Approach Paper for

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION (LEVY AND COLLECTION OF FEES AND CHARGES BY STATE LOAD DESPATCH CENTRE) REGULATIONS, 2014

Issued By:

MERC

Maharashtra Electricity Regulatory Commission

February, 2014

TABLE OF CONTENTS

LIST OF ABBREVIATIONS

ARR	Annual Revenue Requirement
BEST	Brihanmumbai Electricity Supply And Transport Undertaking
Capex	Capital Expenditure
CERC	Central Electricity Regulatory Commission
CoD	Commercial Operation Date
CPD	Co-incident Peak Demand
CPI	Consumer Price Index
FY	Financial Year
InSTS	Intra-State Transmission System
LDC	State Load Despatch Centre
MERC	Maharashtra Electricity Regulatory Commission
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSLDC	Maharashtra State Load Despatch Centre
MYT	Multi-year Tariff
NCPD	Non Co-incident Peak Demand
O&M	Operation & Maintenance
R&D	Research & Development
R&M	Repairs and Maintenance
Rinfra – D	Reliance Infrastructure Limited – Distribution
RLDC	Regional Load Despatch Centre
SBAR	State Bank Advance Rate
SBI	State Bank of India
STU	State Transmission Utility
TPC – D	Tata Power Company Limited – Distribution
WRPC	Western Regional Power Committee

1 INTRODUCTION

The Load Despatch Department is the nerve centre for the operation, planning, monitoring and control of the power system in any state. Electricity cannot be stored and has to be produced when it is needed and therefore it is essential that power system is planned and operated optimally & economically. The Load Despatch Centre (LDC) plays an important part in this activity. The key objectives of any Load Despatch Department are:

- Matching the power demand with system integrity, reliability and security of generation and transmission facilities;
- Regulating the system frequency;
- Optimum utilisation of resources – adherence to despatches based on Merit Order Despatch principles;
- Quick restoration of normalcy after system disturbances.

Accordingly, co-ordinating generation, transmission and distribution of electricity on real time basis so as to ensure maximum security and efficiency of the grid is the prime objective of Load Despatch Centre.

In Maharashtra, the Maharashtra State Load Despatch Centre (MSLDC) operates from two centres - one at Kalwa and the other at Ambazari (Nagpur) and an additional sub-LDC Mumbai at Trombay. The MSLDC is administratively under the control of Maharashtra State Electricity Transmission Company Limited (MSETCL) which is also the State Transmission Utility (STU).

2 LEGISLATIVE FRAMEWORK – NEED FOR THE REGULATION

Sub-section (1) of Section 31 of the Electricity Act, 2003 (Act), provides that the State Government shall establish a State Load Despatch Centre (SLDC) while sub-section (2) of the Section 31 provides that the said SLDC shall be operated by a Government company or any Authority or Corporation constituted by or under any State Act and that until such company /authority /corporation is notified by the State Government, the State Transmission Utility (STU) shall operate the SLDC. Accordingly, MSETCL which has been designated as the State Transmission Utility is presently operating the SLDC.

Till date the MSLDC has been recovering the capital and operating expenses incurred by it during the course of its operations through various beneficiaries in the manner and as per the terms and conditions specified by the Commission under various Annual SLDC Budget Orders being issued since FY 2005-06. These orders were issued by the Commission partly adopting the terms and conditions specified by the Commission in its Tariff regulations issued from time to time and as applicable for the transmission licensee as MSDLC continued to be administratively a part of the State Transmission Licensee. Additionally, wherever necessary, the Commission outlined the principles for determination of the fees and charges to be levied by the MSLDC on various beneficiaries who were identified by the Commission and the principles for recovery of these fees and charges from these beneficiaries were also outlined in the said orders. However, there was no separate comprehensive Regulation available which outlined the principles to be adopted for determination fees and charges which would be levied by the MSLDC on the identified beneficiaries for its services.

The clause (g) of sub-section (2) of Section 181 of the Electricity Act, 2003 (36 of 2003) clearly provides the following:

*"**Section 181 (Powers of State Commissions to make regulations)**:*

(2) In particular and without prejudice to the generality of the power contained in sub-section (1), such regulations may provide for all or any of the following matters, namely:

(g) <u>Levy and collection of fees and charges from generating companies or licensees under sub-section (3) of section 32</u>;"

Further, the Section 32(3) of the Act provides for levy and collection of such fees and charges from the generating companies and licensees engaged in the intra-State transmission of electricity as may be specified by the State Commission.

*"**Section 32 (Functions of State Load Despatch Centres)**:*

(3) The State Load Despatch Centre may levy and collect such fee and charges from the generating companies and licensees engaged in intra-State transmission of electricity as may be specified by the State Commission."

Accordingly, the Electricity Act 2003 clearly empowers the State Regulatory Commission to make necessary regulations for various matters including those pertaining to levy and collection of fees and charges from generating companies or licensees under sub-section (3) of section 32 of the Electricity Act.

In conformance to the above, the Forum of Regulators in its report on "Open Access" had also recommended that:

"CERC may formulate regulations for fees and charges levied by RLDCs to ensure that they do not only recover operating and capital servicing costs but also generate surpluses to provide equity for future investments"

"The SERCs may thereafter frame regulations for SLDCs as these are essential for ensuring financial autonomy"

Accordingly, Central Electricity Regulatory Commission (CERC) had issued the Central Electricity Regulatory Commission (fees and charges of Regional Load Despatch Centre and other related matters) Regulations, 2009. Similarly, other State Regulators in the states of Madhya Pradesh, Andhra Pradesh, Gujarat, etc. have also issued separate regulations for determination of Fees & Charges to be levied by the SLDC.

