average Rate of Interest on Actual Loans Name of Distribution Licensee Licensed Area of Supply

(Rs. Cr / lakh) 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 S.No Particulars (specify items) Remarks Approved in Approved in Audited Audited Projected Projected Projected Projected Tariff Order Tariff Order 2 3 4 6 9 10 11 12 13 Loan 1 Gross Loan -Opening Cumulative repayments of Loans upto previous year iii. Net loan-Opening Add: Drawal(s) during the Year Less: Repayment (s) of Loans during the year Net loan - Closing Average Net Loan viii Rate of Interest on Loan on annual basis ix Interest on loan Loan repayment effective from (date to be indicated) 2 Loan 2 Gross Loan -Opening Cumulative repayments of Loans upto previous year iii. Net loan-Opening Add: Drawal(s) during the Year Less: Repayment (s) of Loans during the year Net loan - Closing vii Average Net Loan Rate of Interest on Loan on annual basis ix Interest on loan Loan repayment effective from (date to be indicated) Loan 3

4	Total Loan					
i.	Gross Loan -Opening					
ii.	Cumulative repayments of Loans upto previous year					
iii.	Net loan-Opening					
iv.	Add: Drawal(s) during the Year					
v.	Less: Repayment (s) of Loans during the year					
vi	Net loan - Closing					
vii	Average Net Loan					
viii	Interest on Loan					
	Weighted average Rate of Interest on Loans					

Note: In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form

Form D 3.6 (b)	
Calculation of Interest on No	rmative Loan
Name of Distribution Licensee	
Licensed Area of Supply	

(Rs. Cr / lal

C N		2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	(KS. CI / Iai
S.No	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up	Approved in Tariff Order	Normative	Truing Up requirement	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Gross Normative loan - Opening											
2	Cumulative repayment of Normative Loan upto previous year											
3	Net Normative loan - Opening											
4	Increase/Decrease due to ACE/de-capitalization during the Year											
5	Repayments of Normative Loan during the year											
6	Net Normative loan - Closing											
7	Average Normative Loan											
8	Weighted average Rate of Interest of actual Loans											
9	Interest on Normative loan											

## Form D 3.6 (c) Interest on Bonds to meet Terminal Liabilities Name of Distribution Licensee Licensed Area of Supply

	Licensed Area of Supply											(Rs. Cr)
S.No			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
	Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up requirement	Approved in Tariff Order	Normative	Truing Up requirement	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
A	Bond Series 1											
1	Value of Bond											
2	Rate of Interest on Bond											
3	Interest on Bond											
В	Bond Series 2											
4	Value of Bond											
5	Rate of Interest on Bond											
6	Interest on Bond											
C												
				·								

				Fori	n D 3.7							i
				Interest on V	Vorking Capital							Ī
	Name of Distribution Business/Licensee	·			8 - 1							i
	Licensed Area of Supply											
											Rs. Crore / la	ıkh
			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
Sl.No.	Particulars											Remarks
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up requirement	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	O&M expenses (as per norms)											
2	Maintenance Spares (as per norms)											
3	Receivables (as per norms)											
	Less:											
4	Security deposits except security deposts held in the form of Bank Guarantee from Users											
	Less:											
5	Cost of Power Purchase (as per norms)											
6	Total Working Capital											
7	Interest Rate (as per norms)											
8	Interest on Working Capital (actual)											1

Form D 3.8					
Return on Equity/Return on Net Fixed Assets					
Name of Distribution Business/Licensee					
Licensed Area of Supply					

Rs. Cr /lakh

												Rs. Cr / lakh
				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22
S.No.	Particulars		Approved in Tariff Order	Audited	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up requirement	(Projected)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Equity at the beginning of the year											
	Capitalisation											
3	Equity portion of capitalisation											
4	Equity at the end of the year											
	Return Computation											
5	Return on Equity at the beginning of the year	14%*(1)										
6	Return on Equity portion of capitalisation	14%*(3)/2										
7	Total Return on Equity	(5)+(6)										
	In case equity invested in the regulated Business is not clearly identifiable											
8	Net Fixed Assets net of Consumer Contribution &Grants (at the beginning of the year)	(8)										
9	Rate of return	3%										
10	Total return on net fixed assets	3% * (8)									_	

	Form D 3.9	
	Tax on R.O.E.	
Name of Distribution Business/Licensee		
Licensed Area of Supply		

(Rs Cr)

S. No.	No. Particulars		2016-17			2017-18			2019-20	2020-21	2021-22	Remarks
		Approved in Tariff Order	Audited/ Normative	Truing Up	Approved in Tariff Order	Audited/ Normative	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	3	4	5	7	8	9	10	11
A)	Advance Tax assessed & deposited on											
a)	for Quarter I & deposited on 15 th June.											
b)	for Quarter II & deposited on 15 th Sept.											
c)	for Quarter III & deposited on 15 th Dec.											
d)	for Quarter IV & deposited on 15 th March.											
	Total(A)											

Note: Tax calculated should be only for the distribution business and should not include income from any other income streame like efficiency gain & incentive etc.

	Form D 4.1
· ·	
	Project-wise / Scheme-wise Capital Expenditure
Name of Distribution Business/I	
Licensed Area of Supply	

Year: 2016-17/2017-18 (Actual) //2018-19/2019-20/2020-21/2021-22 (Projections)

(Rs Cr / lakh)

		Capital Expenditure Capital Work in Pro						k in Progress			
S. No.	Description of the project/Scheme	Opening Balance as on	Exp. During the year	Interest During Const.	Transfer to fixed Assets	Closing Balance of WIP as on	Additions	Capitalisation	Adjustments	Closing balance	Remark
1	2	3	4	5	6	7	8	9	10	11	12

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 to 2021-22

#### Form D 4.2

#### Consolidated report on additions to Fixed Assets during the year

Name of Distribution Business/Licensee

Licensed Area of Supply

Year: 2016-17/2017-18 (Actual) //2018-19/2019-20/2020-21/2021-22 (Projections)

(Rs Cr. lakh)

S.No	Asset Description	Asset Code	Total Addition to Assets	Date of commissioning
1	2	3	4	5

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 to 2021-22

	Form D 4.3			
General (Other debits, write offs or any other items)				
Name of Distribution Business/Licensee				
Licensed Area of Supply				

(Rs. Cr / lal

												(RS. Cr / lai
			2016-17			2017-18	2018-19	2019-20	2020-21	2021-22		
S.No.	Particulars (specify items)											Remarks
5.140.	Tuneding (specify rems)	Approved in Tariff Order	Audited	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up requirement	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13
1												
2												
3												
4												
5												
	Total											
	Less											
	Chargable to Capital Expenses											
	Net chargable to revenue											
			•									

Note: - This form can be used for any other item not covered under specified forms eg.

- 1. Other Debits / Credits
- 2. Prior period Credits / charges

	Form D 5.1
	Consumer category wise Existing Tariff
Name of Distribution Business/Licensee	
Name of Distribution business/ Licensee	

S.No.	Particulars	Demand / Fixed charges	Energy Charges	Fuel Adjustment Charges	Capacitor/ Power Factor charges	Rebate	LPS	Minimum Billing
		<please specify="" unit=""></please>	<please specify="" unit=""></please>	<please specify<br="">Unit&gt;</please>	<please specify="" unit=""></please>	<please specify Unit&gt;</please 	<please specify Unit&gt;</please 	<please specify="" unit=""></please>
1	2	3	4	5	6	7	8	9
	LT Categories							
1								
2								
	HT Categories							
2	•••							
	Extra High Tension (EHT)							
1								
2								
	Bulk Consumers/ Licensees							
1								
				•				
2								

Note: consumer categories in forms are indicative only. Distribution Business/Licensee should indicate actual consumer categories as per tariff (as per existing tariff for previous & current year).

	Form D 5.2									
Consumer category wise Proposed Tariff										
Name of Distribution Business/Licensee										
Licensed Area of Supply										

S.No.	Particulars	Demand / Fixed charges	Energy Charges	Fuel Adjustment Charges	Capacitor/ Power Factor charges	Rebate	LPS	Minimum Billing
		<please specify="" unit=""></please>	<please specify="" unit=""></please>	<please specify<br="">Unit&gt;</please>	<please specify="" unit=""></please>	<please specify Unit&gt;</please 	<please specify Unit&gt;</please 	<please specify="" unit=""></please>
1	2	3	4	5	6	7	8	9
	LT Categories							
1	<b></b>							
2								
	HT Categories							
1								
2								
	Extra High Tension (EHT)							
	···							
2								
	···							
	Bulk Consumers/ Licensees							
1								
2								

Note: consumer categories in forms are indicative only. Distribution Business/Licensee should indicate consumer categories as per proposed schedule of tariff for ensuring years).

<sup>\*</sup> Note : To be furnished separately for each year in which tariff revision is proposed

### Form D 5.3 (a)

Revenue from existing Tariff

Licensed Area of Supply

tariff consumers billed Charges ch	Other charges recoveries  Rs Lakh Rs Lakh 9 9	Total Revenue from sale of power Rs Lakh paisa/KWI 10 11
Nos.   Nos.   XV AVA   percent   MUs.   Rs Lakb   Rs L		Rs Lakh paisa/KWl
C Antegories	9 9	10 11
1, 17, 17, 17, 19, 19, 19, 19, 19, 19, 19, 19, 19, 19		
Three Phase		
Three Phase		
0.94 units 9.51.00 units 9.10.10 units 10.15.200 units 10.15.2		
0.50 units   1.50 units   1.5		1 1
151-50 units 151-200 units 10-300 units 10-300 units 10-300 units 10-300 units 10-400 units 10-500 units 10-5		
2013-20 units		
0.000 onits 0.000		
0-300 units		
D-90 units D-900 u		
0.500 units		
Above 500 units  2 LT II (Total) Freed charge Freed charge Sorry charge Sorry charge Sorry charge Sorry charge Sorry charges Sor		
2 LTII (Total) Fixed charge Energy charge STII (A) LTII (B) STII (A) LTII (B) STII (B) Fixed Charges < 10 KW		
Freed charge		
Fixed charge		
Energy charges  3		
3 LT III (A) LT III (B) 4 A) LT IV (A) (Total) Fixed Charges < 10 KW  > 20 KW  Energy Charges < 10 KW    10 to < 20 kW   20 KW   20 KW   30 KW   50 KW		
LTIN(B)  4 A)  Fined Charges  Energy Charges - < SOO Units  SOO Units  SOO Units  Energy Charges - < SOO Units  SOO Units  Energy Charges - < SOO Units  SOO Units  Energy Charges - < SOO Units  Energy Charges  Energy Charg		
Fixed Charges < 1.0 KW		
X-10 to <-20 kW   X-20 k		
Energy Charges		
Energy Charges		
4 (a)   17 fv (b) (Total)		
Fixed Charges   10 KW		
Energy Charges  5(A)   T-SA (Total) Fixed Charges Energy Charges E		
Energy Charges  \$(A) LT-SA (Total)  Fixed Charges  Energy Charges - < 500 Units  Soou Units  Energy Charges - < 500 Units  Energy Charges  E		
S(A)   LT-SA (Total)		
Fixed Charges		
Energy Charges  5(B) IT-58 (Total) Fixed Charges Energy Charges  6(A) IT-6A (Total) Fixed charge Energy charges - < 500 Units  5500 Units  6(B) IT-6B (Total) Fixed charge Energy charges - < 500 Units  500 Units  6(C) IT-6C (Total) Fixed charge Energy charges - < 500 Units  500 Units  6(C) IT-6C (Total) Fixed charge Energy charges - < 500 Units  500 Units  6(C) IT-6C (Total) Fixed charge Energy charges - < 500 Units  500 Units  51 UT-6C (Total) Fixed charge Energy charges Energy cha		
Fixed Charges		
Energy Charges  (6)   T-6A (Total)		
17-6A (Total)		
Fixed charge		
Energy charges - < 500 Units		
>500 Untis  6(B) LT-6B (Total)  Fixed charge  Energy charges - < 500 Units  500 Untis  Energy charges - < 500 Units  Energy charges - < 500 Units  Energy charges - < 500 Units  5500 Untis  (E) LT-6C (Total)  Fixed charge  Energy charges - < 500 Units  5500 Units  Energy charges - < 500 Units  Energy Charges  Energy Charges  Energy Charges  Energy Charges  Energy Charges  Energy Charges  IT-6E (Total)  Single phase  Energy Charges  Energy Charges  It o 50 units  It to 50 units  It to 50 units  It to 50 units		
Fixed charge		
Energy charges - < 500 Units		
>500 Untis 6 (C) LT-6 C (Total) Fixed charge Energy charges - < 500 Units  5500 Units  6(D) LT-6D (Total) Fixed charge Energy Charges Energy Charges  6 € LT-6E (Total) Single phase Three phase Energy Charges  1 to 50 units  1 to 50 units  1 to 100 units  1 to 100 units		
T-6 (Total)		
Fixed charge		
>500 Untis 6(D) LT-6D (Total) Fixed charge Energy Charges 6 € LT-6E (Total) Single phase Three phase Energy Charges 1 to 50 units 51 to 100 units 101 to 200 units		
6(D) 1T-6D (Total)  Fixed charge  Energy Charges  6 € LT-6E (Total)  Single phase  Three phase  Energy Charges  1 to 50 units  1 to 50 units  101 to 200 units		
Fixed charge		
Energy Charges 6 € LT-6E (Total) Single phase Three phase Energy Charges 1 to 50 units St to 100 units 101 to 200 units		
6 € LT-6E (Total)  Single phase  Three phase  Energy Charges  1 to 50 units  51 to 100 units  101 to 200 units		
Single phase		
Three phase Energy Charges 1 to 50 units 51 to 100 units 101 to 200 units		
1 to 50 units		
51 to 100 units		
101 to 200 units		+ + + + + + + + + + + + + + + + + + + +
		<del>                                     </del>
G F LT-6F (Total)		
Fixed charge		
Single Phase		
Three phase Energy Charge		
0 to 100 units per month	+	+ + + + + + + + + + + + + + + + + + + +
0 to 200 units per month		
0 to 300 units per month		
0 to 500 units per month		
above 500 units per month		
6 G LT-6G (Total) Fixed charge		+ + + + + + + + + + + + + + + + + + + +
Single Phase		
Three phase		
Energy Charge		
up to 500 units per month		
501 units upto 1000 units per month		
1001 units upto 2000 units per month  Above 2000 units per month		
7 (A) LT-7A (Total)		
(a) Fixed charge		

#### Form D 5.3 (a)

Revenue from existing Tariff

Name of Distribution Business/Licensee Licensed Area of Supply

	Year 2017-18 (Actual)													
S.No.	Particulars	Applicable tariff	No. of consumers	No. of consumers billed	Billed Connected Load /Billed	Units	billed*	Demand/ Fixed charges	Energy Charges	Power factor surcharge/i ncentive	Other charges	Misc. recoveries	Total Revenue from sale of power	Average tariff
			Nos	Nos	KW /kVA	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
1	2		3	4	5	5	6	7	7	8	9	9	10	11
	(i) Single Phase													
	(ii) Three phase													
	(b) Energy Charge (Rs per unit)													<u> </u>
	(i) Of and below 100 unit													<b></b>
	(ii) Of and below 200 units (iii) Of and below 300 units													
	(iv) Of and below 500 units													
	(v) Above 500 units per mo													
2	LT-7B (Total)													
_	(a) Fixed Charge													
	(b)Energy charge													
	(i) 0 to 100 units													
	(ii) 0 to 200 units													
	(iii) 0 to 300 units													
70	LT 7C (Total)													
	(a) Fixed Charge (b) Energy Charge (Rs/kWh)													-
	(b) Ellergy Cliarge (RS/RWII)													
	(i) Of and below 1000													
	kWh		1					1						-
	(ii) Above 1000 kWh LT-8A		-					-						
8A	LT-8B													
0	LT XII		<del>                                     </del>					<del>                                     </del>						
10(a)														
_5(0)	Demand charges													
	Energy Charges													
10(b)	HT I (B) (Total)													
	Demand charges													
	Energy Charges													
10©	HT II A (Total)													
	Demand charges													
	Energy charges													-
	HT II B (Total)  Demand charges													
	Energy Charges													1
	(i) Of and below 30,000 units													
	(All units)													
	(ii) Above 30,000 units (All													
11/2)	units) HT III A (Total)													
11(0)	Fixed charges													
	Energy charges													
11(b)	HT III B (Total)													
	Fixed charges													
	Energy charges													ļ
12	HT Commercial (Total)													
	Demand charges (i) Of and below 30,000													-
	units (All units)													Ì
	(ii) Above 30,000 units													
	(All units) HT Domestic (Total)													
13	Fixed charges													
	Energy charges													
14	EHT 66 KV Industrial (Total)	I												
	Demand charges													
	Energy charges													
15	EHT 110 KV Industrial (Total)													
	Demand charges													<b></b>
	Energy charges													
	EHT 220 KV Industrial (Total)	1												
16	Demand charges		-					-						
	Energy charges													
17	EHT Commercial (Total)													
	Demand charges													
	Energy charges													
	(i) Of and below 60,000		1					1						1
	units (ii) Above 60,000 units		-					-						
10	EHT General (A) (Total)		<del>                                     </del>					<del>                                     </del>						
10	Demand charges													
	Energy charges													
19	EHT General (B) (Total)													
	(i) Of and below 60,000													
	units													
	(ii) Above 60,000 units Railways (Total)													
20	Demand charges													
	Energy charges													
	Kochi Metro (Total)													
	Demand charges													

	Form D 5.3 (a)
	Revenue from existing Tariff
Name of Distribution Business/Licensee Licensed Area of Supply	

Year 2017-18 (Actual)

	Year 2017-18 (Actual)													
S.No.	Particulars	Applicable tariff	No. of consumers	No. of consumers billed	Billed Connected Load /Billed	Units	billed*	Demand/ Fixed charges	Energy Charges	Power factor surcharge/i ncentive	Other charges	Misc. recoveries	Total Revenue from sale of power	Average tariff
			Nos	Nos	KW /kVA	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
1	2		3	4	5	5	6	7	7	8	9	9	10	11
1	Energy charges		3	4	5	5	O	/	/	8	9	9	10	11
21	Others if any													
22	Bulk Supply													
	KINESCO POWER & UTILITIES (P) LIMITED (Total)													
	Demand charges													
	Energy charges													
	COCHIN SPECIAL ECONOMIC													
	ZONE (Total)													1
	Demand charges													
	Energy charges													
	RUBBER PARK INDIA (P)													
	LIMITED (Total)													
	Demand charges													
	Energy charges													
	TECHNOPARK (Total)													
	Demand charges													
														<b>-</b>
	Energy charges													<b></b>
	COCHIN PORT TRUST (Total)													1
	Demand charges													<b>-</b>
														<b>-</b>
	Energy charges													
	THRISSUR CORPORATION													1
	(Total)													<b>-</b>
	Demand charges													<del></del>
	Energy charges													
	KANNAN DEVAN HILLS PRODUCE COMPANY LIMITED													1
	(Total)													1
	Demand charges													
														<b>—</b>
	Energy charges													
	MILITARY ENGINEERING SERVICES (Total)													
	Demand charges													
	Energy charges													
	PONDICHERY ELECTRICITY													<del>                                     </del>
	DEPARTMENT (Total)													
	Demand charges													
	Energy charges													
	KARNATAKA ELECRICITY													
	DEPARTMENT (Total)													
	Demand charges													
	Energy charges													
	INFOPARK (Total)													
														<b> </b>
	Demand charges													-
	Energy charges													
	Revenue from sale of power													
	outside the State													-
a)														-
b)	Sale to other States													
c)	Sale through Traders													
	Total Bayanya from Calo of Bo										-			

Total Revenue from Sale of Power

<sup>\*</sup>If ToD tariff is applicable, zone wise details should be furnished

#### Form D 5.3 (b)

#### Revenue from existing Tariff

Name of Distribution Business/Licens	
Licensed Area of Supply	

#### Year 2018-19

	Year 2018-19													
S.No.	Particulars	Applicable tariff	No. of consumers	No. of consumers billed	Connected Load /Billed demand*	Units	billed*	Demand/ Fixed charges	Energy Charges	Power factor surcharge/i ncentive	Other charges	Misc. recoveries	Total Revenue from sale of power	Average tariff
			Nos	Nos	KW	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
1	2		3	4	5	5	6	7	7	8	9	9	10	11
	LT Categories													
1	LT I (Total) Single Phase													
	Three Phase													
	0-40 units													
	0-50 units													
	51-100 units													
	101-150 units 151-200 units													
	201-250 units													
	0-300 units													
	0-350 units													
	0-400 units													
	0-500 units													
	Above 500 units													
2	LT II (Total)													
	Fixed charge													
	Energy charge													
3	LT III (A) LT III (B)													<del>                                     </del>
<b>⊿</b> ∧\	LT IV (A) (Total)													<del>                                     </del>
+ M)	Fixed Charges < 10 K	W												
		<=20KW												
	>20 KW	/												
4 (0)	Energy Charges LT IV (B) (Total)													
4 (B)	Fixed Charges < 10 K	W												
		<=20KW												
	>20 KV	I												
	Energy Charges													
5(A)	LT-5A (Total) Fixed Charges													
	Energy Charges													
5(B)	LT-5B (Total)													
	Fixed Charges													
	Energy Charges LT-6A (Total)													
6(A)	Fixed charge													
	Energy charges - < 5	00 Units												
	>500 Untis													
6(B)	LT-6B (Total) Fixed charge													
	Energy charges - < 5	i00 Units												
	>500 Untis													
6 (C )	LT-6 C (Total)													
	Fixed charge Energy charges - < 5	0011=:+=												
	>500 Untis	OU UTILS												
6(D)	LT-6D (Total)													
	Fixed charge													
	Energy Charges													
6€	LT-6E (Total) Single phase													<del></del>
	Three phase													<del></del>
	Energy Charges													
	1 to 50 units													
	51 to 100 units 101 to 200 units													-
	Above 200 units (non-	telescopic for tl	he entire consu	mption)										<del></del>
6 F	LT-6F (Total)													
	Fixed charge													
	Single Phase													<del>                                     </del>
	Three phase Energy Charge													<del>                                     </del>
	0 to 100 units per mor	nth												
	0 to 200 units per mor													
	0 to 300 units per mor													
	0 to 500 units per mor above 500 units per m													<del></del>
6.6	LT-6G (Total)													<del></del>
	Fixed charge													
	Single Phase													
	Three phase													
	Energy Charge up to 500 units per mo	onth												<del>                                     </del>
	501 units upto 1000 u													
	1001 units upto 2000	units per month	1											
	Above 2000 units per	month												
7 (A)	LT- 7A (Total) (a) Fixed charge													<del>                                     </del>
		1	1		ı	1	ı	ı	1	ı	ı	ı	ı	1

