Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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CASE No. 233 of 2022

In the matter of

Case of Maharashtra State Load Despatch Centre for Truing-Up for FY 2019-20 to FY 2021-22, Provisional Truing-Up of Aggregate Revenue Requirement for FY 2022-23 and Aggregate Revenue Requirement forecast and determination of Fees & Charges for FY 2023-24 to FY 2024-25.

Coram
Sanjay Kumar, Chairperson
I. M. Bohari, Member
Mukesh Khullar, Member

ORDER

Date: 31 March, 2023

In accordance with the first proviso to Section 31(2) of the Electricity Act (**EA**), 2003, the Maharashtra State Electricity Transmission Co. Ltd. (**MSETCL**), which is the State Transmission Utility (**STU**) in Maharashtra, operates the Maharashtra State Load Despatch Centre (**MSLDC**).

MSLDC has filed a Petition for Truing-Up for FY 2019-20 to FY 2021-22, Provisional Truing-up of Aggregate Revenue Requirement (**ARR**) for FY 2022-23 and ARR forecast and determination of Fees and Charges for the balance years of the 4th Multi Year Tariff (**MYT**) Control Period from FY 2023-24 to FY 2024-25. The Truing-up of the ARR for FY 2019-20 is being considered under the MERC (Multi Year Tariff) Regulations (‘**the MYT Regulations’**), 2015, while the Truing-Up for FY 2020-21 to FY 2021-22, Provisional Truing-up of ARR for FY 2022-23 and revised ARR forecast and determination of Fees and Charges for FY 2023-24 to FY 2024-25 is being considered under the MERC (Multi Year Tariff) Regulations (‘**the MYT Regulations’**), 2019.

The Commission, in exercise of the powers vested in it under Sections 61 and 62 of the EA, 2003 and all other powers enabling it in this behalf, and after taking into consideration the submissions made by MSLDC, issues raised during the public consultation process and all other relevant material, has approved the Truing-up for FY 2019-20 to FY 2021-22, Provisional Truing-up of ARR for FY 2022-23 and ARR forecast and determination of Fees and Charges for FY 2023-24 to FY 2024-25 in this Order.

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List of Abbreviations

A&G	Administration and General
ABT	Availability Based Tariff
AFC	Annual Fixed Charges
ALDC	Area Load Despatch Centre
AMC	Annual Maintenance Contract
ARR	Aggregate Revenue Requirement
BSM	Balancing and Settlement Mechanism
CAGR	Compounded Annual Growth Rate
Capex	Capital Expenditure
CERC	Central Electricity Regulatory Commission
CPD	Co-incident Peak Demand
CPI	Consumer Price Index
CPRI	Central Power Research Institute
DA	Dearness Allowance
DPR	Detailed Project Report
FBSM	Final Balancing Settlement Mechanism
FOR	Forum of Regulators
GFA	Gross Fixed Asset
InSTS	Intra-State Transmission System
MoP	Ministry of Power
MERC	Maharashtra Electricity Regulatory Commission
MSETCL	Maharashtra State Electricity Transmission Company Limited
MSLDC	Maharashtra State Load Despatch Centre
NCPD	Non-Coincident Peak Demand
NLDC	National Load Despatch Centre
O&M	Operation and Maintenance
PFC	Power Finance Corporation
POSOCO	Power System Operation Corporation
REMC	Renewable Energy Management Centre
ROE	Return on Equity

RLDC	Regional Load Despatch Centre
SBI	State Bank of India
SCADA	Supervisory Control and Data Acquisition
SLDC	State Load Despatch Centre
STOA	Short Term Open Access Users
STU	State Transmission Utility
TSU	Transmission System User
WPI	Wholesale Price Index
WRPC	Western Regional Power Committee

1 INTRODUCTION

1.1 Background

1.1.1 MSETCL, which is also the STU in Maharashtra, operates the MSLDC. The MSLDC operates from two centres at Kalwa (Thane) and at Ambazari (Nagpur), and has an additional sub-LDC in Mumbai, which was shifted to MSLDC Control room at Kalwa and being operated through separate desk.

1.1.2 MSLDC has filed a Petition on 25 October, 2022 for approval of Truing-Up for FY 2019-20 to FY 2021-22, Provisional Truing-Up of ARR for FY 2022-23 and ARR forecast and determination of Fees and Charges for FY 2023-24 to FY 2024-25 under Regulation 5.1(b) of the MYT Regulations, 2019.

1.2 Petition and prayers of MSLDC

1.2.1 The Commission conveyed preliminary data gaps to MSLDC on 10 November, 2022. The Technical Validation Session (**TVS**) was held at the Office of the Commission on 24 November, 2022 with the MSLDC officials to discuss the queries raised by the Commission. The list of persons who attended the pre-admittance TVS discussion is at **Appendix – I**. Based on the discussions, MSLDC submitted its replies to the data gaps on 23 November, 2022, 29 November 2022 and 5 December, 2022. Further MSLDC submitted its Revised Petition incorporating the response to data gaps on 9 December 2022.

1.2.2 The main prayers of MSLDC in its Revised Petition are as follows:

"

1. *Admit the Mid-term review Petition in accordance with Regulations 5.1 of the MERC MYT Regulations, 2019.*
2. *Allow truing-up for FY 2019-20 to FY 2021-22 of Maharashtra State Load Despatch Centre (MSLDC) based on the Audited Accounts and Allocation Statement for the respective financial year, and according to the applicable provisions under MERC (Multi Year Tariff) Regulations, 2015 and MERC (Multi Year Tariff) Regulations, 2019.*
3. *While truing-up of FY 2020-21 and FY 2021-22, the normative O&M expenses may be considered based on final true-up approved expense for FY 2019-20 before sharing of loss and gain due to efficiency parameters. The Petitioner humbly requests the Commission not to project the normative O&M expenses for future years (FY 2020-21 & FY 2021-22) based on performance achieved in base year FY 2019-20 (i.e. after sharing of gain / loss) as it may not be appropriate to judge the performance of future years based on the performance achieved in past year (i.e. after sharing of gain / loss). The Commission may review and revise the methodology of re-computing the normative O&M expenses*

while truing-up for FY 2020-21 and FY 2021-22 by availing powers vested in 'Regulations 105: Power to Relax' under MYT Regulations 2019.

4. *Allow and approve GFA and capitalization as per audited account of the Petitioner including earlier period capitalization as per detailed explanation submitted by the Petitioner.*
5. *Allow Provisional true up for FY 2022-23 of MSLDC according to applicable provisions under MERC (Multi Year Tariff) Regulations, 2019.*
6. *Approve O&M expenses as projected by the Petitioner for FY 2022-23 to FY 2024-25 considering average O&M expenses of FY 2020-21 and FY 2021-22 (before sharing of gain and loss), since true impact of wage revision is not captured in FY 2019-20 which is the base year as per the MYT Regulations 2019. The Petitioner humbly requests the Hon'ble Commission for the said relaxation under 'Regulations 105: Power to Relax'.*
7. *Approve MSLDC Charges for FY 2023-24 to FY 2024-25 as per MERC MYT Regulations 2019 that would help in recovery of consolidated ARR for respective years of the remaining period of 4th Control Period.*
8. *Allow MSLDC to use the LDCD fund, as created by the Hon'ble Commission in MSLDC MYT Order in Case No. 291 of 2019, for the purpose of financing the capitalization during FY 2019-20 to FY 2024-25.*
9. *Continue the various charges i.e., Short-term Open Access Application Processing Fees, Registration or Connection Fees, Scheduling Fees/Charges and Re-Scheduling Fees, Renewable Energy Certificate Processing Fees as approved by the Hon'ble Commission in MSLDC MYT Order in Case No. 291 of 2019.*
10. *Approve the SLDC's request for relaxation of certain parameters as sought in the Petition, while approving this Petition.*
11. *Allow the Petitioner for further submission, addition and alteration to this petition as may be necessary from time to time.*
12. *Grant an opportunity in person before Hon'ble Commission during the hearing on the above matter.*
13. *Condone any inadvertent omission/errors/short comings and permit the petitioner to add/change/modify/alter this filing and make future submissions as may be required at a future date."*

1.3 Admission of Petition and Public Consultation Process

1.3.1 The Commission admitted the revised Petition on 22 December, 2022 and directed MSLDC to publish a Public Notice in accordance with Section 64 of the EA 2003 in the prescribed abridged form and manner for inviting suggestions/objections on its MTR Petition. The Commission also directed MSLDC to reply expeditiously to all the suggestions and comments received.

1.3.2 MSLDC published the Public Notice inviting suggestions and objections in two daily English newspapers (Hindustan Times and Indian Express) and two Marathi newspapers (Punya Nagari, and Sakal) on 27 December 2022. The Petition and its Executive Summary were made available at MSLDC's offices and website (www.mahasldc.in). The Public Notice and Executive Summary of the Petition were also made available on the website of the Commission (www.merc.gov.in) in downloadable format.

1.3.3 The Commission received a written objection on the MSLDC's MTR Petition from three objectors, namely (i.) Mindspace Business Parks Pvt. Ltd. (**MBPPL**), (ii.) Gigaplex Estate Pvt. Ltd. (**GEPL**) and (iii.) Maharashtra State Electricity Distribution Co. Ltd. (**MSEDCL**). The E-Public Hearing through video conferencing was held on 24 January 2023 at 10:30 Hrs. The list of persons who attended the Public Hearing is at **Appendix- II.**

1.3.4 The Commission has ensured that the due process contemplated under law to ensure transparency and public participation was followed at every stage and an adequate opportunity was given to all concerned to express their views.

1.3.5 The suggestions and objections made in writing as well as during the e-Public Hearing, along with MSLDC's responses and the Commission's rulings have been summarized in Section 2 of this Order.

1.4 Organization of the Order

1.4.1 This Order is organized in the following eight Sections:

- **Section 1** sets out the regulatory process undertaken by the Commission.
- **Section 2** sets out the suggestions / objections received, the responses of MSLDC and the Commission's rulings.
- **Section 3** deals with the Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22.
- **Section 4** deals with the Provisional Truing-up of ARR for FY 2022-23.
- **Section 5** deals with forecast of revised Annual Fixed Charges for the FY 2023-24 to FY 2024-25.
- **Section 6** deals with revised determination of Fees and Charges and the mechanism for their recovery.
- **Section 7** deals with the compliance of previous directives, and new directives to MSLDC.
- **Section 8** deals with the applicability of the present Order.

2 SUGGESTIONS/OBJECTIONS RECEIVED, MSLDC'S RESPONSES AND COMMISSION'S RULINGS

2.1 Computation of Transmission Capacity Rights (TCRs)

GEPL and MBPPL's submission

2.1.1 The demand in area of supply of GEPL and MBPPL was affected due to imposition of COVID 19 related lockdown and due to the fact that post relaxation of the COVID 19 related restrictions, the occupants (IT and ITeS consumers) were mostly working from home. The demand in FY 2020-21 and FY 2021-22 was reduced significantly in comparison with demand in FY 2019-20. They requested to consider the demand of FY 2019-20 (pre-Covid era) instead of present level of FY 2021-22 while projecting the base transmission capacity rights (**TCR**). The peak demand catered by GEPL and MBPPL during FY 2020-21 and FY 2021-22 shall not be considered as yardstick for computation of TCR. The identical prayer i.e. considering the peak demand catered by them during pre-Covid circumstances for revised projecting TCR for FY 2023-24 and FY 2024-25 has also been made by GEPL and MBPPL in their respective MTR Petitions filed before the Commission.

MSLDC's Response

2.1.2 The Petitioner has calculated the Base Transmission Capacity Right (TCR) as per data available with MSLDC regarding demand data of the transmission system users (**TSU**s). The Base TCR for FY 2023-24 and FY 2024-25 has been projected considering the growth rate (**CAGR**) derived based on past four years' actual data (FY 2019-20 to FY 2022-23). The same approach has been considered by the Commission in its Order in Case No. 291 of 2019. Further, as per share of individual TSU in base TCR during FY 2021-22, sharing of the base TCR has been proposed for next two years' period for every TSUs. As per Regulation 99 of MERC MYT Regulations, 2019, MSLDC Charges payable by the Transmission System Users shall be computed on the basis of base TCR of the beneficiaries. TCR can be calculated as average of Coincident Peak Demand (**CPD**) and Non-Coincident Peak Demand (**NCPD**). Regulation 99.1 of the MYT Regulations, 2019 is reproduced below:

"The MSLDC Charges payable by the Transmission System Users shall be computed in accordance with the following formula:

$$AFC(u)\,(t) = AFC(t)\ X\ ([Base\ TCR(u)](t)\ /\ \Sigma[Base\ TCR(u)](t))$$

Where,

AFC(u)(t) = MSLDC Charges to be shared by the Beneficiary (u) for the Yearly period(t);

AFC(t) = Total MSLDC Charges to be shared by the Beneficiaries for the Yearly period(t);

Base TCR (u) = [CPD(u)(t) + NCPD(u) (t)] /2

Where,

Base TCR represents the Base Transmission Capacity Right of each Beneficiary (u) for the Yearly period (t);

CPD(u) (t) = Average Coincident Peak Demand of the Beneficiary (u) for the Yearly period(t);
NCPD(u)(t) = Average Non-Coincident Peak Demand of the Beneficiary (u) for the Yearly period(t);

Provided that the Allotted Capacity for long-term Open Access Users, excluding partial long-term Users, shall be considered in lieu of the average monthly CPD and NCPD for calculating the Base TCR for Open Access consumers."