In case of Maharashtra, the Maharashtra Electricity Regulatory Commission (Multi Year Tariff) Regulations, 2011 (hereinafter referred to as "MYT Regulations 2011") issued by Commission are applicable to the generation companies, transmission licensees and distribution licensees in the state of Maharashtra but do not have any separate provisions for determination of fees and charges to be levied by the SLDC and its recovery. As mentioned previously, the Commission has been till date guided by the relevant provisions of the MYT Regulations applicable to the transmission licensee in the process of determination of fees & charges for SLDC as it administratively remains part of MSETCL – the transmission licensee. In addition to the same, other guidelines / principles outlined by the Commission as part of various Orders issued since FY 2005-06 continue to be the basis for determination of fees & charges of SLDC in the state.

In view of the above, and to bring in more clarity with regards to the basis for determination of the fees & charges to be levied by SLDC and its recovery, need was felt to issue separate Regulation clearly outlining the basis for determination of fees & charges for SLDC and the manner in which the same would be recovered from the beneficiaries who will also be identified in the said Regulation. Accordingly, the Commission wishes to finalize the Regulations to determine the SLDC fees and charge for each year of the control period from FY 2015-16 to FY 2019-20, after considering the objections/suggestions received/heard from general public and other stakeholders. The present Regulation is proposed to be issued exercising the powers conferred on the Commission under the above stated provisions of the Electricity Act 2003.

The approach proposed to be adopted by the Commission for determination of the Fees and Charges to be levied by the SLDC on the identified beneficiaries has been outlined in the subsequent chapters of this approach paper and the comments and suggestions of the general public and other stakeholders are invited on the same.

The Approach Paper is organised in following sections as below:

1. Section 1: Introduction
2. Section 2: Legislative Framework – Need for the Regulation
3. Section 3: General Principles
4. Section 4: Financial Principles
5. Section 5: Computation of Annual Fixed Charges
6. Section 6: Levy and Collection of Fees and charges
7. Section 7: Billing

3 General Principles

This Approach Paper details the philosophy and principles adopted for formulation of the Maharashtra Electricity Regulatory Commission (Levy and Collection of Fees and Charges by State Load Despatch Centre) Regulations, 2014 for the Control Period. The underlying objectives of a typical Multi-Year Regulation include the following:

- Provide regulatory certainty to the Utilities, investors and consumers by promoting transparency, consistency and predictability of regulatory approach, thereby minimizing the perception of regulatory risk.
- Address the risk sharing mechanism between Utilities and consumers / beneficiaries based on controllable and uncontrollable factors.
- Ensure financial viability of the sector to attract investment, ensure growth and safeguard the interest of the consumers.
- Review operational norms for Generation, Transmission, Distribution and Supply businesses, related issues and recommend suitable measures to address such issues.
- Promote operational efficiency.
- Reduce tariffs in the long-term through improvement in operational efficiency.

The MYT Regulation 2011 was also based on the above objectives which are more relevant to the generation, transmission and distribution functions from the perspective of improving operational efficiency, optimising the costs, reducing tariffs and providing regulatory consistency. However, the functions undertaken by SLDC are more statutory in nature and emanate from the need to function in an independent manner to discharge its duties effectively. The Electricity Act 2003 also clearly outlines the roles and responsibilities of the State Load Despatch Centres. Accordingly, the fees and charges for the SLDC would be designed considering the nature of activities being undertaken by them and also ensuring cost recovery for the SLDCs as they have no other source of income. The revenue recovery mechanism would also be designed so as to ensure cost recovery through beneficiaries which utilise the services provided by SLDC. While the quantum of SLDC fees and charges are comparatively very small as compared to the other costs incurred by the generators, transmission & distribution licensees, it would be prudent to outline a framework for SLDC which is broadly similar to the existing framework for other licensees/generators in the state for the sake of consistency.

Accordingly, the proposed Multi-Year Tariff (MYT) framework for SLDC is broadly in line with the provisions of the MYT Regulation 2011 issued by the Commission with some modifications considering the nature of business of SLDC. Relevant provisions from the CERC (fees and charges of Regional Load Despatch Centre and other related matters) Regulations, 2009 have also been considered as deemed appropriate.

The financial principles pertaining to elements like capital cost and structure, interest on loan capital, return on equity, depreciation, etc. outlined in the existing MERC (Multi-Year Tariff) Regulations, 2011 have been retained to the extent appropriate to maintain consistency of principles between the existing MYT Regulations 2011 and the proposed Regulation pertaining to fees and charges to be levied by the SLDC. The broad features of the proposed framework are as outlined below:

3.1 Applicability

The Multi-Year Tariff Framework shall apply to petitions made for determination of ARR/budget for State Load Despatch Centre as per provisions of the proposed framework.

3.2 Multi-Year Tariff Framework

The Multi-Year framework is envisaged to be broadly in line with the existing MYT framework existing for the generation, transmission and distribution functions and shall be based on the following elements for calculation of Annual Fixed Charges and expected revenue from fees and charges for the State Load Despatch Centre as given below:

- Submission of forecast of Annual Fixed Charges and expected revenue from existing fees and charges by the petitioner and approved by the Commission prior to commencement of the Control Period;
- A detailed Capital Investment Plan shall be submitted for each year of the Control Period by the petitioner for the Commission’s approval and which shall be based on:
    - Operational requirements prescribed by the Commission in the Fees & Charges Regulations, various orders & other relevant Regulations notified by the Commission;
    - Recommendations of various committees constituted for looking into matters related to strengthening and ring fencing of the State Load Despatch Centre by the Ministry of Power, Govt. of India or any such other statutory authorities;
- Along with the Capital Investment Plan, the applicant shall submit the forecast of Annual Fixed Charges and expected revenue from existing fees and charges for each year of the Control Period, and the Commission shall approve the Annual Fixed charges for each year of the control period and fees and charges for the State Load Despatch Centre, for the Control Period.
- The Commission shall also approve the sharing of charges amongst the beneficiaries in the form of the fees and charges for the control period;

- The Commission shall, notify by Order, the change in sharing proportion of the existing fees and charges amongst the beneficiaries, if required, for the remaining years of the Control Period along with the refund of excess or recovery of additional Fees and Charges as determined by the Commission during the truing up process undertaken along with the Mid-Term Review of performance process;
- Mid-Term Review of performance vis-à-vis the approved forecast for charges shall be undertaken by the Commission along with truing up for the relevant years as specified in the proposed Regulation;
- The mechanism for pass-through of approved variations in charges as specified by the Commission in the proposed Regulation;
- One-time determination of fees and charges of State Load Despatch Centre for each financial year within the Control Period shall be undertaken at the start of the Control Period and also reviewed during the Mid-Term Performance Review.

