# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

No.L-1/153/2019/CERC

Dated:26.2.2019

#### **DRAFT NOTIFICATION**

In exercise of powers conferred under Section 178 of the Electricity Act, 2003 (36 of 2003) read with sub section 4 of section 28 thereof and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission hereby makes the following regulations, namely:

#### **CHAPTER-1**

#### **PRELIMINARY**

#### 1. Short title and commencement

- (1) These regulations may be called the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2019.
- (2) These regulations shall come into effect from the date of their publication in the Official Gazette, and unless reviewed earlier or extended by the Commission, shall be applicable during the control period from 1.4.2019 to 31.3.2024.

### 2. Scope and extent of application

These regulations shall be applicable for determination of fees and charges to be collected by Regional Load Despatch Centres from the generating companies, distribution licensees, inter-State transmission licensees, buyers, sellers and inter-State trading licensees and any other users.

- **Definitions**: In these regulations, unless the context otherwise requires:
  - (1) **'Act'** means the Electricity Act, 2003(36 of 2003);
  - (2) 'Additional Capitalization' means the capital expenditure incurred or projected to be incurred, after the date of commercial operation of the project and admitted by the

Commission after prudence check

- (3) 'Annual LDC Charges (ALC)': The Annual LDC charges (ALC) shall comprise the aggregate revenue requirement (ARR) for meeting the annual expenditure to be incurred by the RLDC and NLDC as approved by the Commission.
- (4) **'Auditor'** means an auditor appointed by the Power System Operation Corporation Limited, qualified for being appointed as an auditor in accordance with the provisions of sections 224, 233B and 619 of the Companies Act, 1956 (1 of 1956), as amended from time to time or Chapter X of the Companies Act, 2013 (18 of 2013),or any other law for the time being in force;
- (5) **'Bank Rate'** means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;
- (6) **'Buyer'** means a person buying power through medium term open access or long term access and whose scheduling, metering and energy accounting is coordinated by the Regional Load Despatch Centre;
- (7) **'Capital Cost'** means the capital cost as defined in Regulation 14 of these regulations;
- (8) **'Capital Expenditure' or 'CAPEX'** means the expenditure of capital nature planned to be incurred during the control period for creation of assets of the Regional Load Despatch Centres or National Load Despatch Centre, as the case may be;
- (9) **'Charges'** means recurring payments on monthly basis to be collected by the Regional Load Despatch Centres for the services rendered by National Load Despatch Centre, Regional Load Despatch Centre and Power System Operation Corporation Limited;
- (10) **'Commission'** means Central Electricity Regulatory Commission referred to in sub-section (1) of section 76 of the Act;
- (11) **'Contingency Reserve'** is the reserve to be created and maintained by RLDCs and NLDCs from other incomes (other than registration fees and approved annual LDC charges) viz. short term open access application fees and operating charges, REC and PAT charges etc.
- (12) **'Contracted Capacity'** means the capacity arranged through long **te**rm access or medium term open access;
- (13) **'Control Period'** means a period of five years starting from 1.4.2019;
- (14) **'Day'** means the 24 hour period starting at 0000hour;

- (15) **'Effective tax rate** 'for tax on return on equity is the rate (in %) calculated on the basis of actual tax paid by the concerned Load Despatch Centre in the respect of the financial year in line with the provisions of the relevant Finance Acts and in line with the norms defined in CERC (Terms and Conditions of Tariff) Regulations for the relevant control period notified by the Commission.
- (16) **'Expenditure Incurred'** means the fund, whether equity or debt or both, actually deployed and paid in cash or cash equivalent, for creation or acquisition of a useful asset and does not include commitments and the liabilities for which no payment has been made;
- (17) **'Ergonomics'** means the science of refining the design of products/Office equipment to optimize them for human use. Human characteristics, such as height, weight, as well as information about human hearing, sight, temperature preferences and so on are considered while choosing the workplace equipment/furniture. Ergonomics is sometimes known as human factors engineering.
- (18) 'Fees' means the non-refundable one-time or fixed payments collected by the Regional Load Despatch Centres, or in a defined periodicity, by the National Load Despatch Centre, for the services rendered for commencement of grid access and scheduling and on account of registration, membership or any other purpose as specified by the Commission from time to time;
- (19) **Forum of Load Despatchers (FOLD)** means the body constituted by Forum of Regulators (FOR) and having NLDC, RLDCs, SLDCs as its members with secretariat at NLDC.
- (20) 'Grid Access' means the permission granted by the concerned RLDC for integration of the generating station including a stage or unit of the generating station, or licensees, buyers and sellers with the grid on meeting the technical requirements;
- (21) **'LDC Development fund'** is the fund to be created and maintained by POSOCO for administering capital expenditure & other expenses for empowerment of human resources as approved by the Commission.
- (22) 'Licensee' means a person granted a license under Section 14 of the Act;
- (23) **'Logistics Function**' means the support functions for NLDC/RLDCs as per Regulation 5(1) of these Regulations;
- (24) 'Market Operation Function' means functions related to power market as per Regulation 5(2) of these Regulations;

- (25) 'National Load Despatch Centre' or 'NLDC' means the Centre at the national level established by the Central Government under sub-section(1) of Section 26 of the Act;
- (26) **'Operational Expenditure or OPEX'** refers to all the services related to the functions where a significant portion of delivery is through an annual recurring expenses mode;
- (27) 'Other Support Functions' means the functions performed by the RLDCs and NLDC and includes but not limited to taxation and TDS Reconciliation, Accounting, Settlement, Billing & Collection, Contracts, human resource administration, management information system, legal & regulatory affairs and inputs for policy making.
- (28) 'Power System Operation Corporation Limited' or 'POSOCO' means a company entrusted with the operation of the National Load Despatch Centre in accordance with Section 26 of the Act and Regional Load Despatch Centres in accordance with Section 27 of the Act or any other related function assigned by the Govt./ Commission from time to time;
- (29) **'Region'** means any one of the regions demarcated by the Central Government under Section 25 of the Act;
- (30) **'Regional entity'** means an entity whose scheduling, metering and energy accounting is done at the regional level by the concerned Regional Load Despatch Centre;
- (31) 'Regional Load Despatch Centre' or 'RLDC' means the Centre for each region established by the Central Government under sub-section (1) of section 27 of the Act;
- (32) 'Replacement Expenditure' or 'REPEX' means the expenditure incurred or projected to be incurred for replacement of capital assets on completion of their useful life but are not covered under the Repairs and Maintenance expenses;
- (33) 'Regulatory Pool Account' means the account operated by the RLDCs or NLDC under the relevant regulations or orders by the Commission for handling Deviation Settlement Charges, Reactive Energy Charges, Ancillary Services Operation, Congestion Charges and Congestion Revenue amount due to market splitting or any other pool account/ market product which may be operated by RLDCs or NLDC from time to time as per the Regulations or directions of the Commission.
- (34) **'Scheme'** means the facilities and equipment associated with and installed at the RLDCs, NLDC and Corporate office of POSOCO, as the case may be, as per Regulation 6 of these Regulation.

- (35) **'Seller'** means a person other than a generating company supplying power through medium term open access or long term access and whose scheduling, metering and energy accounting is coordinated by RLDCs or NLDC;
- (36) **'State Load Despatch Centre (SLDC)**' means the center established under subsection (1) of section 31 of the Electricity Act, 2003;
- (37) **'System Operation Function'** shall be as per Regulation 5(3) of these Regulations;
- (38) 'User' means the generating companies, distribution licensees, buyers, Bulk consumers (SEZ), sellers and inter-State transmission licensees, Demand Response Consumers, Qualified Coordinating Agency (QCA), or any other such existing (or envisaged in future) entity who use the inter-State transmission network or the associated facilities and services of National Load Despatch Centre and Regional Load Despatch Centres further detailed as per Regulation 7 of these Regulations.

### (39) **'Year'** means a financial year;

The words and expressions used in these regulations and not defined here in but defined in the Act or the CERC (Indian Electricity Grid Code), Regulation, 2010 shall have the meaning assigned to them under the Act or the CERC (Indian Electricity Grid Code) Regulations 2010 as amended from time to time.

#### **GENERAL**

### 4. Registration

- (1) The users shall register through online application with the respective Regional load Despatch Centre (RLDC) for commencement of Grid Access for availing system operation services of RLDCs or NLDC as under:
  - (a) All generating stations, distribution licensees and inter-State transmission licensees or any other user defined under clause 3(38) of these regulations intending to avail the Grid Access shall register themselves with concerned Regional Load Despatch Centre responsible for scheduling, metering, energy accounting and switching operations, not less than 30 days prior to intended date of commencement of Grid access, by filing an application in the format prescribed at **Appendix-IV** of these regulations:

Provided that when a unit is added to a generating station or an element is added to a transmission system, the generating company or transmission licensee, as the case may be, shall send an intimation to the concerned RLDC(s) within two days of such addition for updating its records;

- (b) The buyers and sellers who intend to avail grid access shall register themselves with the concerned Regional Load Despatch Centre not less than 30 days prior to intended date of commencement of grid access by filing an application in the format prescribed as **Appendix-IV** to these regulations;
- (c) The Power exchanges and traders who intend to avail the services of RLDCs and NLDC shall register themselves with the National Load Despatch Centre by filing an application in the format prescribed as Appendix-IV to these regulations.
- (2) Upon submission of the online application for registration, auto-generated acknowledgement for receipt of application shall be issued by the nodal agency.
- (3) After scrutiny, RLDC /NLDC shall intimate the deficiencies in the application, if any, to the applicant within one week of receipt of application. The applicant shall rectify the deficiency within one week thereafter, failing which the application shall be closed.
- (4) The RLDCs or NLDC, as the case may be, after scrutinizing applications for registration and on being satisfied with correctness of the information furnished in the application shall register the applicant and send a written intimation to the applicant.
- (5) The generating companies, distribution licensees, inter-State transmission licensees, power

- exchanges, traders, sellers and buyers and any other user as specified in Regulation 3(38) shall pay the registration fees as specified in these Regulations.
- (6) RLDCs or NLDC as the case may be shall maintain a list of registered users on their website along with their date of registration.
- (7) RLDC may, after issuing notice of at least one month, de-register a user in case of persistent default in payment of RLDC Fees and Charges for more than 90 days or termination of connectivity. A user can subsequently re-register once the default has been cured or connectivity re-established by paying 50% of the original registration charges.