2.1.3 The Commission in its Order in Case No. 291 of 2019 has opined the following with respect to base TCR and sharing of the same by TSUs.

"6.1.12 The Commission has elaborated the methodology for determination of the Base Transmission Capacity Rights (TCR) and sharing proportion of the Transmission Charges amongst the Beneficiaries, in its Intra-State Transmission System Tariff Order in Case No. 327 of 2019. The Commission has applied the same considerations for the sharing of the MSLDC Charges, and accordingly considered the Base TCR for TSUs for FY 2020-21 to FY 2024-25 as shown in the following Table:"

2.1.4 MSLDC has submitted the available data as part of the Petition submitted before the Commission. The Commission may decide the base TCR and share of individual TSU in base TCR as per the Intra-State Transmission System Tariff Order, to be finalized by the Commission.

Commission's Analysis and Ruling

2.1.5 The Commission has taken a note of the submission made by GEPL and MBPPL regarding the issues pertaining to Transmission Capacity Rights and response of the Petitioner in this regard. The Commission analysed the matter and presently does not wish to consider the suggestion for change in the methodology for computation of the TCR as per the provisions of the MYT Regulations, 2019, this being the Mid Term Review. The details are outlined in the Section 6 of the Order.

2.2 Scheduling and Re-scheduling charges

MSEDCL's submission

2.2.1 MSLDC, in its MTR Petition, has requested the Commission to retain the scheduling Fee of Rs. 2250/- per day and Rescheduling Fees of Rs. 2250 per revision as approved vide Order dated 30 March 2020 in Case No. 291 of 2019.

2.2.2 The Commission, vide its Order dated 30 March 2020 in Case No. 291 of 2019, has approved annual fixed charges as payable by MSEDCL to MSLDC as below:

Table 1: Approved Annual Fixed Charges (Rs. Lakh)

FY 2020-21		FY 2021-22		FY 2022-23		FY 2023-24		FY 2024-25	
Annual	**Monthly**	**Annual**	**Monthly**	**Annual**	**Monthly**	**Annual**	**Monthly**	**Annual**	**Monthly**
2,833.01	236.084	2,685.55	223.796	2,917.81	243.151	3,156.87	263.073	3,253.84	271.154

2.2.3 MSEDCL is paying above monthly SLDC charges in timely manner. As such, the ARR of MSLDC is already being paid by the Distribution Licensees.

2.2.4 Further, the Commission, on 7 October 2021 has issued a suo moto Order in the matter of commencement of the commercial arrangement of MERC (Deviation Settlement Mechanism and related matters) Regulations, 2019 (**DSM Regulations**) and related issues thereof.

2.2.5 In order to facilitate and guide timely implementation, address difficulties, if any, and to monitor progress of several implementation steps related to the DSM Regulations, the Commission constituted a Working Group on 7 January 2019. The Working Group has been monitoring the progress of the DSM Software development, interacting with MSLDC and other stakeholders (Buyers and Sellers) for understanding their difficulties or concerns related to implementation of the DSM Regulations as well as guiding the stakeholders and suggesting the Commission to address their difficulties and facilitating preparedness of stakeholders for smooth shift to DSM regime.

2.2.6 MSEDCL, during the working group committee's meeting, had raised the issue of the scheduling and re-scheduling charges as payable for each revision in schedule after finalization of schedules by MSLDC on a day-ahead basis.

2.2.7 MSEDCL and Adani Electricity Mumbai Ltd.-Distribution (**AEML-D**) had suggested that the Distribution Licensees / TSUs need not pay the scheduling and re-scheduling charges as they are paying monthly SLDC Charges determined under the Commission's Order in Case No. 291 of 2019.

2.2.8 The Commission has noted the aforesaid submissions of MSEDCL and AEML-D in its Order dated 7 October 2021 and held that the Distribution Licensees/Buyers may make their submission in the upcoming Mid Term Review Petitions along with the impact of the applicability of scheduling and re-scheduling charges for Distribution Licensees.

2.2.9 MSLDC has raised Scheduling and Rescheduling bills for 12 months i.e., for period of October 2021 to September 2022 in the month of August 2022 towards the revisions in scheduling. Subsequently the bills were revised in the month of November 2022, amounting to Rs 632.21 Lakh.

2.2.10 Scheduling and rescheduling charges, amounting Rs. 632.25 Lakh levied on MSEDCL will result in additional burden on MSEDCL and also on the end consumers. MSEDCL carries out schedule revisions considering the real time demand for optimizing the power purchase cost with the objective to minimize the burden on the consumers. Further, rescheduling is one of the basic functions carried out by MSLDC.

2.2.11 Further, no such scheduling and rescheduling charges are being recovered by WRLDC for the revisions in schedule as requested by MSEDCL for Inter State Generating Stations.

2.2.12 Therefore, since MSEDCL is already contributing to annual fixed charges of SLDC as per the MYT Regulations 2019, scheduling and rescheduling charges as levied by MSLDC on MSEDCL (which is a TSU), are not required to be recovered from MSEDCL. Further, all TSUs may be exempted from paying scheduling and rescheduling charges to MSLDC.

2.2.13 MSLDC should not be allowed to recover monthly scheduling and rescheduling charges from MSEDCL and the other TSUs.

MSLDC's Response:

2.2.14 Vide its Order dated 30 March 2020 in Case No. 291 of 2019 in the matter of MSLDC's Petition for Truing up for FY 2017-18 and FY 2018-19 and determination of Fees & Charges from FY 2020-21 to FY 2024-25, the scheduling and rescheduling charges have been approved by the Commission.

2.2.15 Accordingly, MSLDC has issued scheduling and rescheduling invoices to State Entities by considering rescheduling charges only.

2.2.16 Presently, in scheduling module of DSM software, Discom-wise load generation balance is carried out in each time block for their economic load despatch. Distribution Licensees are revising their forecasted demands in the software. The revisions for the State Entities including open access seller and buyers are recorded in the software and Discom-wise load-generation balance is being carried out by considering the effect of these revisions. Hence, charges towards these schedule revisions are required to be recovered as per the MYT Regulations, 2019.

2.2.17 Further, MSLDC is revenue neutral in this matter. Income from scheduling and re-scheduling charges has been considered as income from open access charges and the same is deducted from total expenditure of MSLDC to finalize the Annual Fixed Charges for MSLDC. If open access charges are reduced, Annual Fixed Charges for MSLDC will increase accordingly and hence MSEDCL will have to bear proportionate increased charges.

Commission's Analysis and Ruling

2.2.18 The Commission notes that the DSM Procedure notified by the Commission on 11 November 2019 provides the MSLDC Fees and Charges payable by the generators and the Distribution Licensees. The relevant extract of the DSM Procedure reads as follows:

" 9 MSLDC Fees and Charges

MSLDC fees and charges including amount towards Corpus shall be paid by the State Entity in advance as approved by the Commission from time to time. ***The other charges shall be applicable as per relevant Orders/Regulations of the Commission. The prevalent charges are provided under Annexure No. 1 with this Procedure****."*

2.2.19 Further, the Annexure1 of the approved DSM procedure has stipulated the following charges payable to MSLDC:

" *Annexure I*

Proposed Charges payable by Buyer/Seller to MSLDC

Sr. No.	*Type of Charges*	*Parameter*	*Amount (Rs.)*	*Details of Payment*
		……		
2	*Scheduling Charges*	*As and when approved by the Commission*	*2,250/-*	*For every day*
3	***Revision in Schedules if requested by Buyer/Seller***	*As and when approved by the Commission)*	***2,250/-***	***For every revision***
		………		

2.2.20 Further, the Commission has been determining the scheduling and rescheduling charges in accordance with the applicable provisions of the MYT Regulations, 2019. The regulation reads as under:

*"**100 Fees to be Charged by MSLDC***

100.1 The MSLDC shall recover the following Fees as approved by the Commission from time to time:

a) Registration or Connection Fees per connection from all users connecting to the Intra-State Transmission System;

b) Scheduling Fees per day for intra-State short-term Open Access transactions;

c) ***Re-scheduling Fees for each revision in schedule after the finalization*** *of schedules by the MSLDC on a day-ahead basis or for non-submission of schedule as per State Grid Code requirements;*
d) Short-term Open Access Application Processing Fees;
e) Any other Fees approved by the Commission from time to time.

100.2 The revenue from such Fees shall be considered for adjustment of Annual Fixed Charges in subsequent Years unless the same forms part of the LDC Development Fund."

2.2.21 Since, the MYT Regulations, 2019 provide that the scheduling charges shall be payable for intra-State short term Open Access transactions, generators and distribution licensees are not being levied the scheduling charges. However, rescheduling charges are being levied on the generators and distribution Licensees for each revision in schedule after finalization of the schedule on day-ahead basis as per above referred provisions of the Regulations/DSM Procedure. Thus, MSLDC has been following the aforesaid Regulation while levying the scheduling and rescheduling charges. Further, the Commission also notes that these re-scheduling charges are being recovered from the Distribution Licensees for scheduling/rescheduling services provided by MSLDC.

2.2.22 Having said that, the Commission also notes that since commencement of the commercial implementation of the DSM Regulations, the number of revisions by the distribution licensees and generating companies has increased as these State Entities monitor their deviations in real time on 15-minute basis and revise their schedules regularly to avoid the levy of deviation and additional deviation charges and thereby improving deviation management of the State. Hence, their revisions in schedules also help MSLDC in maintaining the state's overdrawal / underdrawal within the stipulated limit and managing deviation. Also, since the scheduling and rescheduling is being done using the DSM software, the manual efforts have substantially reduced post implementation of automation of such scheduling and rescheduling through DSM software at MSLDC**. Further, no such scheduling and rescheduling charges are recovered by WRLDC for the revisions in schedule for schedule requested Discoms from Inter State Generating Stations**. **In view of this, the Commission is of the view that it would be appropriate to reduce the rescheduling charges from its present level considering that the revisions in schedules undertaken by the state entities helps MSLDC in deviation management and automation of scheduling/rescheduling services at MSLDC. Considering the suggestions of the Distribution Licensees, the Commission thinks it fit to rationalise and reduce the rescheduling charges to a level lower than 50% of the present level for the time being. Accordingly, it is directed that the rescheduling charges shall be Rs. 1000/- per revision in schedule after finalization of the schedule on day-ahead basis and MSLDC (if felt necessary**

for any pressing reason) may make its detailed submission in next MYT Petition, if any change is required in these charges.

2.3 Exclusion of revisions of partial Open Access consumers in MSEDCL's scheduling/ rescheduling charges computation related issue

MSEDCL's submission

2.3.1 In case the Commission allows MSLDC to recover monthly scheduling and rescheduling charges from MSEDCL, MSLDC should be directed to exclude revisions of open access consumers in MSEDCL's computation as MSEDCL cannot recover these charges from such open access consumers and MSLDC may be directed to recover scheduling and rescheduling charges directly from open access consumers. MSLDC may recover scheduling and rescheduling charges from the users / participants who are not contributing annual fixed charges of MSLDC.

MSLDC's Response:

2.3.2 As per Regulation 53 of the MERC (State Grid Code) Regulations, 2020 (**Grid Code Regulations**), Buyer(s) or Seller(s) may request for revision of their schedules during intra-day operation.

2.3.3 The submission of availability of contracted sources for all consumers including partial open access consumers is the responsibility of the Distribution Licensees. The relevant Regulation of State Grid Code Regulations reads as follows:

> *"52.3.5. While preparing the Day ahead load forecast, the Buyers shall take into consideration the load requirements of the Open Access Users located within their licensee area as well.* ***While furnishing the overall Load forecast schedule to SLDC, Buyers shall consider forecasted load requirement of 'Partial Open Access Users****."*
>
> *"52.3.6. Buyers including Distribution Licensees shall regularly carry out the necessary exercises regarding short-term Load estimation for their respective area, to enable them to plan in advance as to how they would meet their consumers' load without overdrawing from the grid."*
>
> *"52.3.7. Buyers including Distribution licensees shall furnish details of bilateral power they have contracted on short term, medium term, and long-term basis."*
>
> *"52.3.8. Buyers shall furnish the details of their bi-lateral purchases and sources of power supply to SLDC."*

2.3.4 The sellers (above 25 MW and connected to the Intra-State Transmission System (**InSTS**) and buyer i.e., Distribution Licensees are the registered entities in the DSM software. The embedded open access consumers are not part of DSM registration. However, incorporation of their scheduling and rescheduling for revisions is essentially required for Discom wise load generation balance and accuracy in calculations of Discom's drawl.

2.3.5 Hence, the access of scheduling module is provided to the open access consumers for the daily scheduling and rescheduling activities, in order to ensure timely incorporation of their revisions. This also ensures the accuracy of scheduling. For MSEDCL, it will be difficult to submit/punch the revisions of all the open access consumers. Also, there may be possibility of delayed punching in software which may affect the scheduling and real time load generation.