#### Form D 5.3 (b)

#### Revenue from existing Tariff

Name of Distribution Business/Licens
Licensed Area of Supply

#### Year 2018-19

S.No.	Particulars	Applicable		No. of	Connected					Power			Total	
		tariff	No. of consumers	consumers billed	Load /Billed demand*	Units l		Demand/ Fixed charges	Energy Charges	factor surcharge/i ncentive	Other charges	Misc. recoveries	Revenue from sale of power	Average tariff
			Nos	Nos	KW	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
1	2		3	4	5	5	6	7	7	8	9	9	10	11
(	i) Single Phase													
(	ii) Three phase													
(	b) Energy Charge (Rs	per unit)												
	i) Of and below		nonth											
(	ii) Of and below													
(	iii) Of and below													
	iv) Of and below													
	v) Above 500 uni													
2	T-7B (Total)													
	a) Fixed Charge													
	b)Energy charge													
	i) 0 to 100													
	units													
	ii) 0 to 200													
	units													
	iii) 0 to 300													
	units													
	.T 7C (Total)													
	a) Fixed Charge b) Energy Charge													
	Rs/kWh)													
,	(i) Of and													
t	oelow 1000 kWh													
Ţ	(ii) Above													
	1000 kWh													
8A	.T-8A													
	.T-8B													
	T XII													
	HT I (A) (Total)													
	Demand charges													
	nergy Charges													
10(b)	HT I (B) (Total)													
	Demand charges													
E	Energy Charges													
10©	HT II A (Total)													
I	Demand charges													
E	nergy charges													
ŀ	HT II B (Total)													
	Demand charges													
	nergy Charges													
	i) Of and below													
	30,000 units (All													
	units)													
	ii) Above 30,000 units (All units)													
	HT III A (Total)													
	ixed charges													
	nergy charges													
	HT III B (Total)													
,	ixed charges													
	nergy charges													
	T Commercial (Tot	al)												
	Demand charges													
	i) Of and below													
	30,000 units (All													
ι	units)													
	ii) Above													
	30,000 units (All units)													
13 1	HT Domestic (Total)													
	ixed charges													
	nergy charges													
	HT 66 KV Industrial	(Total)												
	Demand charges													
	nergy charges													
	HT 110 KV Industrial	(Total)												
	Demand charges	. ,												
	nergy charges													
	-													
16	HT 220 KV Industrial	(Total)												
	Demand charges													
	nergy charges													
	HT Commercial (To	tal)												
	Demand charges													
	nergy charges													
	i) Of and below													
	50,000 units													
	ii) Above 60,000													
	units	tal)												
		ital)												
	Demand charges													
	nergy charges	tal)												
19	HT General (B) (To	Lai)												

#### Form D 5.3 (b)

Revenue	from	existing	Tariff

Name of Distribution Business/Licens
Licensed Area of Supply

#### Year 2018-19

tariff consumers billed billed demand*		Year 2018-19													
1	S.No.	Particulars			consumers	Load /Billed	Units l	billed*	Fixed		factor surcharge/i			Revenue from sale	Average tariff
1				Nos	Nos	KW	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
INCONTROLLER MACHINERY MAC	1	2						6		7			9		11
Marked GLODO	-				-	,	,	3	•	•	3	,	,	10	
worth wortha															
By Silvery (FCS)		(ii) Above 60,000													
Demand charges   Song charges															
Cock Motor (Cital) Cock Motor (C	20	Railways (Total)													
Social Metro   (Total)		Demand charges													
Demand charges   Dema		Energy charges													
Control Property   Control Pro		Kochi Metro (Total)													
2.2 Olium Sarry  2.3 Mult-Supply  3.00LOSC PYOFA & S. OLIUM S. OLI		Demand charges													
22 (Mich Septive 1)  23 (Mich Septive 1)  24 (Mich Septive 1)  25 (Mich Septive 1)  26 (Mich Septive 1)  27 (Mich Septive 1)  28 (Mich Septive 1)  29 (Mich Septive 1)  20 (Mich Septive 1)  20 (Mich Septive 1)  20 (Mich Septive 1)  21 (Mich Septive 1)  22 (Mich Septive 1)  23 (Mich Septive 1)  24 (Mich Septive 1)  25 (Mich Septive 1)  26 (Mich Septive 1)  26 (Mich Septive 1)  27 (Mich Septive 1)  28 (Mich Septive 1)  29 (Mich Septive 1)  20 (Mich Septive 1)  21 (Mich Septive 1)  22 (Mich Septive 1)  23 (Mich Septive 1)  24 (Mich Septive 1)  25 (Mich Septive 1)  26 (Mich Septive 1)  26 (Mich Septive 1)  27 (Mich Septive 1)  28 (Mich Septive 1)  29 (Mich Septive 1)  20 (Mich Septive 1)  21 (Mich Septive 1)  22 (Mich Septive 1)  23 (Mich Septive 1)  24 (Mich Septive 1)  25 (Mich Septive 1)  26 (Mich Septive 1)  26 (Mich Septive 1)  26 (Mich Septive 1)  27 (Mich Septive 1)  28 (Mich Septive 1)  29 (Mich Septive 1)  20 (Mich Septive 1)  21 (Mich Septive 1)  22 (Mich Septive 1)  23 (Mich Septive 1)  24 (Mich Septive 1)  25 (Mich Septive 1)  26 (Mich Septive 1)  26 (Mich Septive 1)  27 (Mich Septive 1)  28 (Mich Septive 1)  29 (Mich Septive 1)  20 (Mich															
22 BMX Septity  ORNSCO POYER &  OUTSILES (P)  Demond divings  Demond divings  COCHRISTORY COME  COCHRISTORY COME  COCHRISTORY COME  COCHRISTORY COME  COCHRISTORY COME  Demond divings  Demond divings  Demond divings  Demond divings  Demond divings  Demond divings  COCHRISTORY COME  COCHRISTORY COME  COCHRISTORY COME  Demond divings  COCHRISTORY COME  COCHRISTORY  COC	21														
INVESCO POWER & UTITITES (PM)  AMPLE (TUDIE)  LOWER SPECIAL  COCKING SPECI		,													
INVESCO POWER & UTITITES (PM)  AMPLE (TUDIE)  LOWER SPECIAL  COCKING SPECI	22	Bulk Supply													
UNITIES PI  Demind druges  Demind dr	- 22														
Demand druges De															
Demand charges   COCKNA SPECAL   COCKNA SPECAL															
COCHAN SPICAL COCHAN (CORE (Total) (Total) (Power durges (Power durges) (Power du		Demand charges													
COCHAN SPICAL COCHAN (CORE (Total) (Total) (Power durges (Power durges) (Power du															
CONCONCEONE (Total) Demand charges Energy charge NUBSER PANK MOILD PORMAND (Total)  Demand charges Energy charge TOCHOOPANK TOCHOOPA															
Titrosh   Demand charges   Energy char															
RIBBER ARI RIONA (P) UNITED (Total) (P) UNITED (Tot		(Total)													
RUSSER PARK NOVA (PLUTED TOTAL)  OPERATED TOTAL)  Demand charges  Energy charges  COCHN ORT TRUST (TOTAL)  Demand charges  Energy charges  COCHN ORT TRUST (TOTAL)  Demand charges  Energy charges  THISSUR  CORPORATION (TOTAL)  OPERATED TOTAL  Demand charges  Energy charges  THISSUR  THISSUR  CORPORATION (TOTAL)  OPERATED TOTAL  COMMON DEVIN  HILLS PRODUCE  Energy charges  Demand charges  Energy c		Demand charges													
RUSSER PARK NOVA (PLUTED TOTAL)  OPERATED TOTAL)  Demand charges  Energy charges  COCHN ORT TRUST (TOTAL)  Demand charges  Energy charges  COCHN ORT TRUST (TOTAL)  Demand charges  Energy charges  THISSUR  CORPORATION (TOTAL)  OPERATED TOTAL  Demand charges  Energy charges  THISSUR  THISSUR  CORPORATION (TOTAL)  OPERATED TOTAL  COMMON DEVIN  HILLS PRODUCE  Energy charges  Demand charges  Energy c															
Demand charges  Energy charges  TYCHONANC  (TCHS)  Demand charges  Energy charges  Energy charges  COCHON POOR TRUST  (TCHS)  Demand charges  Energy charges  Energy charges  Energy charges  Energy charges  Energy charges  Energy charges  THISSUR  CORPORATION  (TCHS)  Demand charges  ANNAN REVAN  HILL STROUGHT DO  (TCHS)  Demand charges  Energy charges  ANNAN REVAN  HILL STROUGHT DO  (TCHS)  Demand charges  Energy charges  Demand charges  Energy charges  Energy charges  Energy charges  Demand charges  Energy charges  Energy charges  Demand charges  Energy charges  ANNANANANA  ELECTOOTY  CTOLAI)  Demand charges  Energy charges  ANNANANANAN  ELECTOOTY  CTOLAI  Demand charges  Energy charges  ANNANANANANAN  ELECTOOTY  CTOLAI  Demand charges  Energy charges  ANNANANANANAN  ELECTOOTY  CTOLAI  Demand charges  Energy charges  ANNANANANANAN  ELECTOOTY  CTOLAI  ENERGY CHARGES  ENERGY CHARGES		RUBBER PARK INDIA													
Incept charges IT CHONOPARK (TORI) Demand charges Energy charges COCHN POOLT THUST (Total) Demand charges Energy charges Energ															
TCHNOPASK TOTAL Demand charges Energy charges COCHIN PORT TRUST TOTAL Demand charges Energy char															
(Total) Demand charges Energy charges COCNIN PORT TRUST (Total) Demand charges Energy charges En															
Demand charges Gnegy charges COCHIN PORT TRUST (Total)  Demand charges Energy charges  CORPORATION COMMANDER CORPORATION COMMANDER COMPORTED COMMANDER COMPORT LIMITED COMMANDER COMPORT LIMITED COMMANDER COMPORT LIMITED COM															
Inergy Charges OCOLIN PORT TRUST (Total) Demand charges Inergy Cha															
COCHIN PORT TRUST (Total)  Demand charges  Sinety charges  THRISSUR  CORPORATION (Total)  Demand charges  Energy charges  ARAMNO BOYN  MILLS PRODUCE  COMPANY LIMITED (Total)  Demand charges  Energy charges  MILLTART  RESIDENCE  Energy charges  MILLTART  RESIDENCE  Energy charges  FONDICHERY ELECTRICTY  DEPARTMENT (Total)  Demand charges  Energy charges  FRENENCE  Energy charges  RENENCE  Energy charges															
(Total)  Demand charges  Energy charges  THRISSUR  COBPORATION  (Total)  Demand charges  Energy charges  Energ															
Demand charges Energy charges THRESUR CORPORATION (Total) Demand charges Energy charges KANNAN DEVAN HILLS RODUCE COMPANY LUNITED (Total) Demand charges Energy charges NULTARY ENERGENO SERVICES (Total) Demand charges Energy charges POMOICHERY ELECTRICITY DEPARTMENT (Total) Demand charges Energy charges Energy charges POMOICHERY ELECTRICITY DEPARTMENT (Total) Demand charges Energy charges Energ															
Energy charges THISSUR CORPONATION CORPONATION Demand charges Energy charges Ener															
THISSUR CORPORATION (Total) Demand charges Energy charges  XANNAN DEVAN HILLS RODOCE COMPANY LIMITED (Total) Demand charges Energy charges MILITARY RONINCERING SERVICES (Total) Demand charges Energy charges Energy charges PONDICHERY ELECTRICITY DEPARTMENT (Total) Demand charges Energy charges PONDICHERY ELECTRICITY DEPARTMENT (Total) Demand charges Energy charges															
CORPORATION (Total)  Demand charges Energy charges  KANNAN DEVAN HILLS PRODUCE COMPANY LIMITED (Total) Demand charges Energy c															
(Total)															
Demand charges Energy charges RANNAN DEVAN HILLS PRODUCE COMPANY LIMITED (Total) Demand charges Energy charges Energy charges Energy charges Energy charges PONDICHERY ELECTRICITY DEPARTMENT (Total) Demand charges Energy charges Ene															
Energy Charges  KANNAN DEVAN HILLS PRODUCE COMPANY LIMITED (Total)  Demand charges Energy Charges  Energy Char															
KANNAN DEVAN HILLS PRODUCE COMPANY LIMITED (TOTAI) Demand charges Energy charges MILITARY ENGINEERING SERVICES (TOTAI) Demand charges Energy charges PONDICHERY ELECTRICITY DEPARTMENT (TOTAI) Demand charges Energy cha															
HILLS PRODUCE COMPANY LIMITED (Total)  Demand charges  Energy charges  MILITARY PEGINEERING SERVICES (Total)  Demand charges  Energy charges  PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  Energy charges  PORDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  Increase the service of the															
Crotal)   Demand charges   Demand char															
Demand charges  Energy charges  MILITARY ENGINEERING SERVICES (Total)  Demand charges  Energy charges  PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  MARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges  INFOPARK (Total)  Demand charges  Energy charges  Energy charges  Sale through power exchange  Jale Sale through power exchange															
Energy charges  MILITARY ENGINEERING SERVICES (Total)  Demand charges  Energy charges  PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy cha															
MILITARY ENGINEERING SERVICES (Total)  Demand charges  Energy charges  PONDICHERY ELECTRICITY DEPARAMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARAMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARAMENT (Total)  Demand charges  Energy charges  INFOPARK (Total)  Demand charges  Energy charges  Revenue from sale of power outside the 22 State  3 Sale through power exchange															
ENGINEERING SERVICES (Total)  Demand charges  Energy charges  PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  INFOPARK (Total)  Demand charges  Energy charges  Energy charges  Revenue from sale of power outside the 22 State  3 Sale through power exchange  b) Sale to other States															
SERVICES (Total)  Demand charges  PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges  Reverue from sale of power outside the 2z State  a) Sale through power exchange															
Demand charges  Energy charges  PONICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Inergy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges  INFOPARK (Total)  Demand charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange															
Energy charges  PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
PONDICHERY ELECTRICITY DEPARTMENT (Total)  Demand charges Energy charges KARNATAKA ELECRICITY DEPARTMENT (Total) Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges InFOPARK (Total)  Demand charges Energy charges Ener															
ELECTRICITY DEPARTMENT (Total)  Demand charges Energy charges KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges															
DEPARTMENT ([Total)  Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT ([Total)  Demand charges  Energy charges  INFOPARK (Total)  Demand charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
Demand charges  Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges  Energy charges INFOPARK (Total)  Demand charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
Energy charges  KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges Energy charges  INFOPARK (Total)  Demand charges Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
KARNATAKA ELECRICITY DEPARTMENT (Total)  Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges  INFOPARK (Total)  Demand charges Energy charges  10															
ELECRICITY DEPARTMENT (Total)  Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges Energy charges Energy charges Energy charges Energy charges Aevenue from sale of power outside the 22 State 3 Sale through power exchange b) Sale to other States	$\Box$														
DEPARTMENT (ITotal)  Demand charges  Energy charges  INFOPARK (Total)  Demand charges  Energy charges  Energy charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
(Total)   Demand charges															
Demand charges Energy charges INFOPARK (Total)  Demand charges Energy charges Energy charges Energy charges 2 State 2 State 3 Sale through power exchange b) Sale to other States															
Energy charges  INFOPARK (Total)  Demand charges Energy charges Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
INFOPARK (Total)  Demand charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
Demand charges  Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States															
Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange		INFUPAKK (Total)													
Energy charges  Revenue from sale of power outside the 22 State  a) Sale through power exchange b) Sale to other States		Demand charges													
Revenue from sale of power outside the 22 State as Sale through power exchange by Sale to other States															
of power outside the 22 State 2 I State 3   Sale through power exchange b  Sale to other States															
22 State  a) Sale through power exchange b) Sale to other States															
a) Sale through power exchange b) Sale to other States	22														
b) Sale to other States			change												
I I I I I I I I I I I I I I I I I I I	c)			1	1			1	1	1	1	1	1		1

c) Sale through Traders
Total Revenue from Sale of Power

\*If ToD tariff is applicable, zone wise details should be furnished

#### Form D 5.3 ©

#### Revenue from proposed Tariff

Name of Distribution Business/License	
Licensed Area of Supply	

#### Year 2018-19 \*

	Year 2018-19 *													
S.No.	Particulars	Applicabl e tariff	No. of consumers	No. of consumers billed	Connected Load /Billed demand*	Units		Demand/ Fixed charges	Energy Charges	Power factor surcharge/ incentive	Other charges	Misc. recoveries	Total Revenue from sale of power	Average tariff
			Nos	Nos	KW	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
1			3	4	5	5	6	7	7	8	9	9	10	11
	LT Categories													
1	LT I (Total)													
	Single Phase													
	Three Phase													
	0-40 units													
	0-50 units 51-100 units													
	101-150 units													
	151-200 units													
	201-250 units													
	0-300 units													
	0-350 units													
	0-400 units													
	0-500 units													
	Above 500 units													
2	LT II (Total)													
	Fixed charge													
	Energy charge LT III (A)													
3	LT III (B)													
۵۸۱	LT IV (A) (Total)													
4 A)	Fixed Charges < 10 KW	,												
	>10 to <													
	>20 KW													
	Energy Charges													
4 (B)	LT IV (B) (Total)													
	Fixed Charges < 10 KV													
	>10 to <	=20KW												
	>20 KW													
	Energy Charges													
5(A)	LT-5A (Total)													
	Fixed Charges													
	Energy Charges LT-5B (Total)													
5(B)	Fixed Charges													
	Energy Charges													
6(4)	LT-6A (Total)													
O(A)	Fixed charge													
	Energy charges - < 50	0 Units												
	>500 Untis													
6(B)	LT-6B (Total)													
	Fixed charge													
	Energy charges - < 50	0 Units												
	>500 Untis													
6 (C)	LT-6 C (Total)													
	Fixed charge Energy charges - < 50	O Unite												
	>500 Untis	O OTHES												
6(D)														
0(D)	Fixed charge													
	Energy Charges													
6€	LT-6E (Total)													
	Single phase													
	Three phase													
	Energy Charges													
	1 to 50 units													
	51 to 100 units													
	101 to 200 units Above 200 units (non-te	lesconic for "	e entire con	mption)										
	LT-6F (Total)	iescopic for th	endre consu	риоп)										
6 F	Fixed charge													
	Single Phase													
	Three phase													
	Energy Charge													
	0 to 100 units per mont	h												
	0 to 200 units per mont	h												
	0 to 300 units per mont	h												
	0 to 500 units per mont													
	above 500 units per mo	nth												
6 G	LT-6G (Total)													
	Fixed charge													
	Single Phase													
	Three phase													
	Energy Charge	l uth												
	up to 500 units per mor													
	501 units upto 1000 uni 1001 units upto 2000 ur													
	Above 2000 units per m													
7 (^\	LT- 7A (Total)													
, (A)	(a) Fixed charge													

#### Form D 5.3 ©

#### Revenue from proposed Tariff

Name of Distribution Business/License	
Licensed Area of Supply	

#### Year 2018-19 \*

	Year 2018-19 *													
S.No.	Particulars	Applicabl e tariff	No. of consumers	No. of consumers billed	Connected Load /Billed demand*	Units I	oilled*	Demand/ Fixed charges	Energy Charges	Power factor surcharge/ incentive	Other charges	Misc. recoveries	Total Revenue from sale	Average tariff
			Nos	Nos	KW	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	of power Rs Lakh	paisa/KWh
1	2		3	4	5	5	6	7	7	8	9	9	10	11
	(i) Single Phase (ii) Three phase													
	(ii) Three phase (b) Energy Charge (Rs p	er unit)												
	(i) Of and below 1		nonth											
	(ii) Of and below 2													
	(iii) Of and below 3													
	<ul><li>(iv) Of and below 5</li><li>(v) Above 500 units</li></ul>		nonth											
	(v) Above 300 units	per month												
2	LT-7B (Total)													
	(a) Fixed Charge													
-	(b)Energy charge (i) 0 to 100 units													
	(i) 0 to 100 units													
	(ii) 0 to 200 units													
	(iii) 0 to 300 units													
-	IT 7C (Tatal)													
70	LT 7C (Total) (a) Fixed Charge		<del>                                     </del>											
	(b) Energy Charge													
<u> </u>	(Rs/kWh)		<u> </u>											
	(i) Of and below 1000 kWh													
	(ii) Above 1000													
21	kWh LT-8A													
JA.	LT-8B													
9	LT XII													
10(a)	HT I (A) (Total)													
	Demand charges Energy Charges													
	HT I (B) (Total)													
- , ,	Demand charges													
	Energy Charges													
	HT II A (Total)													
	Demand charges Energy charges													
	HT II B (Total)													
	Demand charges													
	Energy Charges													
	(i) Of and below 30,000 units (All units)													
	(ii) Above 30,000 units (All units)													
11(a)	HT III A (Total)													
	Fixed charges													
	Energy charges HT III B (Total)													
11(b)	Fixed charges													
	Energy charges													
	HT Commercial (Tota	1)				-								
	(i) Of and below													
	(i) Of and below 30,000 units (All units)		1											
			<u> </u>											
	(ii) Above 30,000 units (All units)													
	HT Domestic (Total) Fixed charges		<del>                                     </del>											
	Energy charges													
14	EHT 66 KV Industrial	(Total)												
	Demand charges													
	Energy charges	(Total)	-											
	EHT 110 KV Industrial Demand charges	(rotdl)	<del>                                     </del>											
_	Energy charges													
		(Total)												
-	Demand charges Energy charges		<del>                                     </del>											
17	EHT Commercial (Tota	al)												
	Demand charges													
	Energy charges													
	(i) Of and below 60,000 units													
	(ii) Above 60,000 units													
	EHT General (A) (Tot	al)												
	Demand charges	1	1											
	Energy charges													
	EHT General (B) (Tota	al)			-	_						-	-	
	(i) Of and below 60,000 units		1											
	,		1	1				1						1

Form	D	5	3	(C)