#### 5. Functions of RLDC and NLDC

- (1) Logistics Functions includes design, operations & maintenance of but shall not be limited to the following:
  - (a) Engineering of new SCADA/EMS/WAMS/REMC upgrades
  - (b) Maintenance of SCADA/EMS/WAMS/REMC infrastructure
  - (c) Synchro- phasor technologies
  - (d) Real time software applications
  - (e) Off-line software applications
  - (f) Big Data Analytics tools
  - (g) Decision Support Systems
  - (h) IT, Networking and Communication systems including websites, Wi-Fi access systems, cyber security & other related systems
  - (i) Conference & meeting related facilities including audio-visual equipment such as video conference equipment etc.,
  - (j) Power supply system
  - (k) Fire fighting & alarm systems
  - (1) Ergonomic systems
  - (m) Public Address System
- (2) Market Operation function includes but shall not be limited to the following functions:
  - (a) Facilitating Grid Access to new entities including but not limited to first time charging of elements
  - (b) Feedback in respect of Market Design, for complementing reliability and causing economy
  - (c) Open Access Administration,
  - (d) Finalization of Inter-change schedules for energy accounting

- (e) Day Ahead Market,
- (f) Real Time Market,
- (g) Ancillary Services Market,
- (h) Interface Energy Metering.
- (3) Registry Function under REC and PAT and similar other scheme as directed by the Commission includes:
  - (i) Information dissemination.
  - (j) Any other functions assigned to the RLDCs or NLDC under the Act and/or National Load Despatch Centre Rules, 2005 ('NLDC Rules') or the regulations and orders issued by the Commission from time to time;
- (4) System Operation function includes but shall not be limited to the following functions

## a) Operational Planning

- i) Load Forecasting
- ii) RE forecasting
- iii) Fuel security assessment
- iv) Production cost optimization studies
- v) Generating outage planning
- vi) Transmission outage planning
- vii) Assessment of Transfer Capability
- viii) Reactive Power studies
  - ix) Short circuit and transient stability studies
  - x) small signal stability studies
  - xi) Electromagnetic transient studies
- xii) Mock black start drills
- xiii) Activation of back up control centre
- xiv) Preparations for special events like festivals, natural calamities like cyclone, floods etc.
- xv) Documentation of procedures (operating, restoration)

#### b) Scheduling and Despatch on day-ahead and realtime basis

- i) Day ahead security studies factoring all outages
- ii) Unit commitment
- iii) Day ahead optimization and scheduling
- iv) Shift Crew Resource Management
- v) Anticipating and mitigating congestion

- vi) Preparation for special events
- vii) Handling requests for emergency/urgent outages unforeseen in operational planning horizon

## c) Real Time Operation

- a) Frequency Control
- ii) Voltage control
- iii) Tie line loading control
- iv) Congestion management
- v) Ensuring security at all times
- vi) Ancillary Services
- vii) Balancing Services, Automatic Generation Control
- viii) Real Time Contingency Analysis
- ix) Dynamic Security Assessment
- x) Monitoring weather updates
- xi) Handling emergency outage requests
- xii) Restoration of network after tripping
- xiii) Rescheduling of generation
- xiv) Reportingof a grid disturbance (GD)/grid incident(GI)
- xv) Periodic communication with stakeholders and sensitizing in case of emergency
- xvi) De-briefing after an extreme event

#### d) After the Fact or Post Despatch Analysis:

- i) Analysis of frequency and voltage
- ii) Analysis of Grid Code violations and follow up with agencies
- iii) Analysis of Grid Events (GD/GI)
- iv) Evaluating primary response viz.computation of Frequency Response Characteristics (FRC) of individual control areas
- v) Low Frequency Oscillations (LFO) monitoring and analysis
- vi) Detailed reports of Grid Disturbances/Grid Events
- vii) Simulation of events and learnings thereof
- viii) Event replay, lessons learnt and dissemination of same
- ix) Taking up shortcomings with stakeholders
- e) Submission of Operational feed back to CEA/CTU/STU/CERC/SERC
- **f**) Information dissemination and any other function(s) assigned to the RLDCs or NLDC, as the case may be, under the Act or NLDC Rules or regulations and/or orders issued by the Commission from time to time;
- **6. Scheme** includes but shall not be limited to the following: -

- (k) Supervisory control and data acquisition (SCADA) System, Wide Area Measurement System (WAMS), Renewable Energy Management Centre (REMC), Weather Portal and other such related information systems
- (l) Computer systems, hardware and software, Cyber Security Systems, Multiple Video conferencing facilities, Voice Recording Systems
- (m) Ergonomically designed office furniture/equipment
- (n) Auxiliary power supply system comprising Uninterrupted Power Supply, Diesel Generating Set and DC power system,
- (o) Communication system including redundant communication infrastructure Satellite communication in addition to conventional systems,
- (p) Other infrastructure facilities, such as air-conditioning, fire-fighting and construction and renovation of buildings, roof-top solar units for energy efficiency etc.
- (q) Any innovative schemes R & D projects and pilot projects for better system operation, such as Synchro-phasors, System Protection Scheme,
- (r) Disaster Recovery (Main-I & Main-II) control centres for RLDCs and NLDC,
- (s) Surveillance System,
- (t) Dual redundant internet connectivity for Web Servers of LDCs
- (u) NMS (Network Management System) & Asset management tool for Network & IT Asset Monitoring
- (v) Market Management System Software
- (w) Cyber Security System infrastructure facilities such as Anti-APT (Advanced Persistent Threat) monitoring, Vulnerability Assessment for Persistent Threat (VAPT)& control Device, Local Area Network (LAN) Zone & Layer, Secure Sockets Layer (SSL) Certificate, SSL Virtual Private Network (VPN) and Security Information & Event Management(SIEM)
- (x) Infrastructure to ensure high availability of the Information Technology (IT) and Operational Technology (OT) applications:
- (y) Redundant communication links / distribution path for IT / OT equipment
  - a) Redundant site infrastructure DR
  - b) Multiple independent distribution path serving the equipment
  - c) Dual powered and fully compatible with the site topology
  - d) Cooling equipment dual powered including air-conditioning system
  - e) Fault tolerant site infrastructure with electrical power storage, standby power supply, distribution facility
  - f) Physical access security needs to be ensured for IT OT infrastructure with biometric access, CCTV surveillance, fire alarm and firefighting system.
- (z) Additional infrastructure facilities like 'Digital Signature', 'Instant Messaging for

- Business', 'Centralized Patch Management and Antivirus server', 'Syslog Server' and 'Enterprise class Backup and replication software' etc.
- (aa) Future Technologies like Cloud Computing (e.g. PaaS (Platform as a Service), SaaS (Software as a Service) and DaaS (Desktop as a Service) are available on Public Cloud, Private Cloud and Hybrid Cloud), Big Data Analytics tools and Advanced data visualization tool (with GIS interfacing) etc.
- (bb) Ergonomically designed office equipment

## 7. Users specifications

- (1) A generating station or unit whose scheduling, metering and energy accounting is carried out separately for each stage or unit, such generating station or stage or unit shall be considered as a user for the purpose of sharing of Annual LDC Charges (ALC) in accordance with Regulation 25 of these Regulations and for payment of registration fees in accordance with Regulation 23 of these Regulations;
- (2) In case of inter-State transmission licensees, each region where the licensee has the operation shall be considered as a user for the purpose of these Regulations;
- (3) Where the inter-State transmission system is having cross-border international connections, the agency designated by Government of India for coordinating the scheduling, metering and energy accounting for the transaction carried out for import and export of power through the said transmission system shall be considered as a user for the purpose of these Regulations;
- (4) Where any cross border generating station is connected to the inter-State transmission system of the Indian Grid and is injecting power through medium and/or long term PPA, the agency designated by Government of India for coordinating the scheduling, metering and energy accounting for the transaction carried out for import or export of power through the said transmission system shall be considered as a user for the purpose of these Regulations;
- (5) Sardar Sarovar Project (SSP), DVC and Bhakra Beas Management Board (BBMB), whose scheduling, metering and energy accounting is carried out by the concerned RLDCs, shall be considered as users of the respective Regional Load Despatch Centres for the purpose of this Regulation;
- (6) Distribution licensee selling power through LTA or MTOA and using transmission system shall be considered as a user under the category "Seller" for the purpose of these Regulations;
- (7) Any other entity which may use services of the RLDCs and NLDC from time to time;

### 8. Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX) Plan:

- (1) The RLDCs and NLDC shall formulate the scheme for Capital Expenditure (CAPEX) and Replacement Expenditure (REPEX) for the control period duly approved by the Board of Directors of Power System Operation Corporation Limited. The CAPEX and REPEX plan shall also include future costs to be incurred for the up-gradation, modernization, automation and expansion of infrastructure in addition to existing capital assets.
- (2) The concerned RLDCs or NLDC as the case may be shall submit the following along with the petition for determination of fees and charges:
  - a) the CAPEX for the control period along with details of estimated expenses, and estimated completion period of each scheme;
  - b) the REPEX plan for capital expenditure of existing asset, completion of life of existing asset, cumulative depreciation recovered, date of replacement, cumulative repayment of loan upto date of replacement, writing off of the gross value of the original assets from the original fixed assets along with estimated expenses and estimated completion period of each scheme.
  - (3) In relation to any consolidated schemes of CAPEX and REPEX involving one or more RLDCs and/or NLDC, the capital expenditure chargeable to each RLDC and NLDC shall be segregated and considered as a part of capital expenditure of RLDC concerned and NLDC, as the case may be .

## 9. OPEX Plan

RLDCs and NLDC shall identify the services to be engaged under OPEX and shall submit, along with the petition for determination of Fees and Charges, an year wise OPEX plan duly approved by the Board of Directors of POSOCO.