2.3.6 Further, open access consumer's demands are the part discom's drawl and availabilities of its contracted seller is also considered as availability of that discom in which it is embedded, while operating Discom-wise load generation balance.

2.3.7 At the time of issuance of rescheduling invoices vide email dated 22 June 2022, MSLDC clarified to MSEDCL that rescheduling invoices are raised to discoms which includes the charges of demand revisions of the respective discom and the revisions of embedded open access consumers. All discoms have to make payment towards the rescheduling charges as per the invoices raised and recover the same from the respective embedded OA consumers.

2.3.8 Therefore, the rescheduling counts of open access consumers are also included in embedded discom while issuing rescheduling invoices to respective discoms.

Commission's Analysis and Ruling

2.3.9 The Regulation 14 of the MERC (Distribution Open Access) Regulations, 2016 states that:

"14.1. The ***bill for use of the Distribution System for wheeling of electricity in its network shall be raised by the Distribution Licensee on the entity to whom the Open Access is granted****, and shall indicate the following:*

(i) Wheeling Charges;

(ii) Cross-Subsidy Surcharge;

(iii) Additional Surcharge on the charges for wheeling;

(iv) ***MSLDC fees and charges****.*

Provided that, if the ***Distribution Licensee schedules power for the Open Access Consumer, Generating Company or Licensee****, as the case may be, the* ***MSLDC fees and charges payable by the Licensee shall be shared by them in the ratio of scheduled demand of Open Access sought to the total demand of the Distribution Licensee on a pro-rata basis for Long-term and Medium-term Open Access****;*

Provided further that the ***scheduling and other operating charges, as may be applicable, shall be levied by the Distribution Licensee on the Short-term Open Access Consumer, Generating Station or Licensee at the rate approved for Short-term Open Access by the Commission in its Order determining MSLDC Fees and Charges;***

Provided also that any specific methodology for charging MSLDC fees and charges as may be approved by the Commission from time to time through separate Order or other Regulations shall be applicable."

2.3.10 **Similar provision exists in the MERC (Transmission Open Access) Regulations, 2016.**

2.3.11 **Thus, the above Regulation is very clear which allows recovery of MSLDC fees and charges from the open access consumers and MSEDCL should ensure implementation of the above Regulations.**

3 TRUING-UP FOR FY 2019-20, FY 2020-21 and FY 2021-22

3.1 Background

3.1.1 MSLDC has sought Truing-Up of the expenses and revenue for FY 2019-20 considering actuals as per the audited trial balance certified by Statutory Auditors, allocation statement prepared on the basis of audited Trial Balance and in accordance with the MYT Regulations, 2015. It has submitted reasons for variations in the actual expenses of FY 2019-20 as compared to those approved in the Order dated 30 March 2020 in Case No. 291 of 2019 (**MYT Order**). Truing up of the ARR for FY 2019-20 is in accordance with the provisions of the MYT Regulations, 2015.

3.1.2 Further, MSLDC has also sought Truing-Up of the expenses and revenue for FY 2020-21 and FY 2021-22 considering actuals as per the audited trial balance certified by Statutory Auditors, allocation statement prepared on the basis of audited Trial Balance and in accordance with the MYT Regulations, 2019. It has submitted reasons for variations in the actual expenses of FY 2020-21 and FY 2021-22 as compared to those approved in the MYT Order. Truing up of the ARR for FY 2020-21 and FY 2021-22 is in accordance with the provisions of the MYT Regulations, 2019.

3.1.3 The analysis underlying the Commission's approval is set out in the following Sections.

3.2 Operation and Maintenance Expenses

Employee Expenses - FY 2019-20

3.2.1 ***MSLDC's Submission***The actual employee expenses for FY 2019-20 are Rs. 1,711.25 Lakh, which are marginally lower than Rs. 1,805.31 Lakh approved by the Commission in the MYT Order. The employee expenses approved by the Commission include wage revision arrears of Rs. 237.96 Lakh.

3.2.2 Further, the training expenses including Travelling Allowance (**TA**) / (Dearness Allowance (**DA**) and remuneration for training expert reflected in the Trial Balance as a part of employee cost has been considered as part of A&G expenses based on the approach adopted in the past MYT Order of the Commission. To this extent, variation exists in claimed and Audited figures of Employee expenses as well as A&G expenses.

3.2.3 The details of actual Employee Expenses incurred in FY 2019-20 are shown in the following Table:

Table 2: Employee Expenses for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	
	MYT Order	MTR Petition
Employee Expenses	1567.35 + 237.96 (wage revision) = 1805.31	1711.25

Employee Expenses - FY 2020-21 and FY 2021-22

3.2.4 Based on the Audited Accounts prepared by MSLDC for FY 2020-21 and FY 2021-22, the actual O&M expenses are Rs. 3025.95 Lakh and Rs. 3453.80 Lakh, respectively. The actual Operations and Maintenance marginally differ from approved O&M expenses given in Case No. 291 of 2019.

3.2.5 The number of employees was around 116 to 119 in those two years and the employee expenses were also similar, without any great divergence. The employee expenses were increased from FY 2020-21 onwards, as new pay scale was already implemented from Oct-2019 (applicable for 6 months for the FY 2019-20) and the revised salary was applicable for full 12-months period in FY 2020-21.

Commission's Analysis and Ruling

3.2.6 The Commission has noted the submissions of MSLDC and also validated the information submitted by MSLDC from the allocation statement and audited trial balance.

3.2.7 It was observed that the number of employees at MSLDC has not varied much i.e. 116 in FY 2019-20, 118 in FY 2020-21 and 117 in FY 2021-22. Accordingly, the number of employees is not impacting the employee expenses significantly.

3.2.8 As observed from the responses provided by MSLDC, the key reason for the increase in the employee expenses is the revision in the pay scale from October 2019 onwards. Further, MSLDC has provided the details pertaining to the actual pay out of wage revision arrears which has been done during the true-up period. The revised salary as per the new pay scale and payment of wage arrears for past periods is reflected in the employee expenses for FY 2019-20. The actual payment towards wage revision arrears as provided by MSLDC is given below.

Table 3: Actual Wage Revision Arrear, as submitted by MSLDC (Rs.)

Year-wise actual wage revision arrears payment	
FY 2019-20	89,33,092
FY 2020-21	138,34,737
FY 2021-22	174,52,243

3.2.9 As the actual pay out against the wage revision arrears has taken place during FY 2019-20, FY 2020-21 and FY 2021-22, the Commission has considered the same for approval as part of the employee expenses.

3.2.10 It is observed that the Employee expenses for FY 2019-20 have increased by 12% as compared to those for FY 2018-19. In response, MSLDC clarified that the House Rent Allowance (**HRA**) and conveyance allowance are calculated on basic pay. Due to pay revision, these allowances are now calculated on new basic pay. Also, in FY 2018-19, working strength was 111 and in FY 2019-20 working strength has increased to 116 resulting in increase in conveyance allowance. Consequent to the pay revision, all allowances have increased. As per Circular No. 90, Leave

Encashment for block year 2020-2022 has been stopped for pandemic year (Covid-19). Till FY 2018-19, employee share to EPS was included in G/L 424010, however in FY 2019-20 new General Ledger (**G/L**) for EPS was introduced.

3.2.11 The employee expenses have increased from FY 2020-21 onwards, as new pay scale was implemented from October 2019 onwards and revised salary was applicable for entire 12-months' period. Further, the remaining three instalments of wage arrears (for the period from April 2018 to September 2018) were paid in the months of February 2021, March 2021 and December 2021. The impact of payment towards wage arrears is included in the employee expenses.

3.2.12 MSLDC has clarified that the Leave travel expenses have reduced significantly in FY 2020-21 due to Covid-19 related travel restrictions imposed by various authorities.

3.2.13 Before pay revision, House Rent Allowance (**HRA**) has been calculated on old Basic Pay and after pay revision, HRA has been calculated on new basic pay leading to increase in HRA.

3.2.14 MSLDC has also clarified that the training expenses which are part of the employee expenses as per Audited Accounts, have been claimed as a part of A&G expenses in the Petition and to that extent, there exists a difference between the Employee Expenses and A&G Expenses shown in the Audited Accounts vis-à-vis those claimed in the Petition.

3.2.15 Accordingly, the Commission has reviewed the reasons for the variation in the employee cost and for the Truing-Up for FY 2019-20, FY 2020-21 and FY 2021-22, the actual Employee Expenses approved by the Commission are given in the table below:

Table 4: Employee Expenses for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Rs Lakhs

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Employee Expenses		1,621.92	1,621.92		1,886.02	1,886.02		2,087.96	2,087.96
Add: Wage Revision Arrears		89.33	89.33		138.35	138.35		174.52	174.52
Total Employee Expenses	**1,805.31**	**1,711.25**	**1,711.25**	*****	**2,024.37**	**2,024.37**	*****	**2,262.49**	**2,262.49**

** The Commission did not approve the employee expenses seperately for FY 2020-21 and FY 2021-22*

3.2.16 **The Commission approves Employee Expenses of Rs. 1711.25 Lakh for FY 2019-20, Rs. 2024.37 for FY 2020-21 and Rs. 2262.49 for FY 2021-22 on Truing-Up as claimed by MSLDC.**

Administration & General Expenses - FY 2019-20

MSLDC's Submission

3.2.17 The Administrative and General Expenses (**A&G**) includes the following major heads:

- Rent, Rates and Taxes
- Insurance
- Revenue Stamp Expenses, Telephone, Postage & Telegrams
- Legal Charges
- Technical Fees, Consultancy and Other Professional Charges
- Conveyance and Travel
- Electricity charges
- Vehicle Running Expenses i.e., Petrol and Oil & Vehicle Hiring Expenses
- Security/Service Charges Paid to Outside Agencies for safety & protection
- IT and Communication related expenses
- Other Charges:
    - Fee and Subscriptions - Books and Periodicals
    - Printing and Stationery
    - Advertisement Expenses
    - Water Charges
    - Upkeep of Office Premises
    - Miscellaneous Expenses

3.2.18 The major components of A&G expenses are electricity charges, security charges, vehicle hiring expenses, outsourced personnel salary and office expenses.

3.2.19 The actual A&G Expenses for FY 2019-20 as per audited accounts are Rs. 785.30 Lakh as against Rs. 542.67 Lakh approved by the Commission in the MYT Order.

3.2.20 The actual A&G expenses were higher than that approved in MYT Order due to increase in electricity expenses, cost of service procured, computer stationery and increase in deployment of security guards. The expenses towards computer stationery have increased due to the increase of cost of AMC services. The outsourced persons salary component was also significant. The outsource personnel related details based on the purchase orders issued by the MSLDC are provided in the Petition. This includes outsourcing of 21 resources for an amount of Rs. 38.30 Lakh and 12 ITI resources for an amount of Rs. 23.73 Lakh during FY 2019-20.

3.2.21 Further, the training expenses for FY 2019-20 have been shifted from Employee Expenses to A&G Expenses. Thus, to this extent, A&G Expenses claimed in the Petition are higher than those appearing in Allocation Statement.

3.2.22 The A&G Expenses for FY 2019-20 as claimed by MSLDC are given in the table below:

Table 5: A&G Expenses for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	
	MYT Order	MTR Petition
A&G Expenses	542.67	785.30

FY 2020-21 and FY 2021-22

3.2.23 A&G Expenses in FY 2020-21 and in FY 2021-22 were Rs. 755.22 Lakh and Rs. 1020.94 Lakh respectively. MSLDC's A&G expenses have increased in FY 2020-21 and FY 2021-22 due to increase in electricity charges, upkeep of office, security charges, and vehicle hiring charges and outsource personnel salary. The details of outsource personnel related contracts are provided in the Petition which indicates procurement of services of 82 no. of outsourced / hired resources for Rs. 226.80 Lakh and 20 nos. ITI resources at Rs. 42.66 Lakh in FY 2020-21. Similarly, this cost was Rs. 72.31 Lakh for 48 nos. of outsourced / hired resources and Rs. 7.97 Lakh for 8 nos. ITI resources.

3.2.24 For security purpose, MSLDC appointed around 17 to 20 guards in FY 2020-21 and around 17 to 22 guards in FY 2021-22.

3.2.25 Office upkeep expenses have increased due to wrong booking of outsource expenses of Rs 82 lakhs in office upkeep GL. In FY 2019-20, rent expenditure includes rent reimbursement to Chief Engineer-MSLDC of Rs. 2 lakhs which was not there in FY 2020-21 and hence the expenditure reduced. Further, most of the expenditure also reduced due to Covid pandemic.

Commission's Analysis and Ruling

3.2.26 The Commission had reviewed the submissions of MSLDC and also validated the information submitted by MSLDC from the allocation statement and the audited trial balance.

3.2.27 The Commission also sought clarification regarding 31% increase in the A&G expenses in FY 2019-20 as compared to the previous year. MSLDC stated that the increase was mainly on account of the following reasons:

- Legal charges increased due to payment to lawyers for various Court cases.
- Fees paid to the Technical Advisor was included under consultancy charges.
- Advertisement expenses were increased on account of publication of various tenders.
- MSLDC, being an apex body for State Grid Operation, various authorities from State Government, Central Government, Generating Companies, Distribution Licensees, Transmission Licensees etc. visit MSLDC for discussion/meetings on grid related issues. Hence, the expenditure related to meetings and conferences have increased.