Revenue	from	proposed	Tariff

Name of Distribution Business/License	
Licensed Area of Supply	

#### Year 2018-19 \*

	Year 2018-19 *													
5.No.	Particulars	Applicabl e tariff	No. of consumers	No. of consumers billed	Connected Load /Billed demand*	Units		Demand/ Fixed charges	Energy Charges	Power factor surcharge/ incentive	Other charges	Misc. recoveries	Total Revenue from sale of power	Average tariff
			Nos	Nos	KW	percent	MUs	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	Rs Lakh	paisa/KWh
1	2		3	4	5	5	6	7	7	8	9	9	10	11
	(ii) Above 60,000 units													
20	Railways (Total)													
20	Demand charges													
	Energy charges													
	Kochi Metro (Total)													
	Demand charges													
	Energy charges													
21	Others if any													
22	Bulk Supply													
	KINESCO POWER & UTILITIES (P) LIMITED (Total)													
	Demand charges													
	Energy charges													
	COCHIN SPECIAL ECONOMIC ZONE (Total)													
	Demand charges													
	Energy charges													
	RUBBER PARK INDIA (P) LIMITED (Total)													
	Demand charges													
	Energy charges TECHNOPARK (Total)													
	B													
	Demand charges													
	Energy charges													
	COCHIN PORT TRUST (Total)													
	Demand charges													
	Energy charges													
	THRISSUR CORPORATION (Total)													
	Demand charges													
	Energy charges													
	KANNAN DEVAN HILLS PRODUCE COMPANY LIMITED (Total)													
	Demand charges													
	Energy charges													
	MILITARY ENGINEERING SERVICES (Total)													
	Demand charges													
	Energy charges													
	PONDICHERY ELECTRICITY DEPARTMENT (Total)													
	Demand charges													
	Energy charges													
	KARNATAKA ELECRICITY DEPARTMENT													
	(Total) Demand charges													
	Energy charges													<b>†</b>
	INFOPARK (Total)													
	Demand charges													
	Energy charges													
22	Revenue from sale of power outside the State													
	Sale through power excl	nange												
	Sale to other States													
c)	Sale through Traders	` <del>-</del>												

b) Sale to other States
c) Sale through Traders
Total Revenue from Sale of Power
\* Note: 1 Tariff categories mentioned here is indicative only. Details to be furnished separately for each year in which tariff revision is porposed, with proposed tariff categories
2 If ToD tariff is applicable, zone wise details should be furnished

Form D 6.1	
Improvement in performance	mance
Name of Distribution Business/Licensee	
Licensed Area of Supply	

CN	n 1	n c				MYT Cont	rol Period		ъ 1
S.No.	Particulars	Ref	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Remarks
1	2	3	4	5	6	7	8	9	10
1	Distribution Losses, (%)								
2	Collection Efficiency, (%)								
3	Distribution losses for (%)								
(a)	Urban areas with population exceeding 1 lakh								
(b)	Industrial areas of load exceeding 5MVA#								
(c)	Rural areas								
4 (a)	Percentage of consumers billed								
4 (b)	Revenue realisation , (Rs Cr)								
5	Stopped Meters %								
6 (a)	Defective meters/metering arrangement%								
6 (b)	Replacement of Defective meters, %								
7	Supply availability %								
(1)	Base Load supply availability								
(a)	Actual contracted Base Load supply in MW								
(b)	Base Load in MW								
(c)	Base Load supply availability (%) (c=a/b)								
(2)	Peak Load supply availability								
(d)	Actual Contracted Peal Load Supply in MW								
(e)	Peak load in MW								
(f)	Peak Load Supply Availability (%) (c=a/b)								
	Supply availability %(0.75*c + 0.25*f)								
8	Transformer failure rate								
a.	Distribution transformers (%)								
b.	Power transformers (%)								

	Form D 6.2	
	Appropriation of Distribution loss	
Name of Distribution Business/Licensee		
Licensed Area of Supply		

Year: 2016-17/2017-18 (Actual) //2018-19/2019-20/2020-21/2021-22 (Projections)

		Year										
			(Actual/Audited)									
S.No.	No. Particulars	Energy Input Energy Sales		Enrergy sent to lower voltage	Distributio	Distribution Loss						
		MKWh	MKWh	MKWh	Percent	MKWh						
1	2	3	4	5	6	7						
	Voltage-wise Apportionment of Distribution losses											
1	33 kV											
2	11 kV											
3	LT											
	Overall Distribution Loss											

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 to 2021-22

Form D 7.1	
Category-wise Sales	
Name of Distribution Business/L	
Licensed Area of Supply	

Year 2017-18 (MI

S. No.	Consumer Category & Consumption Slab	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	HT Category												
	Category-1												
	Category-n												
	LT Category												
	Category-1												
	Category-n												
	Total												

Note: consumer categories in forms are indicative only. Distribution Business/Licensee should indicate actual consumer categories as per tariff (as per existing tariff for previous & current year and as per proposed tariff for ensuring years).

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 to 2021-22

#### U/lakh units)

U/lakh units)
Total
15

		Form D 7.2	
	Dis	tribution Losses	
Name of Distribution Business/Li			
Licensed Area of Supply			

#### Year 2017-18

S. No.	Voltage Level	No of Feeders	Feeders metered	Energy Input	Energy Sent to lower network	Direct Sale	Total Output	Total Losses	Total Losses (% of Energy Input)		Total technical Losses (% of Energy Input)		Total Commercial Losses (% of Energy Input)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Circle 1													
Circle 2													
Circle 3													
•••													

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 to 2021-22

	Form D 7.3	
	Collection Efficiency	
Name of Distribution Busin		
Licensed Area of Supply		

(Rs. Crore / Lakh)

		2016-17	2017-18	2018-19	2019-20	2020-21	2021-22		
S. No.	No. Particulars	Particulars	(Actuals/Audited)	(Actuals/Audited)	(Projected)	(Projected)	(Projected)	(Projected)	Remarks
1	2	3	4	5	6	7	8	9	
	HT Category								
	Category-1								
	Category-n								
	LT Category								
	Category-1								
	Category-n								
	Total								

Note: 1. Collection Efficiency should be calculated after taking into account provision for bad debts (as per Tariff Policy para 8.2.1(IV))

Note: 2. consumer categories in forms are indicative only. Distribution Business/Licensee should indicate actual consumer categories as per tariff (as per existing tariff for previous & current year and as per proposed tariff for ensuring year).

Form D 8  Deviation Analysis  Name of Distribution Business/Licensee						

Year (2016-17 & 2017-18)

(Rs. Crore / lakh)

S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllabl e	Uncontroll able
1	2	3	4	5	6	7	8
1	Cost of own power generation/power purchase						
2	Transmission Charges						
3	NLDC/RLDC/SLDC Charges						
4	Operation & Maintenance Expenses						
4.1	Employee Expenses						
4.2	Administration & General Expenses						
4.3	Repair & Maintenance Expenses						
5	Interest and finance charges on long term loans						
6	Depreciation						
	Interest on Working Capital						
8	Interest on consumer security deposits and deposits from Users of the distribution system						
9	Any other item (to be specified)						
10	Contribution to contingecny reserves						
11	Provisioning for Bad debts, if any						
A	Total Expenditure						
В	Return on Equity						
С	Tax on ROE						
D	Revenue						
1	Revenue from sale of electricity						
2	Other Income						

Note: Please give detailed explanation separately for the deviations on account of uncontrollable factors

	Form D 9	
	Consumer category-wise Cross-subsidy	
Name of Distribution Business/Licensee		
Licensed Area of Supply		

2018-19\*

S.No.	Particulars	Average Cost of	Average	Billing Rate	Rate to Av	verage Billing verage Cost of ply (%)	Proposed percentage
		Supply (Rs./unit)	As per latest Tariff Order	Proposed by Distribution Business/ Licensee	As per latest Tariff Order	Proposed by Distribution Business/ Licensee	increase in tariff (%)
1	2	3	4	5	6	7 = 5 / 3	8 = 5 / 4
	LT Categories						
1							
2							
3							
	High Tension (HT)						
2							
3							
4							
	Extra High Tension (EHT)						
	EHT 66 kV						
	EHT 110 kV						
	EHT 220 kV						
	Railway Traction						
27	Bulk Consumers/ Licensees						
	Kinesco Power Utilities Private Limited						
	Cochin Special Economic Zone						
	Rubber Park India Pvt Ltd						
	Technopark						
	Cochin Port Trust						
	Thrissur Municipal Corporation						
	Kanan Devan Hills Plantation Corporation Limited						
	Infopark						
	Military Engineering Services						
	Electricity Department Pondicherry						
	Electricity Department Karnataka						

Note: consumer categories in forms are indicative only. Distribution Business/Licensee should indicate actual consumer categories as per tariff (as per existing tariff for previous & current year).

Form D P&L							
Profit & Loss	Account						
Name of Distribution Business/Licensee							
Licensed Area of Supply							

S.No.	Particulars	Ref	2017-18	2016-17	2015-16	Remarks
1	2	3	4	5	6	7
-	LINCOME	o .	-	3	Ü	,
	a. Revenue from Sale of Power					
	b. Revenue Subsidies and Grants					
	c. Other Income					
	Total (a+b+c)					
	II. EXPENDITURE					
	a. Repairs and Maintenance.					
	b. Employee Cost					
	c. Administration and General Expenses					
	d.Depreciation					
	e.Interest and Finance charges					
	f. Subtotal ( a+b+c+d+e)					
	g. Less Capitalised Expenses:					
	- Interest & Finance Charges					
	- Other Expenses					
	h. Other Debits					
	I. Extra Ordinary Items					
	j. Purchase of power					
	k.Generation of Power					
	Total Expenditure (f-g+h+i+j+k)					
	III. Profit/(Loss) before Tax (I-II)					
	IV. Provision for Income Tax					
	V.Net Prior period credits (Charges )					
	VI. Surplus (Deficit)					
	VII. Net Assets at the beginning of the year (Less consumer's Contribution )					
	VIII. Rate of Return (VI/VII)	1 L - C	1 1			

Note: 1. Split up details of each of the item should be furnished

<sup>2.</sup> Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item

<sup>3.</sup> Reconciliation between audited accounts and amounts for distribution business should be furnished.

Form D BS							
Balance Sheet at the	Balance Sheet at the end of the year						
Name of Distribution Business/Licensee							
Licensed Area of Supply							

CNo	Dauti autous	Dof	2017-18	2016-17	2015-16	Domonto
S.No.	Particulars	Ref				Remarks
1	2	3	4	5	6	7
Α	EQUITY AND LIABILITIES					
1	Shareholders funds					
	(a) Share Capital					
	(b) Reserve and Surplus (Reserves+surplus/deficit)					
2	Contribution, Grants and other long term Reserve funds					
3	Non Current liabilities					
	(a) Long Term borrowings (Capital liabilities)					
	(b) Other long term liabilities (SD from consumers)					
	-					
	(c) Long term provisions (Reserve funds+provision for int. On bonds/payrevision)					
4	Current liabilities					
	(a) Short Term borrowings (Borrowing for working capital)					
	(b) Trade Payables (payment due to CGS/Others)					
	(c) Other short term liabilities (other current liabilies except payment to CGS)					
	(d) Short Term provisions					
В	TOTAL EQUITY & LIABILITIES					
	ASSETS					
1	Non Current Assets					
	(a) Fixed Assets					
	(i) Tangible Assets					
	(ii)Intabgible Assets					
	(iii) Capital work in progress					
	(b) Non-Current investment					
	(c) Long term loans and Advances					
	(d) Other non-current assets					
2	Current Assets					
	(a) Current investments					
	(b) Inventories (Stocks) (c) Trade reveivables					
	(d) Cash and Cash equivalents					
	(e)Short term loans and advances					
	(f) Other current assets					
	TOTAL ASSETS					

Note: 1. Split up details of each of the item should be furnished
2. Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item
3. Reconciliation between audited accounts and amounts for distribution business should be furnished.

#### Form D CF

#### Cash Flow for the year

Name of Distribution Business/Licensee Licensed Area of Supply

S.No	Particulars	Ref	2016-17	2017-18	Remarks
1	2	3	4	5	6
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants				
	Less : Income Tax Payment during the year				
	Total of (a)				
	b. Add: Debits to revenue account not requiring cash Flow:				
	I) Depreciation				
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets				
	iv) Investment Allowance Reserve				
	v) Others, if any				
	Total of (b)				
	c. Less: Credits to revenue Account not involving cash receipts				
	I) Deprecation				
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)				
	Net Funds from Earnings (a)+(b)-(c)				
2	Contributions, Grants & Subsidies to cost of Capital Assets				
3	Security Deposit from consumers				
4	Proceeds from disposal of fixed Assets				
5	Total Funds from Operations (1+2+3+4)				
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories				
	ii) Receivables against sale of power				
	iii) Loans and Advances				
	iv) Sundry receivables				
	v)Subsidy receivables				
	Total of (a)				

		T	T	1
	(b) Increase/(Decrease) in Current liabilities			
	I)Borrowings for working Capital			
	ii) Other current liabilities			
	iii) Others (Increase in Reserve + payment due on cap.liab)			
	Total of (b)			
	Net Increase/(Decrease) in working Capital (a)- (b)			
7	Net Funds from operations before subsidies and Grants (5-6)			
8	Receipts from revenue subsidies and Grants			
	Total Net Funds from operations including subsidies & Grants (7+8)			
II.	Net increase/ decrease in Capital liabilities			
	a). Fresh borrowings			
	I) State Loans			
	ii) Foreign currency Loans / Credits			
	iii) Other borrowings			
	Total of (a)			
	b) Repayments :			
	I) State Loans			
	ii) Foreign currency Loans / Credits			
	iii) Other borrowings			
	Total of (b)			
	Net Increase/(Decrease) in Capital liabilities (a) - (b)			
III.	Increase/(Decrease ) in equity Capital			
IV.	Total Funds available for Capital Expenditure (I+II+III)			
v	Funds utilised on Capital Expenditure			
	a)On projects			
	b)Advance to Suppliers & Contractors			
	c) Intangible Assets			
	d) Deferred Cost			
	Total of V (a+b+c+d)			
VI	Net Increase/(Decrease ) in Government contribution			
VII	Net Increase/(Decrease ) in Terminal benefit fund			
VIII	Net Increase/(Decrease ) in Provident fund			
IX	Net Increase/(Decrease ) in investments			
x	Net Increase /(Decrease ) in cash / bank balance ( IV - V- VI )			
-				
	Add opening cash & Bank balance			

Note: Reconciliation between audited accounts and amounts for distribution business should be furnished.

#### Small Distribution Licensee - licensed business P&L Account

#### Profit & Loss Account

Applicable to Licensees other than KSEB L Name of Distribution Licensee

S.No.	Particulars	Ref	Audited Accounts of Licensee	Electricity Distribution Business	Other Business	Remarks
1	2	3	4	5	6	7
	LINCOME					
	a. Revenue from Sale of Power					
	b. Revenue Subsidies and Grants					
	c. Other Income					
	Total (a+b+c)					
	II. EXPENDITURE					
	a. Repairs and Maintenance.					
	b. Employee Cost					
	c. Administration and General Expenses					
	d.Depreciation					
	e.Interest and Finance charges					
	f. Subtotal ( a+b+c+d+e)					
	g. Less Capitalised Expenses:					
	- Interest & Finance Charges					
	- Other Expenses					
	h. Other Debits					
	I. Extra Ordinary Items					
	j. Purchase of power					
	k.Generation of Power					
	Total Expenditure (f-g+h+i+j+k)					
	III. Profit /(Loss) before Tax (I-II)					
	IV. Provision for Income Tax					
	V.Net Prior period credits (Charges )					
	VI. Surplus (Deficit )					
	VII. Net Assets at the beginning of the year (Less consumer's Contribution )					
	VIII. Rate of Return (VI / VII)					

Note: Above details should be submitted for 2017-18 & 2016-17

#### KSEBL SBU-wise P&L Account

#### Profit & Loss Account

S.No.	Particulars	Ref	As per Accounts	SBU-G	SBU-T	SBU-D	SLDC	Remarks
3.110.	1 atticulars	Kei	(KSEB Ltd)					Kemarks
1	2	3	4	5	6	7	8	9
	LINCOME							
	a. Revenue from Sale of Power							
	b. Revenue Subsidies and Grants							
	c. Other Income							
	Total (a+b+c)							
	II. EXPENDITURE							
	a. Repairs and Maintenance.							
	b. Employee Cost							
	c. Administration and General Expenses							
	d.Depreciation							
	e.Interest and Finance charges							
	f. Subtotal ( a+b+c+d+e)							
	g. Less Capitalised Expenses:							
	- Interest & Finance Charges							
	- Other Expenses							
	h. Other Debits							
	I. Extra Ordinary Items							
	j. Purchase of power							
	k.Generation of Power							
	Total Expenditure (f-g+h+i+j+k)							
	III. Profit /(Loss) before Tax (I-II)							
	IV. Provision for Income Tax							
	V.Net Prior period credits (Charges )							
	VI. Surplus (Deficit )							
	VII. Net Assets at the beginning of the year (Less consumer's Contribution )							
	VIII. Rate of Return (VI/VII)							

Note: Reconciliation between audited accounts of KSEBL Limited and amounts for each SBU should be furnished.

Note: Above details should be submitted for 2017-18 & 2016-17

#### SBU wise Balance Sheet at the end of the year

#### Applicable to KSEB Ltd

S.No.	Particulars	Ref	KSEB Ltd	SBU-G	SBU-T	SBU-D	SLDC	Remarks
3.140.	1 diticulais	Kei	accounts					Kemarks
1	2	3	4	5	6	7	8	9
А	EQUITY AND LIABILITIES							
1	Shareholders funds							
	(a) Share Capital							
	(b) Reserve and Surplus (Reserves+surplus/deficit)							
2	Contribution, Grants and other long term Reserve funds							
3	Non Current liabilities							
	(a) Long Term borrowings (Capital liabilities)							
	(b) Other long term liabilities (SD from consumers)							
	(c) Long term provisions (Reserve funds+provision for int. On bonds/payrevision)							
4	Current liabilities							
	(a) Short Term borrowings (Borrowing for working capital)							
	(b) Trade Payables (payment due to CGS/Others)							
	(c) Other short term liabiliites (other current liabilies except payment to CGS)							
	(d) Short Term provisions							
	TOTAL EQUITY & LIABILITIES							
_								
В	ASSETS							
1	Non Current Assets							
	(a) Fixed Assets							
	(i) Tangible Assets							
	(ii)Intabgible Assets							
	(iii) Capital work in progress							
	(b) Non-Current investment							
	(c) Long term loans and Advances		-					
	(d) Other non-current assets		-					
2	Current Assets							
<u> </u>	(a) Current investments		-					
	(b) Inventories (Stocks)							
-	(c) Trade reveivables							
-	(d) Cash and Cash equivalents							
-	(e)Short term loans and advances (f) Other current assets							
-								
	TOTAL ASSETS		1		1	l .	l .	l .

Note: Above details should be submitted for 2017-18 & 2016-17

Reconciliation between audited accounts and amounts for distribution business should be furnished.

	Form D BS
Balance She	eet at the end of the year
Applicable to Licensees other than KSEB Ltd	

S.No.	Particulars	Ref	Audited accounts (consolidated)	Distribution business	Other Business	Total	Remarks
1	2	3	4	5	6	7	8
А	EQUITY AND LIABILITIES						
1	Shareholders funds						
	(a) Share Capital						
	•						
	(b) Reserve and Surplus (Reserves+surplus/deficit)						
2	Contribution, Grants and other long term Reserve funds						
3	Non Current liabilities						
	(a) Long Term borrowings (Capital liabilities)						
	(b) Other long term liabilities (SD from consumers)						
	(c) Long term provisions (Reserve funds+provision for int. On bonds/payrevision)						
4	Current liabilities						
	(a) Short Term borrowings (Borrowing for working capital)						
	(b) Trade Payables (payment due to CGS/Others)						
	(c) Other short term liabilities (other current liabilies except payment to CGS)						
	(d) Short Term provisions						
	TOTAL EQUITY & LIABILITIES						
В	ASSETS						
1	Non Current Assets						
	(a) Fixed Assets						
	(i) Tangible Assets						
	(ii)Intabgible Assets						
	(iii) Capital work in progress						
	(b) Non-Current investment						
	(c) Long term loans and Advances						
	(d) Other non-current assets						
2	Current Assets						
	(a) Current investments						
	(b) Inventories (Stocks)		_				
	(c) Trade reveivables						
ļ	(d) Cash and Cash equivalents						
	(e)Short term loans and advances						
	(f) Other current assets						
	TOTAL ASSETS						

Note: Above details should be submitted for 2017-18 & 2016-17

Reconciliation between audited accounts and amounts for distribution business should be furnished.