#### **DETERMINATION OF FEES AND CHARGES**

## 10. Application for determination of fees and charges

- (1) The RLDCs and NLDC shall make application in the formats annexed as **Appendix-I** to these Regulations within 180 days from the date of notification of these Regulations, for determination of fees and charges for the control period, based on the capital expenditure incurred and duly certified by the auditor as on 1.4.2019 and projected to be incurred during the control period based on CAPEX, OPEX, REPEX and other expenditures viz. Human Resource expense, Operation & Maintenance, Interest on working capital etc.
- (2) The application shall contain particulars such as source of funds, equipment proposed to be replaced, details of assets written off, and details of assets to be capitalized etc.
- (3) Before making the application, the concerned RLDC or NLDC, as the case may be, shall serve a copy of the application on the users and submit proof of service along with the application. The concerned RLDC or NLDC shall also keep the complete application posted on its website till the disposal of its petition.
- (4) The concerned RLDC or NLDC, as the case may be, shall within 7 days after making the application, publish a notice of the application in at least two daily newspapers, one in English language and one in another Indian language, having circulation in each of the States or Union Territories where the users are situated, in the same language as of the daily newspaper in which the notice of the application is published, in the formats given in **Appendix-II** to these regulations. The RLDC or NLDC as the case may be will recover such expenditure on publication of notice of the application from the Users, as one-time expenditure.
- (5) The concerned RLDC or NLDC, as the case may be, shall be allowed the fees and charges by the Commission based on the capital expenditure incurred as on 1.4.2019 and projected to be incurred during control period on the basis of CAPEX and REPEX duly certified by the auditor in accordance with these Regulations:

Provided that the application shall contain details of underlying assumptions and justification for the capital expenditure incurred and the expenditure proposed to be incurred in accordance with the CAPEX and REPEX.

(6) If the application is inadequate in any respect as required under **Appendix-I** of these regulations, the application shall be returned back to the concerned RLDC or NLDC for resubmission after rectifying the deficiencies as may be pointed out by the Commission.

- (7) The Commission shall consider the suggestions and objections, if any, received from the respondents and any other person including the consumers or consumer associations. The Commission shall issue order determining the fees and charges after hearing the petitioner, the respondents and any other person permitted by the Commission.
- (8) During pendency of the application, the applicant shall continue to bill the users on the basis of fees and charges approved by the Commission during previous control period and applicable as on 31.3.2019, for the period starting from 1.4.2019 till approval of the Fees and Charges by the Commission, in accordance with these Regulations. This shall be subject to true up as approved by the Commission for the Control Period 2019-2024.
- (9) After expiry of the control period, the applicant shall continue to bill the users provisionally on the basis of fees and charges approved by the Commission and applicable as on 31.3.2024 for the period starting from 1.4.2024 till approval of fees and charges under the applicable regulations.

## 11. Determination of Fees and Charges

The Fees and Charges shall be determined separately for each of the Regional Load Despatch Centres and National Load Despatch Centre;

Provided that the annual charges of NLDC including corporate office expenses for the control period shall be apportioned among Regional Load Despatch Centres on the basis of the peak met (in MW) in the respective region as indicated on CEA's website for the preceding year

### 12. Prudence Check of Capital Expenditure

The principles adopted for prudence check of capital cost shall be reasonableness of capital cost, financing plan, interest during construction, use of efficient technology, upgradability/ scalability of the technology and systems to accommodate the growing requirement of system operation, cost overrun and time over-run, procurement of equipment and materials through competitive bidding and such other matters as may be considered appropriate by the Commission for determination of fees and charges

Provided that, while carrying out the prudence check, the Commission shall also examine whether the RLDCs or NLDC, as the case may be, has been careful in its judgments and decisions in execution of the project.

## 13. Truing up of Annual Charges

(1) The RLDCs and NLDC shall make an application, in the formats annexed as Appendix-I

- to these regulations by 31.10.2024, for carrying out truing up exercise after end of the control period.
- (2) The RLDCs and NLDC shall submit, along with the application for truing up, details of capital expenditure including additional capital expenditure, sources of financing, human resource expenditure, operation and maintenance expenditure etc. incurred for the period from 1.4.2019 to 31.3.2024, duly audited and certified by the auditor.
- (3) The Commission shall carry out truing up exercise along with the application for determination of fees and charges for the next control period based on the capital expenditure including additional capital expenditure incurred up to 31.3.2024 and as admitted by the Commission after prudence check at the time of truing up:

Provided that each of the Regional Load Despatch Centre or National Load Despatch Centre, as the case may be, shall carry out annual reconciliation and provisional truing up of expenditure based on the capital expenditure including additional capital expenditure up to 31<sup>st</sup> March of each financial year of the control period and refund the additional recovery of fees and charges to the users by 30<sup>th</sup> September of the following year.

Provided that the RLDC or NLDC, as the case may be, shall carry out mid-term review of its expenses once within the control period, if the same is felt necessary in view of the emergent situation such as pay revision, significant deviation w.r.t. approved CAPEX or REPEX or any other unforeseen requirement, and may file the True-up Petition before the Commission, not before two years from the date of commencement of these Regulations.

(4) The amount under-recovered or over-recovered by each of the Regional Load Despatch Centres or National Load Despatch Centre, as the case may be, along with simple interest at the rate equal to the bank rate as on 1<sup>st</sup> April of the respective year, shall be recovered or refunded by the respective RLDCs or NLDC or users, as the case may be, in six equal monthly installments.

#### COMPUTATION OF CAPITAL COST AND ADDITIONAL CAPITALISATION

## 14. Computation of Capital Cost

- (1) The capital cost as admitted by the Commission after prudence check, for each of the Regional Load Despatch Centres or NLDC, as the case may be, shall form the basis for determination of annual charges.
- (2) The capital cost shall be computed by considering the following:
  - i) The Capital cost as admitted by the Commission as on 01.04.2019 duly trued up by excluding liability, if any;
  - ii) Expenditure on account of additional capitalization determined in accordance with the Regulation 15 (1);
  - iii) The fixed assets which have been replaced during control period shall be de-capitalized in accordance with Regulation 15 (2);
  - iv) Interest during construction and incidental expenditure during construction;
  - v) Any grant received from the Central or State Government or any statutory body or authority for execution of the project which does not carry any liability of repayment shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation;
- (3) The Capital cost shall be admitted after prudence check which may include scrutiny of the reasonableness of the capital expenditure, financing plan, Interest During Construction (IDC), Incidental Expenditure During Construction (IEDC), financing charges, any gain or loss on account of Foreign Exchange Rate Variation (FERV), cost over-run and time over-run and such other matters as may be considered appropriate by the Commission:

Provided that interest during construction shall be computed corresponding to the loan from the date of infusion of debt fund, and after taking into account the prudent phasing of funds duly adjusting IDC on account of time overrun if any;

Provided further that incidental expenditure during construction shall be computed after prudence check duly adjusting the IEDC on account of time over run, if any, interest on deposits or advances, or any other receipts and liquidated damages recovered or recoverable corresponding to the delay.

### 15. Additional Capitalization and De-Capitalization

- (1) The capital expenditure incurred or projected to be incurred for the assets already in service and the additional assets projected to be procured during tariff period may be admitted, by the Commission, subject to prudence check.
- (2) In case of de-capitalization of assets under the REPEX or otherwise, the original cost of such

asset as on the date of de-capitalization shall be deducted from the value of gross fixed asset along with corresponding adjustment in equity, outstanding loan, cumulative repayment of loan and depreciation in the year such de-capitalization takes place.

## 16. Debt-Equity Ratio

- (1) The actual debt equity ratio as admitted by the Commission for the period ending 31.3.2019 shall be considered for the opening capital cost of the Regional Load Despatch Centres and National Load Despatch Centre for the next control period:
- (2) The capital expenditure incurred prior to 1.4.2019, where debt-equity ratio has not been determined by the Commission for determination of annual charges of RLDC for the period ending 31.3.2019, the Commission shall determine the debt: equity ratio in accordance with Regulation 11(3) of the Central Electricity Regulatory Commission (Fees and Charges for Regional Load Despatch Centres and other related matters) Regulations 2015:
- (3) For the capital expenditure incurred or projected to be incurred on or after 1.4.2019, the debt-equity ratio shall be considered as 70:30. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan: Provided that:
  - i. Where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of Return on Equity;
  - ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment;
  - iii. Any grant, other than LDC development Fund obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt equity ratio.

**Explanation:** The premium, if any, raised by the Power System Operation Corporation Limited while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilized for meeting the capital expenditure of the RLDC.

### FEES AND CHARGES STRUCTURE

- 17. Components of RLDC Fees and Charges: The RLDC Fees and Charges shall comprise Regional Load Despatch Centre Fees to be recoverable by Power System Operation Corporation Limited towards registration for commencement of grid access and scheduling and annual charges to be collected in the form of Annual LDC Charges from users.
- 18. Annual LDC Charges (ALC): The annual LDC charges shall correspond to the expenditure proposed to be incurred by the RLDCs or NLDC and as approved by Commission. The annual LDC charges (ALC) as approved by the Commission shall be recovered on monthly basis. The annual charges shall consist of the following components, namely:
  - (a) Return on equity;
  - (b) Interest on loan capital;
  - (c) Depreciation;
  - (d) Operation and maintenance (excluding human resource) expenses including:
    - Administrative and General Expenses (excluding HRD expenses);
    - Repair and Maintenance Expenses;
  - (e) OPEX
  - (f) Human resource (HR) expenses including Human Resource Development (HRD) expenses;
  - (g) NLDC and Corporate office expenses
  - (h) Interest on working capital;

## COMPUTATION OF ANNUAL LDC CHARGES (ALC)

### 19. Return on Equity

- (1) Return on equity shall be computed in Rupee terms on the equity base determined in accordance with Regulation 16 of these regulations.
- (2) Return on equity shall be computed on pre-tax base rate of 15.50% to be grossed up as per the sub-clause (3) of this Regulation.
- (3) The rate of return on equity shall be computed by grossing up the base rate with the effective tax rate of the respective financial year based on relevant Finance Act.
- (4) Return on equity with respect to the actual tax rate applicable to the Power System Operation Corporation Limited in line with the provisions of the relevant Finance Acts of the respective year during control period shall be trued up at the end of the control period.
- (5) Rate of return on equity shall be rounded off to three decimal points and be computed as per the following formula:

Rate of pre-tax return on equity = Base rate/(1-t)

Where 't' is the effective tax rate in accordance with sub-clause (3) and regulation 3(15).

### 20. Interest on Loan Capital

- (1) The loan determined in accordance with Regulation 16 shall be considered as gross normative loan for calculation of interest on loan.
- (2) The normative loan outstanding as on 01.04.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission upto 31.03. 2019 from the gross normative loan.
- (3) The repayment for respective year of the control period shall be deemed to be equal to the depreciation allowed for that year. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro-rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalization of such asset.
- (4) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the respective Regional Load Despatch Centre:

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

Provided further that if any of the Regional Load Despatch Centre does not have actual loan, then the weighted average rate of interest on the loan of Power System Operation Corporation Limited as a whole shall be considered.