The major change proposed from the existing MYT framework is in terms of absence of the process of Annual Performance Review. This has been proposed looking at the nature of work being undertaken by SLDC wherein there are no major performance parameters (both operational and financial) which need to be monitored and which can have significant financial impact on the SLDC. Accordingly, any deviations from the approved forecast can be addressed at the time of the Mid-Term review. Accordingly, no Annual Performance Review has been proposed for SLDC in the proposed Regulation.

In view of the above, the stakeholders may provide their comments and suggestions with regards to need for Annual Performance Review for SLDC.

3.3 Control Period

The Control Period means a multi-year period typically ranging from 3 to 5 years, fixed by the Commission from time to time for the duration of which, the principles for determination of Aggregate Revenue Requirement (ARR) and tariff will be fixed.

Clause 5.3 (h) (1) of the Tariff Policy notified by the Ministry of Power, Government of India on January 6, 2006 stipulates:

> *"Section 61 of the Act states that the Appropriate Commission, for determining the terms and conditions for the determination of tariff, shall be guided inter-alia, by multi-year tariff principles. The MYT framework is to be adopted for any tariffs to be determined from April 1, 2006. The framework should feature a five-year control period. The initial control period may however be of 3 year duration for transmission and distribution if deemed necessary by the Regulatory Commission on account of data uncertainties and*

other practical considerations. In cases of lack of reliable data, the Appropriate Commission may state assumptions in MYT for first control period and a fresh control period may be started as and when more reliable data becomes available."

The Commission has already announced a control period of five years vide the MYT Regulations 2011 (April 1, 2011 to March 31, 2016) for all the other functions i.e. Generation, Transmission and Distribution**.** In line with the same, the Commission proposes as 5 year (April 1, 2015 to March 31, 2020) Control Period for the MYT framework being considered for the SLDC in Maharashtra. This would mean that the Control Periods for SLDC would not be aligned with the control period of other entities (Generation/transmission/distribution). Accordingly, another option possible is to have the Control Period coterminous with the existing MYT control period i.e. upto FY 2015-16. In such a condition, the process of Mid-Term review will become redundant and would not be required at all.

In view of the above, the stakeholders may provide their comments and suggestions regarding the appropriateness of the tenure of the Control Period proposed.

3.4 Forecast

The State Load Despatch Centre shall be required to submit the forecast of Aggregate Revenue Requirement and expected revenue from fees and charges from the beneficiaries for the Control Period in such manner, within such time limit as provided in the Regulation. The Commission will examine the reasonableness of the forecast and approve the same.

The process of forecasting is envisaged to be similar to the process prescribed in the existing MERC MYT 2011 Regulations.

3.5 Mid Term Performance Review

The time frame for application shall not be less than one hundred and twenty (120) days before the commencement of FY 2018-19. Scope of the Mid Term Performance Review is envisaged to include:

- A comparison of the audited performance of the applicant for the previous two financial years with the approved forecast for such previous financial year; and
- A comparison of the performance of the applicant for the first half of the current financial year with the approved forecast for the current financial year.
- Carrying cost on surplus/deficit amounts as a result of the truing up for the previous financial years, if any, at the time of Mid-term Performance review.

The Commission may review the approved forecast for the remainder of the Control Period as an outcome of the review process including the sharing proportion of fees and charges amongst beneficiaries.

The Mid-term Performance Review Order will include:

- the approved quantum of variations in the Annual Fixed Charges that can be recovered from the beneficiaries or refunded to the beneficiaries by the SLDC;
- the approved modifications to the forecast of the State Load Despatch Centre for the remainder of the Control Period and the fees and charges to be recovered for the remaining years of the Control Period based on the modifications;
- the approved changes in the sharing proportion of fees and changes amongst the beneficiaries;

In view of the above, the stakeholders may provide their comments and suggestions regarding the scope of the Mid Term Performance Review.

3.6 Truing up

Truing up for the past years shall be taken up at the time of Mid-Term Performance Review and end of the Control Period. The truing up for the past years shall be based on the audited data only. The scope of the truing up process is envisaged to include:

- The Commission shall approve the refund or recovery of fees & charges based on the same;
- The recovery or refund will be done after considering simple interest at the rate equal to State Bank Advance Rate (SBAR) of State Bank of India as on 1st April of the respective year;
- The recovery or refund by the SLDC shall be done in six equal monthly instalments starting within one month from the date of the Order on Fees and charges;
- The refund or recovery of the charges will be affected in the same sharing proportion as applicable for the year for which the Truing up is being carried out.

In view of the above, the stakeholders may provide their comments and suggestions regarding the scope of Truing up.

3.7 Capital Investment Plan

The SLDC will be required to file a Capital Investment Plan for the Control Period in accordance with guidelines and formats, as stipulated by the Commission from time to time which shall comprise of:

(a) Capital investment plan;

(b) Financing plan; and

(c) Physical targets in accordance with guidelines and formats, as stipulated by the Commission from time to time.

The Capital Investment Plan will show separately, on-going projects that will spill into the year under review and new projects (along with justification) that will commence but may be completed within or beyond the Control Period. The Commission will consider and approve the capital investment plan for which the State Load Despatch Centre may be required to provide relevant technical and commercial details.

Considering the typical size of the investments made by the SLDC, it is envisaged that the SLDC will be required to submit Detailed Project Reports covering details of each scheme involving an outlay exceeding Rs. 100 lakh along with Capital Investment Plan, sources of funding, and justification/rationale for the scheme for the scrutiny and approval of the Commission. The SLDC will be entitled to undertake the expenditure only after the due approval of the Commission.