# ARR and Tariff Formats Generation Business INDEX

S.No.	Form No.	Title of Form
1	2	3
1	Form G 1.1	Summary of Tariff Proposal
2	Form G 1.2	Aggregate Revenue Requirement
3	Form G 2.1	Plant Characteristics
4	Form G 2.2	Operational Parameters - Generation
5	Form G 3.1	Revenue from Sale of Power
6	Form G 3.2	Other Income
7	Form G 3.3	Capital Subsidies and Grants
8	Form G 4	O&M Expenses
9	Form G 4a	Employee Expenses
10	Form G 4b	Administrative & General Expenses
11	Form G 4c	Repair & Maintenance Expenses
12	Form G 5.1	Energy Charges for Thermal Generation
13	Form G 5.2	Fuel Cost Details for Thermal Generation
14	Form G 6.1	Fixed assets & provisons for depreciation
15	Form G 6.2a	Calculation of Weighted Average Rate of Interest on Actual Loans
16	Form G 6.2b	Calculation of Interest on Normative Loan
17	Form G 6.3	Details of Project Specific Loans
18	Form G 6.4	Consilidated report on additions to Fixed Assets during the year
19	Form G 6.5	Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects
20	Form G 6.6	Break-up of Capital Cost for Thermal projects
21	Form G 6.7	Break-up of Construction / Supply / Service packages
22	Form G 6.8	Draw Down Schedule for Calculation of IDC & Financing Charges (year wise from commencement
		of works to COD)
23	Form G 6.9	Return on Equity/Return on Net Fixed Assets
24	Form G 6.10	Statement of Additional Capitalisation after COD and Details for Financing
25	Form G 6.11	Interest on Working Capital
26	Form G 6.12	Tax on ROE
27	Form G 6.13	Inflow Review (Water Year)
28	Form G 6.14	Month wise inflow in MM3
29	Form G 6.15	Maintenance Schedule and net hydro capacity available (MW)
30	Form G 7.1	Proposed improvement in performance
31	Form G 8	Deviation Analysis
Other Information/Documents		
1	Form G P&L	Profit & Loss Account
2	Form G BS	Balance Sheet at the end of the year
3	Form G CF	Cash Flow for the year
4	Corporate audi	ted/unaudited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the
	relevant years.	
	,	

 $\textbf{Note}: Spread \ sheet \ financial \ models \ (in \ CD) \ shall \ also \ be \ submitted \ along \ with \ the \ application.$ 

#### Form G 1.1 Summary of Tariff Proposal

Name of the Generating Business/Company	
Name of the Generating Station/Unit:	

Rs. Crore)

	(Rs. Crore)												
				2016-17		2017-18 2018-19			2019-20	2020-21	2021-22	Remarks	
S.No.	Particulars	Ref.of Form No	Approved in Tariff Order	Audited	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up requirement	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	7	8	9	10	11	12	13	14	15
1	Capacity Charge												1
1.1	Annual Fixed Charges												
1.1.1	O & M Expenses												
1.1.2	Depreciation												
	Interest on Loan Capital												
1.1.4	Interest on Bonds to meet Terminal Liabilities												
1.1.5	Interest on Working Capital												
1.1.6	Return on Equity												l .
1.1.7	Tax on ROE												1
1.1.8	Any other item (to be specified)												
	Less: Other income												
	Total (1.1) Annual Fixed Charges												İ
2	Total- Energy (variable ) charges												I
3	Units sold to Discoms (MU)												
4	Rate of Variable Charges												
4.1	Rate of Energy Charge from Primary Fuel (REC) <sub>p</sub>												
4.2	Total-(2) Rate of Energy Charge ex-bus(REC) <sup>3A,3B</sup>												

<sup>&</sup>lt;sup>1</sup> Details of calculations to be furnished.

<sup>&</sup>lt;sup>3A</sup> The rate of energy charge shall be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.

<sup>&</sup>lt;sup>3B</sup> The total energy charge shall be worked out based on ex-bus energy sent out in case of plants not covered by ABT,

## Form G 1.2 Aggregate Revenue Requirement

	Aggregate Kevenue Kequirement
Name of the Generating Business/Company	
Name of the Generating Station/Unit:	

(Rs. Crore)

												(Rs. Crore)
Particulars	Reference Form		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	
2	3	4	5	6	7	8	9	10	11	12	13	14
xpenditure												
ariable Costs, including Fuel Cost												
Depreciation												
nterest on term Loan & Finance charges												
leturn on Equity												
ax on ROE												
nterest on Working Capital												
0 & M Expenses												
any other item (to be specified)												
otal- (A) Expenditure												
Receipts	•		·									
Levenue from Sale of Power (Tariff income)												
Other income	•		·									
evenue Subsidies, Grants & Subvention												
rom State Govt.												
Total- (B)												
ARR (A-B(2)-B(3))												
n le	2 spenditure ariable Costs, including Fuel Cost epreciation terest on term Loan & Finance charges eturn on Equity ax on ROE terest on Working Capital & M Expenses ny other item (to be specified) otal- (A) Expenditure eccipts evenue from Sale of Power (Tariff income) their income evenue Subsidies, Grants & Subvention om State Govt. otal- (B)	2 3  spenditure  raiable Costs, including Fuel Cost experication  terest on term Loan & Finance charges eturn on Equity  ix on ROE  terest on Working Capital & M Expenses ny other item (to be specified)  stal- (A) Expenditure eccipts evenue Form Sale of Power (Tariff income) ther income evenue Subsidies, Grants & Subvention om State Govt.  otal- (B)	Particulars  Form Approved in Tariff Order  2 3 4  spenditure  ariable Costs, including Fuel Cost experication  terest on term Loan & Finance charges  eturn on Equity  ax on ROE  terest on Working Capital  & M Expenses  ny other item (to be specified)  yalal- (A) Expenditure  execipts  evenue Form Sale of Power (Tariff income)  their income  evenue Subsidies, Grants & Subvention  om State Govt.  otal- (B)	Particulars  Reference Form Approved in Tariff Order  2 3 4 5  Appenditure  Ariable Costs, including Fuel Cost epreciation terest on term Loan & Finance charges eturn on Equity to on ROE terest on Working Capital & M Expenses ny other item (to be specified) otal- (A) Expenditure eccipts evenue Subsidies, Grants & Subvention om State Govt. otal- (B)	Particulars  Reference Form Approved in Tariff Order  Audited Truing Up  Approved in Tariff Order  Audited Truing Up  Approved in Tariff Order  Audited Truing Up   Particulars  Reference Form Approved in Tariff Order  2 3 4 5 6 7  Approved in Tariff Order  2 3 4 5 6 7  Approved in Tariff Order  2 3 4 5 6 7  Approved in Tariff Order  Approved in Tariff Order  2 3 4 5 6 7  Approved in Tariff Order  Audited Truing Up Approved in Tariff Order  Approved in Tariff Order  Approved in Tariff Order  Audited Truing Up Approved in Tariff Order  7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Particulars  Reference Form Approved in Tariff Order  2 3 4 5 6 7 8  Rependiture  Approved in Tariff Order  2 3 4 5 6 7 8  Rependiture  Approved in Tariff Order  Audited Order  Rependiture  Approved in Tariff Order  Rependiture  Repnditure  Repndit	Particulars  Reference Form Approved in Tariff Order  2 3 4 5 6 7 8 9  penditure Ariable Costs, including Fuel Cost experication terest on term Loan & Finance charges exturn on Equity to to ROE terest on Working Capital & M Expenses ny other item (to be specified) total- (A) Expenditure execipts execute from Sale of Power (Tariff income) their income execute Subsidies, Grants & Subvention om State Govt. botal- (B)	Particulars  Reference Form  Approved in Tariff Order  Addited Pruing Up (Projected)  Forder  Approved in Tariff Order  Addited Truing Up (Projected)  Forder  Audited Truing Up (Projected)  Forder  F	Particulars  Reference Form Approved in Tariff Order Approved in Tariff Urder  2 3 4 5 6 7 8 9 10 11  Approved in Tariff Order  Approved in Tariff Order  2 3 4 5 6 7 8 9 10 11  Approved in Tariff Urder  Addited In Turing Up (Projected)  1	Particulars  Reference Form Approved in Tariff Order  2 3 4 5 6 7 8 9 10 11 12  Approved in Tariff Order  Percentiture Ariable Costs, including Fuel Cost Percentition Audited Pe	Particulars  Reference Form Tariff Order Approved in Tariff Urder Tariff Order Tari	

### Form G 2.1 Plant Characteristics

Name of the Generating Business/Company Name of the Generating Station/Unit:

Basic characteristics of the plant <sup>1</sup>							
Special Features of the Plant							
Site Specific Features <sup>2</sup>							
Special Technological Features <sup>3</sup>							
Environmental Regulation related features <sup>4</sup>							
Any other special features Fuel Details <sup>5</sup>		Primary Fuel		Conom	ndary Fuel	Alternate	Euglo
Fuel Details	Frintary Fuel		Secoi	luary ruei	Atternati	e rueis	
Details		1				1	
	1	2	3	4	5	6	& so on
Installed Capacity (IC)	ļ						
Date of Commercial Operation (COD)							
Type of cooling system <sup>6</sup>							
Type of Boiler Feed Pump <sup>7</sup>							
Pressure (kg/cm2)							
Temperature 0C							
-At Superheater Outlet	ļ						
-At Reheater Outlet							
Turbine Cycle heat Rate(Kcal/ Kwh)							
Boiler Efficiency (%)							
Guaranteed Design Heat rate (kCal/kWh)s							
Conditions on which guaranteed	ļ						
% MCR							
% Makeup							
Design Fuel							
Design cooling water Temperature							
Back Pressure							

<sup>&</sup>lt;sup>1</sup> Describe the basic characteristics of the plant, e.g., in the case of a coal based plant whehter it is a conventional steam generator or circulating fludized bed combustion generator or sub-critical once through steam generator etc.

<sup>&</sup>lt;sup>2</sup> Any site specific feature such as Merry-Go-Round, Vicinity to sea, Intake / makeup water systems etc. scrubbers etc. Specify all such features.

 $<sup>^{3}\,</sup>$  Any Special Technological feature like Advanced class FA technology in Gas Turbines, etc.

<sup>&</sup>lt;sup>4</sup> Environmental regulation related features like FGD, ESP etc.

<sup>&</sup>lt;sup>5</sup> Coal or natural gas or naptha or lignite etc.

 $<sup>^{\</sup>rm 6}$  Closed circuit cooling, once through cooling, sea cooling etc.

<sup>&</sup>lt;sup>7</sup> Motor driven, Steam turbine driven etc.

<sup>8</sup> In case guaranteed unit heat rate is not available then furnish the guaranteed turbine cycle heat rate and guaranteed boiler efficiency separately along with condition of guarantee.

Form G 2.2 Operational Parameters - Generation

Name of the Generating Business/Company	
Name of the Generating Station /Unit ·	

	2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks			
S. No.	Particulars	Units	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Operational Parameters - Hydel												
1.1	Total Capacity	MW											
	AFC												
	Capacity Charge												
	Energy charge rate												
1.2	NAPAF	%											
1.3	Actual/Projected Annual Plant Availability Factor	%											
1.4	Design Energy	MU											
1.5	Gross Generation	MU											
1.6	Auxiliary Energy Consumption	%											
1.7	Auxiliary Energy Consumption	MU											
1.8	Net Generation	MU											

## Form G 3.1 Revenue from Sale of Power

Name of the Generating Business/Company	
Name of the Generating Station :	
5	

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

									Rs. Crore	
S.No.	Particulars	Allocation (in %) /contract demand	Unit Sold (MU)	% of total Unit Sold	Fixed Charges	Energy Charges	Others, if any	Total (6+7+8)	Average' rate/kWh (paisa/kWh)	Remarks
1	2	3	4	5	6	7	8	9	10	11
	Revenue from sale of Electricity (as per approved tariff)									
1	Dist.Licensee/trader/ consumers									
(a)										
(b)										
( c)										
(d)										
(e)										
(f)										
2	Other recoveries									
	Reactive energy charges									
(b)	Electricity duty & other state Levies recovery (contra)									
	Delayed payment surcharge									
	Rebate on fuel supplies									
(e)	Other miscellaneous charges									
(f)										
3	Revenue From Sale of Power									

 $<sup>^*</sup>To \ be \ submitted \ Separately \ for \ the \ financial \ years \ 2016-17, \ 2017-18, \ 2018-19, \ 2019-20, \ 2020-21, \ 2021-22$ 

### Form G 3.2 Other Income

Name of the Generating Business/Company	
Name of the Generating Station /Unit:	

	,				_							Rs. Crore
Sr.	Particulars		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
No	raticulais	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
	Other Income											
1	Interest on staff loans and advances											
2	Income from statutory investments											
3	Income from sale of ash/rejected coal											
4	Income from rent of land or buildings											
5	Income from sale of scrap											
6	Income from staff welfare activities											
7	Rental from staff quarters											
8	Excess found on physical verification											
9	Interest on investments, fixed and call deposits and bank balances											
10	Interest on advances to suppliers/contractors											
11	Income from hire charges from contractors and others											
12	Income from advertisements, etc.											
13	Miscellaneous receipts											
	Total Other income											

#### Form G 3.3 Capital Subsidies and Grants

Name of the Generating Business/Company	
Name of the Generating Station/Unit:	

Rs. Crore

			2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	
S. No.	Particulars	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks	
	1	2 3		4	5	6	7	8	9	10	11	12	13
	1	Subsidy towards cost of Capital Asset											
	2	Grant towards cost of Capitals Assets											
	3	Receipts from State Govt. under any scheme as grant/subsidy											
		Total											

## Form G 4 O&M Expenses

Name of the Generating Business/Company	
Name of the Generating Station/Unit:	 (Rs. Crore)

				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
S.No.	Particulars	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks	
	1	2	3	4	5	6	7	8	9	10	11	12	13
	1	Employee Expenses (as per norms)											
		Annual Contribution for Terminal Liabilities based on actuarial valuation											
	3	Repair & Maintenance Expenses (as per norms)											
	4	Administrative & General Expenses (as per norms)											
	5	Total O&M Expenses (as per Norms)											
	6	Total O&M Expenses (actuals)											

### Form G 4(a) Employee Expenses

Name of Generating Business/Licensee

				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Rs. Crore Remarks
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	Kemarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Basic Salary												•
2	Dearness Allowance (DA)												
3	House Rent Allowance												
4	Conveyance Allowance												
5	Leave Travel Allowance												
6	Earned Leave Encashment												
7	Other Allowances												
8	Medical Reimbursement												
9	Overtime Payment												
10	Bonus/Ex-Gratia Payments												
11	Interim Relief / Wage Revision												
12	Staff welfare expenses												
13	VRS Expenses/Retrenchment Compensation												
14	Commission to Directors												
15	Training Expenses												
16	Payment under Workmen's Compensation Act												
17	Net Employee Costs												
18	Terminal Benefits												
18.1	Provident Fund Contribution												
18.2	Provision for PF Fund												
18.3	Pension Payments												
18.4	Gratuity Payment												
18.5	Annual Contribution for Terminal Liabilities based on actuarial valuation												
19	Others												
20	Gross Employee Expenses												
21	Less: Expenses Capitalised												
22	Net Employee Expenses												

#### Form G 4(b) Administrative & General Expenses

Name of Generating Business/Licensee

	Name of Generating Business/Licensee												Rs. Crore
				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Rent Rates & Taxes												
2	Insurance												
3	Telephone & Postage, etc.												
4	Legal charges												
5	Audit Fees												
6	Consultancy charges												
7	Other Professional charges												
8	Conveyance												
9	Vehicle Running Expenses Truck / Delivery Van												
10	Vehicle Hiring Expenses Truck / Delivery Van												
11	Electricity charges												
12	Water charges												
13	Entertainment												
14	Fees & subscription												
15	Printing & Stationery												
16	Advertisements, exhibition publicity												
17	Contribution/Donations												
18	Training expenses												
19	Miscellaneous Expenses												
20	DSM activities												
21	SRPC expenses												
22	Sports and related activities												+
23	Freight												
24	Purchase Related Advertisement Expenses												
25	Bank Charges												
26	Office Expenses												
27	License Fee and other related fee												
28	Cost of services procured												+
29	Outsourcing of metering and billing system												+
30	V-sat, Internet and related charges												
31	Security arrangements												1
32	Books & periodicals												†
33	Computer Stationery												†
34	Others												+
35	Gross A&G Expenses												+
36	Ele. Duty u/s 3(I), KED Act				<del>                                     </del>	1						<u> </u>	+
37	Less: Expenses Capitalised												+
	Net A&G Expenses				<del>                                     </del>	1						<u> </u>	+

### Form G 4(c) Repair & Maintenance Expenses

Name of Generating Business/Licensee

R	c	$C_{\mathbf{r}}$	or

													Rs. Crore
				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
S. No.	Particulars	Reference	Approved in Tariff	Audited	Truing Up	Approved in Tariff	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Plant & Machinery												
2	Buildings												
3	Civil Works												
4	Hydraulic Works												
5	Lines & Cable Networks												
6	Vehicles												
7	Furniture & Fixtures												
8	Office Equipment												
9	Gross R&M Expenses												
10	Less: Expenses Capitalised												
11	Net R&M Expenses												

## Form G 5.1 Energy Charges for Thermal Generation

Name of the Generating Business/Company	
Name of the Generating Station /Unit:	

				2016-17		2017-18			2018-19	2019-20	2020-21	2021-22	Remarks
S.No.	Particulars	Units	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	7	8	9	10	11	12	13	14	15
1	Operational Parameters												
1.1	Total Capacity	MW											
	Availability	%											
	PLF	%											
	Gross Generation	MU											
	Auxiliary Energy Consumption	%											
	Auxiliary Energy Consumption	MU											
	Net Generation	MU											
	Heat Rate	kcal/kWh											
2	Fuel Parameters (for each primary and secondary fuel)												
2.1	Gross Calorific Value												
2.1.1	Fuel 1	kcal/unit											
2.2	Landed Fuel Price per unit (Please specify the fuel)												
	Fuel 1	Rs/unit											
	Fuel Consumption and Heat Contribution (for each fuel separately)												
3.1	Specific Fuel Consumption												
3.1.1	Fuel 1	unit/kWh											
3.2	Total Fuel Consumption												
3.2.1	Fuel 1	unit											
	Heat Content (each fuel separately)												
	Fuel 1 (2.1.1 x 3.1.1)	Million kcal											
	Total Heat Content												
4	Total Fuel Cost												
	Fuel 1 (2.2.1 x 3.2.1)	Rs Crore											
	Total Fuel Cost	Rs Crore											
	Total Fuel Cost	KS CIOIE											
5	Other Charges and Adjustments												
	Other Charges (pl. specify details)	Rs Crore											
	Other Adjustments (Pl. specify details)	Rs Crore											
	Total Other Charges and Adjustments	Rs Crore											
6	Total Cost (4+5)	Rs Crore							1				
7	Cost of Generation per unit (at Generation Terminal) (6/1.4)	Rs/kWh											
	Energy Charge per unit (ex-bus) (6/1.7)												
	Fuel 1	Rs/kWh											
	Total(9)	Rs/kWh											

- Submit details of each primary and secondary fuel
   The energy charge should be computed for open cycle operation and combined cycle operation separately in case of gas/liquid fuel fired plants.
   Operational data are to be submitted for each Unit of each station separately

#### Form G 5.2 Fuel Cost Details for Thermal Generation

Name of the Generating Business/Company	
Name of the Cenerating Station /Unit:	

				2016-17			2017-18		2018-19	2019-20	2020-21 2021-22 (Projected) (Projected)  12 13	Remarks	
S. No.	Particulars	Units	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Basic Cost	Rs/unit											
2	Freight	Rs/unit											
3	Freight Surcharge, if applicable	Rs/unit											
4	Fuel Handling Charges	Rs/unit											
5	Taxes and Duties (pl. specify details)	Rs/unit											
6	Any other charges	Rs/unit											
7	Total Price excluding Transit Loss	Rs/unit											
	Transit Loss	%											
	Total Price including Transit Loss	Rs/unit											

### Form G 6.1 Fixed assets & provisons for depreciation

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)		
Name of the Generating Business/Company		
Name of the Generating Station :		
	(Rs Crore)	

				Gross fix	ed assets			Provisions fo	r depreciation		Net fixed assets	Not Fixed Asset
S. No.	Particular	Rate of depreciation %	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Cumulative upto the begining of the year	Additions during the year	Adjustment during the year	Cumulative at the end of the year	at the beginning of the year	at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights											
1A	Hydraulic works											
2	Building & Civil works of Power plant											
3	Plant & machinery including sub-station equipments											
4	Communication equipment											
5	Vehicles											
6	Furniture & fixtures											
7	Office Equipments											
8	Capital spares											
9	IT Equipments											
11	Any other items											
	Total (1) to (11)											

 $<sup>^{\</sup>star}$  Note : To be furnished separately for each year commencing from 2016-17 to 2021-22.

Note: Name of the assets should conform to the description of the assets mentioned in the depreciation sheedule under Tariff Regulations

## Form G 6.2(a) Calculation of Weighted Average Rate of Interest on Actual Loans

Name of Generating Business/Company Licensed Area of Supply

(Rs. Cr) 2016-17 2017-18 2021-22 Particulars (specify items) Remarks Approved in Tariff Approved in Tariff Audited Truing Up Audited Truing Up Projected 8 10 11 12 13 i. Gross Loan -Opening ii. Cumulative repayments of Loans upto previous year iii. Net loan-Opening iv. Add: Drawal(s) during the Year v. Less: Repayment (s) of Loans during the year vi Net loan - Closing vii Average Net Loan viii Rate of Interest on Loan on annual basis ix Interest on loan x Loan repayment effective from (date to be indicated) 2 Loan 2 i. Gross Loan -Opening ii. Cumulative repayments of Loans upto previous year iii. Net loan-Opening iv. Add: Drawal(s) during the Year v. Less: Repayment (s) of Loans during the year vi Net loan - Closing vii Average Net Loan viii Rate of Interest on Loan on annual basis ix Interest on loan x Loan repayment effective from (date to be indicated) 3 Loan 3 4 Total Loan i. Gross Loan -Opening ii. Cumulative repayments of Loans upto previous year iii. Net loan-Opening iv. Add: Drawal(s) during the Year v. Less: Repayment (s) of Loans during the year vi Net loan - Closing vii Average Net Loan viii Interest on Loan ix Weighted average Rate of Interest on Loans

Note: In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form

#### Form G 6.2(b)

### Calculation of Interest on Normative Loan

Name of Generating Business/Company
Licensed Area of Supply

	Licensed Area of Supply											(Rs. Cr)
S.N			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
0.	Particulars (specify items)	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Gross Normative loan - Opening											
2	Cumulative repayment of Normative Loan upto previous year											
3	Net Normative loan - Opening											
4	Increase/Decrease due to ACE/de-capitalization during the Year											
5	Repayments of Normative Loan during the year											
6	Net Normative loan - Closing											
7	Average Normative Loan											
8	Weighted average Rate of Interest of actual Loans											
9	Interest on Normative loan											

## Form G 6.2 (c)

#### Interest on Bonds to meet Terminal Liabilities

Name of Generating Business/Company

(Rs. Cr)

S.N			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	(RS. CI)
0.	Particulars (specify items)	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
Α	Bond Series 1											
1	Value of Bond											
2	Rate of Interest on Bond											
3	Interest on Bond											
В	Bond Series 2											
4	Value of Bond											
5	Rate of Interest on Bond											
6	Interest on Bond											
С	Bond Series 3											

#### Form G 6.3 Details of Project Specific Loans

Name of the Generating Business/Compa	ny:								
Name of the Generating Station :									_
Commercial Operation Date :									
Year 2016-17 & 2017-18 (Actuals) // 2013	8-19 (Estim	ate) //201	9-20/2020-	21/2021-22	2 (proje	ctions	)		
	n 1	-					_		

Particulars	Package 1	Package 2	Package 3	Package 4	Package 5	Package 6
1	2	3	4	5	6	7
•	-	3		J	· ·	•
Source of Loan <sup>1</sup>						
Currency <sup>2</sup>						
Amount of Loan sanctioned						
Amount of Gross Loan drawn upto previos year/during current/ensuing year/COD 3,4,5,13,15						
Interest Type <sup>6</sup>						
Fixed Interest Rate, if applicable						
Base Rate, if Floating Interest <sup>7</sup>						
Margin, if Floating Interest <sup>8</sup>	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Are there any Caps/Floor <sup>9</sup>						
If above is yes, specify caps/floor						
Moratorium Period <sup>10</sup>						
Moratorium effective from						
Repayment Period <sup>11</sup>						
Repayment effective from						
Repayment Frequency <sup>12</sup>						
Repayment Instalment <sup>13,14</sup>						
Base Exchange Rate <sup>16</sup>					•	

<sup>&</sup>lt;sup>1</sup> Source of loan means the agency from whom the loan has been taken such as WB, ADB, WMB, PNB, SBI, ICICI, IFC, PFC etc.