- (5) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (6) The Power System Operation Corporation Limited 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 users and the net savings shall be shared between the users and the Power System Operation Corporation Limited in the ratio of 50:50. The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

Provided that the users shall not withhold any payment on account of the interest claimed by the users and the Power System Operation Corporation Limited during the pendency of any dispute arising out of re-financing of loan.

## 21. Depreciation

- (1) The value base for the purpose of depreciation shall be the capital cost of the assets admitted by the Commission.
- (2) The salvage value of the asset (excluding IT equipment and Software) shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. The salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered as depreciable.
- (3) Land shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the capital cost of the asset.
- (4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the Regional Load Despatch Centre.
- (5) Assets fully depreciated shall be shown separately.
- (6) Value of the assets not in use or declared obsolete shall be taken out from the capital cost for the purpose of calculation of depreciation.
- (7) The balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation from the gross depreciable value of the assets appearing in the books of accounts of the Power System Operation Corporation Limited for the respective Regional Load Despatch Centre and National Load Despatch Centre.
- (8) In case of de-capitalization of assets in respect of concerned RLDC, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful life.

#### 22. Operation and Maintenance Expenses

(1) Operation and maintenance(O&M) expenses (excluding human resource expenses) shall be derived on the basis of actual operation and maintenance expenses for the years 2014-15 to 2018-19, based on the audited balance sheets. The O&M expenses shall be normalized by

- excluding abnormal operation and maintenance expenses, donation, loss-in-inventory, priorperiod adjustments, claims and advances written-off, provisions, etc., if any, after prudence check by the Commission
- The normalized operation and maintenance expenses, after prudence check, for the years 2014-15 to 2018-19, shall be escalated at the rate of 3.2% to arrive at the normalized operation and maintenance expenses at the 2018-19 price level respectively and then averaged to arrive at normalized average operation and maintenance expenses for the 2014-15 to 2018-19 at 2018-19 price level. The average normalized operation and maintenance expenses of 2018-19 price level shall be escalated at the escalation rate as worked out in accordance with clause(4) of this Regulation to arrive the operation and maintenance expenses for the year 2019-20.
- (3) The operation and maintenance expenses for the year 2019-20 shall be escalated further at the annual escalation rate as worked out in accordance with clause (4) this Regulation to arrive at permissible operation and maintenance expenses for the subsequent years of the control period.
- (4) The escalation rate shall be worked out by considering the compounded annual growth rate, inflation rate, rationalization of O&M expenses and other factors, if any.
- (5) The actual expenditure towards Annual Maintenance Contract (AMC) of SCADA system and other Software/Hardware like REMC, National Open Access Registry (NOAR), web based scheduling software etc. involving significant expenditure, after prudence check, shall be considered for arriving at the Operation and Maintenance Expenses during 2019-20 to 2023-24.

### 23. Operational Expenditure (OPEX)

OPEX shall include services like Cloud Computing, Data Storage, Data Centre, Big Data Analytics tools, Advanced data visualization tool (with GIS interfacing), Satellite Services, Weather Data Services, WebNetUse, Forecasting Services, Licensee Fee for software etc. Actual expenditure towards engaging of services under OPEX shall be considered, after prudence check during 2019-20 to 2023-24.

## 24. Human Resource Expenses

- (1) Human resource expenses shall be derived on the basis of actual human resource expenses for the years 2017-18 to 2018-19 based on the audited balance sheets. The human resource expenses shall be normalized by excluding abnormal Human resource expenses, ex-gratia, VRS expenses, prior-period adjustments, claims and advances written-off, provisions, etc., if any, after prudence check by the Commission:
- (2) The expenses towards payment of Certificate Retainer-ship amount would be a part of the Human Resource Expenses.
- (3) Performance related pay computed in accordance with DPE /other applicable guidelines shall

be met from the incentive allowed in accordance with Regulation 32 of these Regulations.

Provided that in case of any surplus in the incentive collected as per provisions of Regulation 32 after payment of performance related pay in accordance with DPE guidelines, such surplus amount shall be maintained separately to be used in subsequent years in case of shortfall of funds for payment of performance related pay as per DPE guidelines.

Provided further that in case shortfall in the funds as per Regulation 32 for distribution of performance related pay in accordance with DPE guidelines still persists, the shortfall shall be met from the LDC development Fund.

- (4) The normalized human resource expenses, after prudence check, for the year 2017-18 to 2018-19, shall be escalated at the rate of 5.72% to arrive at the normalized human resource expenses at the 2018-19 price level respectively and then averaged to arrive at normalized average human resource expenses for the 2017-18 to 2018-19 at 2018-19 price level.
- (5) The manpower approved during the year 2018-19 shall be the basis for computation of the HR expenses for 2019-20. Thereafter, for the subsequent years, the HR expenses shall be escalated at the annual escalation rate.
- (6) The average normalized human resource expenses of 2018-19 price level shall be escalated at the escalation rate as worked out in accordance with clause (8) of this Regulation to arrive the HR expenses for the year 2019-20.
- (7) The human resource expenses for the year 2019-20 shall be escalated further at the annual escalation rate as worked out in accordance with clause (8) this Regulation to arrive at permissible human resource expenses for the subsequent years of the control period:
- (8) The escalation rate shall be worked out by considering the compound annual growth rate, inflation rate, rationalization of human resource and other factors, if any.
- (9) The cost of anticipated increase in the manpower of each year of the control period shall also be considered after prudence check. The strength of manpower required for effective functioning of LDC will be as approved by the Commission while specifying the fees and charges.
- (10) Human Resource Development (HRD) expenses, incurred by the NLDC or RLDCS shall be a part of HR Expenses from FY 2019-20 onwards. In addition to the capacity building of the employees of NLDC or RLDCs, capacity building workshops and training programs organized for other stakeholders will also form part of the HRD expenses. Projected annual HRD expenses will be at least 5% of the HR expenses arrived based on the methodology defined above. However, if the actual utilization towards HRD expenditure exceeds the 5% of HR expenses of any year, it shall be allowed at the time of truing up by the Commission after prudence check. In case of less than 5% utilization, it shall be refunded at the time of annual truing up. All efforts shall be made to ensure that minimum seven days training per employee per annum is imparted as per the National Training Policy.

## 25. Interest on Working Capital

- (1) The working capital shall cover:
  - (i) Operation and maintenance expenses (excluding human resource expenses) for one month;
  - (ii) Human resource expenses including Human Resource Development Expenses for one month;
  - (iii) NLDC charges for one month; and
  - (iv) Receivables equivalent to 45 days of annual charges as approved by the Commission.
- (2) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 as per tariff Regulations.
- (3) Interest on working capital shall be payable on normative basis not withstanding that the Power System Operation Corporation Limited has not taken any loan for working capital from any outside agency.

## 26. NLDC Charges and Corporate Office) Expenses

- (1) To the extent applicable, NLDC charges shall be computed by following the methodology specified for computing annual charges of Regional Load Despatch Centres except interest on working capital.
- (2) The Corporate Office Expenses, computed in accordance with the actual expenses incurred, shall be allowed by the Commission, after prudence check.
- (3) The expenditure towards running the FOLD Secretariat computed in accordance with the actual expenses incurred, shall be allowed by the Commission, after prudence check.
- (4) All expenses of NLDC and Corporate Office expenses approved by the Commission shall be apportioned to the Regional Load Despatch Centre on the basis of the peak met (in MW) in the respective region as indicated in CEA's website for the preceding year.

#### LDC DEVELOPMENT FUND

## 27. LDC Development Fund

- (1) The Power System Operation Company shall create and maintain a separate fund called 'Load Despatch Centre Development Fund' ('LDCD Fund') for administering capital expenditure.
- (2) The charges on account of return on equity, interest on loan, depreciation of the RLDCs and NLDC including the registration fees and interest earned on LDCD Fund shall be deposited into the LDCD Fund after meeting the statutory tax requirements:
  - Provided that short term open access charges and other income of the RLDCs and NLDC, if any, shall not form part of the LDCD Fund and will be deposited to a separate account namely Contingency Reserve as per regulation -28 of these Regulations.
- (3) The RLDC and NLDC shall be entitled to utilize the money deposited in the LDCD Fund for creation of new assets, loan repayment, servicing the capital raised in the form of interest and dividend payment restricted to 15.50% of paid up Capital, meeting stipulated equity portion in asset creation, margin money for raising loan from the financial institutions, Corporate Social Responsibility and Sustainability Activities in compliance of the applicable provisions of the Companies Act and Dept. of Public Enterprises (DPE) / other applicable Government Guidelines issued and amended from time to time, Capacity Building of SLDCc and sub-LDC personnel and other users / stake holders, including but not limited to using the platform of Forum of Load Despatchers (FOLD) and/or through Institutes of national/international repute for capacity building, funding participation in national/international conferences and publication of technical papers there-in, facilitating higher education, availing institutional membership with national/international bodies and funding of Research & Development (R & D) projects, hiring consultancy service for learning & implementation of new technology & market products etc. subject to approval of the Commission.
- (4) LDCs shall ensure timely payment of fees like membership fee or any other recurring or non-recurring expenditure related to participation in the activities of the FOLD from the LDCD Fund. NLDC shall deposit such fees to the LDCD Fund after meeting the expenses on FOLD activities, if any.
- (5) Any shortfall in meeting the revenue expenditure including HR expenses shall be met from LDCD Fund. For this purpose, Load Despatch Centre shall be entitled to take interest free advance from LDCD Fund which shall be recouped from the expenditure allowed by the Commission under the respective heads at the time of truing up to be carried out after the expiry of the control period 2019-24.

- (6) Any asset created by the POSOCO out of the money deposited into the LDCD Fund shall be considered for computation of depreciation as per the rates specified in these Regulations. If required, POSOCO may finance capital assets partly from the equity and partly from LDCD Fund. As such, if the capital project is partly financed from equity share capital, it shall be considered for computation of return on equity, in which case, the funding shall be considered in a normative debt equity ratio of 70:30 with the interest on loan component as NIL and the treatment of equity as per regulation 16(2) of these Regulations. Load Despatch Centre shall submit details of such assets in the CAPEX plan.
- POSOCO shall submit the amount accumulated in LDCD Fund along with the break-up of sources from where the Fund is received. The POSOCO shall submit to the Commission at the end of every year, a report, along with an auditor's certificate, on utilization of LDCD Fund during the previous year. The report shall, inter alia, contain the details of the quantum of utilized as well as un-utilized portions of the LDCD Fund. The Commission may, if necessary, issue directives to the RLDCs and NLDC for effective utilization of LDCD Fund. For financing of capital assets during 2019-24, money utilized from LDCD Fund shall be treated as interest free advance to be refunded to the Reserve.