3.2.28 Further, in response to the query raised by the Commission regarding the reasons for increase of A&G expenses in FY 2021-22, MSLDC has submitted that the increase in the A&G expenses is mainly on account of increase in the cost associated with insurance expenses, professional, consultancy & technical fees, outsourcing expenses, training expenses, IT & communication related expenses, etc.

3.2.29 From the details submitted by MSLDC, it is observed that the increase in the insurance expenses was on account of the increased expenses due to REMC - SCADA asset which were being insured for the first time in FY 2021-22. Further, 42 nos. of additional computer operators were appointed through outsourcing for undertaking the FBSM pending bills and DSM related work. Further, in FY 2021-22, payment to Nagar Parishad Wadi for Ambazari ALDC was made, which was not there in FY 2020-21. The cost related to professional, consultancy and technical fees increased due to appointment of 3 advisors to support and capacity building work of MSLDC regarding implementation of DSM, RE DSM and implementation of remedial actions suggested by High Level Committee constituted for Mumbai partial grid failure occurred on 12th October 2020 during FY 2021-22.

3.2.30 The Commission also observed that the expenses in FY 2020-21 (i.e. the year prior to FY 2021-22) remained stagnant at the previous year levels due to impact of Covid 19 pandemic, however, this has led to the cost increase in FY 2021-22 to appear substantial. The Commission has examined the submissions of MSLDC with regards to the increase in the A&G expenses in FY 2021-22 over the previous year and considers it for purpose of approval.

3.2.31 Further, it is observed that RLDC fees is deducted from Fees and Subscriptions under A&G expenses. The amount deducted for FY 2019-20 is Rs 249.96 Lakh, however, the amount submitted under RLDC fees is Rs 498.59 Lakh. In response to the query raised by the Commission, MSLDC stated that the RLDC fees for FY 2019-20 includes Rs. 96.31 Lakh for the period of April to June 2019 (for 3 months), Rs. 152.32 Lakh for July to September 2019 (next 3 months) and Rs. 249.96 Lakh for remaining six months' period. For first six months, Rs.96.31 Lakh and Rs. 152.32 Lakh has been claimed by MSLDC, but not reflected in Trial Balance (TB). It has been mentioned that the said amount was not paid to MSEDCL by MSLDC and only adjusted against past due receivable from MSEDCL. That is why, while accounting, first it is considered as expenses as per claim of MSEDCL as per bill and subsequently it has been reversed and considered as an adjustment. The Commission has examined and accepted the submission of MSLDC.

3.2.32 The Commission has considered the justifications given by MSLDC for the increase in expenses and based on the same, the A&G Expenses approved by the Commission for FY 2019-20, FY 2020-21 and FY 2021-22 are shown in the table below:

Table 6: A&G Expenses for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
A&G Expenses	542.67	785.30	785.30	-	775.22	775.22	-	1,020.94	1,020.94

3.2.33 **The Commission approves Administration and General Expenses of Rs. 785.30 Lakh for FY 2019-20, Rs. 775.22 for FY 2020-21 and Rs. 1020.94 for FY 2021-22 on Truing-up, as claimed by MSLDC.**

Repairs and Maintenance Expenses

MSLDC's Submission

FY 2019-20

3.2.34 The actual Repairs and Maintenance (**R&M**) Expenses are Rs.178.78 Lakh as against Rs. 207.5 Lakh approved in MYT Order. The major expenditure in R&M expenses is attributable to various civil works, server, AC systems, indoor substation, lift, CCTV, etc. The R&M Expenses for FY 2019-20 as claimed by MSLDC are given in the table below:

Table 7: R&M Expenses for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
	FY 2019-20	
R&M Expenses	207.50	178.78

FY 2020-21 and FY 2021-22

3.2.35 The R&M expenses as per the audited statement have been claimed in truing up Petition. The R&M expenses on account of various civil works, servers, AC systems, indoor substation, lift, CC TV are the major expenditure items.

3.2.36 The R&M expenditure for FY 2020-21 is Rs 226.36 Lakhs and for FY 2021-22 it is Rs. 170.37 Lakhs.

Commission's Analysis and Ruling

3.2.37 The Commission has noted the submissions of MSLDC with regards to the R&M expenses and also validated the amounts from the allocation statement and audited trial balance shared by MSLDC.

3.2.38 In response to the Commission's query, MSLDC submitted that the variation in R&M expenses in FY 2020-21 is majorly due to cost towards AMC of SCADA and

Rs 43.42 lakh was due to expenditure for road work at ALDC, Ambazari. For other two years, there is no such variation.

3.2.39 The Commission observed that the actual R&M expenses in FY 2018-19 was Rs. 190.17 Lakhs and compared to the same, the expenses FY 2019-20 and FY 2021-22 have been lower. **The reason for increase in FY 2020-21 has been provided by MSLDC, as discussed above.**

3.2.40 Accordingly, for Truing-Up for FY 2019-20, FY 2020-21 and FY 2021-22, the Commission has approved the actual R&M Expenses as submitted by MSLDC, as given below:

Table 8: R&M Expenses for FY2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
R&M Expenses	207.50	178.78	178.78	-	226.36	226.36	-	170.37	170.37

3.2.41 **The Commission approves Repairs & Maintenance Expenses of Rs. 178.78 Lakh for FY 2019-20, Rs. 226.36 lakh for FY 2020-21 and Rs. 170.37 Lakh for FY 2021-22 on Truing-up, as submitted by MSLDC.**

3.2.42 Based on the above submission and considering the above three expenses items of O&M expense, the summary of Operation and Maintenance (**O&M**) Expenses as submitted by MSLDC and as approved by the Commission on truing up of FY 2019-20, FY 2020-21 and FY 2021-22 is given below:

Table 9: Operation and Maintenance expenses for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Employee Expenses	1,805.31	1,711.25	1,711.25	-	2,024.37	2,024.37	-	2,262.49	2,262.49
A&G Expenses	542.67	785.30	785.30	-	775.22	775.22	-	1,020.94	1,020.94
R&M Expenses	207.50	178.78	178.78	-	226.36	226.36	-	170.37	170.37
Total O&M Expenses	**2,555.48**	**2,675.33**	**2,675.33**	**3,403.73**	**3,025.96**	**3,025.96**	**3,021.35**	**3,453.80**	**3,453.80**

3.2.43 **The Commission approves O&M expenses of Rs. 2675.33 Lakh for FY 2019-20, Rs. 3025.96 Lakh for FY 2020-21 and Rs. 3453.80 Lakh for FY 2021-22 on Truing up of ARR, as claimed by MSLDC.**

3.3 Sharing of efficiency gains/losses on account of O&M Expenses

MSLDC's Submission

FY 2019-20

3.3.1 As per Regulation 9 and Regulation 11 of the MYT Regulations, 2015, variation in O&M expense corresponding to approved value is categorized as controllable expenses and hence sharing is required.

3.3.2 Further, the MYT (First Amendment) Regulations, 2017 were notified on 29 November, 2017, wherein the provisions related to calculation of normative O&M expenses for MSLDC were amended as follows:

"93.1 The Operation and Maintenance expenses for the MSLDC shall be computed in accordance with this Regulation.

93.2 The Operation and Maintenance expenses shall be derived on the basis of the Final Trued-up Operation and Maintenance expenses after adding/deducting the sharing of efficiency gains/losses, for the year ending March 31, 2016, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expenses."

3.3.3 MSLDC has recomputed the normative expenses and gain/ loss for FY 2019-20 based on the approved normative expenses for FY 2018-19 and WPI/CPI data. Also, the normative expenses have been compared with actual expenses without wage revision arrears. The wage revision arrears is added after sharing of gains/ losses to arrive at the entitlement of the Petitioner. Thus, impact of sharing of gains/losses has been considered on this account for FY 2019-20.

3.3.4 Based on the above, the impact of sharing of gains/losses on account of O&M expenses for FY 2019-20 as worked out by MSLDC is presented in the table below.

Table 10: Sharing of gains/losses on account of O&M expenses for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars		Amount
O&M expenses normative for FY 2019-20	(a)	2399.376
Actual O&M expenses without wage revision arrears	(b)	2585.996
Total Gain/(Loss) on account of controllable factors	(c)=(a)-(b)	(186.619)
Sharing proposed (two-third to be absorbed by MSLDC)	(d)	(124.413)
Entitlement to MSLDC without wage revision	(b) + (d)	2461.58
Total Entitlement to MSLDC after wage revision		**2550.91**

FY 2020-21 and FY 2021-22

3.3.5 Regulation 11 of MYT Regulations, 2019 provides as under:

"11 Mechanism for sharing of gains or losses on account of controllable factors

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

(a)Two-third of the amount of such gain shall be passed on as a rebate in Tariff…….

(b) The balance amount of such gain shall be retailed by the Generating Company or Licensee or MSLDC.

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

(a) One-third of the amount of such loss may be passed on as an additional charge in Tariff…….

(b) The balance amount of such loss shall be absorbed by the Generating Company or Licensee or MSLDC."

3.3.6 Further, as per Regulation 96.3 of the MYT Regulations, 2019, variation in O&M expenses corresponding to approved value are categorized as controllable expenses. For true-up and sharing, the relevant clause of MERC MYT Regulations 2019 is given below:

"96.3 At the time of true-up for each Year of this Control Period, the Operation and Maintenance expenses shall be derived on the basis of the Final Trued-up Operation and Maintenance expenses ***after adding/deducting*** *the sharing of efficiency gains/losses, for the year ending March 31, 2020, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expenses:*

Provided that the Operation and Maintenance expenses for each subsequent year shall be determined by escalating these Base Year expenses of FY 2019-20 by an inflation factor with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India, as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, to arrive at the permissible Operation and Maintenance expenses for each year of the Control Period:

Provided further that, in the Truing-up of the O&M expenses for any particular year of the Control Period, an inflation factor with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years (including the year of Truing-up) and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all- India) of the respective past five financial years (including the year of Truing-up), as reduced by an *efficiency factor of 1% or as may be stipulated by the Commission from time to time, shall be applied to arrive at the permissible Operation and Maintenance Expenses for that year.*

The impact of Wage Revision, if any, may be considered at the time of true-up for any Year, based on documentary evidence and justification to be submitted by the Petitioner:

Provided that if actual employee expenses are higher than normative expenses on this account, then no sharing of efficiency losses shall be done to that extent:

Provided further that efficiency gains shall not be allowed by deducting the impact of Wage Revision and comparison of such reduced value with normative value.

96.5 Provisioning of wage revision expenses shall not be considered as actual expenses at the time of true-up, and only expenses as actually incurred shall be considered."

3.3.7 Regulation 96.4 of the MYT Regulations, 2019 provides that the impact of wage revision, if any, may be considered the time of true-up for any year, based on documentary evidence and justification. The Petitioner has implemented the revised pay-scale and wage revision related arrears are also paid, which is considered in the audited accounts. Hence, the same may be approved.

3.3.8 Proviso to the Regulation 96.4 of the MYT Regulations, 2019 provides as under:

"Provided that if actual employees expenses are higher than normative expenses on this account, then no sharing of efficiency losses shall be done to that extent:"

3.3.9 Accordingly, MSLDC has kept the impact of wage revision arrears payment outside the gain /loss calculations. The same has been added after sharing calculation to find out total entitlement. For example, Rs 138.35 lakh and Rs 174.52 lakh (arrear due to wage revision for FY 2020-21 and FY 2021-22) has not been considered while calculating the sharing of gains / losses.

3.3.10 MSLDC has considered the O&M expenses for FY 2019-20 as normative expenses after sharing of gains and losses, but excluding wage revision arrears. The normative expenses have been escalated with relevant WPI and CPI data for finding out the normative expenses for FY 2020-21 and FY 2021-22, which has been compared with actual for determining the sharing of gain / loss. The impact of sharing of gains/losses has been considered for O&M expenses for FY 2020-21 and FY 2021-22 and the same is presented in the following table.

Table 11: Sharing of Gain and Loss on account of O&M Expenses for FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars		FY 2020-21	FY 2021-22
O&M Expenses normative (derived based on O&M	(a)	2549.40	2773.05

Particulars		FY 2020-21	FY 2021-22
expenses for FY 2019-20 after sharing of gain /loss but without wage revision arrear)			
Actual O&M expenses		3025.96	3453.80
Actual O&M expenses without wage revision arrear	(b)	2887.61	3279.27
Total Gain/(Loss) on account of controllable factors	(c) = (a) – (b)	(338.21)	(506.22)
Sharing proposed (gain: two-third rebate/ loss: one-third additional charge)	(d)	(112.74)	(168.74)
Net Entitlement to MSLDC without wage revision arrear	(a) - (d)	2662.14	2941.79
Net Entitlement to MSLDC with wage revision arrear		**2800.49**	**3116.32**

3.3.11 The difference between normative and actual (both without wage revision arrear) is significant. The Petitioner can claim only one-third part of that differential amount. This would be loss to the Petitioner, and this is only due to wrong setting of the normative expenses. The normative O&M Expenses were derived based on O&M expenses for FY 2019-20 after sharing of gain /loss but without wage revision arrears. However, the O&M expenses for FY 2019-20 have not captured the complete impact of new pay scale, as the new pay scale was effective part of the year, being implemented from October 2019. Had the impact of wage revision been there for all the 12 months (i.e. revised wage in new scale from April 2019), then the normative expenses for FY 2019-20 would have been different (i.e. higher than present level) and hence, the same would have reflected the correct normative expenses of FY 2020-21 and FY 2021-22.