The stakeholders may provide their comments and suggestions regarding the details expected in the Capital Investment Plan submitted by the SLDC.

3.8 Procedure for filing of the petition for determination of Fees and Charges

The Petition for determination of fees and charges will be made by the SLDC in such form and in such manner as specified by the Commission in the Regulation, and will be accompanied by such fees as specified under the MERC (Fees and Charges) Regulations, 2004, as amended from time to time. The application will be accompanied by information which is to be supplied in formats as may be prescribed by the Commission.

The proceedings to be held by the Commission for determination of fees and charges will be in accordance with the MERC (Conduct of Business) Regulations, 2004, as amended from time to time. It is also being clarified that the Commission will have the power, either on suo motu basis or on a Petition filed by any interested or affected Party, to determine the fees and charges, including terms and conditions thereof, of the State Load Despatch Centre.

Accordingly, the Commission has not proposed any changes in the procedure and the timelines for filing of the petition, for determination of fees and charges.

4 FINANCIAL PRINCIPLES

The Commission proposes to adopt the financial principles as prescribed in the MYT Regulation 2011 in the present Regulation to the extent relevant so as to maintain consistency of principles applicable to various Licensees in the state. However, modifications, wherever deemed necessary, have been proposed and discussed in the subsequent paragraphs.

4.1 Capital Cost & Capital Structure

The capital cost of the assets in use is considered as the base for deciding the return on the investment made by the investor.

The capital cost approved by the Commission for the purpose of tariff determination is proposed to include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of exchange rate variation on the foreign loan availed for funding the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares to the extent of maximum 2% of the total capital cost; and

(c) additional capital expenditure as permitted under the Regulation.

The Commission, after prudence check, would approve the capital expenditure to be undertaken by the SLDC.

Further, it is proposed that for determination of fees and charges for SLDC, in case of separation of the SLDC from the MSETCL as part of the ring fencing exercise, the capital cost appearing in the books of accounts of State Load Despatch Centre on the date of such transfer along with the approved capex plan will be considered as the capital cost for determination of charges for the Control P eriod.

The approach as prescribed in the MYT Regulations 2011 has been adopted for the purpose of admittance of the capital cost and additional capitalisation for charge determination for the SLDC. The Debt Equity ratio of 70:30 has been prescribed in line with the MYT Regulations 2011. Maximum Equity is restricted at 30% or actual, whichever is lower for consideration of allowable returns.

4.2 LDC Development Fund

The intent of the Electricity Act 2003 is to ensure that the SLDC should function independently and hence, has prescribed for its ring fencing from the State transmission licensee which is presently controlling the functioning of the SLDC. Accordingly, the intent for proposing creation of a LDC Development Fund is to enable the SLDC to service the capital raised through interest and dividend payment, contribute stipulated equity portion and margin money for raising loan from the financial institutions for asset creation and funding R & D projects. This has been proposed in line with the fund created by CERC for the Regional Load Despatch Centres (RLDCs).

It is proposed that the funding of this development fund will be undertaken through fees and charges received by the SLDC on account of elements like return on equity, interest on loan, depreciation and other income of the State Load Despatch Centre such as registration fee, application fee, short-term open access charges, etc. received by the SLDC. The use of the funds by SLDC for purposes other than for servicing of the capital raised and contributing equity and margin money for raising loans is prohibited. A monitoring mechanism is being proposed whereby the Commission can seek necessary documentary evidence from the SLDC to prove the appropriate usage of the funds as envisaged under these regulations.

Further, it is also proposed that this fund can only be created after the ring fencing of the State Load Despatch Centre as mandated under Section 31 of the Electricity Act 2003 has been completed. Prior permission of the Commission would be required for creation of this fund and the same will be granted by the Commission at its discretion.

The stakeholders may provide their comments and suggestions regarding the utility of such fund for the SLDC and monitoring mechanism for ensuring appropriate usage of funds for the prescribed purposes only.

5 COMPUTATION OF ANNUAL FIXED CHARGES

As mentioned previously, the Commission has adopted the principles similar to those prescribed in the existing MYT Regulation 2011 to the extent possible so as to maintain consistency of principles and wherever modifications have been proposed, the same are discussed in subsequent paragraphs.

5.1 Annual Fixed Charges

The nature of costs incurred by the SLDC is fixed on account of the nature of work undertaken by it. It is proposed that the components of Annual Fixed Charges may be grouped under two heads:

(a) Capital Charges: Comprising of (i) Depreciation, (ii) Return on equity and (iii) Interest on loan capital which are mainly linked to Gross Fixed Assets created as well as capital expenditure proposed to be capitalized during the year.

(b) Operating Charges – based on the nature of expenses: Comprising of (i) Tax on Income, (ii) Interest on Working Capital, (iii) Operation and maintenance expenses excluding employee expenses, (iv) Employee expenses and (v) RLDC Fees and WRPC Charges.

Operating charges are proposed to be collected on a monthly basis and the capital charges are to be collected semi-annually in line with the practice adopted by the Commission in the past SLDC Budget Orders.

5.2 Depreciation:

The Commission proposes to be consistent with the principles for computation of depreciation expense as prescribed in the MYT Regulations 2011 for the transmission function (of which SLDC is presently a part) and same rates as those prescribed in the MYT Regulations 2011. The only additional change which has been proposed is the rate of depreciation for software at 30% in line with the rate prescribed by CERC in its SLDC Fees and Charges Regulation. The SLDC is expected to incur substantial expenditure on software for efficient system operation. The rate is proposed taking into consideration the expected period within which the software is likely to be obsolete. This is in line with the general industry practice.