## 28. Contingency Reserve

- (1) The RLDCs and NLDC shall maintain a separate account namely Contingency Reserve for depositing other income like short term open access charges, REC charges, PAT Charges and any other income (if any) etc.
- (2) The RLDCs and NLDC shall use such income to meet the short fall, if any, in the annual charges allowed by the Commission or to meet the contingency expenses which were not foreseen at the time of making the application for fees and charges and are considered necessary for the efficient power system operation.
- (3) The balance amount shall be deposited into the LDCD Fund after meeting the statutory tax requirements.
- (4) There may be some requirements for which funds available under the contingency expenses are not enough to meet the unforeseen requirements. Such shortfall may be met from the LDCD Fund.

# CHAPTER-8 COMPUTATION AND RECOVERY OF FEES AND CHARGES

- **29. Registration Fees:** The fees shall be payable by the users including power exchanges and electricity traders before commencement of grid access and scheduling. The fees payable are as under:
  - (1) The distribution licensees and inter State transmission licensees shall pay non-refundable one-time registration fees of Rs.10 Lakh along with application for commencement of grid access:

Provided that the RLDCs concerned shall be intimated from time to time by the inter State transmission licensees about the additions of transmission elements synchronized with the grid and by the distribution licensees about the additional capacity tied up for the purpose of updating the record by concerned RLDC.

- (2) The generating companies shall pay registration fees as under:
  - a) For generating station upto 10 MW installed capacity: Rs .0.50 Lakh;
  - b) Generating stations having installed capacity of not less than 10 MW and upto 100 MW: Rs. 1.0 Lakh;
  - c) Generating stations having installed capacity of not less than 100 MW and upto 2000 MW: Rs. 5.0 Lakh;
  - d) Generating stations having capacity of 2000 MW and above: Rs.10.0 Lakh, and;
  - e) Provided that the entire capacity of the generating station or stage there of whose scheduling, metering and energy accounting is done separately shall be considered for the purpose of registration fees at the time of the initial registration;
  - f) Provided further that the generating companies shall intimate RLDCs concerned about the additional capacity commissioned by the generating station or a stage thereof.
- (3) The inter-State trading licensees, sellers and buyers shall pay one time registration fees of Rs. 10,000.00 (Rupees Ten Thousands only) along with application for commencement of scheduling for market operation.
- (4) The Power exchanges shall pay Rs.20.0 Lakh (Rupees Twenty Lakh only) as one time registration fees to NLDC
- (5) All other users as defined in 3(38) of these regulations shall be liable to pay one time registration fees of Rs. 10,000 (Rupees Ten Thousand only) along with the application (ref. Appendix-IV) for commencement of grid access.
- 30. Monthly LDC Charges: The monthly LDC charges shall be calculated for the inter-State

transmission licensees, generating stations and sellers, distribution licensees and buyers as under:

- (a) The LDC Charges for inter-State transmission licensees shall be determined on the basis of (1/3) of approved annual charges and shall be worked out on the basis of the circuit kilometers (ckt-km) of the lines owned by inter-State transmission licensees;
- (b) The LDC Charges for the inter-State Generating station and sellers shall be determined on the basis of (1/3) of annual LDC charges and shall be worked out on the basis of installed capacity in case of the generating station and long term and / or medium term contracted capacity in case of sellers;
- (c) The LDC Charges for the distribution licensees and buyers shall be determined on the basis of (1/3) of annual charges and shall be worked out on the basis of sum of aggregate allocated capacity and / or contracted capacities in case of distribution licensee including deemed distribution licensees and sum of long term and / or medium term contracted capacity in case of buyer.

## 31. Computation and Payment of LDC Charges:

(1) The rates of LDC charges for inter-State transmission licensee shall be computed on annual basis and recovered on monthly basis in accordance with following formula;

Monthly LDC Charge rate (for Transmission Licensee) =

(1/3) [ALC/ (Ckt\_Km)]/12 in Rs./Kilometer

Where,

ALC = Approved Annual LDC Charges in accordance with Chapters 5 & 6;

Ckt\_Km = Length of aggregate inter-State transmission lines as on last day of the month prior to the month of billing (rounded off to the nearest two decimals);

- (2) Monthly LDC charges for individual transmission licensee shall be computed on the basis of rates determined above and the length (in Ckt\_ Km) of transmission lines owned and operated by the respective transmission licensee(s).
- (3) The rates of LDC charges for generating companies and sellers shall be computed on annual basis and recovered on monthly basis in accordance with following formula:

Monthly LDC Charge rate (for Generation or seller) =

(1/3) (ALC/ (Capacity)) / 12 in Rs. / MW

Where,

ALC = Approved Annual LDC Charges in accordance with Chapters 5 & 6;

Capacity=Aggregate Installed capacity (in MW) of generating stations and contracted capacity (in MW) of the sellers (rounded off to the nearest two decimals) whose scheduling and energy accounting is covered under concerned RLDC as on last day of the month prior to the month of billing;

- (4) The monthly LDC charges for generating companies or sellers shall be computed on the basis of rates determined above and respective 'capacity' (MW) of the generating station or seller.
- (5) The rates of LDC charges for distribution licensee and buyers shall be computed on annual basis and recovered monthly after taking into account aggregate contracted capacity in accordance with following formula:

Monthly LDC Charge rate (for Distribution Licensee or buyer) = (1/3) (ALC/ (Capacity))/12 in Rs./ MW

#### Where,

ALC = Approved Annual LDC Charges in accordance with Chapters 5 & 6;

Capacity = Aggregate long term or medium term contracted capacity by distribution licensees and buyers (rounded off to the nearest two decimal) whose scheduling and accounting is covered under concerned RLDC as on last day of the month prior to the month of billing;

- (6) Monthly LDC charges from distribution licensees and buyers shall be collected in proportion to the sum of their allocations and contracted capacities, as the case may be, as on the last day of the month prior to billing of the month.
- (7) All other users having NIL contracted capacity (LTA & MTOA) shall be billed monthly ALC charge on the basis of a minimum capacity for which an entity is eligible for grant of connectivity to Inter-State transmission system as per the CERC Connectivity Regulations 2009.
- (8) The respective State Load Despatch Centre (SLDC) shall be the nodal agency for collection of monthly LDC charges payable to the concerned Regional Load Despatch Centre (RLDC), from the distribution licensees and other RLDC users in the State. After collecting the monthly LDC charge the concerned SLDC shall deposit the same into the account of the concerned RLDC. The RLDC users in the state shall have to option to make direct payment of monthly RLDC **Charges** into the account of concerned RLDCs or they may choose to pay the same through the respective SLDCs.

#### PERFORMANCE LINKED INCENTIVE

#### 32. Performance linked incentive to RLDCs and NLDC

- (1) Recovery of incentive by the Regional Load Despatch Centre shall be based on the achievement of the Key Performance Indicators (KPIs) as specified in **Appendix-V** or such other parameters as may be prescribed by the Commission.
- (2) Each Regional Load Despatch Centre shall submit its actual performance against each of the key performance indicators to the Commission on annual basis as per the format specified in **Appendix-V**.
- (3) NLDC shall submit the details in regards to each Key Performance Indicator in the format specified in **Appendix-V** along with the methodology for approval of the Commission.
- (4) The Commission shall evaluate the overall performance of the RLDCs or NLDC, as the case may be, on the basis of weightage specified in **Appendix-V**. The Commission, if required, may seek advice of the Central Electricity Authority for evaluation of the performance of RLDCs or NLDC.
- (5) The RLDCs or NLDC, as the case may be, shall be allowed to recover incentive of 15% of Annual LDC Charges for aggregate performance level of 85%. The incentive shall increase by 1% on pro-rata basis for every 5% increase of performance level above 85%: The incentive shall be capped as per DPE Office Memorandum No. W-02/0028/2017-DPE (WC)-GL-XIII/ 17 dated 3.8.2017.
  - Provided that incentive shall be reduced by 1% on pro-rata basis for the every 3% decrease in performance level below 85%.
- (6) The RLDCs or NLDC, as the case may be, shall compute the Key Performance Indicators on annual basis for the previous year ending on 31<sup>st</sup> March and submit to the Commission along with petitions for approval of the Commission as per **Appendix-VI** of these Regulations:
- (7) The key performance indicators of previous year ending on 31<sup>st</sup> March shall be considered to recover incentive on each year and shall be trued up at the end of the control period.

## 33. Certification Retainer-ship Amount to the employees of RLDCs and NLDC

(1) The employees of Regional Load Despatch Centres and National Load Despatch Centre and State Load dispatch Centres who acquire the certificate of basic level, specialist level and management level in their respective areas of specialization shall be allowed a fixed retainer-ship amount during the validity of such certificate period as per the following parameters:

SI. No.	Certification Level	Retainer-ship amount(in Rs. Per Month)
1	Basic	7500
2	Specialist	10000
3	Management	12000

- (2) A person acquiring one basic level and more than one Specialist and/or Management level certificate shall be entitled for maximum retainer ship amount capped at the higher applicable slab. For example, a person having both basic and specialist certificates shall be entitled for a maximum retainer-ship amount of Rs. 10,000/- per month. Similarly, a person having all three levels of certificates shall be entitled for a maximum retainer-ship amount of Rs. 12,000/- per month.
- (3) Funding will be done from the LDCD Fund for (i) payment of registration and / or application fees for appearing in basic, specialist and management level examinations, (ii) payment towards training expenses for these examinations, (iii) payment of certification retainer-ship amount to the certified LDC personnel.
- (4) Certificate Retainer-ship Amount shall be in addition to the performance linked incentive specified in Regulation 32.