3.3.12 MLSDC has requested to exercise power under the Regulations 105 (Power to Relax) of the MYT Regulations, 2019 and approve the normative expenses accordingly.

Commission's Analysis and Ruling

3.3.13 The Commission has issued the MYT (First Amendment) Regulations, 2017 on 29 November, 2017 whereby the provisions related to calculation of normative O&M expenses for MSLDC were amended as follows:

"93.1 The Operation and Maintenance expenses for the MSLDC shall be computed in accordance with this Regulation.

93.2 The Operation and Maintenance expenses shall be derived on the basis of the Final Trued-up Operation and Maintenance expenses after adding/deducting the sharing of efficiency gains/losses, for the year ending March 31, 2016, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expenses.

93.3 The Operation and Maintenance expenses for each subsequent year shall be determined by escalating these Base Year expenses for FY 2015-16 by an inflation factor with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the past five years as per the Office of the Economic Advisor, Government of India and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) for the past five years as per the Labour Bureau, Government of India, as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, to arrive at the permissible Operation and Maintenance expenses for each year of the Control Period:

Provided that, in the Truing-up of the Operation and Maintenance expenses for any particular year of the Control Period, an inflation factor with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the past five years (including the year of Truing-up) and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five years (including the year of Truing-up), as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, shall be applied to arrive at the permissible Operation and Maintenance Expenses for that year."

3.3.14 Accordingly, for truing-up, the Commission has computed the revised normative O&M expenses considering the annual escalation factor computed based on the specified weightage of Wholesale Price Index (**WPI**) and Consumer Price Index (**CPI**), 1% efficiency factor and the final Trued-up O&M expenses after adding/deducting the gains/losses, for the year ending 31 March 2019.

3.3.15 While computing the escalation factor, MSLDC has considered 2011-12 series of WPI and rounded of CPI index number and has arrived at the escalation factor of 4.43% for FY 2019-20. MSLDC has considered 1% efficiency factor while computing the normative expenses. However, the Commission while computing the escalation rate for normative O&M expenses has adopted the same methodology as was adopted in Case No. 291 of 2019. The relevant paragraph from the MYT Order in Case No. 291 of 2019 is reproduced below for reference:

"3.3.6 The Commission in its approval of O&M expenses during MYT Order in Case No. 20 of 2016 had considered 2004-05 data series which was prevailing at that time. The Commission has also observed that the WPI data for the 2004-05 data series is not available beyond FY 2016-17 as the new 2011-12 series is now being published by the Office of the Economic Advisors, Dept. of Promotion of Industry and Internal Trade. ***The Commission is of the view that principles set or methodology adopted during MYT Period should not be changed during the same Control Period. Accordingly, the Commission has continued using the 2004-05***

data series for working out escalation rate for computing the normative O&M expenses. *To overcome the issue of non-availability of WPI data for FY 2017-18 and FY 2018-19, the Commission has applied escalation rate for the FY 2017-18 and FY 2018-19 available for the 2011-12 data series on base value of FY 2016-17 WPI numbers of 2004-005 data series to extrapolate the value for FY 2017-18 and FY 2018-19. Based on the above, the computation of escalation factor for FY 2016-17, FY 2017-18 and FY 2018-19 is highlighted as below:"*

3.3.16 Accordingly, the Commission has considered the WPI monthly data from 2004-05 data series upto FY 2016-17. As 2004-05 data series is not available beyond FY 2016-17 and a new data series 2011-12 is created. The escalation rate of new data series 2011-12 are used after FY 2016-17 for computing the 5-year average. The escalation rate thus considered for FY 2019-20 is 3.54% after deducting 1% efficiency factor.

3.3.17 Based on the above, the computation of escalation factor for FY 2019-20 is highlighted as below:

Table 12: Escalation Rate for FY 2019-20, as approved by the Commission

Year	WPI	WPI Inflation	CPI	CPI Inflation
FY 2015-16	176.68	-2.49%	265.00	5.65%
FY 2016-17	183.20	3.69%	275.92	4.12%
FY 2017-18	NA	2.92%*	284.42	3.08%
FY 2018-19	NA	4.28%*	299.92	5.45%
FY 2019-20	NA	1.68%*	322.50	7.53%
Last 5 years' Average		**2.02%**		**5.17%**
Weightage		**20%**		**80%**
Escalation Rate derived				4.54%
Efficiency factor				1.00%
Effective Escalation Factor				**3.54%**

* *New data series 2011-12 escalation rate*

3.3.18 As regards computation of normative expenses for FY 2019-20, the Petitioner has considered the normative expenses approved by the Commission for FY 2018-19 instead to Net Entitlement after sharing of efficiency gains and losses as per the MYT (First Amendment) Regulations, 2017. This has been rectified by the Commission while approving the revised normative O&M expenses for FY 2019-20.

3.3.19 In line with the MYT (First Amendment) Regulations, 2017 and approach adopted in previous Orders, the Commission has considered the Net entitlement of O&M expenses after sharing of gains and losses of FY 2018-19 as the base for escalating the O&M expenses for FY 2019-20. Based on the above effective escalation factor, the Commission has recomputed the normative O&M expenses for FY 2019-20 as follows:

Table 13: Normative O&M expenses for FY 2019-20, as approved by the Commission (Rs. Lakh)

Particulars	FY 2019-20
Normative expenses approved for FY 2018-19	2,319.90
Net Entitlement of MSLDC for FY 2018-19	2,304.51
Escalation Factor after deducting efficiency factor 1%	3.54%
Normative O&M Expenses for FY 2019-20	**2,385.99**

** based on net entitlement for FY 2018-19*

3.3.20 For FY 2020-21 and FY 2021-22, MSLDC has submitted the escalation factor as 4.57% and 5.17%, respectively. The Commission has re-computed the same as 4.51% and 5.12% for FY 2020-21 and FY 2021-22, respectively. The difference is due to rounding-off of CPI index values by MSLDC.

Table 14: Escalation Factor for FY 2020-21 and FY 2021-22, as approved by the Commission

Year	WPI	WPI Inflation	CPI	CPI Inflation
FY 2016-17	111.62	1.73%	275.92	4.12%
FY 2017-18	114.88	2.92%	284.42	3.08%
FY 2018-19	119.79	4.28%	299.92	5.45%
FY 2019-20	121.80	1.68%	322.50	7.53%
FY 2020-21	123.38	1.29%	338.69	5.02%
FY 2021-22	139.41	13.00%	356.06	5.13%
FY 2020-21				
Average from FY 2016-17 to FY 2020-21		2.38%		5.04%
Weightage		20%		80%
Escalation Factor				4.51%
Efficiency Factor				1.00%
Escalation Factor for FY 2020-21				**3.51%**
FY 2021-22				
Average from FY 2017-18 to FY 2021-22		4.63%		5.24%
Weightage		20%		80%
Escalation Factor				5.12%
Efficiency Factor				1.00%
Escalation Factor for FY 2021- 22				**4.12%**

3.3.21 For FY 2020-21 and FY 2021-22, MSLDC has computed the normative expenses based on the previous year's net entitlement after sharing of efficiency gains and losses. However, MSLDC has requested the Commission to compute the normative expenses considering the previous year's normative expenses before sharing of gains and losses and relax the MYT Regulations, 2019 relating to computation of normative expense.

3.3.22 In line with the MYT Regulations, 2019 and the approach adopted by the Commission in previous Orders, the Commission has considered the Net entitlement of O&M expenses after sharing of gains and losses of previous year, as the base for escalating the O&M expenses for FY 2020-21 and FY 2021-22.

3.3.23 The Commission has noted MSLDC's submission regarding the normative O&M Expenses of FY 2020-21 and FY 2021-12 being not reflective of the entire impact of the wage revision. MSLDC has requested to relax the related provisions with respect to normative expenses under the 'Regulations 105: Power to Relax' and approve the normative expenses accordingly, so that the Petitioner can claim its legitimate expenses.

3.3.24 The Commission in its Order in Case No. 291 of 2019 had approved the normative O&M expenses for the 4th control period considering the base O&M expenses for the year ending 31 March 2018 which were computed on the basis of the average of the trued up O&M expenses, after adding/deducting the share of efficiency gains/losses, for the three years ending 31 March 2019. These Base Year O&M expenses were escalated at the rate specified over the Tariff Period for determination of the normative O&M expenses. This computation was undertaken in line with the Regulation 96.2 of the MYT Regulations, 2019. However, the Commission also additionally approved the payments towards wage revision arrear (2 instalments) and the estimated impact of wage revision on base employee expenses over the Control Period over and above the normative O&M expenses. Accordingly, the Commission had already acknowledged and approved the impact of the wage revision by considering its impact on the base employee expenses over and above the normative O&M expenses.

3.3.25 To ensure consistency in approach adopted in the MYT Order, the impact of wage revision has also been recomputed considering the details of the actual wage revision arears submitted by MSLDC. MSLDC has submitted that the wage revision arrears paid during FY 2019-20 to FY 2021-22 are for a period of 18 months amounting to Rs 402.20 Lakh. The Commission has proportionately considered 12 months arrears as impact of wage revision for base year FY 2019-20 and computed the revised wage revision impact for FY 2020-21 and FY 2021-22 using the relevant escalation rate.

3.3.26 Based on the above effective escalation factor and revised impact of wage revision, the Commission has recomputed the normative O&M expenses for FY 2020-21 and FY 2021-22 as follows:

Table 15: Normative O&M expenses for FY 2020-21 and FY 2021-22, as approved by the Commission (Rs. Lakh)

Particulars	FY 2020-21	FY 2021-22*
Net Entitlement of MSLDC for previous year	2,452.66	2,840.03
Escalation Factor after deducting efficiency factor 1%	3.51%	4.12%
Normative O&M Expenses	**2,538.70**	**2,957.05**
Add: Impact of wage revision as per Case no 291 of 2019	277.54	-
Normative values including impact of wage revision on base employee cost	**2,816.24**	**2,957.05**

*includes impact of wage revision added in FY 2020-21

3.3.27 Accordingly, the above approved normative O&M expenses are considered by the Commission for sharing of gains or losses on account of controllable factors as per Regulation 11 of the MYT Regulation.

3.3.28 The actual O&M expenses are higher as compared to the expenses approved in Case No. 291 of 2019. Accordingly, there is an efficiency loss in FY 2019-20, FY 2020-21 and FY 2021-22 on account of O&M expenses. While computing the efficiency gains and losses, actual O&M expenses are considered net of wage revision arrears paid during the year. In accordance with the relevant MYT Regulations, the approved net entitlement of MSLDC for FY 2019-20, FY 2020-21 and FY 2021-22 is as shown in the table below:

Table 16: Sharing of gains/losses on account of O&M expenses for FY 2019-20, FY 2020-21 and FY 2021-22, approved by the Commission (Rs. Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Base Normative Expenses	2,385.99	2,538.70	2,957.05
Impact of wage Revision	NA	277.54	
Normative Expenses including the Impact of Wage Revision on Base Employee cost	**2,385.99**	**2,816.24**	**2,957.05**
Actual Expenses	2,675.33	3,025.96	3,453.80
Wage revision arrear	89.33	138.35	174.52
Actual Expenses without Wage Revision arrear	2,586.00	2,887.61	3,279.27
Sharing Gain and (Losses)	**-200.01**	**-71.37**	**-322.23**
2/3rd Efficiency Gain or 1/3rd Efficiency Loss shar	-66.67	-23.79	-107.41
Net Entitlement before wage revision arrear	**2,452.66**	**2,840.03**	**3,064.45**
Net Entitlement after wage revision arrear	**2,541.99**	**2,978.38**	**3,238.98**

3.3.29 **The Commission approves a net entitlement of O&M expenses of Rs. 2,541.99 Lakh for FY 2019-20, Rs. 2,978.38 Lakh for FY 2020-21 and Rs. 3,238.98 Lakh for FY 2021-22 after sharing of gains/losses on Truing up of ARR.**

3.4 Interest on Working Capital (IoWC)

MSLDC's Submission

FY 2019-20

3.4.1 The Regulation 31 of the MYT Regulations, 2015 specifies the following:

"31.5 MSLDC

(a) The working capital requirement of the MSLDC shall cover:

(i) Operation and maintenance expenses for one month;

(ii) One-and-a-half-month equivalent of the expected revenue from levy of Annual Fixed Charges:

Provided further that for the purpose of Truing-up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing-up before sharing of gains and losses;

(b) Rate of interest on working capital shall be on normative basis and shall be equal to the Base Rate as on the date on which the Petition for determination of Fees and Charges is filed, plus 150 basis points:

Provided that for the purpose of Truing-up for any year, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned Year plus 150 basis points."