Other key provisions are same as the existing provisions in the MYT Regulations 2011 and are outlined below for reference:

- The value base for the purpose of computing depreciation will be the capital cost of the assets in use as admitted by the Commission:

    - The depreciation will be allowed on the entire capitalised amount of the new assets after reducing the approved original cost of the project/fixed assets of retired or replaced assets;
- Method prescribed for computing Depreciation – Straight Line Method;
    - The salvage value of the assets will be considered as 10% and depreciation will be allowed up to maximum of 90% of the capital cost of the asset;
    - The individual asset will be depreciated to the extent of seventy (70) percent and the remaining depreciable value as on 31st March of the year closing will be spread over the balance useful life of the asset;
    - Land other than the land held under lease will not be a depreciable asset and its cost will be excluded from the capital cost while computing depreciable value of the assets.
    - Depreciation will be chargeable from the first year of the commercial operations;
    - In case of projected commercial operation of the assets for part of the year, depreciation will be calculated based on the average of opening and closing value of assets in use, approved by the Commission.

5.3 Return on Equity

The Return on Equity (ROE) approach has been preferred by the CERC as well as majority of SERCs as it is a simpler approach to understand and adopt. Further, as mentioned previously, the Commission proposes to adopt the existing methodology for computation of the Return on Equity so as to maintain consistency of principle. Accordingly, the Return on Equity is proposed be computed on the equity approved by the Commission. In case the actual equity infusion is higher than the normative level (30%), then the return will be computed on the normative equity level. The equity contribution over 30% will be considered as normative loan and appropriate treatment will be provided in line with other loans availed by SLDC. However, in case the actual equity infused is below normative level, the actual equity infused will be used to compute return on equity. The rate base will be computed by applying the debt: equity mix to the approved capital cost of project.

It is proposed that the rate of Return on Equity permissible to SLDC will be 15.5% of the equity capital which is same as that prescribed for the transmission licensee in the MYT Regulations 2011. All the other principles are proposed to be same as specified by the Commission in the MYT Regulations 2011.

5.4 Interest on Loan Capital

The Commission is proposing to adopt the existing principles as prescribed in the MYT Regulations 2011 for the purpose of computation of the Interest on Loan capital. Accordingly, the key principles are summarised below for reference:

- Normative loans shall be considered based on the provisions outlined in the section pertaining to the capital cost and capital structure;
- In case of retirement or replacement of assets, the loan capital approved as mentioned above, will be reduced to the extent of 70% (or actual loan component based on documentary evidence, if it is higher than 70%) of the original cost of the retired or replaced assets.
- The normative loan outstanding as on April 1, 2015, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2015, from the gross normative loan.
- The repayment for the year of the tariff period FY 2015-16 to FY 2019-20 will be deemed to be equal to the depreciation allowed for that year,
- Notwithstanding any moratorium period availed by State Load Despatch Centre, the repayment of loan shall be considered from the first year of commercial operation of the project and will be equal to the annual depreciation allowed,
- The rate of interest will be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year:
    - 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 will be considered:
    - Provided further that if State Load Despatch Centre does not have actual loan, then the weighted average rate of interest of State transmission licensee (MSETCL) will be considered.
- The interest on loan will be calculated on the normative average loan of the year by applying the weightage average rate of interest.

All the other principles are proposed to be same as specified by the Commission in the MYT Regulations 2011.

5.5 Tax on Income

The Commission has proposed to provisionally approve Income Tax payable for each year of the Control Period, if any, based on the actual income tax paid on permissible return as allowed by the Commission relating to the electricity business regulated by the Commission, as per latest

Audited Accounts available for the petitioner. This will be subject to prudence check as part of the Multi Year Order for Fees and Charges. Further, it is proposed that the Income Tax on the amount of efficiency gains and incentive, if any, earned by State Load Despatch Centre will not be considered for the purpose of reimbursement.

State Load Despatch Centre continues to be part of the State transmission licensee presently and the accounts are prepared for MSETCL as a whole including SLDC. In view of the same, there would not be any separate tax liability computed for SLDC. Accordingly, the income tax payable by the State Load Despatch Centre will not be recoverable through the fees and charges of State Load Despatch Centre and will be part of the tariff filings by the State Transmission Licensee till the time separate annual accounts are prepared for SLDC and separate tax liability is computed in accordance to the existing law.

Any variation between Income Tax actually paid and approved, if any, on the income stream of the regulated business shall be reimbursed to/recovered, based on the documentary evidence submitted at the time of Truing up or Mid-term Performance Review or Multi Year Order for fees and charges for Control Period, subject to prudence check.

Under-recovery or over-recovery of any amount from the beneficiaries or the consumers on account of such income tax having been passed on to them will be on the basis of income-tax assessment under the Income-Tax Act, 1961, as certified by the statutory auditors. State Load Despatch Centre may include this variation in its Mid-term Performance Review Petition and Multi Year Petition for fees and charges of next Control Period.

Provided that tax on any income stream from other than the business regulated by the Commission will not constitute a pass through component in fees and charges and tax on such other income will be borne by State Load Despatch Centre.

The above provisions, except for relevant modifications, are proposed to be in line with the provisions of the MYT Regulation 2011 issued by the Commission.

5.6 Operation and Maintenance Expenses (excluding Employee expenses)

The O & M expenses typically comprise of employee expenses, repairs & maintenance expenses and administrative & general expenses. SLDC is presently undergoing organisational changes wherein the upgradation of the SLDC is being undertaken based on the recommendations of expert committees constituted by the Ministry of Power. Upgradation is being undertaken not only in terms of the infrastructure but also in terms of manpower deployment as per norms prescribed by the committee. Accordingly, it is felt appropriate to separate out employee expenditure from the O&M expenses and treat it separately.

The existing norms prescribed for the O&M expenses for the transmission licensee in the MYT Regulations 2011 are based on ckt. km lines and no. of bays. The same are not relevant for SLDC in view of the nature of business and hence there is a need to prescribe norms which can take into account the past trend of their expenditure and also factors in inflation.

Accordingly, the O&M expenses (excluding employee expenses) are proposed to be allowed on the basis of the actual expenses incurred in the past and as per the methodology proposed in the subsequent paragraphs.