#### BILLING AND OTHER MISCELLANEOUS PROVISIONS

## 34. Billing and Payment of charges

- (1) Bills shall be raised for the LDC charge on monthly basis by the Power System Operation Company in accordance with these regulations, and payments shall be made by the users directly to the Power System Operation Corporation Limited.
- (2) Persistent default in payment of RLDCs/NLDC fee and charges shall be brought to the notice of the Commission.
- 35. Late payment surcharge: In case the payment of any bill for charges payable under these regulations is delayed by a user beyond a period of 45 days from the date of billing, a late payment surcharge at the rate of 1.25% per month shall be levied from the users.
- **36.** Recovery of cost of hedging or Foreign Exchange Rate Variation: Recovery of cost of hedging or foreign exchange rate variation shall be made directly by the RLDCs from the users without making any application before the Commission:

Provided that in case of any objections by users regarding the cost of hedging or foreign exchange rate variation, the RLDCs may make an appropriate application before the Commission for decision.

## 37. Rebate

- (1) A rebate of 2% shall be allowed by the RLDCs or NLDC on gross bill amount settled through RTGS, NEFT, Letter of Credit or cheque up to seventh day (i.e. T+6 day) from the date of issuance of the bills, where T is the date of issuance of the bill.
- (2) The rebate of 1% shall be allowed when payment is made from T+7 to T+30 days from issuance of the bill.
- (3) No rebate shall be allowed for payment made from T+31 days till T+45 days from the date of issuance of the bill.
- **38. Dispute Resolution:** In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re- enactment thereof, for settlement of the dispute.
- 39. Power to Relax: The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by NLDC or RLDCs or Users after giving reasonable opportunity to those likely to be affected by such

relaxation.

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

(Sanoj Kumar Jha) Secretary

## **APPENDIX**

## TARIFF FILING FORMS (NLDC/RLDCs)

**INDEX** 

## Checklist of Forms and other information/ documents for tariff filing for NLDC/RLDCs

Form No.	Tariff Filing Formats (RLDCs)	Tick
FORM-1	Summary Sheet	
FORM-2	Calculations for Return on Equity	
FORM-3A	Financial Package	
FORM-3B	Statement of Capital Costcost	
FORM-3C	Financing of Additional Capitalization	
FORM-4A	Calculation of Interest on Normative Loan	
FORM-4B	Calculation of Weighted Average Rate of Interest on Actual Loans	
FORM-4C	Details of Foreign Loans	
Form-4D	Details of allocation of Corporate loans to various RLDCs	
FORM-5A	Statement of Depreciation	
FORM-5B	Calculation of depreciation rate	
FORM-6A	Details of Operation and Maintenance Expense excluding Human Resource Expenses	
FORM-6B	Details of Human Resource Expenses	
FORM-6C	Details of Repairs and Maintenance Expenses	
FORM-6D	Details of Administrative and General expenses	
FORM-7	Details of Operational Expenditure (OPEX)	
FORM-8	Interest on Working Capital	
FORM-9	Year wise statement of LDC Development Fund (projected)	
FORM-10	Other Income	

Sl. No.	Information/Document	Tick
1	Audited Balance Sheet and Profit & Loss Accounts with all the Schedules & Annexure for RLDC /NLDC and Corporate office.	
2	Copies of relevant loan Agreements	
3	<ul> <li>a) Copies of the approval of Competent Authority for the Capital Cost and Financial package.</li> <li>b) CAPEX and REPEX plan along with Board approval, estimated capital cost and justification</li> </ul>	
4	<ul> <li>a) Copies of the Equity participation agreements and necessary approval for the foreign equity, if any.</li> <li>b) Equity contribution from LDC Development Fund along with Board Approval</li> </ul>	
5	Any other relevant information, (Please specify)	

**Note1.**Electronic copy of the petition (in words format) and detailed calculation as per these formats (in excel format) and any other information submitted shall also be furnished in the electronic form.

## **Summary Sheet**

Name of the NLDC/RLDCs: _	
<del>-</del>	·

(Rs. In lakh)

S.N.	Particulars	Form No.	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2		3	4	5	6	7	8
1	Return on Equity 1							
2	Interest on Loan Capital							
3	Depreciation							
4	O&M Expenses excluding human resource expenses							
5	Human resource expenses including HRD							
6	OPEX							
7	NLDC*/RLD Ccharges and Corporate office expenses (as applicable)							
8	Interest on Working Capital							
	Total							

<sup>&</sup>lt;sup>1</sup> Details of calculations, considering equity as per regulation, to be furnished.

Petitioner

<sup>\*</sup>NLDC charge & corporate office expense applicable for RLDCs

	Calculations	for return	on equity				
Name of NLDC / RLDCs :		Regional	Load Despat	ch Centre			
				Year endi	ng March		
Particulars	Unit	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7	8
Base rate of Return on Equity	%						
Tax Rate	%						

Particulars	Unit	Existing 2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
GROSS EQUITY AS ON 1.4.2019 FOR RLDC ASSETS							
ADD CAP 2019-20 (AVG EQUITY DURING THE YEAR)							
ADD CAP 2020-21 (AVG EQUITY DURING THE YEAR)							
ADD CAP 2021-22 (AVG EQUITY DURING THE YEAR)							
ADD CAP 2022-23 (AVG EQUITY DURING THE YEAR)							
ADD CAP 2023-24 (AVG EQUITY DURING THE YEAR)							
TOTAL EQUITY							
RATE OF RETURN ON EQUITY							
RETURN ON EQUITY							

## **Financial Package**

Name of the LDC:	
Project Cost as on 1.4.2019:	
Date of Commercial Operation:	

(Rs in lakh)

	8	l Package is roved	as	l Package on .4.2019	As Admitted on 1.4.2019		
	Currenc	ey and	Currenc	y and	Currency and		
	Amount	3	Amount	3	Am	ount <sup>3</sup>	
1	2	3	4	5	6	7	
Loan-I							
Loan-II							
Loan-III							
and so on							
Equity-							
Foreign							
Domestic							
Total Equity							
Debt : Equity Ratio							

### **Statement of Capital cost**

### Name of the NLDC/ RLDCs:

(Rs in lakh)

		As on relevant
		date.1
A	a) Opening Gross Block Amount as per books	
	b) Amount of capital liabilities in A(a) above	
	c) Amount of IDC, FC, FERV & Hedging cost	
	included in A(a)above	
	d) Amount of IEDC (excluding IDC, FC, FERV &	
	Hedging cost)	
	included in A(a) above	
В	a) Addition in Gross Block Amount during the	
	period	
	b) Amount of capital liabilities in B(a) above	
	c) Amount of IDC, FC, FERV & Hedging cost	
	included in B(a)above	
	d) Amount of IEDC (excluding IDC, FC, FERV &	
	Hedging cost)	
	included in B(a) above	
С	a) Closing Gross Block Amount as per books	
	b) Amount of capital liabilities in C(a) above	
	c) Amount of IDC, FC, FERV & Hedging cost	
	included in C(a) above	
	d) Amount of IEDC (excluding IDC, FC, FERV &	
	Hedging cost)	
	included in C(a) above	

 $<sup>^{1}</sup>$  Relevant date/s means date of COD and financial year start date and end date

## Financing of Additional Capitalisation Name of the NLDC/RLDCs:

(Rs. in lakh)

	Projected/Actual						·· ,	Admit	ted	
Financial Year (Starting from 1.4.2019)	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5 & So on	Year 1	Year 2	Year 3	Year 4	Year 5 & So on
1	2	3	4	5	6	7	8	9	10	11
Amount capitalized in Work/ Equipment										
Financing Details										
Loan-1										
Loan-2										
Loan-3andsoon										
Total Loan <sup>2</sup>										
Equity										
Internal Resources										
Others										
Total										

<sup>&</sup>lt;sup>1</sup> Year 1 refers to Financial Year of COD and Year 2, Year 3 etc. are the subsequent financial years respectively.

Calcula	Calculation of interest on Normative Loan									
Name of LDC:			I	1						
Particulars	Existing 2018-19	2019 -20	2020 -21	2021 -22	2022 -23	202 3-24				
1	2	3	4	5	6	7				
Gross Normative loan – Opening										
Cumulative repayment of Normative Loan upto previous year										
Net Normative loan-Opening										
Increase/Decrease due to ACE during the Year										
Repayments of Normative Loan during the year										
Net Normative loan-Closing										
Average Normative Loan										
Weighted average Rate of Interest on actual Loans										
Interest on Normative loan										

## ${\bf Calculation\ of\ Weighted\ Average\ Rate\ of\ Interest\ on\ Actual\ Loans} {\bf 1}$

Name of LDC:	
	(Rs in lakh)

Sl.	Particulars	Existing 2018-19	2019- 20	2020- 21	2021-22	2022- 23	2023-24
1	2	3	4	5	6	7	8
	Loan-1						
	Gross loan – Opening						
	Cumulative						
	repayments of Loans						
	upto previous year						
	Net loan – Opening						
	Add: Drawal (s)						
	during the Year						
	Less:						
	Repayment (s)						
	of Loans during						
	the year						
	Net loan – Closing						
	Average Net Loan						
	Rate of Interest on						
	Loan on annual basis						
	1						
	Interest on loan						
	Loan repayment effective from						
	(date to be						
	indicated)						
	Indicated)						
	Loan-2						
	Loan-3 and so on						
	Total Loan						
	Gross loan – Opening						
	umulative repayments of						
	Loans upto previous year						
	Net loan –						
	Opening						
	Add: Drawal (s) during						
	the Year						
	Less: Repayment (s) of						
	Loans during the year						
	Net loan – Closing						
	Average Net Loan						
	Interest on loan						
	Weighted average Rate					T	
	of						
	Interest on Loans						

 $^{1}$ In case of Foreign Loans, the calculations in Indian Rupees is to be furnished. However, the calculations in Original currency are also to be furnished separately in the same form.