3.4.2 In accordance with the above Regulations, the IoWC for FY 2019-20 has been computed. The normative O&M expenses as derived under the truing-up for FY 2019-20 are considered. For computing receivables, revenue net of rebate is considered.

3.4.3 As per Regulations 31.5 of MYT Regulations, 2015, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned year plus 150 basis points. Further, MYT Regulations, 2015 were amended on 29 November, 2017, which define the Base Rate as one-year Marginal Cost of funds – based Lending Rate (**MCLR**) declared by the State Bank of India. Accordingly, the data of one-year MCLR for FY 2019-20 is considered and the weighted average MCLR is determined as 8.16%. The Petitioner has considered the interest rate as 9.66% for truing up of FY 2019-20.

3.4.4 MSLDC has not taken any working capital loan from any outside agency.

3.4.5 The IoWC claimed by MSLDC for FY 2019-20 is shown in the table below:

Table 17: Interest on Working Capital for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	
	MYT Order	MTR Petition
Interest on Working Capital	54.98	54.30

FY 2020-21 and FY 2021-22

3.4.6 Regulation 32.5 of the MYT Regulations, 2019 provides as follows:

"32.5 MSLDC

The working capital requirement of the MSLDC shall cover:

(i) Operation and maintenance expenses for one month;

(ii) One and a half months equivalent of the expected revenue from levy of Annual Fixed Charges approved by the Commission for ensuing year/s:

Provided further that for the purpose of Truing-up for any year, the working capital requirement shall be re-computed on the basis of the values of revised normative Operation & Maintenance expenses and actual Revenue from sale of electricity excluding incentive, if any, and other components of working capital approved by the Commission in the Truing-up before sharing of gains and losses;

(b) Rate of interest on working capital shall be on normative basis and shall be equal to the Base Rate as on the date on which the Petition for determination of Fees and Charges is filed, plus 150 basis points:

Provided that for the purpose of Truing-up for any year, interest on working capital shall be allowed at a rate equal to the weighted average Base Rate prevailing during the concerned Year plus 150 basis point."

3.4.7 Further, Regulation 2.1 (11) of the MYT Regulations 2019 provides that the Base Rate would be one-year MCLR as declared by the State Bank of India (**SBI**) from time to time.

3.4.8 In accordance with the MYT Regulations, 2019, MSLDC has computed IoWC, by considering one month's normative O&M expenses and 1.5 months' receivables. For computing receivables, MSLDC has considered the actual revenue earned. It is further submitted that there is no actual loan borrowed for meeting its working capital requirements.

3.4.9 Regarding interest rate, MSLDC has considered the interest rate equivalent to 150 basis point margin over the SBI MCLR prevailed during FY 2020-21 and FY 2021-22. The Petitioner has derived the weighted average MCLR (one-year period) for FY 2020-21 and FY 2021-22 based on actual MCLR prevailing during the year. The applicable interest rate for working capital calculation is explained below.

Table 20: SBI base rate (MCLR) prevailing during FY 2020-21 and FY 2021-22 and interest rate considered for working capital as submitted by MSLDC (%)

Particulars	FY 2020-21	FY 2021-22
Weighted average MCLR	7.07	7.00
Applicable interest rate (MCLR +150 basis point)	8.57	8.50

3.4.10 The IoWC considered by MSLDC and approved for FY 2020-21 and FY 2021-22 are shown in the table below:

Table 18: Interest on Working Capital for FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Interest on Working Capital	67.58	54.53	62.35	53.76

Commission's Analysis and Ruling

3.4.11 The IoWC is computed in line with the provisions of the MYT Regulations, 2015 for FY 2019-20 and MYT Regulations, 2019 for FY 2020-21 and FY 2021-22. The revised normative O&M expenses approved in this Order, prior to sharing of gains/losses and the actual Revenue recovered by MSLDC, net of rebate availed by Transmission System Users (**TSU**s) for prompt payment, based on revenue approved in applicable Orders for recovery have been considered for computing the IoWC. This is also in line with the approach adopted by the Commission for all other licensees in their respective tariff Orders. The Commission has also considered the wage revision arrears paid by MSLDC and the impact of wage revision on base employee expenses over and above the normative O&M expenses for working out the interest on working capital.

3.4.12 Accordingly, the Commission has considered the weighted average 1 year MCLR after adding 150 basis points to this, as per the Regulations. The detailed working of the interest rate for computing the IoWC is provided in the following table:

Table 19: Interest Rate on Working Capital Loan for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission

Interest on Working Capital Loan							
Year	**From**	**To**	**No. of days**	**Rate Type**	**Rate %**	**Wt. average rate**	**Final interest rate for IoWC & Carrying Cost**
FY 2019-20							
	01-04-2019	09-04-2019	9.00	MCLR	8.55%	8.16%	**9.66%**
	10-04-2019	09-05-2019	30.00	MCLR	8.50%		
	10-05-2019	09-06-2019	31.00	MCLR	8.45%		
	10-06-2019	09-07-2019	30.00	MCLR	8.45%		
	10-07-2019	09-08-2019	31.00	MCLR	8.40%		
	10-08-2019	09-09-2019	31.00	MCLR	8.25%		
	10-09-2019	09-10-2019	30.00	MCLR	8.15%		
	10-10-2019	09-11-2019	31.00	MCLR	8.05%		
	10-11-2019	09-12-2019	30.00	MCLR	8.00%		
	10-12-2019	09-01-2020	31.00	MCLR	7.90%		
	10-01-2020	09-02-2020	31.00	MCLR	7.90%		
	10-02-2020	09-03-2020	29.00	MCLR	7.85%		
	10-03-2020	31-03-2020	22.00	MCLR	7.75%		
FY 2020-21							
	01-04-2020	09-04-2020	9.00	MCLR	7.75%	7.07%	**8.57%**
	10-04-2020	09-05-2020	30.00	MCLR	7.40%		
	10-05-2020	09-06-2020	31.00	MCLR	7.25%		
	10-06-2020	09-07-2020	30.00	MCLR	7.00%		
	10-07-2020	09-08-2020	31.00	MCLR	7.00%		
	10-08-2020	09-09-2020	31.00	MCLR	7.00%		
	10-09-2020	09-10-2020	30.00	MCLR	7.00%		
	10-10-2020	09-11-2020	31.00	MCLR	7.00%		
	10-11-2020	09-12-2020	30.00	MCLR	7.00%		
	10-12-2020	09-01-2021	31.00	MCLR	7.00%		
	10-01-2021	09-02-2021	31.00	MCLR	7.00%		
	10-02-2021	09-03-2021	28.00	MCLR	7.00%		
	10-03-2021	31-03-2021	22.00	MCLR	7.00%		
FY 2021-22							
	01-04-2021	09-04-2021	9.00	MCLR	7.00%	7.00%	**8.50%**
	10-04-2021	14-04-2021	5.00	MCLR	7.00%		
	15-04-2021	14-05-2021	30.00	MCLR	7.00%		
	15-05-2021	14-06-2021	31.00	MCLR	7.00%		
	15-06-2021	14-07-2021	30.00	MCLR	7.00%		
	15-07-2021	14-08-2021	31.00	MCLR	7.00%		
	15-08-2021	14-09-2021	31.00	MCLR	7.00%		
	15-09-2021	14-10-2021	30.00	MCLR	7.00%		
	15-10-2021	14-11-2021	31.00	MCLR	7.00%		
	15-11-2021	14-12-2021	30.00	MCLR	7.00%		
	15-12-2021	14-01-2022	31.00	MCLR	7.00%		
	15-01-2022	14-02-2022	31.00	MCLR	7.00%		
	15-02-2022	14-03-2022	28.00	MCLR	7.00%		
	15-03-2022	31-03-2022	17.00	MCLR	7.00%		

3.4.13 The revised normative IoWC for FY 2019-20, FY 2020-21 and FY 2021-22 approved in this Order is as given in the table below:

Table 20: Normative Interest on Working Capital for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
1 month of O&M expenses	212.96	199.95	206.28	283.64	212.45	246.22	251.78	231.09	260.96
1.5 months of receivales	362.75	362.36	362.36	423.95	423.60	423.60	401.07	401.41	401.41
Total Working Capital Requirement	**575.71**	**562.30**	**568.63**	**707.59**	**636.05**	**669.81**	**652.85**	**632.49**	**662.37**
Interest Rate (%)	0.00%	9.66%	9.66%	0.00%	8.57%	8.57%	0.00%	8.50%	8.50%
Interest on Working Capital	**54.98**	**54.30**	**54.91**	**67.58**	**54.53**	**57.42**	**62.35**	**53.76**	**56.30**

3.4.14 **The Commission approves a normative IoWC of Rs. 54.91 Lakh for FY 2019-20, Rs. 57.42 Lakh for FY 2020-21 and Rs. 56.30 Lakh for FY 2021-22 on Truing up of ARR.**

3.5 Sharing of efficiency gains/losses on account of Interest on Working Capital

MSLDC's Submission

3.5.1 The IoWC shall be payable on normative basis notwithstanding that MSLDC has not taken any working capital loan from any outside agency. The Commission in Case No. 291 of 2019 opined that as no actual IoWC has been paid, the entire amount would be considered as efficiency gain and would be shared as per Regulation 11 of MYT Regulations, 2015 for FY 2019-20 and as per Regulation 11 of the MYT Regulations, 2019 for FY 2020-21 and FY 2021-22. Therefore, two-third of IoWC is proposed to be shared as efficiency gain, as shown in table below.

Table 21: Sharing of efficiency gains/losses on account of IoWC for FY 2019-20 as submitted by MSLDC (Rs. Lakh)

Particulars	Claimed	Efficiency Gain	Shared with Beneficiary	Net Entitlement
Interest on Working Capital	54.98	54.30	36.20	18.10

Table 22: Sharing of gain / loss in case of Interest on Working Capital for FY 2020-21 and FY 2021-22 as submitted by MSLDC (Rs. Lakh)

(Rs. Lakh)

Particular	Claimed	Efficiency gain	Shared with beneficiary	Net entitlement
Interest on Working Capital FY 2020-21	54.53	54.53	36.35	18.18
Interest on Working Capital FY 2021-22	53.76	53.76	35.84	17.92

Commission's Analysis and Ruling

3.5.2 The Regulation 8.4 (a) of MYT Regulations, 2015 specifies that the amount of approved aggregate gain or loss to the MSLDC on account of controllable factors for the truing up years may be shared in accordance with Regulation 11of the MYT Regulations, 2015.

3.5.3 Further, as per Regulation 9.2 of the MYT Regulations, 2015, variation in IoWC is a controllable factor. Thus, impact of sharing of gains/loss has been considered on this account for FY 2019-20.

3.5.4 The Regulation 31.6 of MYT Regulations, 2015 reads as follows:

"31.6 For the purpose of Truing-up for each year, the variation between the normative interest on working capital computed at the time of Truing-up and the actual interest on working capital incurred by the Generating Company or Licensee or MSLDC, substantiated by documentary evidence, shall be considered as an efficiency gain or efficiency loss, as the case may be, on account of controllable factors, and shared between it and the respective Beneficiary or consumer as the case may be, in accordance with Regulation 11 :"

3.5.5 Similarly, the Regulation 32.6 of the MYT Regulations, 2019 reads as follows:

"32.6 For the purpose of Truing-up for each year, the variation between the normative interest on working capital computed at the time of Truing-up and the actual interest on working capital incurred by the Generating Company or Licensee or MSLDC, substantiated by documentary evidence, shall be considered as an efficiency gain or efficiency loss, as the case may be, on account of controllable factors, and shared between it and the respective Beneficiary/ies or consumer as the case may be, in accordance with Regulation 11:"

3.5.6 MSLDC has submitted that it has not taken any actual working capital loans. Accordingly, the entire normative IoWC computed on Truing up of ARR for FY 2019-20 shall be considered as an efficiency gain and shared with the consumers in accordance with Regulation 11 of MYT Regulations, 2015.

3.5.7 The Regulation 11 of the MYT Regulations, 2015 stipulates the manner in which the approved gain or loss on account of controllable factors is to be shared between the MSLDC and TSUs. Similarly, the Regulation 11 of the MYT Regulations, 2019 also stipulates the manner in which the approved gain or loss on account of controllable factors is to be shared between the MSLDC and TSUs

3.5.8 Accordingly, the sharing of gains/losses on account of IoWC on Truing up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22 is as shown in the following table:

Table 23: Sharing of gains/losses on account of IoWC for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	Revised Normative	Actual for the Year	Entitlement as per Regulation/ Order	Efficiency Gain/(Loss)	2/3rd Efficiency Gain or 1/3rd Efficiency Loss shared with Consumers	Net Entitlement of MSLDC
Interest on Working Capital						
FY 2019-20	54.91	0.00	0.00	54.91	36.61	18.30
FY 2020-21	57.42	0.00	0.00	57.42	38.28	19.14
FY 2021-22	56.30	0.00	0.00	56.30	37.53	18.77

3.5.9 **The Commission approves a net entitlement of IoWC after sharing of gains/losses of Rs. 18.30 Lakh for FY 2019-20, Rs. 19.14 Lakh for FY 2020-21 and Rs. 18.77 Lakh for FY 2021-22 on Truing up of ARR in accordance with the MYT Regulations**.