<sup>&</sup>lt;sup>2</sup> Currency refers to currency of loan such as US\$, DM, Yen,Indian Rupee etc.

 $<sup>^3</sup>$  Details are to be submitted as at the end of previous year for existing assets and as on COD for the remaining assets.

<sup>&</sup>lt;sup>4</sup> Where the loan has been refinanced, details in the Form is to be given for the loan refinaced. However, the details of the original loan is to be given seperately in the same form.

<sup>&</sup>lt;sup>5</sup> If the Tariff in the petition is claimed seperately for various units, details in the Form is to be given seperately for all the units in the same form.

 $<sup>^{\</sup>rm 6}$  Interest type means whether the interest is fixed or floating.

 $<sup>^7</sup>$  Base rate means the base as MCLR, LIBOR etc. over which the margin is to be added. Applicable base rate on different dates from the date of drawl may also be

 $<sup>^{8}\,\</sup>mathrm{Margin}$  means the points over and above the floating rate.

<sup>&</sup>lt;sup>9</sup> At times caps/floor are put at which the floating rates are frozen. If such a condition exists, specify the limits.

 $<sup>^{\</sup>rm 10}$  Moratorium period refers to the period during which loan servicing liability is not required.

<sup>11</sup> Repayment period means the repayment of loan such as 7 years, 10 years, 25 years etc.

<sup>&</sup>lt;sup>12</sup> Repayment frequency means the interval at which the debt servicing is to be done such as monthly, quarterly, half yearly, annual, etc.

<sup>13</sup> Where there is more than one drawal/repayment for a loan, the date & amount of each drawal/repayement may also be given seperately

<sup>14</sup> If the repayment instalment amount and repayment date can not be worked out from the data furnished above, the repayment schedule to be furnished

 $<sup>^{15}</sup>$  In case of Foreign loan date of each drawal & repayment along with exchange rate at that date may be given.

<sup>16</sup> Base exchange rate means the exchange rate prevailing at the end of prevous year for existing assets and as on COD for the remaining assets.

<sup>\*</sup> Note: To be furnished separately for each year commencing from 2016-17 till 2021-22.

### Form G 6.4 Consilidated report on additions to Fixed Assets during the year

	Consilidated report on additions to Fixed Assets during the year
Name of the Generating Business/Company :	
Name of the Generating Station :	

																				(Rs. in Crore)			
						201	6-17						2017	'-18						2018-1	19		
Sr.	Accel December	Asset				(Actuals/	/audited)						(Actu	ials)						(Project	ed)		
Sr. No.	Asset Description	Code	Cost	Interest	Finance Charges	Pre- Operative expenses	Exchange fluctuations	Total	Date of commissioning	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissioning	Cost	Interest	Finance Charges	Pre- Operative expenses	Exchange fluctuations	Total	Date of commissionin g
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	11	12	13	14	15	16	17
-																							

Name of the Generating E Name of the Generating S

						2019-20							2020-21							2021-22			
S	r.	Accel December				(Projected)							(Projected)							(Projected)			
S. N	о. '	Asset Description	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissionin g	Cost	Interest	Finance Charges	Pre-Operative expenses	Exchange fluctuations	Total	Date of commissionin g	Cost		Finance Charges	Operativ			Date of commiss ioning
1	ı	2	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

# Form G 6.5 Abstract of Capital Cost Estimates and Schedule of Commissioning for the New projects

Name of the Generating Business/Company:							
Name of the Power Station :							
New Projects							
Capital Cost Estimates							
'							
Board of Director/ Agency approving the Capital cost							
estimates:							
Date of approval of the Capital cost estimates:							
· · · · · · · · · · · · · · · · · · ·	<del>                                     </del>	D (D C (			6 1 1 16		
		Present Day Cost			Completed C		
Price level of approved estimates	As of End of	Qtr. Of the year	·	As on Sche	duled COD of	the Station	
Foreign Exchange rate considered for the Capital cost estimates							
Capital Cost excluding IDC & FC							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
Capital cost excluding IDC & FC (Rs. Cr)							
IDC & FC							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
Total IDC & FC (Rs.Cr.)							
Rate of taxes & duties considered							
Capital cost Including IDC & FC							
Foreign Component, if any (In Million US \$ or the relevant Currency)							
Domestic Component (Rs. Cr.)							
Capital cost Including IDC & FC (Rs. Cr)							
Schedule of Commissioning							
COD of Unit-I/Block-I							
COD of Unit-II/Block-II							
				]			
COD of last Unit/Block				İ			

## Note:

- 1. Copy of approval letter should be enclosed.
- 2. Details of Capital cost are to be furnished in relevant forms
- 3. Details of IDC & Financing Charges are to be furnished in relevant form

### Form G 6.6 Break-up of Capital Cost for Thermal projects

Name of the Generating Business/Company:	 
Name of the Generating Station:	

							Rs. Crore.
			Cost in Rs. Crores				
S.No.	Break Down	As per original Estimates	Actual Expenditure as on COD	Liabilities/ Provisions	Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
1	2	3	4	5	6	7	8
1.0	Land & Site Development						
2.0	Access road						
3.0	Temporary construction and enabling works						
4	Water storage system						
5.0	Water transportation system						
6.0	Railway system						
7.0	Steam generator / Boiler Island						
8.0	Steam Turbine Generator island including taxes, duties etc.						
9.0	Balance of Plant						
9.1	Mechanical BOP						
9.1.1	Coal handling system / fuel handling system and storage						
9.1.2	Ash handling system						
9.1.3	CW System						
9.1.4	DM Plant						
9.1.5	Raw water system						
9.1.6	Effuelent treatment Plant						
9.1.7	Station Piping System						
9.1.8	Fire Fighting System						
9.1.9	Compressed Air System						
9.1.10	Air Conditioning and Ventilation System						
9.1.11	Misc. items including EOT cranes, hoist and elevators etc.						
9.1.12	Tax, Duties, F&I						
9.1.13	Spares						
9.2	Electrical BOP						
9.2.1	Power Transformers						·
9.2.2	Switchyard			-			
9.2.3	Bus Duct						
9.2.4	HT Switchgear						
9.2.5	LT Switchgear						
9.2.6	DC Power System						
9.2.7	Power and Control Cables						

#### Form G 6.6 Break-up of Capital Cost for Thermal projects

Name of the Generating Business/Company:
Name of the Generating Station:

Rs. Crore.

			Cost in Rs. Crores				Rs. Crore.
S.No.	Break Down	As per original Estimates	Actual Expenditure as on COD	Liabilities/ Provisions	Variation (Rs. Cr.)	Reasons for Variation	Admitted Cost (Rs. Cr.)
1	2	3	4	5	6	7	8
9.2.8	Control and Relay Panels						
9.2.9	Station Lighting						
9.2.10	DG Set						
9.2.11	Electrical equipment erection, cabling and grounding						
9.2.12	Other Misc. items						
9.2.13	Taxes, Duties and F&I						
9.2.14	ETC and spares						
9.3	Total BOP Civil Works						
9.3.1	Main Power house building						
9.3.2	Plant water system						
9.3.3	Chimney						
9.3.4	Permanent Township						
9.3.5	Ash dyke						
9.3.6	Misc. plant buildings						
9.3.7	Temporary sheds						
10.0	Control and Instrumentation						
11.0	Operator Training						
12.0	Start up fuel						
13.0	Construction insurance						
14.0	Special T&P						
15.0	Total Cost of Works (sum of items 1 to 15 above)						
16.0	Overheads						
16.1	Development Expenses						
16.2	Legal Expenses						
16.3	Establishment/Construction supervision						
16.4	Consultancy and Engineering						
16.5	Audit and Account						
16.6	Contingency						
16.7	Sub-total of Item 16						
17.0	Capital cost excluding IDC & FC						
18	Interest During Construction (IDC)						
19	Financing Charges (FC)						
20.0	Capital cost including IDC & FC						
21	Cost per MW						
-	Note:	1	1	1	1	1	

1. Above list is illustrative

2. In case of time & Cost over run, a detailed note giving reasons of such time and cost over run should be submitted clearly bring out the agency responsible and whether such time & cost over run was beyond the control of the generating company.

## Form G 6.7 Break-up of Construction / Supply / Service packages

	Break-up of Construction/Supply/Service package
Name of the Generating Business/Company:	
Name of the Congrating Station :	

S.No.	Name/No. of	Scope of works <sup>1</sup> (in	Whether awarded	No. of bids	Date of	Date of	Date of	Value of	Firm or	Actual expenditure			Variation	Variation on	Reason	Variatio	
	Construction/Supply/	line with head of cost	through ICB/DCB/	received	Award	Start of	Completio	Award <sup>2</sup> in	With	till the completion	and Pre-	& Hedging	(Rs.Cr.)	account of change		n on	for
	Service Package	break-ups as	Depatmentally/			work	n of Work	(Rs. Cr.)	Escalation	or up to COD	operative	cost		in Price (Rs. Cr.)		account	
		applicable)	Deposit Work						in prices	whichever is	Expenses				in Price	of	in Scope
										earlier(Rs.Cr.)							of Work
																in Scope	
																of Work	
																(Rs. Cr.)	
	2	3	4	5		7	0	9	10	11	42	42	14	15	46	17	18
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2																	-
3																	
4																	_
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12 13																	₩
14																	+
15																	1
16																	_
17																	
18																	
19																	1
20																	1
21																	
22			-							-							
23																	
24																	<u> </u>
25																	igsquare
26																	igspace
27															ļ		
28																	<b>—</b>
29														ļ			₩
30														<del>                                     </del>	<del>                                     </del>		<del></del>
31																	<b>↓</b>
32	6 1: 1																1

The scope of work in any package should be indicated in conformity of Capital cost break-up for the coal/lignite based plants to the extent possible. In case of Gas/Liquid fuel based projects, break down in the similar manner in the relevent heads.

<sup>&</sup>lt;sup>2</sup> If there is any package, which need to be shown in Indian Rupee and foreign currency(ies), the same should be shown separatly alongwith the currency, the exchange rate and the date e.g. Rs.80 Cr+US\$50m=Rs.280Cr at US\$=Rs40 as on say 4.1.1999.

Form G 6.8
Draw Down Schedule for Calculation of IDC & Financing Charges (year wise from commencement of works to COD)

Name of the Generating Business/Company:	
Name of the Generating Station :	
	De Croro

	Draw Down		Quarter 1			Quarter 2			Quarter 3		Quarter 4			
	Diaw Down		Quarter 1			Quarter 2			Quarters			Quarter 1		
S.No.	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	Loans													
1.1	Foreign Loans													
1.1.1	Foreign Loan 1													
	Draw down Amount													
	IDC													
	Financing charges													
1.1.2	Foreign Loan 2													
	Draw down Amount													
	IDC													
	Financing charges													
1.1.3	Foreign Loan 3													
	Draw down Amount													
	IDC													
	Financing charges													
1.1.4														
		1												
-		<del>                                     </del>												
-		<u> </u>												
1.1	T-t-1 F! I	<del>                                     </del>												
1.1	Total Foreign Loans													
	Draw down Amount	-												
	IDC	-												
I	Financing charges				I			l		ĺ		ĺ		

Form G 6.8
Draw Down Schedule for Calculation of IDC & Financing Charges (year wise from commencement of works to COD)

Name of the Generating Business/Company:	
Name of the Generating Station :	
	Po Co

										Rs. Crore			
	Draw Down		Quarter 1			Quarter 2			Quarter 3			Quarter 4	
S.No.	Particulars	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee	Quantum in Foreign currency	Exchange Rate on draw down date	Amount in Indian Rupee
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.2	Indian Loans												
	Indian Loan 1												
	Draw down Amount												
	IDC												
	Financing charges												
1 2 2	Indian Loan 2												
	Draw down Amount IDC												
	Financing charges												
	Thancing charges												
1.2.3	Indian Loan 3												
	Draw down Amount												
	IDC												
	Financing charges												
1.2.4													
1.2	Total Indian Loans	-											
	Draw down Amount												
	IDC												
	Financing charges												
	Thursday charges												
1	Total of Loans drawn												
	IDC												
	Financing charges												
2	Equity		_	•									
	-												
2.1	Foreign equity drawn												
2.2	Indian equity drawn												
	Total equity deployed												

Note: Drawal of debt and equity shall be on paripassu basis to meet the commissioning schedule. Drawal of higher equity in the beginning is permissible.

## Form G 6.9 Return on Equity/Return on Net Fixed Assets

	Return on Equity/Return on Net Fixed Assets	
Name of the Generating Business/Company:		
Name of the Generating Station :		

													Rs. Crore
				2016-17		2017-18			2018-19	2019-20	2020-21	2021-22	Remarks
S.No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	(Projected)	(Projected)	(Projected)	(Projected)	(Projected)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Equity at the beginning of the year												
	Capitalisation												
	Equity portion of capitalisation												
4	Equity at the end of the year												
	Return Computation												
5	Return on Equity at the beginning of the year	14%*(1)											
	Return on Equity portion of capitalisation (on pro- rata basis)	14%*(3)/2											
7	Total Return on Equity	(5)+(6)											

# $\label{eq:Form G 6.10} Form~G~6.10$ Statement of Additional Capitalisation after COD and Details for Financing

Name of the Generating Business/Company:	 _	
Name of the Generating Station :		
COD		
		(Rs. Crore)

											(Rs. Crore)
S.No.		Work/Equipment added after COD up to Cut off Date/ Beyond Cut off Date	Amount Capitalised/ Proposed to be capitalised	Justification	Regulations under which such additional capitalisation has been claimed	Loan 1	Source Loan 2 and so on	of Finan Total Loan	Equity	Internal Sources or Others (mention	Admitted Cost <sup>I</sup>
	•									details)	
Total	1				1						

<sup>&</sup>lt;sup>1</sup> In case the project has been completed and any tariff notification(s) has already been issued in the past by GOI, give the cost as admitted for the purpose of tariff notification already issued by (Name of the authority) (Enclose copy of the tariff Order)

#### Note:

1 Fill the form in chronological order year wise along with detailed justification clearly bring out the necessity and the benefits accruing to the beneficiaries.

2 In case initial spares are purchased alongwith any equipment, then the cost of such spares should be indicated separately. e.g. Rotor - 50 Crs. Initial spares- 5 Crs.

#### Form G 6.11 Interest on Working Capital

Name of the Generating Business/Company
Name of the Generating Station:

Name of t	he Generating Station :											Rs. Crore
		2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	
S. No.	Particulars	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Fuel cost (as per norms)											
2	Liquid fuel stock (as per norms)											
3	O & M expenses (as per norms)											
4	Maintenance Spares (as per norms)											
5	Receivables (as per norms)											
	Total Working Capital											
	Rate of Interest (as per norms)											
	Interest on Working Capital											

## Form G 6.12 Tax on ROE

Name of the Generating Business/Company:	
Name of the Generating Station :	

Rs.

S. No.	Particulars		2017-18	2018-19	2019-20	2020-21	2021-22	Remarks		
		Approved in Tariff Order	Audited	Truing Up	Actual	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11
A)	Advance Tax assessed & deposited on									
a)	for Quarter I & deposited on 15 th June.									
b)	for Quarter II & deposited on 15 th Sept.									
c)	for Quarter III & deposited on 15 th Dec.									
d)	for Quarter IV & deposited on 15 th March.									
	Total(A)									

Note:- Tax calculated should be only for the generation business and should not include income from any other income streame like efficiency gain & incentive etc.

## Form G 6.13 Inflow Review (Water Year)

Name of the Generating Business/Company:	

														Rs. Crore
Sr. No.	Year	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1993-94													
2	1994-95													
3	1995-96													
4	1996-97													
5	1997-98													
6	1998-99													
7	1999-00													
8	2000-01													
9	2001-02													
10	2002-03													
11	2003-04													
12	2004-05													
13	2005-06													
14	2006-07													
15	2007-08													
16	2008-09													
17	2009-10													
18	2010-11													
19	2011-12													
20	2012-13				-									
21														
22														
23					-									
24	-				-									
	Average													

## Form G 6.14 Month wise inflow in MM<sup>3</sup>

Name of the Generating Business/Company:	
Name of the Hydro Generating Station :	

R													Rs. Crore			
Sr. No.	Month	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12		2016-17	2017-18	2018-19	Average
1	2	3	4	5	6	7	8	9	10	11	12		17	18	19	20
1	June															
2	July															
3	Aug															
4	Sep															
5	Oct															
6	Nov															
7	Dec															
8	Jan															
9	Feb															
10	Mar															
	Apr															
12	May															
	Average															

## Form G 6.15 Maintenance Schedule and net hydro capacity available (MW)

Name of the Generating Business/Company:	
Name of the Generating Station :	

- Tunic or	the Generating Stati	on .														Rs. Crore
Sr. No.	Chathana	No. of units and unit size	Installed Capacity	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Remarks
Sr. No.	Stations							N	Maintenance	Schedule (	MW)					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1																
2																
3																
4																
	m															
	Total															

# Form G 7.1 Proposed improvement in performance

Name of the Generating B	3usiness/Compan
Name of the Generating S	Station :

\_\_\_\_

												Rs. Crore	
	Particulars		2016-17			2017-18		MYT Con	trol Period				
S.No.								2018-19	2019-20	2020-21	2021-22	Remarks	
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up		(Proj	ected)			
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Plant load factor (%)												
2	Auxiliary consumption (%)												
3	Specific fuel consumption												
(I)	coal, kg / kWh												
ii)	gas, SCM / kWh												
(iii)	oil, ml / kwh												
(iv)	Limestone kg / kWh												
(v)	any other fuel												
4	Station heat rate, (kcal / kwh)												
5	Annual Maitenance shut down days												
	Forced / planned shut down except annual shut down												
(I)	number / year												
(ii)	cumulative duration, hours / year												
7	Fly ash utilisation, %												
8	Other by-product utilisation(give list)												
9	Outstanding dues, days of receivables												
10	Availability			11 1 10									

Note:-1. Remarks to indicate manner in which performance parameters reflected in the tariff proposal 2.list is illustrative

	Form G 8	
	Deviation Analysis	
Name of Generation Business/Company	<del></del>	

(Rs. Crore)

S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllable	Uncontrollable
1	2	3	4	5	6	7	8
A	Expenditure						
1	Variable Costs, including Fuel Cost						
2	Depreciation						
3	Interest on term Loan & Finance charges						
4	Return on Equity						
5	Tax on ROE						
6	Interest on Working Capital						
7	O & M Expenses						
9	Any other item (to be specified)						
	Total (A) Expenditure						
В	Receipts						
1	Revenue from Sale of Power (Tariff income)						
2	Non Tariff income						
3	Revenue Subsidies, Grants & Subvention from State Govt.						

Note: Please give detailed explanation separately for the deviations on account of uncontrollable factors

Form G P&L					
•					
Profit & Loss Account					
Name of Generation Business/Company					

S.No.	Particulars	Ref	2017-18	2016-17	2015-16	Remarks
5.140.						
1	2	3	4	5	6	7
	I.INCOME					
	a. Revenue from Sale of Power					
	b. Revenue Subsidies and Grants					
	c. Other Income					
	Total (a+b+c)					
	II. EXPENDITURE					
	a. Repairs and Maintenance.					
	b. Employee Cost					
	c. Administration and General Expenses					
	d.Depreciation					
	e.Interest and Finance charges					
	f. Subtotal ( a+b+c+d+e)					
	g. Less Capitalised Expenses:					
	- Interest & Finance Charges					
	- Other Expenses					
	h. Other Debits					
	I. Extra Ordinary Items					
	j.Fuel cost					
	Total Expenditure (f-g+h+i+j)					
	III. Profit/(Loss) before Tax (I-II)					
	IV. Provision for Income Tax	_				
	V.Net Prior period credits (Charges )					
	VI. Surplus (Deficit )					
	VII. Net Assets at the beginning of the year (Less consumer's Contribution )					
	VIII. Rate of Return (VI / VII)					

Note: 1. Split up details of each of the item should be furnished

- 2. Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item
- 3.Reconciliation between audited accounts and amounts for generation business should be furnished.

Form G BS										
Balance Sheet at the end	d of the year									
Name of Generation Business/Company										

S.No.	Particulars	Ref	2017-18	2016-17	2015-16	Remarks
5.No.	rarticulars	Kei				Kemarks
1	2	3	4	5	6	7
Α	EQUITY AND LIABILITIES					
1	Shareholders funds					
	(a) Share Capital					
	(b) Reserve and Surplus (Reserves+surplus/deficit)					
2						
	Contribution, Grants and other long term Reserve funds					
3	Non Current liabilities					
	(a) Long Term borrowings (Capital liabilities)					
	(b) Other long term liabilities (SD from consumers)					
	(c) Long term provisions (Reserve funds+provision for int. On bonds/payrevi	sion)				
4	Current liabilities					
	(a) Short Term borrowings (Borrowing for working capital)					
	(b) Trade Payables (payment due to CGS/Others)					
	(c) Other short term liabilites (other current liabilies except payment to CGS	)				
	(d) Short Term provisions					
	TOTAL EQUITY & LIABILITIES					
В	ASSETS					
1	Non Current Assets					
	(a) Fixed Assets					
	(i) Tangible Assets					
	(ii)Intabgible Assets					
	(iii) Capital work in progress					
	(b) Non-Current investment					
	(c) Long term loans and Advances					
	(d) Other non-current assets					
2	Current Assets					
	(a) Current investments (b) Inventories (Stocks)					
	(c) Trade reveivables					
	(d) Cash and Cash equivalents					
	(e)Short term loans and advances					
	(f) Other current assets					
	TOTAL ASSETS	1	1			1

Note: 1. Split up details of each of the item should be furnished

Note: Reconciliation between audited accounts and amounts for generation business should be furnished.