### Details of Foreign Loans

Name of the LDC:	
Exchange Rate as on 01.04.2019:	

(Rs. in lakh)

	starting from									
1.4	.19		Yea	r-1	T		Year-	2 – Year	-3 and so or	<u>n</u>
S	1	2	3	4	5	6	7	8	9	10
		Date	Amount (Foreign Exchang e)	Exch ange rate	Amount (in Rs)	Date	Amount (Foreig n Exc.)	Excha nge Rate	Amount (in Rs)	
	Currency1 [1]									
A 1	At the date of Drawl									
2	Scheduled repayment date of principal									
3	Scheduled payment date of interest									
4	At the end of Financial year									
В	In case of Hedging [3]									
1	At the date of hedging									
2	Period of hedging									
3	Cost of hedging									
	Currency2 [1]									
A 1	At the date of Drawl									
2	Scheduled repayment date of principal									
3	Scheduled payment date of interest									
4	At the end of Financial year									
В	In case of Hedging [3]			,						
1	At the date of hedging									
2	Period of hedging									
3	Cost of hedging									

## **Statement of Depreciation**

### Name of LDC:

(Rs. In lakh)

Financial Year	Existin g 2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
1	2	11	12	13	14	15
<b>Depreciation on Capital</b>						
Cost						
Depreciation recovered						
during						
the Year						
Cumulative depreciation						
deducted						
due to de-capitalization						
or write off of the assets						
etc.						
<b>Cumulative Depreciation &amp;</b>						
Advance against						
Depreciation recovered						
upto the year						

### **Calculation of Depreciation Rate**

### Name of LDC:

(Rsin lakh)

Sl. no.	Name of the Assets <sup>1</sup>	gross Block as on 31.03.2019, whichever is later and subsequently for each year thereafter up to 31.3.2024	Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year up to 31.03.2024
	1	2	3	4= Col.2 X Col.3
1	Land (Freehold, Lease hold)			
2	Building and civil works			
3	Auxiliary power supply system			
4	Office furniture and furnishing			
5	Communication equipment			
6	SCADA hardware with test equipment and spares			
7	ICT equipment			
8	Software			
9	TOTAL			
	Weighted Average Rate of			
	Depreciation (%)			

 ${}^{1}$ Name of the Assets should conform to the description of the assets mentioned in Depreciation Schedule appended to the Notification.

### **Details of Operation and Maintenance Expenses excluding Human Resource expenses**

### Name of LDC:

(Rs. in lakh)

	ITEMS	2019-20	2020- 21	2021-22	2022-23	2023-24
	1	2	3	4	5	6
1	Repairs and maintenance expenses					
2	Administrative and General expenses etc.					
3	Total					

### **NOTE:**

- 1. Detail of these expenditure as per formats enclosed
- 2. To be furnished for the [...] LDC.

### Name of LDC:

## **Details of Human Resource Expenses**

Period-	1	ACTUALS FOR PREVIOUS FIVE YEARS
	2	ACTUALS FOR IST SIX MONTHS OF THE
		CURRENT YEAR
	3	EXPECTED FOR LAST SIX MONTHS OF
		THE
		CURRENT YEAR
	4	EXPECTED FOR ENSUING YEAR

Sr. No.	Account Code Partic		Executive		Non- Executive		Total
			Technic al	Non- Tech.	Technic al	Non- Tech.	
1	Number of Employees						
2	Salaries						
3	Over-time						
4	Dearness Allowance						
5	Other Allowance						
6	Bonus						
7	Productivity Linked Incentive						
8	Sub Total (1 to 6)						
	OTHER STAFF COST						
8	Reimbursement of Medical						
	Expenses						
9	Leave Travel Concession						
10	Reimbursement of House						
	Rent						
11	Interim Relief to Staff						
12	Encashment of Earned						
	Leave						
13	Honorarium						
14	Payment under Workmen						
	compensation Act						
15	Ex-gratia						

	1		I		
16	Expenditure on VRS				
17	Sub Total (8 to 16)				
18	Staff Welfare Expenses				
19	Terminal Benefits				
20	Provisions				
21	Others (Specify)				
22	Human Resource Development				
23	Total (7+17+18+19+20+21 +22)				
	Revenue recovered, if any				
24	Revenue recovered, if any				
25					
25	<b>Net Total (23-24)</b>				
	Net Total (23-24) onal Information				
Additio	No. of Employees as				
Additio	No. of Employees as on :				
Additio	No. of Employees as on:  i) Executives ii) Non-				
Additio	No. of Employees as on:  i) Executives  ii) Non- Executives				
Additio	No. of Employees as on:  i) Executives  ii) Non- Executives  iii) Skilled				
Additio	No. of Employees as on:  i) Executives  ii) Non- Executives  iii) Skilled  iv) Non-Skilled				
Additio	No. of Employees as on:  i) Executives  ii) Non- Executives  iii) Skilled  iv) Non-Skilled  Total  No. of Employees				
Additio	No. of Employees as on:  i) Executives  ii) Non- Executives  iii) Skilled  iv) Non-Skilled  Total  No. of Employees  per				

I)	An annual increase in HR expenses under a given head in excess of 20 percent
	should be explained with proper justification.

II) The data should be based on audited balance sheets.

III) Details of arrears, if any pertaining to prior period should be mentioned separately.

IV) No. of employees opting for VRS during each year should be indicated.

V) Details of abnormal expenses, if any shall be furnished separately.

### **Details of Repairs and Maintenance Expenses**

### Name of LDC:

### A. Repairs and Maintenance Expenses(Actuals)

(Rs in lakh)

_						
Sr.No.	Description	Actuals for previou s	Current Financial Year			Estimat es for ensuing year
		Financi al Year	Actual For First Six Months	Projectio n For Balance Six Months	Total	
1	Consumption of stores and spares					
2	Loss of stores and spares					
3	Plant & Machinery					
	repairs and maintenance					
4	Civil works repairs and					
	Maintenance					
5	Annual Maintenance					
	Contract (4a+4b+4c)					
5a	-Plant & machineries					
5b	-Civil repairs and maintenance					
5c	-Others					
6	Others (Specify)					
7	Total (1+2+3+4+5+6)					
8	Revenue recoveries, if any					
9	Net Total (7-8)					

## **B. Repairs And Maintenance Expenses (As per Regulation)**

(Rs in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Admitted Capital cost as on 1st April of the year					
Repairs and Maintenance expenses					
Repairs and Maintenance expenses as a percentage of Capital cost					

# **Details of Administrative and General Expenses Name of LDC/:**

SI. No.	Description	Actual for previous five Financial Year (Rs in lakh)	Current Financial Year (Rs in lakh)  Actual Projecti For on First Six For		Estimates for ensuing Year (Rs in lakh)	
			Months	Balance Six Months	Total	
	<b>Property Related Expenses</b>					
1	License Fees					
2	Rent					
3	Rates & Taxes					
4	Insurance					
5	Contribution to accident reserve fund					
6	Sub total:					
	Communication					
7	Telephone & Trunk Call					
8	Postage & Telegram					
9	Telex, Teleprinter Charges, Telefax					
10	Courier Charges					
11	Other					
12	Sub total :					
	Professional Charges					
13	Legal expenses					
14	Consultancy charges					
15	Technical fees					
16	Audit fees					
17	Othe charges					
18	Sub total :					

	Conveyance & Travelling			
19	Conveyance expenses			
20	Travelling expenses			
21	Hire charges of vehicle			
22	Others			
23	Subtotal:			
	Other Expenses			
24	Electricity charges			
25	Fees & Subscription			
26	Books & Periodicals			
27	Printing & Stationery			
28	Advertisement			
29	Entertainment			
30	Watch & Ward			
31	Miscellaneous			
32	Organizational Development Expenses			
33	Donation			
34	Subtotal:			
	<b>Material Related Expenses</b>			
35	Demurrage and Wharf age on materials			
36	Clearing & forwarding charges			
37	Transit insurance			
38	Subtotal:			
39	Others (Specify)			
40	Total (6+12+18+23+34+38+39)			
41	Revenue recoveries, if any			
42	Net Total (40-41)			

	<b>Material Related Expenses</b>			
35	Demurrage and Wharf age on materials			
36	Clearing & forwarding charges			
37	Transit insurance			
38	Subtotal:			
39	Others (Specify)			
40	Total (6+12+18+23+34+38+39)			
41	Revenue recoveries, if any			
42	Net Total (40-41)			

## **Details of OPEX**

### Name of LDC/

(Rs in lakh)

Sl. No.	Particulars	2019- 20	2020- 21	2021- 22	2022-	2023- 24
1	2	3	4	5	6	7
1						
2						
3						
4						
5						
6						
7						
	Total					

## **Calculation of Interest on Working Capital**

### Name of LDC/

(Rs in lakh)

	<u> </u>					`	i iakii)
Sl. No.	Particulars	Existi ng 2018- 19	2019-	2020-	2021-	2022-	2023-
1	2	3	4	5	6	7	8
1	O & M expenses excl. HR						
2	Human resource expenses						
3	NLDC charges (Applicable for RLDC only) or RLDC Charges (Applicable only for SLDCs)						
4	Receivables						
5	Total Working Capital						
6	Rate of Interest						
7	Interest on Working Capital						

### **LDC Development Fund (Projected)**

|--|

(Rs in lakh) <b>Particul</b> <b>ars</b>	Existing 2018-19	2019-20	2020- 21	2021-22	2022-23	2023-24
1	2	3	4	5	6	7
Opening LDC Development Fund – Opening						
Additions in LDC development fund during the year						
Total LDC development fund						
Less: Utilization for capital expenses						
Less: Utilization for revenue expenses						
Net LDC development fund as on31st March of the year						
Average fund accumulated during the year						

Note: Break-up of additions and utilization shall be provided in separate sheet for each year

### **Other Income**

(Rs in lakh) Particul ars	As on 31.3.201	2019-20	2020-21	2021-22	2022-23	2023- 24
1	2	3	4	5	6	7
Other Income – Opening						
Add : Short term open access charges						
Add : Allocation from REC income						
Add:						
Add:						
Gross Income during the year						
Less : Utilization to meet shortfall						
Less: Use for						
So on						
Net Income as on 31st March						

[To be published in pursuance of Regulation 6]

## Name of the Applicant (in Bold Letters)

## (Registered Office Address)

1.	The applicant above-named has made an application before the (Central Electricity Regulatory Commission, [Location] for determination of fees and charges for [Give name of the applicant].								
2.	The users of the [] LDC are:								
	a								
	b								
3.	Details	of tariff (Pub	olish only applica	able portion	n):				
				-		(Rs. i	in lakh)		
		Tariff for the previous year	Year-wise tariff sought to be determined						
			Previous year	2019-20	2020-21	2021-22	2022-23	2023-24	
	[]LDC								
4.	A copy of the application made for determination of tariff is posted on the website (indicate here the address of the website).								
5.	the applica <b>Electricity</b>	tion be filed	bjections, if any, I by any person, Commission, Coe.	including	the benefic	ciary before	e the Secre	etary, Central	
Place		Name and Designation of the Authorized Signatory							