Historically, the changes in the CPI and WPI are considered as a measure of inflation when considered over a period of time. These indices have been used by CERC while considering inflationary increase for determining the O&M expenses. Accordingly, the Commission is also proposing to use the same for the purpose of computing the inflationary increases to be considered while approving the O&M expenses (excluding employee expenses) for the Control Period.

Accordingly, the O&M expenses (excluding employee expenses) are proposed to be derived on the basis of the normalised average of the actual O&M expenses for the years 2011-12 to 2013-14, based on the audited/ unaudited accounts. The O&M expenses will be normalized by excluding abnormal operation and maintenance expenses, donation, loss-in-stock, prior-period adjustments, claims and advances written-off, provisions, etc., if any, after prudence check by the Commission.

The normalization will be done by applying weighted average inflation at 60% weightage to actual variation in Consumer Price Index (CPI) and 40% weightage to actual variation in Wholesale Price Index (WPI) on year to year basis. The weighted average point to point rate of inflation used for this purpose over the period of 3 years (i.e. November 2010 to November 2013) is 9.30%.

The average of normalized net present value for FY 2011-12, FY 2012-13 and FY 2013-14, will then be used to project base year value for FY 2014-15. The methodology to be adopted for the same is illustrated below:

Illustrative O&M expenditure for the period under consideration:

(Rs. Lakhs)

Particulars	***FY 2011-12***	***FY 2012-13***	***FY 2013-14***
A & G Expenses	*2000*	*2200*	*2400*
R & M Expenses	*3000*	*3200*	*3400*
Total O&M Expenses (Excl. Employee expenses)	***5000***	***5400***	***5800***

O&M expenses of each year are normalized @ 9.30% to arrive at normalized O&M expenses at the FY 2013-14 price levels as follows:

FY 2011-12= (5000) × (1.0930)^2 = Rs. 5,973.25 lakh

FY 2012-13= (5400) × (1.0930) = Rs. 5,902.20 lakh

FY 2013-14= (5800) = Rs. 5,800.00 lakh

Sum = Rs. 17,675.45 lakh

Average normalized O&M at FY 2013-14 price level= 17,675.45 / 3

= Rs. 5,891.82 lakh

The Average normalized O&M at FY 2013-14 price levels so obtained shall be escalated @ 9.30% to arrive at O&M for the year 2014-15 which is the base year.

The O&M expenses for the year 2014-15 will be escalated further at the rate of 9.30% to arrive at permissible O&M expenses for the subsequent years of the tariff period. The above method is proposed to be adopted by the Commission for computing the O&M expenses (excluding employee expenses).

<u>*The stakeholders may provide their comments and suggestions regarding the basis adopted by the Commission for determining the O&M expenses (excluding employee expenses) for SLDC for the Control Period.*</u>

5.7 Employee expenses

As discussed above, employee expenses have been excluded from O&M expenses and considered as a distinct cost component. Accordingly, the employee expenses are proposed to be derived on the basis of actual employee expenses for the financial years 2011-12 to 2013-14, based on the audited/ unaudited accounts. The escalation index for the control period is proposed to be based on the CPI and WPI for three years as discussed in the previous section.

Accordingly, the employee expenses are proposed to be normalized by excluding abnormal employee expenses, ex-gratia, VRS expenses, prior-period adjustments, claims and advances written-off, provisions, etc., if any, after prudence check by the Commission.

The normalised employee expenses, after prudence check, for the years 2011-12 to 2013-14, will be escalated at the rate of 9.30% to arrive at the normalized employee expenses at the 2013-14 price level respectively and then averaged to arrive at normalized average employee expenses.

The average normalized employee expenses at 2013-14 price level will be escalated at the rate of 9.30% to arrive at the employee expenses for year 2014-15.

As mentioned previously, the employee deployment at SLDC is being augmented based on the recommendations of the Gireesh Pradhan Committee Report and this would mean that the normative employee expenditure derived based on past data may not be sufficient to meet the increased costs. In view of the same, the Commission proposes to have a provision whereby the base year price level obtained may be adjusted to absorb the impact of addition of employees during the Control Period, subject to necessary prudence check by the Commission. This would to a large extent address the possible under-recovery of employee expenditure by the SLDC during the Control Period.

Accordingly, the base year value so arrived will be escalated by the above inflation rate of 9.30% to estimate the employee expense for each year of the Control Period. At the time of True up, the employee cost shall be considered after taking into account the actual inflation instead of projected inflation for that period. Any expenditure over and above the approved expenditure for the Control Period may be considered by the Commission during the True-up as per audited /unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission. It is also proposed that the impact of pay revision (including arrears), if any, shall be considered during the True-up as per audited /unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission.

The stakeholders may provide their comments and suggestions regarding the basis adopted by the Commission for determining the employee expenses for the SLDC for the Control Period.

5.8 Interest on Working Capital:

The Working Capital, in respect of the SLDC, will cover O&M expenses excluding employee expenses, employee expenses and receivables from operating charges. The norms prescribed by the Commission for the transmission Licensees in the MYT Regulations 2011 may not be relevant for SLDC and accordingly, the Commission in line with the practice followed in the past has proposed the approach for computation of Interest on Working Capital.

Working capital for the financial year is proposed to be computed as follows:

- One-twelfth ($1/12^{th}$) of the amount of operation and maintenance expenses (excluding employee expenses) for such financial year; plus
- One-twelfth ($1/12^{th}$) of the amount of employee expenses for such financial year; plus

- Fifteen (15) days equivalent of receivables corresponding to Operating Charges only. The Operating Charges will include all the expenses under the Annual Charges excluding the expenses pertaining to depreciation, return on equity and interest on loan capital;

The receivables corresponding to the operating charges only are proposed to be considered as only the operating expenditure is proposed to be recovered on a monthly basis and the capital charges are proposed to be recovered on semi-annual basis. Further, the capital charge includes elements like return on equity and depreciation which are non-cash expenses and hence may not be included in computation of working capital requirements.