3.6 RLDC Fees

MSLDC's Submission

FY 2019-20

3.6.1 The charges towards Regional Load Despatch Centres (**RLDC**) Fees are being paid by MSEDCL against the invoices raised by RLDC to MSEDCL. After payment, MSEDCL claims those charges from MSLDC and the same are being paid by MSLDC to MSEDCL. CERC has issued an Order dated 26 December 2016 in Case No. 241/TT/2015 approving Fees and Charges of WRLDC for the FY 2014-15 to FY 2018-19. Further, vide Order dated 9 June 2021 in Petition No.400/MP/2019, CERC has determined the WRLDC Charges for the control period 1 April 2019 to 31 March 2024.

3.6.2 The RLDC Fees for FY 2019-20 is Rs. 498.59 Lakh as against Rs. 782.14 Lakh approved in Case No. 291 of 2019 and has been included in the A&G expenses in the allocation statement. The RLDC fees are Rs.96.31 Lakh for April 2019 to June 2019, Rs. 152.32 Lakh for July 2019 to September 2019 and Rs. 249.96 Lakh for remaining six months period.

3.6.3 RLDC fees for the period April 2019 to September 2019 has not been reimbursed by MSLDC and this amount has been adjusted against amount credited by WRLDC to MSEDCL in accordance with true-up of WRLDC for FY 2009-10 to FY 2013-14 period. The amount was already deducted by the Commission while truing up of FY 2016-17 based on CERC Order issued on 14 March 2016 for truing-up of WRLDC for FY 2009-10 to FY 2013-14 (the direction for refund was issued by CERC vide its Order dated 16 April 2015). However, the Petitioner has considered the said amount (first six months RLDC fees) as expenses during FY 2019-20, (although adjusted as per audited account and not actually paid), as the same amount was deducted earlier by the Commission during FY 2016-17 truing-up.

3.6.4 The RLDC Fees for FY 2019-20 as claimed by MSLDC are given in the table below:

Table 24: RLDC Fees and WRPC Charges for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	
	MYT Order	Petition
RLDC Fees	782.14	498.59

FY 2020-21 and FY 2021-22

3.6.5 The RLDC Fees and WRPC Charges for FY 2020-21 are Rs. 511.83 Lakh. The same is payment related to RLDC Fees only. The payment for April 2020 to October 2020 was Rs. 299.46 Lakh and Rs 212.38 Lakh was for remaining five months' period. For FY 2021-22, total RLDC payment is as Rs.584.98 Lakh. The Petitioner has considered the RLDC payment under Fees and Subscription (covered under A&G expenses). RLDC fees were deducted from Fees and Subscription G/L under A&G and remaining is considered as Fees and Subscription under A&G expenses. The details, as per entries made in TB, for FY 2021-22, has been provided in the Petition.

3.6.6 The WRPC charges are not being paid by MSLDC from FY 2016-17, as SLDCs are exempted from sharing the charges, and hence not reflected in the Audited Accounts. The actual payment made against the approved charges in Case No. 291 of 2019 is given below.

Table 25: RLDC Fees for FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	Actual	True-Up Requirement
FY 2020-21	874.41	511.83	-362.58
FY 2021-22	1055.16	584.98	-470.18

Commission's Analysis and Ruling

3.6.7 The Commission has verified the actual RLDC Fees from the Audited Trial Balance and allocation statement of MSLDC for FY 2019-20.

3.6.8 It was observed that the break-up provided by MSLDC in the trial balance has both +ve and -ve entries for RLDC charges. In response to query raised by the Commission, MSLDC clarified that for first six months of FY 2019-20, MSLDC has claimed Rs. 96.31 Lakh and Rs. 152.32 Lakh, but this amount is not reflected in the Trial Balance. Trial Balance entries of Fees & subscription (G/L 440010)) have both +ve and -ve entries corresponding to these charges. It has been mentioned that the said amount was not paid to MSEDCL by MSLDC and was only adjusted. For the purpose of accounting, first it is considered as expenses as per claim of

MSEDCL as per the bill and subsequently it has been reversed (opposite sign) as it has been considered only as an adjustment.

3.6.9 In the MYT Order in Case No. 20 of 2016, the Commission had ruled the following in respect of the RLDC Fees for FY 2016-17:

> *"5.4.3 The CERC has issued its Order on 14 March, 2016 for Truing-Up from FY 2009-10 to FY 2013-14. It has directed RLDC to refund 95% of the excess amount of Fees and Charges along with the interest in one installment within 2 months. Interest on the refundable amount has to be worked out on a yearly basis till the amount is refunded. However, the share of the surplus amongst the Beneficiaries, including MSLDC, has to be worked out by RLDC.*
>
> *5.4.4 In view of the above, Commission has estimated the share of MSLDC in the Truing-Up for each year based on its share in the RLDC Fees and Charges as per the CERC Order in Case No. 92 of 2010. The Commission has also worked out the holding cost (simple interest basis) on the share of the surplus considering recovery in FY 2016-17, as per the directions of CERC. Accordingly, the share of MSLDC, including holding cost, has been estimated as Rs. 279.72 Lakhs, as detailed in the Table below:*
>
> *.....*
>
> *5.4.5 Accordingly, the share of MSLDC amounting to Rs 279.72 Lakh (including holding cost) in the Surplus arising on Truing-Up is adjusted in the estimate for RLDC Fees and Charges for FY 2016-17 of Rs. 657.97 Lakh, resulting in net RLDC Fees of Rs 378.25 Lakh."*

3.6.10 Further, while truing-up, the RLDC expenses for FY 2016-17 in Case No. 171 of 2017, the Commission ruled as below:

> *"4.6.6 The Commission observes that MSLDC has not considered the aforementioned surplus and associated holding cost approved vide the MYT Order in Case No. 20 of 2016, while computing the net RLDC Fees for FY 2016-17. While computing the net RLDC Fees, the Commission has deducted this Surplus and associated holding cost of Rs. 279.72 Lakh in line with the stand taken in the MYT Order in Case No. 20 of 2016. In case, the RLDC allocates a different share of Surplus and/or associated holding cost as compared to that determined by the Commission, MSLDC should highlight the same in its subsequent Tariff Petition."*

3.6.11 In view of the above, the share of surplus allocated to MSLDC by RLDC has now been adjusted against the RLDC charges for the period April 2019 to September 2019 amounting to Rs. 248.63 Lakh (Rs.96.31 Lakh for April to June'19 and Rs. 152.32 Lakh for July to September'19). The Commission has accepted the submission of MSLDC and approved the RLDC fees.

3.6.12 For FY 2020-21 and FY 2021-22, the Commission has verified the actual RLDC Fees from the Audited Trial Balance and allocation statement of MSLDC and accepted the submission of MSLDC.

3.6.13 Accordingly, the RLDC Fees approved by the Commission are as shown in the Table below:

Table 26: RLDC Fees and WRPC Charges for FY for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
RLDC Fees	782.14	498.59	498.59	874.41	511.83	511.83	1,055.16	584.98	584.98

3.6.14 **The Commission approves the RLDC Fees as Rs. 498.59 Lakh for FY 2019-20, Rs. 511.83 Lakh for FY 2020-21 and Rs. 584.98 Lakh for FY 2021-22 on Truing up of ARR, as submitted by MSLDC.**

3.7 Disallowed capitalization for the past years

MSLDC's Submission

3.7.1 MSLDC has requested the Commission to reconsider the capitalization which was disallowed in past years.

3.7.2 **Capitalization disallowed in FY 2013-14 and FY 2014-15 for DPR scheme for Renovation in existing building in ALDC, Ambazari:**

3.7.3 The Commission, in its true-up Orders for FY 2013-14 and FY 2014-15, stated that MSLDC had not submitted the reasons for cost overrun and hence the capitalization was denied.

3.7.4 The Petitioner submits the following reasons:

3.7.4.1 The said work was entrusted to M/s. N.S. Construction, vide work order dated 13 July 2010 for the cost of Rs. 2,25,32,630.00. As per the work order, the work was to be completed within six months from the date of handing over of part /full site. The site was handed over to the agency on 27 July 2010 and subsequently confirmed to the agency. Accordingly, the work was due for completion on 26 January 2011. However the agency did not complete the work within above stipulation and the work was completed only on 19 June 2012. Thus, there was a delay of 511 days over and above the stipulated period for completion of the work.

3.7.4.2 Competent authority has considered the request and granted extension of time limit up to 19 June 2012. Following are the reasons in support of justification:

a) Due to late handing over of site

b) Due to initial extra work of strengthening of RCC structure.

c) Due to hindrances/fouling of various important cables like OFC etc.

d) Due to insufficient details in given drawings.

e) Due to non-existence of lintel beam.

f) Due to Delay in handing over of SCADA, Control Room, Conference Room.

g) Due to live Building & Prohibited area

h) Importantly Due to delay in issuing various drawings at various stages.

a) **Due to late handing over of site**: Although the work order was issued on 13 July 2010 to the agency, the actual handover of the site took place on 27 July 2010. The delay in handing over of the site is justifiable as the site was live i.e. live control room / the staff was working initially in the said building and the agency had to work by vacating the area of the said building part by part.

b) **Due to initial extra work of strengthening of RCC structure**: The Ambazari building was very old. At the start of the work, it was observed that the RCC structure of the building has some serious damage in terms of crack in beam and columns and corrosion of reinforcement etc. As per the suggestion of the consultant and MSETCL, a structural audit of the building was conducted through independent Structural Engineer. As per the advice of the Structural Engineer, M/s. Micro Concreting, strengthening the RCC structure was undertaken. Further the dismantling work at the site commenced on 25 August 2010. It was also suggested to carry out the dismantling with the help of concrete crusher machine only and not through the manual process in order to avoid further damage to the RCC Structure. Both these items were not included in the original tender and needed to get it approved from executing authority. After approval, on 13 September 2010, the agency started the Micro Concreting work. Hence, there was delay for completion of work.

d**) Due to insufficient details in given drawings.** The location of the 15TR AC unit needed to be changed during the execution stage. During the excavation of the foundation work for AC unit as per the drawing released initially, the live power cables were found and hence the LD Centre stopped the work. After a joint visit along with Architect/LD centre/ Civil Department, it was decided to shift the location of the 15TR unit. Thereafter, revised drawings were issued and the agency again restarted the work after some days. This also resulted in delay to some extent.

e) **Due to non-existence of lintel beam**: During the initial dismantling of the BB masonry at the various floors, it was observed that the lintel beams were not provided in the existing old construction. During renovation and modernization, it was required to provide the lintel beams for the various openings were required be made. Hence, there was some delay in the said project. Due to live building, the dismantling work had to be executed carefully to avoid any accident.

f) **Due to delay in handing over of SCADA, Control Room, Conference Room:** The entire work had to be executed by the agency in phases as the center was in operational mode. Hence, there was a delay in completing the entire project. The SCADA room and the Control Room were handed over very late. Even the conference room was also handed over at the last moment and that too after shifting all the equipment, computers etc. to the newly executed control room.

g) **Due to live building and prohibited area**: As the existing building fell under prohibited area, the movement of labors and machineries were restricted. Hence the work had to be executed by taking due permissions and completing all formalities etc. This is also one of the reasons for delay in completion of said projects.

h) **Due to changes in working drawings at various stages**: The working drawings were finalized during the execution of work as per the site condition and requirement. The architecture had to be consulted along with the MSETCL and RCC consultant and the LD centre for any modification or finalization of any drawings. This has also resulted in delay in completion of the work to some extent.

3.7.5 Capitalisation disallowed in FY 2014-15 for DPR scheme for Construction of new SLDC building

3.7.5.1 The Commission disallowed the capitalization partially on the ground that the Petitioner did not submit complete documentation and calculations for the completed costs of the scheme along with IDC calculations and copy of Board resolution for revised cost.

3.7.5.2 It is submitted that the Commission approved the capitalisation during true-up as follows: Rs 1024.62 lakh (FY 2012-13) (as submitted), Rs 562.50 lakh (FY 2013-14) (as submitted) and Rs. 273.16 lakh (FY 2014-15) (partly disapproved).

3.7.5.3 It is pertinent to note the observations made by the Commission in its Order in Case No. 178 of 2013 while approving the capitalisation for FY 2012-13.