Date\_\_\_\_

## **Depreciation Schedule**

S. No.	Asset Particulars	Depreciation Rate
A	Land under full ownership	0.00%
В	Land under lease	
(a)	for investment in the land	3.34%
(b)	For cost of clearing the site	3.34%
C	Other Assets	
A	Building & Civil Engineering works	
(i)	Offices and residential	[3.34%]
(ii)	Containing plant and equipment	3.34%
(iii)	IT (Hardware Equipment and Software)	[100%]
(iv)	Temporary erections such as wooden structures	[100.00%]
(v)	Roads other than Kutcha roads	[3.34%]
(vi)	Others	[3.34]%
В	Transformers, Kiosk, sub-station equipment & other fixed apparatus(including plant foundation)	
(i)	Transformers including foundation shaving rating of 100 KVA and over	5.28%
(ii)	Others	5.28%
C	Solar Panel/Wind Mill	5.28%
D	Lightning arrestor	
(i)	Station type	5.28%
(ii)	Pole type	5.28%
(iii)	Synchronous condenser	5.28%
E	Batteries	15.00%
(i)	Underground cable including joint boxes and disconnected boxes 5.28%	
(ii)	Cable duct system	3.34%

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

### (In Compliance of Regulation 4)

- 1. Name of the entity (in bold letters):
- 2. Registered office address:
- 3. Region in which registration is sought:
  - i. North-eastern
  - ii. North
  - iii. East
  - iv. West
  - v. South
- 4. User category:
  - i. Generating Station
  - ii. Seller
  - iii. Buyer
  - iv. Transmission Licensee
  - v. Distribution Licensee
  - vi. Trading Licensee
  - vii. Power Exchange
  - viii. Battery Energy Storage system
  - ix. QCA / Aggregators
  - x. Others
- **5. User details** (as on 31st March of last financial year):
  - i. Category generating Station
    - i. Total Installed Capacity
    - ii. Maximum Contracted Capacity (MW) using ISTS
    - iii. Points of connection to the ISTS:

Sl.	Point of	Voltage	Number of Special Energy
No.	connection	level	Meters (Main)
		( <b>kV</b> )	installed at this location

### ii. Category - Seller/Buyer/Distribution Licensee

- i. Maximum Contracted Capacity (MW) using ISTS
- ii. Points of connection to the ISTS:

l l	Point of		Number of Special Energy
No.	connection	level (kV)	Meters (Main) installed at this location

### iii. Category – Transmission Licensee (inter-State)

i. Sub-stations:

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

ii. Transmission lines: (line wise details to be given)

Sl.	Voltage	Number of	<b>Total Circuit-Kilometers</b>
No.	level	transmission	
	( <b>kV</b> )	lines	

- iv. Category (Others): Please specify details.
- 6. Contact person(s) details for billing related to [...] LDC:
  - i. Name:
  - ii. Designation:
  - iii. Telephone No.:
  - iv. E-mail address:
  - v. Postal address:
- 7. Other Details:
  - i. PAN No.:
  - ii. GST No.:
  - iii. Bank Account No.:
  - iv. Bank Name and Address:
  - v. MICR No:

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

		Signature of Authorized Representative
Place:	Name:	
Date:	Designation:	
	Contact number:	

### Assessment of Key Performance Indicators for RLDC / NLDC

Name of NLDC/RLDCs:	
Performance Year:	

MoU Rating as per DPE   10	Category	
holder satisfaction  2 Facilitate power system and market functioning • Power Market transaction (Collective & Bilateral), REC, ESCerts • Power System Functioning: Calculation & reporting of FRC, declaration of transmission losses, stakeholder meetings including cross border  3 Maintain system reliability • FDI • VDI Maintenance shutdown coordination  4 Website Availability  5 Information dissemination • ATC/TTC • Transactions scheduled  6 Preparation of accounts  20		
• Power Market transaction (Collective & Bilateral), REC, ESCerts • Power System Functioning: Calculation & reporting of FRC, declaration of transmission losses, stakeholder meetings including cross border  3 Maintain system reliability • FDI • VDI Maintenance shutdown coordination  4 Website Availability  10  5 Information dissemination • ATC/TTC • Transactions scheduled  6 Preparation of accounts  20	Stake	
Power System Functioning: Calculation & reporting of FRC, declaration of transmission losses, stakeholder meetings including cross border      Maintain system reliability 20     FDI     VDI     Maintenance shutdown coordination  4 Website Availability 10  5 Information dissemination 10     ATC/TTC     Transactions scheduled  6 Preparation of accounts 20		
reporting of FRC, declaration of transmission losses, stakeholder meetings including cross border  3 Maintain system reliability 20  • FDI  • VDI  Maintenance shutdown coordination  4 Website Availability 10  5 Information dissemination  • ATC/TTC  • Transactions scheduled  6 Preparation of accounts 20		
losses, stakeholder meetings including cross border  3 Maintain system reliability 20  • FDI  • VDI  Maintenance shutdown coordination  4 Website Availability 10  5 Information dissemination  • ATC/TTC  • Transactions scheduled  6 Preparation of accounts 20		
FDI     VDI     Maintenance shutdown coordination  4 Website Availability  10  5 Information dissemination     ATC/TTC     Transactions scheduled  6 Preparation of accounts  20		
Maintenance shutdown coordination  4 Website Availability 10  5 Information dissemination 10  • ATC/TTC  • Transactions scheduled  6 Preparation of accounts 20		
4         Website Availability         10           5         Information dissemination <ul> <li>ATC/TTC</li> <li>Transactions scheduled</li> <li>Preparation of accounts</li> <li>20</li> </ul> 4		
5 Information dissemination • ATC/TTC • Transactions scheduled 6 Preparation of accounts 20		
ATC/TTC     Transactions scheduled     Preparation of accounts 20	4 Website Availability	
• Transactions scheduled 6 Preparation of accounts 20		
6 Preparation of accounts 20	• ATC/TTC	
1 reparation of accounts		
Interconnection meter error reporting		
4 111 0		
	Ancillary Services	
● AGC  (B) Financial 20 1 Variance in Capex Utilization 40	Financial	
(B) Financial Prudence201Variance in Capex Utilization402Statutory compliance – Audits60		
Statutory compliance – Addits	uchec	
(C)Learning & 20	_	
Lessons learnt and knowledge dissemination by way of data intensive reports 30	, well	
Adequacy of HR - % of certified operators 20 among eligible operators		
4 Capacity Building 20		
No. of man-days per year per eligible		
employee		
• FOLD Meetings/Workshops		
(D) Internal   20   1   Availability of Decision Support System -   40     SCADA		
2 Availability of infrastructure and amenities 30		
3 ISO Certification 10		
4 Process Documentation – Black Start, Reactive 20 Power		

(Calculations of specific metrics for the key performance indicators above are to be detailed in a Procedure duly prepared by the NLDC/RLDC which shall be approved by the Commission)

### **Human Resource Requirement - Projection for Control Period:**

I. Number of regular employees posted in Load Despatch Centre

Grade	Description	Year-1	Year -2	Ye ar- 3	Ye ar- 4	Ye ar- 5
Board	Director					
E9	Executive Director					
<b>E8</b>	General Manager /Chief Engineer					
<b>E7</b>	Dy. General Manager / Jt. CE/Addl. Chief Engineer					
E5-E6	Manager/Chief Manager / Superintending Engineer					
E3-E4	Engineer to Dy. Manager/ Executive Engineer					
E2	Assistant / Deputy Engineer					
<b>E</b> 1	Supervisor / Junior Engineer					
NE	Non-Executives/Workmen					
ТОТ-Е	Total Executives					
E/NE	Ratio of Executives to Non-Executive = (TOT-E)/(NE)					

II. Adequacy of personnel in functional areas

	Description	Year-1	Year -2	Ye ar- 3	Ye ar- 4	Ye ar- 5
E-RS	Executives working in rotating shifts					
E-SO	Executives in System Operation functions (Off-line)					
E-MO	Executives in Market Operation functions (Off-line)					
E-SL	Executives in System Logistics functions (off-line)					
Е-ОТН	Executives in Other Support functions (Off-line) (Law, HR, F&A, etc.)					
E-GS	Executives working in general shifts (E-SO+MO+SL+OTH)					
RS/GS	Ratio of Executives in Rotating Shift / General Shift					
SO/TOT	Ratio of Executives (SO/Total)					
MO/TOT	Ratio of Executives (MO/Total)					
SL/TOT	Ratio of Executives (SL/Total)					
OTH/TOT	Ratio of Executives (Oth/Total)					

## III. Number of personnel in Load Despatch Centre having valid certificates (as on 31<sup>st</sup> March of respective year)

S No.	Particulars	Year-1	Yea r-2	Ye ar- 3	Ye ar- 4	Ye ar- 5
A	Certified executives- Basic level					
В	Certified executives - Reliability Specialist					
С	Certified executives - Market Specialist					
D	Certified executives- System Logistics Specialist					

Е	Certified executives - Specialist (Others)			
F	Certified executives- Management level			
G	Total number of certified executives			
Н	Total number of executives			
I	Ratio of Basic to Total (A/H)			
J	Ratio of Reliability Specialist to Total (B/H)			
K	Ratio of Market Specialist to Total (C/H)			
L	Ratio of Logistics Specialist to Total (D/H)			
M	Ratio of Other Specialist to Total (E/H)			
N	Ratio of Management Specialist to Total (F/H)			

IV. Qualification of personnel in Load Despatch Centre

S No.	Discipline (at graduation level)	Year-1	Yea r-2	Ye ar- 3	Ye ar- 4	Ye ar- 5
1	Power System					
2	Electrical					
3	Renewable					
4	Communication					
5	Computer Science					
6	Public Policy					
7	Economics					
8	Commerce					
9	Statistics					
10	Law					
11	Human Resource					
12	Finance					
13	Management					
14	Others-(Specify)					

V. Number of regular employees posted in Sub-Load Despatch Centre

Grade	Description	Year-1	Yea r-2	Ye ar- 3	Ye ar- 4	Ye ar- 5
E3-E4	Engineer to Dy. Manager/ Executive Engineer					
<b>E2</b>	Assistant / Deputy Engineer					
<b>E1</b>	Supervisor / Junior Engineer					
NE	Non-Executives/Workmen					
TOT-E	Total Executives					
	Ratio of Executives to Non-Executive = (TOT-					
E/NE	E)/(NE)					
	Number of certified personnel					