The rate of interest on working capital is proposed to be on normative basis and will be equal to the State Bank Advance Rate (SBAR) or the Benchmark Prime Lending Rate (BPLR) of State Bank of India as on the date on which the petition for determination of fees and charges is made.

The stakeholders may provide their comments and suggestions regarding the basis adopted by the Commission for determining the working capital requirements of the SLDC for the Control Period.

5.9 RLDC Fees and WRPC charges:

The RLDC fees and charges are payable by the State Load Despatch Centre in accordance to the relevant orders issued by the CERC and as amended from time to time. Accordingly, the recovery of the same is proposed to be permitted through the fees and charges.

In addition to the above, the charges payable to WRPC are also proposed to be allowed to be recovered by the State Load Despatch Centre through the fees and charges. The quantum of such charges will be considered in accordance to the charges specified by the WRPC and as amended from time to time.

To ensure accountability and transparency, the State Load Despatch Centre will have to produce documentary proof towards payment of such charges during the process of Mid-Term review and final True-up of the annual fees & charges as per the procedure outlined in the Regulation. Any variation in the approved RLDC fees and charges and WRPC charges and that actually paid by the State Load Despatch Centre, if any, will be considered during the True-up as per audited /unaudited accounts, subject to prudence check and any other factor considered appropriate by the Commission.

6 LEVY AND COLLECTION OF FEES AND CHARGES

6.1 Fees and Charges

Fees and charges have been broadly categorised in the present Regulation by the Commission in the following manner:

- **"Fees"** means the one-time or annual fixed payments collected by the State Load Despatch Centre for the services rendered on account of registration, membership or any other account as specified by the Commission from time to time;
    - These can include Registration or Connection fees, Scheduling and Re-scheduling Charges or Short Term Open Access Application Processing Fees;
- **"Charges"** means recurring and monthly or semi-annual payments to be collected by the State Load Despatch Centre for the services rendered;
    - Annual SLDC Charges – corresponding to capital charge comprising of Depreciation, Interest on Loan and Return on Equity; payable on semi-annual basis;
    - SLDC Operating Charges – corresponding to annual operating cost budget comprising of Operation and Maintenance expenses (excluding employee expenses), employee expenses, interest on working capital, Tax on Income and RLDC fees and charges; payable on monthly basis;

The State Load Despatch Centre will be entitled to levy and collect the above fees and charges from the beneficiaries/users of the services as may be prescribed by the Commission.

In addition to the above, the State Load Despatch Centre shall also be entitled to levy and collect fees and charges for any other services rendered to the beneficiaries as specified in any other Regulations notified by the Commission.

6.2 Beneficiaries of the SLDC Services

As per the present practice, the beneficiaries of the services of SLDC include the Distribution Licensees in the state of Maharashtra who utilise the intra-State transmission system for transmission of power and who also avail the services of the State Load Despatch Centre for scheduling, metering, energy accounting, operation of pool account, etc. Accordingly, the Annual SLDC Charges and SLDC Operating charges are levied on such beneficiaries. This has been done as per the practice which was adopted by the Commission as per the amendment issued by the Central Government through its Order 795(E) dated 8th June 2005 notified as "The Electricity (Removal of Difficulty) Sixth Order, 2005" wherein, it has clarified that SLDC fees and charges may be levied on distribution licensees instead of transmission licensees as stated under Section 32(3) of EA 2003. The relevant extract of said notification is as under –

> *"The State Load Dispatch Centre may levy and collect such fee and charges from licensees using the intra-State transmission system, as may be specified by the State Commission." (Cl. 2 of The Electricity (Removal of Difficulty) Sixth Order, 2005)*

Accordingly, the practice has continued till date. However, in addition to the Distribution Licensees, the other long / medium term open access users including generators which utilise the services of SLDC are presently not subjected to fees and charges by the SLDC. Further, the long / medium term open access users are also not subjected to scheduling charges which are payable by the short term open access users. Accordingly, it needs to be debated if such fees and charges for use of services of the SLDC need to be levied on such open access consumers. This would become more important with the impending notification of the Open Access Regulation which provides for Long Term and Medium Term Open Access Users which is presently not explicitly mentioned in the existing Transmission and Distribution Open Access Regulations. Accordingly, it would be desirable to identify the beneficiaries of the SLDC services and levy the relevant fees and charges on such beneficiaries.

The stakeholders may provide their comments and suggestions on the need for levy of SLDC fees and charges on the Long / Medium Term Open Access users at par with the Distribution Licensees. Alternatively the present system of charging the fees and charges only of the Distribution Licensees can continue.

6.3 Sharing of SLDC Fees and Charges

Based on the above discussion about the beneficiaries on whom the SLDC fees and charges are to be levied, there can be two options for consideration.

(i) Sharing of SLDC Fees & Charges amongst the Distribution Licensees:

This is the option which is presently adopted by the Commission for sharing of the SLDC Fees & Charges. In this option, the sharing of SLDC Fees and Charges for the first year of the Control Period will be done among the beneficiaries (Distribution Licensees) on the basis of proportion of Distribution Licensee's contribution to average of Coincident Peak Demand (CPD) and Non-coincident Peak Demand (NCPD) recorded for the period October 2013 to September 2014. This approach is consistent with the mechanism of sharing of intra-State transmission charges among the Distribution Licensees and hence adopted to maintain consistency.

The sharing proportion for the charges may be revised, by the Commission for the remaining part of the control period during the Mid-Term review process, based on the submission by the Distribution Licensees in this regard and subject to prudence check by the Commission.