<sup>2.</sup> Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item

#### Form G CF

#### Cash Flow for the year

Name of Generation Business/Company

S.No.	Particulars	Ref			Remarks
011101	T III TEULIU		2017-18	2016-17	Ttemurio .
1	2	3	4	5	6
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants				
	Less: Income Tax Payment during the year				
	Total of (a)				
	b. Add: Debits to rev. account not requiring cash Flow:				
	I) Depreciation				
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets				
	iv) Investment Allowance Reserve				
	v) Others, if any				
	Total of (b)				
	c. Less : Credits to revenue Account not involving cash receipts				
	I) Deprecation				
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)				
	Net Funds from Earnings (a)+(b)-(c)				
2	Contributions, Grants & Subsidies to cost of Capital Assets				
3	Proceeds from disposal of fixed Assets				
4	Total Funds from Operations (1+2+3)				
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories				
	ii) Receivables against sale of power				

	iii) Loans and Advances		
	iv) Sundry receivables		
	v)Subsidy receivables		
	Total of (a)		
	(b) Increase/(Decrease) in Current liabilities		
	I)Borrowings for working Capital		
	ii) Other current liabilities		
	iii) Others (Increase in Reserve + payment due on cap.liab)		
	Total of (b)		
	Net Increase/(Decrease) in working Capital (a)- (b)		
7	Net Funds from operations before subsidies and Grants (5-6)		
8	Receipts from revenue subsidies and Grants		
	Total Net Funds from operations including subsidies & Grants (7+8)		
II.	Net increase/ decrease in Capital liabilities		
	a). Fresh borrowings		
	I) State Loans		
	ii) Foreign currency Loans / Credits		
	iii) Other borrowings		
	Total of (a)		
	b) Repayments :		
	I) State Loans		
	ii) Foreign currency Loans / Credits		
	iii) Other borrowings		
	Total of (b)		
	Net Increase/ (Decrease) in Capital liabilities (a) - (b)		
III.	Increase/(Decrease ) in equity Capital		
IV.	Total Funds available for Capital Expenditure (I+II+III)		
v	Funds utilised on Capital Expenditure		
	a)On projects		
	b)Advance to Suppliers & Contractors		
	c) Intangible Assets		
	d) Deferred Cost		
	Total of V (a+b+c+d )		
VI	Net Increase/(Decrease ) in Government contribution		
VII	Net Increase/(Decrease ) in Terminal benefit fund		
VIII	Net Increase/(Decrease ) in Provident fund		
IX	Net Increase/(Decrease ) in investments		
х	Net Increase /(Decrease ) in cash / bank balance ( IV - V- VI )		
XI	Add opening cash & Bank balance		
XII	Closing Cash & Bank balance (VII+VIII)		
	1 ( )	 	

Note: Reconciliation between audited accounts and amounts for generation business should be furnished.

# ARR and Tariff Formats Transmission Business INDEX

S.No.	Form No.	Particulars
1	2	3
1	Form T 1	Summary of Aggregate Revenue Requirement
2	Form T 2	Operation and Maintenance Expenses
3	Form T 2(a)	Employee Expenses
4	Form T 2(b)	Administrative & General Expenses
5	Form T 2(c)	Repair & Maintenance Expenses
6	Form T 3	Fixed assets & Depreciation
7	Form T 4(a)	Calculation of Weighted Average Rate of Interest on Actual Loans
8	Form T4(b)	Calculation of Interest on Normative Loan
9	Form T 5	Interest on working capital requirement
10	Form T 6	Other items (Other debits or any other items)
11	Form T 7	Return on Equity/Return on Net Fixed Assets
12	Form T 8	Income Tax Provisions
13	Form T 9	Revenue at Existing Transmission Tariff
14	Form T 10	OTHER INCOME
15	Form T 11	Expected Revenue at Proposed Transmission Tariff
16	Form T 12	Revenue Subsidy and Grant
17	Form T 13	Consumer Contribution, Capital Subsidy and Grant
18	Form T 14	Proposed improvement in performance
19	Form T 15	Transmission Losses
20	Form T 16	Forecast of Electricity Transmitted (MU)
21	Form T17	Deviation Analysis

Other In	formation/Doc	uments								
1	Form T P&L	Profit & Loss Account								
2	Form T BS	Form T BS Balance Sheet at the end of the year								
3	Form T CF	Cash Flow for the year								
4	Corporate audite	d/unaudited Balance Sheet and Profit & Loss Accounts with all the Schedules & annexures for the relevant years.								

Note: Spread sheet financial models (in CD) shall also be submitted along with the application.

Form T 1
Summary of Aggregate Revenue Requirement

Name of Transmission Business/Licensee

Rs. Crore

													Rs. Crore	
				Previous Year			Current year			Contro	l Period			
S. No.	Particulars	Reference Form No.		2016-17			2017-18			2019-20	2020-21	2021-22	Remarks	
3. No.	1 atticulars		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	Operation & Maintenance Expenses													
2	Interest and finance charges on long-term loans													
3	Interest on Bonds to meet Terminal Liabilities													
4	Depreciation													
	Interest on Working Capital and deposits from Users of the transmission system													
6	Contribution to contingency reserves													
7	Other items													
8	Adjustment for profit/loss on account controllable/uncontrollable factors													
9	Other items													
10	Total Revenue Expenditure													
11	Return on Equity													
12	Tax on RoE													
13	Aggregate Revenue Requirement (9+10+11)													
14	Less: Other Income													
14	14 Less: Revenue from Short Term/Medium Term Open Access													
15	15 Less: Income from Other Business													
16	Aggregate Revenue Requirement from Transmission Tariff												_	

Form T 2											
Operation and Maintenance Expenses											
Name of Transmission Business/Licensee											

			Previous Year 2016-17			Current Year 2017-18		Ensuing Year	Year	Year	Year	
S. No.	Particular	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	2019-20 Projected	Projected	2021-22 Projected	Remarks
1	2	4	5	6	7	8	9	10	11	12	13	14
1	Bay Basis											
a	Op. Balance of no. of Bays											
b	Addition of no. of Bays during year											
С	Deletion of no. of Bay during year											
d	Cl. Balance of no. of Bays											
e	Average no. of Bays during Year											
f	Applicable O&M cost Norm for Bay :- RsLakh/Bay											
A	O&M Expense per Bay, Rs L											
2	ckt-km Basis											
	Op. Balance of ckt-km											
	Addition of ckt-km during year											
	Deletion of ckt-km during year Cl. Balance of ckt-km											
	Average ckt-km during Year											
f	Applicable O&M cost Norm - RsLakh / ckt-km											
В	O&M Expense Rs. Lakh											
	T. (100)											
3	Total O&M Expenses (as per norms) (A+B)											
4	Total O&M Expenses (actual)											

Form T 2(a)

Employee Expenses

Name of Transmission Business/Licensee

Rs Crore

			1						1	1	1	1	Rs. Crore
				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Basic Salary												
	Dearness Allowance (DA)												
	House Rent Allowance												
	Conveyance Allowance												
	Leave Travel Allowance												
6	Earned Leave Encashment												
	Other Allowances												
8	Medical Reimbursement												
	Overtime Payment												
10	Bonus/Ex-Gratia Payments												
11	Interim Relief / Wage Revision												
12	Staff welfare expenses												
13	VRS Expenses/Retrenchment Compensation												
14	Commission to Directors												
15	Training Expenses												
16	Payment under Workmen's Compensation Act												
17	Net Employee Costs												
18	Terminal Benefits												
	Provident Fund Contribution												
18.2	Provision for PF Fund												
18.3	Pension Payments												
18.4	Gratuity Payment												
18.5	Annual Contribution for Terminal Liabilities ba	sed on actuarial valua	tion										
19	Others												
20	Gross Employee Expenses												
21	Less: Expenses Capitalised												
22	Net Employee Expenses												

Form T 2(b)

Administrative & General Expenses

Name of Transmission Business/Licensee

	Rs. Crore											Rs. Crore	
	Dst1	P-f		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	D-marks
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Rent Rates & Taxes												
2	Insurance												
3	Telephone & Postage, etc.												
4	Legal charges												
5	Audit Fees												
6	Consultancy charges												
7	Other Professional charges												
8	Conveyance												
9	Vehicle Running Expenses Truck / Delivery Van												
10	Vehicle Hiring Expenses Truck / Delivery Van												
11	Electricity charges												
12	Water charges												
13	Entertainment												
14	Fees & subscription												
15	Printing & Stationery												1
16	Advertisements, exhibition publicity												1
17	Contribution/Donations												1
18	Training expenses												1
19	Miscellaneous Expenses												1
20	DSM activities												1
21	SRPC expenses												1
22	Sports and related activities												1
23	Freight												1
24	Purchase Related Advertisement Expenses												+
25	Bank Charges												
26	Office Expenses												
27	License Fee and other related fee												+
28	Cost of services procured												1
29	Outsourcing of metering and billing system												+
30	V-sat, Internet and related charges												-
31	Security arrangements												-
32	Books & periodicals												+
33	Computer Stationery												+
34	Others					1			1		1		+
35	Gross A&G Expenses												+
36	Ele. Duty u/s 3(I), KED Act					1			1		1		+
36	Less: Expenses Capitalised		1			1			<del> </del>		<del>                                     </del>		+
38	Net A&G Expenses		1			1			<del> </del>		<del>                                     </del>		+
- 30	лет ласо въреносо					1		1	1		1		

Form T 2(c)	
Repair & Maintenance Expenses	

Name of Transmission Business/Licensee

	Name of Transmission Business/Licensee  Rs. Crore												
_													Rs. Crore
				2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	A contract of
S. No.	Particulars	Reference	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Plant & Machinery												
2	Buildings												
3	Civil Works												
4	Hydraulic Works												
5	Lines & Cable Networks												
6	Vehicles												
7	Furniture & Fixtures												
8	Office Equipment												
9	Gross R&M Expenses												
10	Less: Expenses Capitalised												
11	Net R&M Expenses												

Form T 3
Fixed assets & Depreciation

Rs. Crore

Name of Transmission Business/Licensee

 15
 Gross Asset (Total (1) to (14))

 16
 Less: Consumer contribution

 17
 Less: Government grants

 18
 Less: Deposit Works

 19
 Less: Capital Subsidies

20 Net Asset considered for depriciation (15-16-17-18-19)

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

				Gross fix				Provisions fo			Net fixed assets	
S.No.	Assets Group (as per notification in respect of depreciation)	Rate of depreciation	At the beginning of the year	Additions during the year	Adjustment & deductions		Cumulative upto the beginning of year	Additions during the year	Adjustment during the year	Cumulative at the end of year	at the beginning of the year	at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & land rights											
2	Other Civil works											
3	EHV											
a)	Transmission lines											
b)	Sub-station equipments											
i)	Transformers											
ii)	Switchgeares, Control gear & Proteciton											
iii)	Batteries											
iv)	Others											
4	HV & LT											
a)	Transmission lines											
b)	Sub-station equipments											
i)	Transformers											
ii)	Switchgeares, Control gear & Proteciton											
iii)	Batteries											
iv)	Others											
5	Communication equipment											
6	Meters											
7	Vehicles											
8	Furniture & fixtures											
9	Office Equipments											
10	Assets of Partnership projects etc.											
11	Capital spares of											
a)	EHV transmission											
	HV & LT transmisison											
12	Assets taken over & pending final valuation											
13	IT equipments											
14	Any other items											

Note:- 1 This statement is to be furnished separately for 2016-17,2017-18, 2018-19, 2019-20, 2020-21 and 2021-22)

<sup>2.</sup> The write off of depreciated price of unserviceable assets & assets not in use lost/damaged in natural or assets sold or cost of buy back of asssetsare to be included in this schedule.

# Form T 4(a) Calculation of Weighted Average Rate of Interest on Actual Loans Name of Transmission Business/Licensee Licensed Area of Supply

censed Area of Supply (Rs. Cr)

S.No			2016-17			2017-18		2017-18	2018-19	2020-21	2021-22	(Rs. Cr)
	Particulars (specify items)	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	4	5	6	7	8	9	10	11	12	13	14
	Loan 1											
i.	Gross Loan -Opening											
ii.	Cumulative repayments of Loans upto previous year											
iii.	Net loan-Opening											
	Add: Drawal(s) during the Year											
v.	Less: Repayment (s) of Loans during the year											
vi	Net loan - Closing											
vii	Average Net Loan											
viii	Rate of Interest on Loan on annual basis											
ix	Interest on loan											
x	Loan repayment effective from (date to be indicated)											
2	Loan 2											
i.	Gross Loan -Opening											
ii.	Cumulative repayments of Loans upto previous year											
iii.	Net loan-Opening											
iv.	Add: Drawal(s) during the Year											
v.	Less: Repayment (s) of Loans during the year											
vi	Net loan - Closing											
vii	Average Net Loan											
viii	Rate of Interest on Loan on annual basis											
ix	Interest on loan											
х	Loan repayment effective from (date to be indicated)											
	пот териутен едесное пот (шие и ве тикией)											
3	Loan 3											
	Loan 5											<del>                                     </del>
	<del></del>											+
4	Total Loan											<del>                                     </del>
i.												+
ii.	Gross Loan -Opening											
iii.	Cumulative repayments of Loans upto previous year						1					+
iv.	Net loan-Opening											+
-	Add: Drawal(s) during the Year											+
v.	Less: Repayment (s) of Loans during the year			-			1					-
	Net loan - Closing			-			1					-
vii	Average Net Loan						1					
	Interest on Loan											
ix	Weighted average Rate of Interest on Loans											

Note: In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency is also to be furnished separately in the same form

Form T4(b)	
Calculation of Interest on Normative Lo	pan
Name of Transmission Business/Licensee	
Licensed Area of Supply	

	Electional Filed of Supply				-							(Rs. Cr)
S.No	Particulars (specify items)	2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	
		Approved in Tariff Order	Normative	Truing Up	Approved in Tariff Order	Normative	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	4	5	6	7	8	9	10	11	12	13	14
1	Gross Normative loan - Opening											
2	Cumulative repayment of Normative Loan upto previous year											
3	Net Normative loan - Opening											
4	Increase/Decrease due to ACE/de-capitalization during the Year											
5	Repayments of Normative Loan during the year											
6	Net Normative loan - Closing											
7	Average Normative Loan											
8	Weighted average Rate of Interest of actual Loans											
9	Interest on Normative loan											

Form 7	Γ4(c)						
Interest on Bonds to meet Terminal Liabilities							
Name of Transmission Business/Licensee							
Licensed Area of Supply							

(Rs. Cr)

c	No			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	(No. CI)
		Particulars (specify items)	Approved in Tariff Order	Normative	Truing Up	Approved in Tariff Order	Normative	Truing Up	Projected	Projected	Projected	Projected	Remarks
	1	2	3	4	5	6	7	8	9	10	11	12	13
	Α	Bond Series 1											
	1	Value of Bond											
	2	Rate of Interest on Bond											
	3	Interest on Bond											
	В	Bond Series 2											
	4	Value of Bond											
	5	Rate of Interest on Bond											
	6	Interest on Bond											
	С	Bond Series 3											

	Form T 5	
	Interest on working capital requirement	
Name of Transmission Business/Licensee		Rs

			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
Sl.	Particulars									Damanla		
No.		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1	O&M expenses (as per norms)											
2	Maintenance Spares (as per norms)											
3	Receivables calculated on target availability (as per norms)											
	Less											
4	Amount, if any, held as security deposits except security deposits held in the form of Bank Guarantees from Users of the transmission system											
5	Total Working Capital											
6	Interest Rate (as per norms)											
7	Interest on Working Capital											

11/27

Form T 6							
	Other items (Other debits or any other items)						
Name of Transmission Business/Licensee							

Rs. Crore

	` * ' '	2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	
S. No.		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
A 1												
2												
3												
	Total											
	Less											
В	Chargeable to Capital Expenses											
	Net chargeable to revenue(A-B)											

Note:- This form can be used for any other item not covered under specified forms

Form T 7	
Return on Equity/Return on Net Fixed Assets	

Name of Transmission Business/Licensee

Rs. Crore 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 S.No. Particulars Ref. Remarks Approved in Tariff Order Approved in Tariff Order Audited Truing Up Audited Truing Up Projected Projected Projected Projected 2 3 4 5 6 7 10 11 12 13 14 Equity at the beginning of the year Capitalisation 2 Equity portion of capitalisation 4 Equity at the end of the year Return Computation 5 Return on Equity at the beginning of the year 14%\*(1) Return on Equity portion of capitalisation 14%\*(3)/2 Total Return on Equity (5)+(6)

Form T 8
Income Tax Provisions

Name of Transmission Business/Licensee

Rs. Crore

	Particulars	2016-17			2017-18			2017-18	2018-19	2020-21	2021-22	
S. No.												Remarks
3.140.		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Kenarks
1	2	3	4	5	6	7	8	9	10	11	12	13
(A)	Advance Tax assessed & deposited on											
a)	for Quarter I & deposited on 15th June											
b)	for Quarter II & deposited on 15th September											
c)	for Quarter III & deposited on 15th December											
d)	for Quarter IV & deposited on 15th March											
	Total (A)											

Form T 9	
Revenue at Existing Transmission Tariff	
Name of Transmission Business/Licensee	

Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)

				Transmission Tariff		Revenue from Transmission charges (Rs. Cr.)							
S. No	Category	Amount of Energy Transmitted (specify unit)	Capacity based Charge (Specify part name and unit)	Energy based charge, (Specify unit)	Any other charge (Specify part name and unit)	Capacity based Charges	Energy based Charges	Any other charge (Please specify)	Total				
1	2	3	4	5	6	7	8	9	10				
1	Long Term Open Access												
A	Distribution Licensees												
	Discom 1												
	Discom 2												
	•••												
	sub-total												
В	Traders												
	Trader 1												
	Trader 2												
	sub-total												
С	Consumers												
	Consumer 1												
	Consumer 2												
	sub-total												
2	Short Term Open Access												
	Consumer 1												
	Consumer 2												
	sub-total												
3	Other chanrges												
	Delayed payment charges												
	Miscellaneous charges												
	Total												

<sup>\*</sup> Note : To be furnished separately for each year commencing from (2016-17) to (2021-22).

Form T 10

#### OTHER INCOME

Name of Transmission Business/Licensee

Rs. Crore

	Ks. Crore											
			2016-17			2017-18			2019-20	2020-21	2021-22	
S.No	Particulars		Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
	Other Income											
1	Interest on staff loans and advances											
2	Income from statutory investments											
3	Income from rent of land or buildings		·									
4	Income from sale of scrap					·						
5	Income from staff welfare activities											
6	Rental from staff quarters											
7	Excess found on physical verification											
8	Interest on investments, fixed and call deposits and bank balances											
9	Interest on advances to suppliers/contractors											
10	Income from hire charges from contractors and others											
11	Income due to right of way granted for paying fibre optic cables/co-axial cables on transmission system											
12	Income from advertisements, etc.											
13	Miscellaneous receipts											
14												
												ļ
	Total OTHER Income											

Form T 11									
Expected Revenue at Proposed Transmission Tariff									
Name of Transmission Business/Licensee									
Year 2016-17 & 2017-18 (Actuals) // 2018-19 (Estimate) //2019-20/2020-21/2021-22 (projections)									

		A		Transmission Tariff		Reve	enue from Transmi	ssion charges (Rs. Cr.)	
S. No	Category	Amount of Energy transmitted (specify unit)	Capacity based Charge (Specify part name and unit)	Energy based charge, (Specify unit)	Any other charge (Specify part name and unit)	Capacity based Charge	Energy based Charge	Any other charge (Please specify)	Total
1	2	3	4	5	6	7	8	9	10
1	Long term open access								
Α	Distribution Licensees								
	Discom 1								
	Discom 2								
	Discom 3								
	sub-total								
В	Traders								
	Trader 1								
	Trader 2								
	Trader 3								
	sub-total								
С	Consumers								
	Consumer 1								
	Consumer 2								
	Consumer 3								
	••••								
	sub-total								
2	Short term open access								
	Consumer 1								
	Consumer 2								
	Consumer 3								
	sub-total								
	Total								

<sup>\*</sup> Note : To be furnished separately for each year commencing from 2016-17 to 2021-22

KSERC Transmission Tariff Formats 17/27

Form T 12

Revenue Subsidy and Grant

Name of Transmission Business/Licensee

Rs. Crore

												Ks. Crore
		2016-17			2017-18			2017-18	2018-19	2020-21	2021-22	Remarks
S.No	Particulars											
5114		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Temarko
1	2	3	4	5	6	7	8	9	10	11	12	13
	Revenue Subsidies & Grants											
1	Subvention from the State Government											
2	The State Govt. Grant											
3	Any Other item											
	Total											

Form T 13	

#### Consumer Contribution, Capital Subsidy and Grant

Name of Transmission Business/Licensee

Rs. Crore

												No. Crore
	Particulars		2016-17			2017-18		2017-18	2018-19	2020-21	2021-22	
S.												Remarks
No.		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Consumer's Contribution for service connection lines and associated wiring											
2	Any other Contribution by consumers or for consumers under any scheme.											
a)												
b)												
c)												
3	Sub-Total											
4	Subsidies towards cost of Capital Asset											
5	Grant towards cost of Capital Assets											
6	Amount received from State Govt. under any scheme as grant /subsidy											
7	Total		·									

### Form T 14

# Proposed improvement in performance

Name of Transmission Business/Licensee

				Performance pa	rameters				
S.No.	Paritculars	2016-17 (actual)	2017-18 (Actual)	2018-19	2019-20	2020-21	2021-22	Remarks	
				Projected	Projected	Projected	Projected		
1	2	3	4	5	6		7	8	
1	EHV Trransmission losses								
2	System availability								
a)	400 kV System								
b)	220 kV System								
c)	132 kV System								
d)	66 kV Systerm								
e)	33 kV System								
	Total System Availability								

Form T 15											
	Transmission Losses										
Name of Transmission Business/Licensee											

S.no.	Particulars	Unit	2016-17			2017-18			2018-19	2019-20	2020-21	2021-22	Remarks
5.no.		Cint	Approved in Tariff Order	Audited	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up requiremen t	Projected	Projected	Projected	Projected	Kemarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Energy input into the sysrtem												
(a)	Energy from the sources Inside the State (T-G interface)	MU											
(b)	Energy from the sources outside the State (State Periphery)	MU											
(c)	Total (a)+(b)	MU											
2	Energy transmitted to Discoms (including their direct EHT consumers being fed from Grid SS)	MU											
3	Energy transmitted to open access consumers	MU											
4	Energy transmitted for inter-state sale	MU											
5	Intra-State transmission losses (1(c)-(2+3+4))/1(c))												

Form T 16	
Forecast of Electricity Transmitted (MU)	

Name of Transmission Business/Licensee

			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
S. No.	Category											Remarks
	g- y	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Distribution Licensees											
	Discom 1											
	Discom 2											
	Discom 3											
	sub-total											
2	Traders											
	Trader 1											
	Trader 2											
	Trader 3											
	sub-total											
3	Consumers											
	Consumer 1											
	Consumer 2											
	Consumer 3											
	sub-total											
	Total											

Form T 17									
Deviation Analysis									
Name of Transmission Business/Licensee	Deviation Analysis								
Licensed Area of Supply									

# Year (2016-17) / 2017-18

(Rs. Crore)

S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllable	Uncontrollable
1	2	3	4	5	6	7	8
1	Operation & Maintenance Expenses						
2	Interest and finance charges on long-term loans						
3	Interest on Bonds to meet Terminal Liabilities						
	Depreciation Interest on Working Capital and deposits from Users of						
6	Contribution to contingency reserves						
7	Other items						
8	Adjustment for profit/loss on account						
9	Other items						
10	Total Revenue Expenditure						
11	Return on Equity						
12	Tax on RoE						
13	Aggregate Revenue Requirement (9+10+11)						
D	Revenue						
1	Revenue from sale of electricity						
2	Less: Non Tariff Income						
3	Less: Revenue from Short Term/Medium Term Open Access						
4	Less: Income from Other Business						

Note: Please give detailed explanation separately for the deviations on account of uncontrollable factors

Form T P&L								
Profit & Loss Account								
Name of Transmission Business/Licensee								

S.No.	Particulars	Ref	2017-18	2016-17	2015-16	Remarks
5.INO.	Farticulars	Kei				Kemarks
1	2	3	4	5	6	7
	LINCOME					
	a. Revenue from wheeling/transmission charges					
	b. Revenue Subsidies and Grants					
	c. Other Income					
	Total (a+b+c)					
	II. EXPENDITURE					
	a. Repairs and Maintenance.					
	b. Employee Cost					
	c. Administration and General Expenses					
	d.Depreciation					
	e.Interest and Finance charges					
	f. Subtotal ( a+b+c+d+e)					
	g. Less Capitalised Expenses:					
	- Interest & Finance Charges					
	- Other Expenses					
	h. Other Debits					
	I. Extra Ordinary Items					
	Total Expenditure (f-g+h+i)					
	III. Profit/(Loss) before Tax (I-II)					
	IV. Provision for Income Tax					
	V.Net Prior period credits (Charges )					
	VI. Surplus (Deficit )					
	VII. Net Assets at the beginning of the year (Less consumer's Contribution )					
	VIII. Rate of Return (VI/VII)					

Note: 1. Split up details of each of the item should be furnished
2. Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item

<sup>3.</sup> Reconciliation between audited accounts and amounts for transmission business should be furnished.

#### Form T BS

#### Balance Sheet at the end of the year

Name of Transmission Business/Licensee

S.No.	Particulars	Ref	2017-18	2016-17	2015-16	Remarks
5.110.	Tarteuris	Rei				Kemarks
1	2	3	4	5	6	7
Α	EQUITY AND LIABILITIES					
1	Shareholders funds					
	(a) Share Capital					
	(b) Reserve and Surplus (Reserves+surplus/deficit)					
2	Contribution, Grants and other long term Reserve funds					
3	Non Current liabilities					
	(a) Long Term borrowings (Capital liabilities)					
	(b) Other long term liabilities (SD from consumers)					
	(c) Long term provisions (Reserve funds+provision for int. On bonds/payre	evision)				
4	Current liabilities					
	(a) Short Term borrowings (Borrowing for working capital)					
	(b) Trade Payables (payment due to CGS/Others)					
	(c) Other short term liabilites (other current liabilies except payment to Co	GS)				
	(d) Short Term provisions					
	TOTAL EQUITY & LIABILITIES					
В	ASSETS					
1	Non Current Assets					
	(a) Fixed Assets					
	(i) Tangible Assets					
	(ii)Intabgible Assets					
	(iii) Capital work in progress					
	(b) Non-Current investment					
	(c) Long term loans and Advances					
	(d) Other non-current assets					
2	Current Assets					
	(a) Current investments					
	(b) Inventories (Stocks)					
	(c) Trade reveivables					
	(d) Cash and Cash equivalents					
	(e)Short term loans and advances					
	(f) Other current assets	1				

Note: 1. Split up details of each of the item should be furnished

<sup>2.</sup> Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item

<sup>3.</sup>Reconciliation between audited accounts and amounts for transmission business should be furnished.

#### Form T CF

#### Cash Flow for the year

Name of Transmission Business/Licensee

S.No.	Particulars	Ref	2016-17	2017-18	Remarks
1	2	3	4	5	6
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants				
	Less : Income Tax Payment during the year				
	Total of (a)				
	b. Add: Debits to rev. account not requiring cash Flow:				
	I) Depreciation				
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets				
	iv) Investment Allowance Reserve				
	v) Others, if any				
	Total of (b)				
	c. Less : Credits to revenue Account not involving cash receipts				
	I) Deprecation				
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)				
	Net Funds from Earnings (a)+(b)-(c)				
2	Contributions, Grants & Subsidies to cost of Capital Assets				
3	Security Deposit from consumers				
4	Proceeds from disposal of fixed Assets				
5	Total Funds from Operations (1+2+3+4)				
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories				
	ii) Receivables against transmission charges				

iii) Loans and Advances  iv) Sundry receivables  Visludsidy receivables  Total of (a)  (b) Incrosse/(Decrosse) in Current liabilities  Diborrowings for working Capital  ii) Others (Incrosse) in Reserve + parament due on capitab)  Total of (b)  Net Incrosse/(Decrosse) in working Capital (a)- (b)  Net Incrosse/(Decrosse) in working Capital (a)- (b)  Net Funds from operations before subsidies and Grants (5-6)  Receipts from revenue subsidies and Grants Total Net Funds from operations before subsidies & Grants (7+8)  II. Net incrosse/ decrosse in Capital Habilities  a). Fresh borrowings  Bista Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Incrosse/(Decrosse) in Capital Habilities (a) - (b)  II. Incrosse/(Decrosse) in Capital Expenditure (+H+HIII)  V Funds willised on Capital Expenditure  A)Ch projects  VI Net Incrosse/(Decrosse) in Terminal benefit fund  VI Net Incrosse/(Decrosse) in Terminal benefit fund  VI Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional  X Net Incrosse/(Decrosse) in incentional				
v/Subsidy receivables  Total of (a)  (b) Increase/(Decrease) in Current liabilities  Diborrowings for working Capital  ii) Other current liabilities  iii) Other lincrease in Reserve + payment due on cap.liab)  Total of (b)  Net Increase/(Decrease) in working Capital (a)- (b)  Net Funds from operations before subsidies and Grants (5-6)  8. Receipts from revenue subsidies and Grants (5-6)  8. Receipts from revenue subsidies and Grants (5-6)  9. Receipts from revenue subsidies and Grants (5-6)  10. Net increase/ decrease in Capital liabilities  a) Fresh borrowings  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in capital liabilities (a) - (b)  III. Increase/(Decrease) in capital Expenditure (+11+111)  V Funds utilised on Capital Expenditure (+11+111)  V Funds utilised on Capital Expenditure (+11+111)  VI Net Increase/(Decrease) in forentment contribution  VII Net Increase/(Decrease) in Torwident fund  VI Net Increase/(Decrease) in Torwident fund  VI Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Add opening cash & Bank balance				+
Total of (a) (b) Increase/(Decrease) in Current liabilities    Blborrowings for working Capital   ii) Others (Increase in Reserve + payment due on capiliab)   Total of (b)   Net Increase/(Decrease) in working Capital (a)-(b)   Net Increase/(Decrease) in working Capital (a)-(b)   Net Increase/(Decrease) in working Capital (a)-(b)   Receipts from revenue subsidies and Grants (5-6)   Receipts from revenue subsidies and Grants (7-8)   Total Receipts from operations including subsidies & Grants (7-8)   Presh borrowings				
(b) Increase/(Decrease) in Current liabilities  I)Borrowings for working Capital  ii) Other (Increase in Reserve + payment due on cap.liab)  Total of (b)  Net Increase/(Decrease) in working Capital (a)- (b)  Net Punds from operations before subsidies and Grants (5-6)  8 Receipts from revenue subsidies and Grants (5-6)  8 Receipts from revenue subsidies and Grants (5-6)  10 Total Net Funds from operations including subsidies & Grants (7-8)  II. Net increase/ decrease in Capital liabilities  a) Fresh borrowings  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a) Cn projects  d) Deferred Cost  Total of V (4±b+c+d)  VI Net Increase/(Decrease) in Geremment contribution  VII Net Increase/(Decrease) in in Forwident fund  IN Net Increase/(Decrease) in in Forwident fund  VII Net Increase/(Decrease) in in Forwident fund  IN Net Increase/(Decrease) in in Forwident fund  VII Net Increase/(Decrease) in in Terminal benefit fund  VII Net Increase/(Decrease) in in Terminal benefit fund  VII Net Increase/(Decrease) in in Investments  Net Increase/(Decrease) in investments  Net Increase/(Decrease) in investments  Net Increase/(Decrease) in investments  Net Increase (Decrease) in investments				
ii) Other current liabilities iii) Others (Increase in Reserve + payment due on capilab) Total of (b) Net Increase/(Decrease) in working Capital (a)- (b) Net Increase/(Decrease) in working Capital (a)- (b) Net Funds from operations before subsidies and Grants (5-6) Receipts from revenue subsidies and Grants (7+8) II. Net increase/ decrease in Capital liabilities a). Fresh borrowings I) State Loans ii) Foreign currency Loans / Credits iii) Other borrowings Total of (a) b) Repayments: I) State Loans ii) Foreign currency Loans / Credits iii) Other borrowings Total of (b) Net Increase/(Decrease) in Capital liabilities (a) - (b) III. Increase/(Decrease) in Capital Expenditure a)On projects b)Adavance to Suppliers & Contractors c) Intangible Assets d) Deferred Cost Total of V (4+b-c-d) VI Net Increase/(Decrease) in Government contribution VII Net Increase/(Decrease) in Terminal benefit fund VIII Net Increase/(Decrease) in in reventments  X Net Increase (Decrease) in in investments  X Net Increase (Decrease) in investments X Net Increase (Decrease) in investments				
ii) Other (Increase in Reserve + payment due on cap liab)  Total of (b)  Net Increase (Decrease ) in working Capital (a)- (b)  Net Increase (Decrease ) in working Capital (a)- (b)  Net Increase (Decrease ) in working Capital (a)- (b)  Receipts from operations before subsidies and Grants (5-6)  Receipts from revenue subsidies and Grants  Total Net Funds from operations including subsidies & Grants (7+8)  II. Net increase/ decrease in Capital liabilities  a). Fresh borrowings  l) State Loans  l) Foreign currency Loans / Credits  ii) Other borrowings  Total of (a)  b) Repayments:  l) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital Expenditure (f-H-HII)  V Funds utilised on Capital Expenditure  a) On projects  b) Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in Ireminal benefit fund		(b) Increase/(Decrease) in Current liabilities		
iii) Others (Increase in Reserve + payment due on capillab)  Total of (b)  Net Increase/ (Decrease) in working Capital (a)- (b)  Receipts from revenue subsidies and Grants (3-6)  Receipts from revenue subsidies and Grants (3-6)  Receipts from revenue subsidies and Grants (3-6)  Receipts from revenue subsidies and Grants (7-8)  II. Net increase/ decrease in Capital liabilities  a). Fresh borrowings  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  j) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  j) State Loans  iii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital Expenditure (I+II+III)  V Funds available for Capital Expenditure  a) On projects  b) Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (4+br-ctd)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase (Decrease) in investments		I)Borrowings for working Capital		
Total of (b)  Net Increase/(Decrease) in working Capital (a)- (b)  Net Funds from operations before subsidies and Grants (5-6)  Receipts from revenue subsidies and Grants  Total Net Funds from operations including subsidies & Grants (7+8)  II. Net increase/ decrease in Capital liabilities  a) Fresh borrowings  l) State Lanns  ii) Foreign currency Lanns / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  l) State Lanns  ii) Foreign currency Lanns / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  l) State Lanns  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Terminal benefit fund  VII Net Increase/(Decrease) in Trovident fund  VII Net Increase/(Decrease) in Investments  X Net Increase/(Decrease) in investments		ii) Other current liabilities		
Net Increase/(Decrease) in working Capital (a)- (b)  7 Net Funds from operations before subsidies and Grants (5-6)  8 Receipts from revenue subsidies and Grants  Total Net Funds from operations including subsidies & Grants (7+8)  II. Net increase/ decrease in Capital Habilities  a). Fresh borrowings  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital Habilities (a)- (b)  III. Increase/(Decrease) in Capital Liabilities (a)- (b)  III. Increase/(Decrease) in Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Terminal benefit fund  VII  Net Increase/(Decrease) in Terminal benefit fund		iii) Others (Increase in Reserve + payment due on cap.liab)		
7 Net Funds from operations before subsidies and Grants (5-6) 8 Receipts from revenue subsidies and Grants Total Net Funds from operations including subsidies & Grants (7+8)  II. Net increase/ decrease in Capital liabilities  a). Fresh borrowings  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/ (Decrease) in Capital liabilities (a) - (b)  III. Increase/ (Decrease) in Gapital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in Terminal benefit fund  IX Net Increase/(Decrease) in Terminal benefit fund  IX Net Increase/(Decrease) in Investments  X Net Increases (Decrease) in investments  X Net Increase (Decrease) in investments  X Net Increase (Decrease) in investments  X Net Increase (Decrease) in investments  X Net Increase (Decrease) in investments		Total of (b)		
8 Receipts from reverue subsidies and Grants Total Net Funds from operations including subsidies & Grants (7+8)  II. Net increase/ decrease in Capital liabilities  a). Fresh borrowings  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Repayments:  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VII Net Increase/(Decrease) in Terminal benefit fund  VII Net Increase/(Decrease) in Terminal benefit fund  VII Net Increase/(Decrease) in in terminal benefit fund  VII Net Increase/(Decrease) in in investments  X Net Increase /(Decrease) in investments  X Net Increase /(Decrease) in investments  X Net Increase /(Decrease) in investments		Net Increase/(Decrease) in working Capital (a)- (b)		
Total Net Funds from operations including subsidies & Grants (7+8)  II. Net increase/decrease in Capital liabilities  a). Fresh borrowings  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  1) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital Expenditure (i+II+III)  V Funds utilised on Capital Expenditure  a)(On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  IX Net Increase/(Decrease) in Terminal benefit fund  IX Net Increases (IDecrease) in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increases (Decrease) in in investments  X Net Increase (Decrease) in in investments	7	Net Funds from operations before subsidies and Grants (5-6)		
II. Net increase/ decrease in Capital liabilities  a). Fresh borrowings  I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)(On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in investments  X	- 8	Receipts from revenue subsidies and Grants		
a). Fresh borrowings  I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VII Net Increase/(Decrease) in Terminal benefit fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in incst/bank balance (IV-V-VI)  XI Add opening cash & Bank balance		Total Net Funds from operations including subsidies & Grants (7+8)		
I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (a)  b) Repayments:  I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a) On projects  b) Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Forwident fund  IX Net Increase/(Decrease) in Provident fund  IX Net Increase/(Decrease) in investments  X	II.	Net increase/ decrease in Capital liabilities		
ii) Foreign currency Loans / Credits iii) Other borrowings  Total of (a) b) Repayments:  1) State Loans ii) Foreign currency Loans / Credits iii) Other borrowings Total of (b) Net Increase/ (Decrease) in Capital liabilities (a) - (b) III. Increase/(Decrease) in equity Capital IV. Total Funds available for Capital Expenditure (I+II+III) V Funds utilised on Capital Expenditure a)On projects b)Advance to Suppliers & Contractors c) Intangible Assets d) Deferred Cost Total of V (a+b+c+d) VI Net Increase/(Decrease) in Government contribution VII Net Increase/(Decrease) in Terminal benefit fund VIII Net Increase/(Decrease) in Provident fund IX Net Increase/(Decrease) in investments X		a). Fresh borrowings		
iii) Other borrowings  Total of (a)  b) Repayments:  i) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in cash / bank balance  IX Add opening cash & Bank balance		I) State Loans		
Total of (a) b) Repayments:  I) State Loans ii) Foreign currency Loans / Credits iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in cash/ bank balance  X Net Increase/(Decrease) in cash/ bank balance  IX Add opening cash & Bank balance		ii) Foreign currency Loans / Credits		
b) Repayments:  I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in cash/ bank balance  X Net Increase/(Decrease) in cash/ bank balance  Add opening cash & Bank balance		iii) Other borrowings		
I) State Loans  ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in Irovident fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in in cash/ bank balance (IV-V-VI)  XI Add opening cash & Bank balance		Total of (a)		
ii) Foreign currency Loans / Credits  iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in Provident fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in cash / bank balance (IV - V- VI)  XI Add opening cash & Bank balance		b) Repayments :		
iii) Other borrowings  Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in investments  X Net Increase /(Decrease) in investments		I) State Loans		
Total of (b)  Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Provident fund  IX Net Increase/(Decrease) in investments  X Net Increase /(Decrease) in investments  X Net Increase /(Decrease) in investments  X Net Increase /(Decrease) in cash / bank balance		ii) Foreign currency Loans / Credits		
Net Increase/(Decrease) in Capital liabilities (a) - (b)  III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Provident fund  IX Net Increase/(Decrease) in investments  X Net Increase /(Decrease) in investments  X Net Increase /(Decrease) in cash / bank balance (IV - V-VI)  XI Add opening cash & Bank balance		iii) Other borrowings		
III. Increase/(Decrease) in equity Capital  IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Provident fund  IX Net Increase/(Decrease) in investments  X Net Increase/(Decrease) in investments  X Net Increase /(Decrease) in cash / bank balance (IV - V-VI)  XI Add opening cash & Bank balance		Total of (b)		
IV. Total Funds available for Capital Expenditure (I+II+III)  V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in investments  X Net Increase /(Decrease) in investments  X Net Increase /(Decrease) in cash / bank balance (IV - V-VI)  XI Add opening cash & Bank balance		Net Increase/(Decrease) in Capital liabilities (a) - (b)		
V Funds utilised on Capital Expenditure  a)On projects  b)Advance to Suppliers & Contractors  c) Intangible Assets  d) Deferred Cost  Total of V (a+b+c+d)  VI Net Increase/(Decrease) in Government contribution  VII Net Increase/(Decrease) in Terminal benefit fund  VIII Net Increase/(Decrease) in Frovident fund  IX Net Increase/(Decrease) in in investments  X Net Increase/(Decrease) in cash/ bank balance (IV-V-VI)  XI Add opening cash & Bank balance	III.	Increase/(Decrease ) in equity Capital		
a)On projects b)Advance to Suppliers & Contractors c) Intangible Assets d) Deferred Cost Total of V (a+b+c+d) VI Net Increase/(Decrease) in Government contribution VII Net Increase/(Decrease) in Terminal benefit fund VIII Net Increase/(Decrease) in Provident fund IX Net Increase/(Decrease) in investments X Net Increase/(Decrease) in investments X Net Increase/(Decrease) in cash/ bank balance (IV-V-VI) XI Add opening cash & Bank balance	IV.	Total Funds available for Capital Expenditure (I+II+III)		
b)Advance to Suppliers & Contractors	v	Funds utilised on Capital Expenditure		
c) Intangible Assets         d) Deferred Cost           Total of V (a+b+c+d)         WI           VI Net Increase/(Decrease) in Government contribution         WIII           VIII Net Increase/(Decrease) in Terminal benefit fund         WIII           VIII Net Increase/(Decrease) in Provident fund         WIII           IX Net Increase/(Decrease) in investments         X           X Net Increase/(Decrease) in cash/ bank balance (IV - V- VI)         XI           Add opening cash & Bank balance         Add opening cash & Bank balance		a)On projects		
d) Deferred Cost		b)Advance to Suppliers & Contractors		
Total of V (a+b+c+d )   VI   Net Increase/(Decrease ) in Government contribution       VII   Net Increase/(Decrease ) in Terminal benefit fund       VIII   Net Increase/(Decrease ) in Provident fund       IX   Net Increase/(Decrease ) in investments       X   Net Increase/(Decrease ) in cash/ bank balance (IV - V- VI)       XI   Add opening cash & Bank balance       Add opening cash & Bank balance       VIII		c) Intangible Assets		
VI Net Increase/(Decrease ) in Government contribution  VII Net Increase/(Decrease ) in Terminal benefit fund  VIII Net Increase/(Decrease ) in Provident fund  IX Net Increase/(Decrease ) in investments  X Net Increase /(Decrease ) in cash / bank balance (IV - V- VI)  XI Add opening cash & Bank balance		d) Deferred Cost		
VI Net Increase/(Decrease ) in Government contribution  VII Net Increase/(Decrease ) in Terminal benefit fund  VIII Net Increase/(Decrease ) in Provident fund  IX Net Increase/(Decrease ) in investments  X Net Increase /(Decrease ) in cash / bank balance (IV - V- VI)  XI Add opening cash & Bank balance		Total of V (a+b+c+d )		
VIII Net Increase/(Decrease ) in Provident fund  IX Net Increase/(Decrease ) in investments  X Net Increase/(Decrease ) in cash/ bank balance (IV - V- VI)  XI Add opening cash & Bank balance	VI	Net Increase/(Decrease ) in Government contribution		
VIII Net Increase/(Decrease ) in Provident fund  IX Net Increase/(Decrease ) in investments  X Net Increase/(Decrease ) in cash/ bank balance (IV-V-VI)  XI Add opening cash & Bank balance	VII	Net Increase/(Decrease ) in Terminal benefit fund		
IX Net Increase/(Decrease ) in investments  X Net Increase /(Decrease ) in cash / bank balance (IV - V- VI)  XI Add opening cash & Bank balance	VIII			
X Net Increase /(Decrease ) in cash / bank balance (IV - V- VI)  XI Add opening cash & Bank balance	IX			
XI Add opening cash & Bank balance				
		Closing Cash & Bank balance ( VII+VIII )		

Note: Reconciliation between audited accounts and amounts for transmission business should be furnished.