(ii) Sharing of SLDC Fees & Charges amongst the Distribution Licensees and other Long / Medium Term Open Access Users:

This is the new option that is being explored by the Commission for sharing of the SLDC Fees & Charges. In this option, the sharing of SLDC Fees and Charges for the first year of the control period will be done among the beneficiaries (Distribution Licensees and Long / Medium Term Open Access Users) on the basis of proportion of Distribution Licensee's contribution to average of Coincident Peak Demand (CPD) and Non-coincident Peak Demand (NCPD) recorded for the period October 2013 to September 2014 and the quantum of Long / Medium Open Access capacity contracted by the users. The same is further elaborated in the following illustration:

Beneficiary	**Share of Average CPD and NCPD or Contracted Capacity for LT/MT Open Access (MW)**	**Percentage Share**
MSEDCL	12919	74.78%
TPC-D	1063	6.15%
Rinfra - D	1010	5.85%
BEST	783	4.53%
LT/Medium term OA User 1	1000	5.79%
LT/Medium term OA User 2	500	2.89%
TOTAL	**17275**	**100.00%**

The sharing proportion for the charges may be revised, by the Commission for the remaining part of the control period during the Mid-Term review process, based on the submission by the beneficiaries in this regard and subject to prudence check by the Commission.

Depending on the choice of the options exercised by the Commission, the relevant sharing proportion will be applicable. The recovery of the SLDC Charges from the beneficiaries is as proposed below:

- The Annual SLDC Charges will be recovered on a semi-annual basis on 10th April and 10th October of each financial year from the beneficiaries.
- The SLDC Operating Charges will be recovered from the beneficiaries on a monthly basis.

<u>The stakeholders may provide their comments and suggestions regarding the appropriateness of the sharing proportion suggested above and if any alternative option can be available.</u>

6.4 Registration or Connection Fees

It is proposed that the State Load Despatch Centre will be entitled to recover Registration or Connection fees at the rate of Rs. 10,000/- (Rupees Ten Thousand Only) per connection from all users including generators, distribution licensees, open access users (sellers & buyers), etc. connecting to the intra-State transmission system (InSTS). The Commission, at its discretion, may change the Registration / Connection fees in the future.

The application for Registration shall be accompanied by a one-time fee of Rs 10,000/- (Rupees Ten Thousand Only) which may be revised by the Commission in the future at its discretion.

The existing users, if not registered previously, shall register themselves with the State Load Despatch Centre concerned by filing an application along with the fees of Rs 10,000/- (Rupees Ten Thousand only) within a month of coming into force of this Regulation.

The revenue from such fees shall be considered for adjustment of SLDC budget/ARR in subsequent years unless it forms part of the LDC fund on its creation.

<u>The fees mentioned above are proposed for recovery and the stakeholders may provide their comments and suggestions on the appropriateness of the proposed fees (quantum).</u>

6.5 Scheduling and Re-scheduling Charges

The State Load Despatch Centre is required to undertake 'Scheduling' process on day-ahead basis in accordance with State Grid Code Regulations, co-ordinate with RLDC and facilitate open access transactions.

Accordingly, the State Load Despatch Centre shall be entitled to Scheduling Charges at the rate of Rs. 1,000/- (Rupees One Thousand Only) per day for intra-State short term open access transactions. The Commission, at its discretion, may change the Scheduling Charges in the future.

The State Load Despatch Centre is entitled to levy Rescheduling Charges on generating companies, distribution licensees, trading companies, transmission OA users, as the case may be, at the rate of Rs. 3,000/- for each revision in schedule after the finalization of schedules by State Load Despatch Centre on a day-ahead basis or for non-submission of schedule as per State Grid Code requirements. The Commission, at its discretion, may change the Re-scheduling Charges in the future.

The revenue from such Scheduling and Rescheduling Charges shall be considered for adjustment of SLDC budget/ARR in subsequent years unless it forms part of LDC development fund on its creation.

The charges mentioned above are proposed for recovery and the stakeholders may provide their comments and suggestions on the appropriateness of the proposed fees (quantum).

6.6 Short Term Open Access Application Processing Fees

The State Load Despatch Centre, as Nodal Agency for Short-term Transmission Open Access (STOA) transactions, is responsible for facilitating and processing of short-term open access applications in accordance with the procedures formulated by the Nodal Agency and as approved by the Commission for the purposes.

Accordingly, the Commission has approved non-refundable application processing fees of Rs. 5,000/- per application in case of short-term open access transactions. The Commission, at its discretion, may change the Short Term Open Access Application Processing Fees in the future.

The revenue from such processing fees shall be considered for adjustment of SLDC budget in subsequent years unless it forms part of LDC development fund on its creation.

The fees mentioned above are proposed for recovery and the stakeholders may provide their comments and suggestions on the appropriateness of the proposed fees (quantum).

7 BILLING

7.1 Billing and Payment of Charges

The billing cycle will depend on the nature of charges being levied. It is proposed that the bills shall be raised on monthly / semi-annual basis by the State Load Despatch Centre in accordance with the Regulations, and payments shall be made by the users / beneficiaries directly to State Load Despatch Centre.

The Annual SLDC Charges will be payable by the beneficiaries on a semi-annual basis on 10^{th} April and 10^{th} October of each financial year. Similarly, the SLDC Operating Charges shall be recovered from the beneficiaries on a monthly basis.

It is proposed that the State Load Despatch Centre will raise monthly bill for SLDC Operating Charges on every beneficiary on 1^{st} working day of the month for the SLDC Operating Charges of preceding month. (E.g. SLDC Operating Charges bill for the month of July shall be raised on 1^{st} working day of August)

Accordingly, the monthly bill for SLDC Operating Charges for each calendar month will be payable by 15^{th} day of subsequent calendar month by the beneficiaries. (E.g. SLDC Operating Charges bill for the month of July shall be payable by 15^{th} day of August)

Persistent default in payment of State Load Despatch Centre fees and charges would be brought to the notice of the Commission who would intervene so as to protect the interest of SLDC which has no other source of income.

7.2 Late Payment Surcharge

In case the payment of any bill for charges payable is delayed by a beneficiary beyond a period of 15 days from the date of billing, it is proposed that a late payment surcharge at the rate of 1.25% per month or part thereof shall be levied by the State Load Despatch Centre.