# ARR and Tariff Formats SLDC INDEX

S.No.	Form No.	Particulars Particulars
1	2	3
1	Form S 1	Summary of Aggregate Revenue Requirement
2	Form S 2	Operation and Maintenance Expenses
3	Form S 2.1	Employee Expenses
4	Form S 2.2	Administrative and General Expenses
5	Form S 2.3	Repair and Maintenance Expenses
6	Form S 3	Interest on working capital requirement
7	Form S 4	RLDC Fees and Charges
8	Form S 5	Fixed assets & provisons for depreciation
9	Form S 6	Loan Repayment & Interest Liability
10	Form S 7	Return on Equity/Return on Net Fixed Assets
11	Form S 8	Income Tax Provisions
12	Form S 9	Other Income
13	Form S 10	Summary of Revenue from current fee and charges
14	Form S 11	Deviation Analysis

Other In	Other Information/Documents										
1	Form S P&L Profit & Loss Account										
2	Form S BS Balance Sheet at the end of the year										
3	Form S CF	Cash Flow for the year									
4	Corporate audited	Corporate audited/unaudited Balance Sheet and Profit & Loss Accounts with all									
	the Schedules & annexures for the relevant years.										

**Note**: Spread sheet financial models (in CD) shall also be submitted along with the application.

Form S1
Summary of Aggregate Revenue Requirement

Name of Petitioner:

\_\_\_\_\_\_\_
Rs. Lakh

S. No.	Particulars	Reference		2016-17		2017-18			2018-19	2019-20	2020-21	2021-22	Remarks
5.710.	- 4. Walland	Form No.	Approved in Tariff Order	Audited	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up requirement	Projected	Projected	Projected	Projected	ACAMA A
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Expenses												
a)	Operating Expenses												
i)	Employee expenses												
ii)	Administrative and General Expenses												
iii)	Repair and Maintenance Expenses												
iv)	Interest on Working Capital												
v)	RLDC Fee and Charges												
b)	Capital expense components												
i)	Depreciation												
ii)	Interest and finance charges on term loan												
iii)	Return on equity												
iv)	Income Tax provision												
2	Total Revenue Expenditure (a+b+c)												
3	Less: Other Income												
4	Less: Income from other business												
5	Aggregate Revenue Requirement												

Form S 2
Operation and Maintenance Expenses

#### Name of Petitioner:

Rs. Lakh

		Previous Year				Current Year		Ensuing Year	Year	Year	Year	
Sl No	Particulars		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
		Approved in Tariff Order	Audited	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up requirement	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13
a)	Employee expenses											
b)	Administrative and General Expenses											
c)	Repair and Maintenance Expenses											
	Total (a) + (b)+(c)											

Form S 2.1

Employee Expenses

Rs. Lakh

Name of Petitioner:

2017-18 2016-17 2018-19 2019-20 2020-21 2021-22 S. No. Particulars Remarks Approved in Tariff Order Approved in Tariff Order Truing Up requirement Truing Up Audited Audited Projected Projected Projected Projected 10 11 12 13 I Employee's Cost (Other Than Covered In 'III'&'IV') 1 Basic Salary 2 Additional Pay 3 D.A. 4 House Rent Allowance 5 Other Allowances & Relief 6 Sub-Total: (1 to 5) 7 Medical Expenses Reimbursement 8 Travelling Allowance(Conveyance Allowance) 9 Leave Travel Assistance 10 Honorarium/Overtime 11 Load Despatch Allowance 12 Earned Leave Encashment 13 Payment Under Workman's Compensation 14 Any Other Item 15 Arrears to Wage Revision 16 Sub-Total (7 to 15) 17 Staff Welfare Expenses II Apprentice And Other Training Expenses III Payment/Contribution To PF Staff Pension And Gratuity 1 Terminal Benefits a. Provident Fund Contribution b. Provision for PF Fund c. Pension Payments d. Gratuity Payment on super annuation e. SuperAnnuation Fund, If any f. Any other terminal benefit(Encashment) 2 Any Other Items Total III IV Grand Total [I.6 + I.16 + I.17 + II + III] V Incentive Payment VI Grand Total VII Less Expenses Capitalised Net Employee expenses

Form S 2.2

#### Administrative and General Expenses

Name of Petitioner:

	Name of Petitioner:											Rs. Lakh
			2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	
Sl No	Particulars		2010 17			2017 10		2010-17	2017-20	2020-21	2021-22	Remarks
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13
A)	Administration Expenses											
	Rent rates and taxes											
i)	Rent											
ii)	Rates & Taxes											
	Sub - total of Rent rates and taxes											
iii)	Insurance											
iv)	Revenue Stamp Expenses, Telephone, P&T & Telex Charges											
v)	Legal Charges											
vi)	Audit Fees											
vii)	Technical Fees, Consultancy and Other Professional Charges											
viii)	Conveyance and Travel											
ix)	Electricity charges											
x)	Vehicle Running & Hiring Expenses											
xi)	Vehicles Running Expenses Petrol And Oil											
xii)	Security / Service Charges Paid To Outside Agencies											
	Sub-Total of Admistrative Expenses											
B)	Other Charges											
i)	Fee And Subscriptions Books And Periodicals											
ii)	Printing And Stationery											
iii)	Advertisement Expenses (Including Purchase Related) Exhibition & Demo.											
iv)	Water Charges											
v)	Bank Charges											
vi)	Miscellaneous Expenses											
vii)	Office Expenses											
	Sub-Total of other charges											
		-										
	Material Related Expenses											
i)	Incidental Stores Expenses											
	Sub Total of Material related expenses											
	T-1100											
D)	Total A&G expenses											
E)	A&G expenses chargeable To Capital Works											
	A											
F)												
	Net A&G expenses chargeable to Revenue Expenses											

Form S 2.3

#### Repair and Maintenance Expenses

#### Name of Petitioner:

Rs. Lakh

												NS. Lakii
Sl No	Particulars					2047 10					Remarks	
51 NO	rarticulars		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Kemarks
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Plant & Machinery											
2	Building											
3	Civil Works											
4	Lines, Cables, Networks, etc.											
5	Vehicle											
6	Furniture & Fixtures											
7	Office Equipment											
8	Station Supplies											
9	Miscellaneous											
A	Total R&M Expenses											
В	less: Expenses Capitalized											
C	Total R&M Expenses chargeable to Revenue Expenses											

Form S 3
Interest on working capital requirement

Rs. Lakh

												No. Lakii	
Sl.N			204	C 48			2045 40		2010.10		2000 24		
	Particulars		201	6-17			2017-18	2018-19	2019-20	2020-21	2021-22	Remarks	
0.		Approved in Tariff Order	Audited	Normative	Truing Up requirement	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	O&M expenses												
2	Maintenance Spares												
3	Annual Revenue from Tariff and Charges												
4	Receivables equal to one and half months of average billing												
	Less												
5	Amount held as security deposits from Users except security deposits held in the form of Bank Guarantees												
6	Total Working Capital												
7	Interest Rate												
8	Interest on Working Capital												

Form S 4
RLDC Fees and Charges

Rs. Lakh

												KS. Lakii
Sl No	Particulars	articulars  2016-17  Approved in Tariff Order Audited Truing Up			Approved in Tariff Order	2017-18 Audited	Truing Up	2018-19 Projected	2019-20 Projected	2020-21 Projected	2021-22 Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
1	NRLDC Fees											
2	NRLDC Charges											
3	ULDC Scheme charges											
4	NRPC Charges											
5	Other Costs (related to RLDC), if any											
	Grand Total											

# Form S 5 Fixed assets & provisons for depreciation

Name of Petitioner:

Year: 2016-17/2017-18 (actual) // 2018-19 / 2019-20 / 2020-21 / 2021-22 (projections)

Rs. Lakh

					Gross fixed assets	3		Prov	isions for deprecia	ntion		
Sl No	Assets Group (as per notification in respect of depreciation)	Rate of depreciation	At the beginning of the year	Additions during the year	Adjustment & deductions		Cumulative upto the beginning of year	Additions during the year	Adjustment during the year	Cumulative at the end of year		Net fixed assets at the end of the year
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land & Land rights											
2	Building and Civil Works											
3	Hydraulic Works											
4	Other Civil Works											
5	Plant & Machinery											
6	Lines Cable Network etc.											
7	Vehicles											
8	Furniture & fixtures											
9	Office Equipment's											
10	Communication equipment											
11	SCADA and IT system											
12	Other equipment											
	Total (1) to (12)											

Note:- 1 This statement is to be furnished separately for 2016-17,2017-18,2018-19, 2019-20, 2020-21 and 2021-22

<sup>2.</sup> The figures at the beginning of the year & that at the end of previous year will be the same

<sup>3.</sup> The write off of depreciated price of unserviceable assets & assets not in use lost/damaged in natural or assets sold or cost of buy back of asssetsare to be included in this schedule.

Form S 6
Loan Repayment & Interest Liability

Year: 2016-17/2017-18 (actual) // 2018-19 / 2019-20 / 2020-21 / 2021-22 (projections)

S.No.	Source	Opening Balance	Anticipited Receipts	Anticipited Repayment	Intres	t Rate	Closing Balance	Average Rate of	Liability of intrest during	Finance Charges	Total interest charges and	Less: Interest charges	Net interest charges and finanace
				1.7	Fixed	Floating		Intrest	the year		Finance charges	capitalised	charges
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Note:\* to be furnished for all years from 2016-17 to 2021-22

Form S 7	
Return on Equity/Return on Net Fixed Assets	

Rs. Crore

												Rs. Crore
S.No.	Particulars		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
		Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	6	7	8	9	10	11	12	13	14
1	Equity at the beginning of the year											
2	Capitalisation											
3	Equity portion of capitalisation											
4	Equity at the end of the year											
	Return Computation											
5	Return on Equity at the beginning of the year	14%*(1)										
6	Return on Equity portion of capitalisation (on prorata basis)	14%*(3)/(n/12)										
7	Total Return on Equity	(5)+(6)										

Form S 8
Income Tax Provisions

Rs. Crore

			2016-17		2017-18			2018-19	2019-20	2020-21	2021-22	-
S1 No	Particulars	Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13
(A)	Advance Tax assessed & deposited on											
a)	for Quarter I & deposited on 15th June											
b)	for Quarter II & deposited on 15th September											
c)	for Quarter III & deposited on 15th December											
d)	for Quarter IV & deposited on 15th March											
	Total (A)											
(B)	Deferred tax liability before 01.04.2009											

Other Income

Name of Petitioner:

Rs. Crore

												10. 01010	
S.No.	Particulars	Ref.		2016-17			2017-18		2018-19	2019-20	2020-21	2021-22	Remarks
			Approved in Tariff Order	Audited	Truing Up	Approved in Tariff Order	Audited	Truing Up	Projected	Projected	Projected	Projected	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Other Income												
1	Interest on staff loans and advances												
2	Income from statutory investments												
3	Income from rent of land or buildings												
4	Income from sale of scrap												
5	Income from staff welfare activities												
6	Rental from staff quarters												
7	Excess found on physical verification												
8	Interest on investments, fixed and call deposits and bank balances												
9	Interest on advances to suppliers/contractors												
10	Income from hire charges from contractors and others												
11	Income due to right of way granted for paying fibre optic cables/co-axial cables on transmission system												
12	Income from advertisements, etc.												
13	Miscellaneous receipts												
14													
	Total Other Income												

Name of Petitioner: Form S 10

Summary of Revenue from current fee and charges

				2016	5-17	2017-18 2018-19 2019-20							2020-	1			2021-22																				
SI No	Particular	Contracted Capacity	Fixed Annual Charges	Operating Charges on monthly basis	Annual SLDC Fees &	SLDC Operating Charges	Total SLDC Charges	Contracted	Fixed Annual Charges	Onweller	Annual	SLDC Operating Charges	Total SLDC Charges	Contracted Capacity	Fixed Annual Charges		Annual SLDC Fees & Charges	SLDC Operating Charges	Total SLDC Charges	Contracte d Capacity	Fixed (Annual Charges n	perating An	- 1	LDC Total erating SLDG larges Charg	Contracted Capacity	Fixed Annual Charges	Operating Charges on monthly basis	Annual SLDC Fees & Charges	SLDC Operating Charges	Total SLDC Charges	Contracted Capacity	Fixed Annual Charges	Operating	Annual	SLDC Operating Charges	Total SLDC Charges	Remarks
		(in MW)	Rs. Lakh/MW	Rs. Lakh/MW	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	(in MW)	Rs. Lakh/MW	Rs. Lakh/MW	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	(in MW)	Rs. Lakh/MW	Rs. Lakh/MW	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	(in MW)	Rs. Lakh/MW La			ts. In (Rs. I nkhs) Lakh	(in MW)	Rs. Lakh/MW	Rs. Lakh/MW	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	(in MW)	Rs. Lakh/MW	Rs. Lakh/MW	(Rs. In Lakhs)	(Rs. In Lakhs)	(Rs. In Lakhs)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25 26	27	28	29	30	31	32	33	34	35	36	37	38	39
1	Fee and Charges for System Operation																																			i l	
a	Discom 1																																			i l	
b	Discom 2																																			i l	
c	Discom 3																																			i l	
d	Generating Company 1																																			i l	
e	Generating Company 2																																				
	Generating Company 3																																		$\Box$		
g	Other Long term Users (Please specify)																																				
Ξ						1			1																								-		$-\Box$	$\vdash$	
2	Charges for decision support system an	d IT Infrastru	cture																																		
	Discom 1																																				
	Discom 2																																		-	$\longrightarrow$	
	Discom 3														-																				-	$\longrightarrow$	
	Generating Company 1														-																				-	$\longrightarrow$	
	Generating Company 2 Generating Company 3																					_		_	_										-	-	
	Other Long term Users (Please specify)																																				
- 6																																					
3	Operating Charges for Scheduling, Met	tering and Sett	tlement																																		
	Discom 1																																			1	
	Discom 2																																				
	Discom 3																																				
	Generating Company 1																																		$\longrightarrow$		
	Generating Company 2																																		$\longrightarrow$		
	Generating Company 3																																			$\longrightarrow$	
	Trading Companies																																		-	$\longrightarrow$	
	Captive Users																																		-	$\longrightarrow$	
	Other third party transactions																																		-	$\longrightarrow$	
j	Any other user (Please specify)																																		$\longrightarrow$	$\longrightarrow$	
																																				$\longrightarrow$	
	Other Revenue	1																							1	1										$\longrightarrow$	
	Consultancy services																																			$\longrightarrow$	
	Manpower development	1																							1	1										$\longrightarrow$	
c	Interest on delayed or deferred payment of bills																																			1	
d	Miscellaneous Receipt																																				
	·	1																																			
5	Total (1+2+3+4)																																				
			1			1		1	1						1	1										_										$\longrightarrow$	
			1		1	1	1	1	1	l	l				1	1	1		1	1	1			- 1			1									1	

Form S 11							
	Deviation Analysis						
SLDC							

Year

(Rs. Lakh)

							(Rs. Lakh)
S. No.	Particulars	Approved	Actual	Deviation	Reason for Deviation	Controllable	Uncontrollable
1	2	3	4	5	6	7	8
1	Expenses						
a)	Operating Expenses						
i)	Employee expenses						
ii)	Administrative and General Expenses						
iii)	Repair and Maintenance Expenses						
iv)	Interest on Working Capital						
v)	RLDC Fee and Charges						
b)	Capital expense components						
i)	Depreciation						
ii)	Interest and finance charges on term loan						
iii)	Return on equity						
iv)	Income Tax provision						
2	Total Revenue Expenditure (a+b+c)						
3	Less: Non Tariff income						
4	Less: Income from other business						

Note: Please give detailed explanation separately for the deviations on account of uncontrollable factors

Form	S	P	&L
------	---	---	----

## **Profit & Loss Account**

Name of Petitioner \_\_\_\_

S.No	Particulars	Ref.	2017-18	2016-17	2015-16	Remar ks
1	2	3		4	5	11
	I.INCOME					
	a. Revenue from charges					
	b. Revenue Subsidies and Grants c. Other Income					
	Total (a+b+c)					
	II. EXPENDITURE					
	a. Repairs and Maintenance.					
	b. Employee Cost					
	c. Administration and General					
	Expenses					
	d.Depreciation					
	e.Interest and Finance charges					
	f. Subtotal ( a+b+c+d+e)					
	g. Less Capitalised Expenses:					
	- Interest & Finance Charges					
	- Other Expenses					
	h. Other Debits					
	I. Extra Ordinary Items-Impact of					
	APTEL orders					
	Total Expenditure (f-g+h+i)					
	III. Profit/(Loss) before Tax (I-II)					
	IV. Provision for Income Tax					
	V.Net Prior period credits (Charges )					
	VI. Surplus (Deficit )					
	VII. Net Assets at the beginning of the year (Less consumer's Contribution)					
	VIII. Rate of Return (VI/VII)					

Note: 1. Split up details of each of the item should be furnished

- 2. Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item
- 3. Reconciliation between audited accounts and amounts for SLDC should be furnished.

F	n	71	n	S	R	9

#### Balance Sheet at the end of the year

Name of Petitioner

S.N o.	Particulars	Ref	2017-18	2016-17	2015-16	Remar ks
1	2	3		4	5	11
Α	EQUITY AND LIABILITIES					
1	Shareholders funds					
	(a) Share Capital					
	(b) Reserve and Surplus (Reserves+surplus/deficit)					
2	Contribution, Grants and other long term Reserve funds					
3	Non Current liabilities					
	(a) Long Term borrowings (Capital liabilities)					
	(b) Other long term liabilities (SD from consumers)					
	(c) Long term provisions (Reserve funds+provision for int. On bonds	s/payrevisio	n)			
4	Current liabilities					
	(a) Short Term borrowings (Borrowing for working capital)					
	(b) Trade Payables (payment due to CGS/Others)					
	(c) Other short term liabiliites (other current liabilies except payment	to CGS)				
	(d) Short Term provisions					
	TOTAL EQUITY & LIABILITIES					
В	ASSETS					
1	Non Current Assets					
	(a) Fixed Assets					
	(i) Tangible Assets					
	(ii)Intabgible Assets					
	(iii) Capital work in progress					
	(b) Non-Current investment					
	(c) Long term loans and Advances					
	(d) Other non-current assets					
2	Current Assets					
	(a) Current investments					
	(b) Inventories (Stocks)					
	(c) Trade reveivables					
	(d) Cash and Cash equivalents					
	(e)Short term loans and advances					
	(f) Other current assets  TOTAL ASSETS					

Note: 1. Split up details of each of the item should be furnished

<sup>2</sup>. Additional details in the form of 'Note on accounts' is to be furnished showing Actuals and adjustments if any made as part of accounting standards for each item

<sup>3.</sup>Reconciliation between audited accounts and amounts for SLDC business should be furnished.

F,	orm	2	CE
т. с	<i>]</i>		CI.

## Cash Flow for the year

Name of Petitioner

S.No.	Particulars	Ref	2016-17	2017-18	Remar ks
1	2	3	4	5	6
I	Net Funds from Operations				
1a	Net Funds from Earnings :				
	a) Profit before tax and before revenue subsidies and grants  Less: Income Tax Payment during the year				
	Total of (a)				
	b. Add: Debits to rev. account not requiring cash Flow:  I) Depreciation				
	ii) Amortisation of Deferred costs				
	iii) Amortisation of Intangible Assets	1			
	iv) Investment Allowance Reserve				
	v) Others, if any				
	Total of (b)				
	c. Less : Credits to revenue Account not involving cash				
	receipts	1			
	I) Deprecation	1			
	ii) Subsidies receivables				
	iii) Revenue gap				
	Total of (c)				
	Net Funds from Earnings (a)+(b)-(c)				
3	Contributions, Grants & Subsidies to cost of Capital Assets Security Deposit from consumers				
4	Proceeds from disposal of fixed Assets				
5	Total Funds from Operations (1+2+3+4)				
6	Net Increase/(Decrease) in working Capital				
	(a) Increase/(Decrease) in Current Assets				
	I) Inventories				
	ii) Receivables against sale of power				
	iii) Loans and Advances				
	iv) Sundry receivables				
	v)Subsidy receivables				
	Total of (a)				
	(b) Increase/(Decrease) in Current liabilities				
	I)Borrowings for working Capital				
	ii) Other current liabilities				

	iii) Others (Increase in Reserve + payment due on	
	cap.liab)	
	Total of (b)	
	Net Increase/(Decrease) in working Capital (a)- (b)	
	7. Net Funds from operations before subsidies and Grants (5-	
	6)	
	8. Receipts from revenue subsidies and Grants	
	Total Net Funds from operations including subsidies &	
	Grants (7+8)	
II.	Net increase/ decrease in Capital liabilities	
	a). Fresh borrowings	
	I) State Loans	
	ii) Foreign currency Loans / Credits	
	iii) Other borrowings	
	Total of (a)	
	b) Repayments :	
	I) State Loans	
	ii) Foreign currency Loans / Credits	
	iii) Other borrowings	
	Total of (b)	
III.	Net Increase/(Decrease) in Capital liabilities (a) - (b)	
111.	Increase/(Decrease ) in equity Capital	
IV.	Total Funds available for Capital Expenditure (I+II+III)	
V	Funds utilised on Capital Expenditure	
•	a)On projects	
	b)Advance to Suppliers & Contractors	
	c) Intangible Assets	
	d) Deferred Cost	
	Total of V (a+b+c+d)	
	2011 01 7 (4.0.0.4)	
VI	Net Increase/(Decrease ) in Government contribution	
VII	Net Increase/(Decrease ) in Terminal benefit fund	
	Net Increase/(Decrease ) in Provident fund	
VIII	,	
IX	Net Increase/(Decrease ) in investments	
х	Net Increase /(Decrease ) in cash / bank balance ( IV - V- VI )	
XI	Add opening cash & Bank balance	
XII	Closing Cash & Bank balance (VII+VIII)	

Note: Reconciliation between audited accounts and amounts for SLDC business should be furnished.