"4.68 While approving the capitalisation as proposed by MSLDC, the Commission has taken cognisance of the fact that the completed cost of schemes pertaining to construction of the new SLDC control room building at Kalwa and renovation of the existing SLDC buildings at Kalwa and Ambazari is higher than the cost in-principally approved by the Commission at the time of approval of the DPR. The reasons provided by MSLDC for increase in the capital cost are summarised below:

- *The estimates prepared by the appointed consultants were based on PWD DSR and prevailing market rates for the year 2007-08. Due to price escalations during last 3 years in basic construction materials such as steel, cement, sand, bricks, copper, aluminium etc. the estimated prices are much below the market prices.*

- *Over the DSR estimated rates, the taxes like VAT, WCT, Octroi, Service Tax, insurance etc., to the extent of 3-5% are to be considered.*
- *Skilled and unskilled labour charges are drastically increased.*
- *Material transportation charges are increased due to increase in fuel prices.*
- *There were also certain changes in the quantities of tendered material which were required for completion of the work.*
- *Revision in the cost of solar system to Rs. 2 lakh/kW for 25 kW.*
- *Cost incurred in shifting of EHV Line in the new Building area by Tata Power Company;*
- *Cost escalation on account of price escalation and increase in the interest during construction.*

4.69 The Commission has considered the above reasons provided by MSLDC and accordingly approved the capitalisation as proposed by MSLDC for the said schemes."

3.7.5.4 The Petitioner had also obtained the necessary board approval dated 18 November 2014 for revised cost of Rs 2,305 Lakh (without centages) and Rs 2,630 Lakh (with centage). The same is attached with the Petition.

3.7.5.5 Further, the Commission disallowed the claim of IDC of Rs.446.38 lakhs in FY 2014-15 as details were not available. The Petitioner requests the Commission to approve the same on the basis of detailed IDC calculation attached with the Petition (in soft copy).

3.7.5.6 The Commission has made the following observation in its Order in Case No 20 of 2016.

"3.7.6. ……………………………..

Accordingly, the Commission has considered the approved total cost of Rs. 2306.66 lakh as per Case No. 178 of 2013 for the purpose of capitalisation for FY 2014-15."

3.7.5.7 Based on the above, it is submitted that the Commission had considered the approved total cost of Rs. 2,306.66 lakh, however, actual approval after true-up amount is lower than this, i.e. Rs 1,024.62 lakh (FY 2012-13), Rs 562.50 lakh (FY 2013-14), Rs. 273.16 lakh (FY 2014-15) only. Based on the above detailed submission, the Petitioner requests to approve the capitalization as per cost of the project.

3.7.6 Capitalisation Disallowed for non-DPR scheme Infrastructure development

3.7.6.1 The Commission disallowed the schemes due to the fact that Non-DPR scheme capitalisation exceeded 20% of DPR schemes and on account of non-submission of DPR schemes.

3.7.6.2 MSLDC had requested the Commission to allow non-DPR capitalization for FY 2014-15 (which was exceeding the 20% limit of approved DPR capitalization) and MSLDC's submission in its Petition for true-up of FY 2014-15 is given below.

"MSLDC would like humbly submit that the schemes capitalised within MSLDC are mostly low value schemes (less than Rs. 100 lakhs), and includes capitalisation of items procured on an intermittent basis such as Furniture for Office, Fire Alarm System, Battery Sets with Charger, Online STOA software/hardware, Office equipment including Servers, PCs, Printers, Laptop, Xerox machine, Firewalls, Routers, LAN Components, cables, switches, etc. Thus, considering the varied and intermittent nature of asset addition of lower value, it is difficult to club the same under DPR scheme. In view of this, it is humbly submitted that the capitalisation claimed by MSLDC towards such non-DPR schemes may please be approved irrespective of what percentage it forms of that of the capitalisation of DPR schemes claimed during the year."

3.7.6.3 Vide its Order in Case No. 171 of 2017, the Commission in case of approval of capitalisation for FY 2015-16, i.e. immediate next year of FY 2014-15, ruled the following with regard to capitalisation of Non-DPR schemes.

"3.8.7 For any scheme with projected capital expenditure above Rs.100 Lakh, MSLDC is expected to submit a DPR for in-principle approval. The Commission observes that most of the capex schemes of MSLDC are small value schemes and Capitalisation against which is intermittent and periodic in nature. Further, the Commission notes that, with new developments and issues in the power sector such as increasing share of renewable energy in the overall energy mix, integration of renewable energy into the grid, grid management to accommodate such smaller capacities and infirm nature of renewable energy, there are operational and technological challenges before SLDCs. Considering the foregoing, the Commission is of the view that the routine operations of MSLDC should not be adversely affected and it should also be equipped to undertake necessary capital expenditure to meet the operational and technological challenges. Therefore, the Commission has reviewed MSLDC's request to approve the capitalisation proposed under DPR and non-DPR schemes as submitted and accordingly, decides not to restrict the non-DPR capitalisation at 20% of DPR capitalisation approved for the year. Accordingly, the Commission approves capitalisation against DPR as well as non-DPR schemes as claimed by MSLDC, after verification from the audited annual accounts."

3.7.6.4 Thus, the Commission in aforesaid Order and in subsequent Orders too, has allowed capitalisation of non-DPR schemes without any restriction of 20% of DPR capitalisation. The Commission accepted the proposal of the MSLDC so that operations of the Petitioner should not be adversely affected and it should also be equipped to undertake necessary capital expenditure to meet the operational and technological challenges. Some of the non-DPR schemes are clubbed and termed as infrastructural development. These are not single schemes and hence DPR cannot be prepared for such schemes. These are small fragmented schemes as submitted by the Petitioner in true-up of FY 2014-15. Hence, DPR is not possible to be prepared for those small schemes, which are different in nature and purposes of each of them are different also.

3.7.6.5 Considering the Commission's decision to allow non-DPR capitalisation in excess of 20% of DPR capitalisation from FY 2015-16 onwards, the Petitioner requests the Commission to approve the capitalisation as submitted by the Petitioner under previous true-up Petitions, without any disallowance. The costs are reflected in the annual account of the Petitioner and without approval, the Petitioner cannot claim the associated cost elements in the ARR.

Commission's Analysis and Ruling

3.7.7 The Commission has noted the submissions of MSLDC and its observations on the same are outlined in the subsequent paragraphs.

3.7.8 **Capitalization disallowed in FY 2013-14 and FY 2014-15 for DPR scheme for Renovation in existing building in ALDC, Ambazari**

3.7.8.1 MSLDC has submitted that the Commission in its true-up Orders for FY 2013-14 and FY 2014-15 held that MSLDC had not submitted the reasons for cost overrun and hence, the capitalization was denied.

3.7.8.2 In this context, the observations of the Commission in its Order in Case No. 218 of 2014 are reproduced below:

"2.7.7 For final truing up of FY 2013-14, the Commission has considered the audited figures as submitted by MSLDC. However, in the ***case of the renovation of existing building at Area Load Despatch Center, Ambazari, the actual capitalisation till FY 2012-13 is Rs.331.18 lakh and that proposed for FY 2013-14 is Rs.35.70 lakh, amounting to Rs.367 lakh as against the approved project cost of Rs.269 lakh****. In its Petition in Case No.178 of 2013,* ***MSLDC had mentioned that the over-run had occurred for reasons such as increases in prices of cement, steel and labour charges, and increase in interest during the construction period (IDC)****.*

2.7.8 ***The Commission asked for details of works costs and IDC considered in the capitalisation proposed for FY 2013-14 for each scheme, and the CBA reports. MSLDC stated that, except for the construction of new building at Kalwa, IDC has not been considered for any other scheme. However, it has not spelt out the reasons for the cost over-run in the CBA report****.*

*2.7.9 As mentioned earlier, in the previous Case, **MSLDC had given general reasons for cost over-run without any break-up of the cost relating to increase in prices of materials (cement/steel), labour charges and any changes in requirements due to change in plans, if any.** Therefore, the Commission is constrained in approving the capitalisation proposed by MSLDC towards the renovation of the building at Ambazari."*

3.7.8.3 Further, the Commission in its Order in Case No. 20 of 2016 made the following observations:

"3.7.5 The Commission asked MSLDC to submit Cost Benefit Analysis (CBA) reports for the DPR schemes, with their progress in terms of timelines (scheduled vs. actual commencement/completion) and analysis of cost over-runs to enable the Commission to carry out a prudence review of the Capex Schemes. The Commission also asked MSLDC to clarify whether Interest during Construction (IDC) has been capitalised in any particular year (including FY 2014-15) and, if so, to provide formula based Excel computation sheet of the IDC claimed for the particular scheme with details such as date of commencement and completion, funding source, amount of loan, interest rate, repayment terms and quantum, IDC claimed etc.

3.7.6 The Commission has reviewed MSLDC's submissions on the capitalisation on each DPR scheme as follows:

…………..

- ***Renovation of existing Area LDC Building at Ambazari:** The Commission observed a **significant cost overrun, and had asked MSLDC for the details and reasons. However, MSLDC has not provided these**. Hence, the Commission has not considered any capitalisation for FY 2014-15."*

3.7.8.4 As it is evident from the above extracts of the Commission's Orders in Case No. 218 of 2014 (dated 20 October 2015) and Case No. 20 of 2016 (dated 22 July 2016), the Commission had been seeking requisite details from MSLDC multiple times to enable approval of the capitalisation based on prudence check. The details sought by the Commission should have been easily available with MSLDC and providing the same should not have been an issue. However, MSLDC has not submitted the requisite details till filing of the present Petition i.e. for almost 6.5 years and is now seeking approval of the same. This delay on part of MSLDC for submission of the relevant information sought the Commission in a timely manner raises questions regarding the seriousness on the part of MSLDC to provide the requisite information sought by the Commission. Hence, the Commission is not inclined to approve the disallowed capitalisation as sought by MSLDC after a significant delay of over 6.5 years.

3.7.9 Capitalisation disallowed in FY 2014-15 for DPR scheme for Construction of new SLDC building

3.7.9.1 MSLDC has stated that the Commission disallowed the partial capitalization on the ground that the Petitioner was asked to submit complete documentation and calculations for the completed costs of the scheme along with IDC calculations and copy of Board resolution for revised cost.

3.7.9.2 MSLDC has quoted the relevant paragraph related to approval of the capitalisation pertaining to the schemes from the Commission's Order in Case No. 178 of 2013. The Commission based on the available information has approved a capitalisation of Rs. 1024.62 Lakhs for FY 2012-13 and Rs. 1282.04 Lakhs for FY 2013-14 (projection).

3.7.9.3 The Petitioner has also stated in the present Petition that it had also got the necessary board approval dated 18 November 2014 for revised cost of Rs 2305 Lakh (without centages) and Rs 2630 Lakh (with centage).

3.7.9.4 The Commission vide its Order dated 20 October 2015 in Case No. 218 of 2014 had approved capitalisation of Rs. 562.50 Lakhs on truing up of FY 2013-14.

3.7.9.5 Further, the Commission's ruling in its Order in Case No. 20 of 2016 (22 July 2016) is reproduced below:

"3.7.5 The Commission asked MSLDC to submit Cost Benefit Analysis (CBA) reports for the DPR schemes, with their progress in terms of timelines (scheduled vs. actual commencement/completion) and analysis of cost over-runs to enable the Commission to carry out a prudence review of the Capex Schemes. The Commission also asked MSLDC to clarify whether Interest during Construction (IDC) has been capitalised in any particular year (including FY 2014-15) and, if so, to provide formula based Excel computation sheet of the IDC claimed for the particular scheme with details such as date of commencement and completion, funding source, amount of loan, interest rate, repayment terms and quantum, IDC claimed etc.

3.7.6 The Commission has reviewed MSLDC's submissions on the capitalisation on each DPR scheme as follows:

…………..

- ***New SLDC Kalwa Building:** The Commission asked whether MSLDC had capitalised IDC as part of any scheme and whether there were any delays and cost overruns, etc. MSLDC replied that MSETCL has allocated IDC of Rs.446.38 lakh for the New SLDC building towards IDC. This IDC forms part of the capitalisation of Rs.2457.13 lakh claimed till FY 2015-16. IDC for FY 2013-14 is Rs. 124 lakhs and Rs. 321.98 for FY 2014-15. MSETCL had allocated both amounts of IDC in FY 2014-15. Accordingly, IDC of Rs.446.38 lakhs is capitalised in FY 2014-15.*

MSLDC has not furnished details of the computation of IDC. Also, the Board approval for the revised cost of the scheme sought by the Commission during the Public Hearing has not been submitted.
The scheme was proposed to be completed by FY 2009-10 but actually completed in FY 2012-13. ***There was also a significant cost overrun as compared to the original approved estimates. Hence, MSLDC was asked to submit complete documentation and calculations for the completed costs of the scheme with reasons for deviations and cost overruns. However, MSLDC has not provided these.*** *Accordingly, the Commission has considered the approved total cost of Rs. 2306.66 lakh as per Case No. 178 of 2013 for the purpose of capitalisation for FY 2014-15.*
Considering the above, the Commission disallows the claim of IDC of Rs. 446.38 lakhs in FY 2014-15 and approves Rs. 273.16 lakh towards capitalisation for the new SLDC Kalwa building scheme."

3.7.9.6 **It is thus evident from the above extracts that the Commission had clearly outlined the details to be submitted by MSLDC to enable the Commission to undertake the due prudence check of the scheme costs to be able to approve the same. However, MSLDC has failed to provide the necessary documents / information identified by the Commission. Further, the Commission had asked MSLDC to submit the copy of the Board Resolution for the revised cost of the scheme during the public hearing held on 12 April 2016 i.e. well beyond the date on which the revised board approval was obtained i.e. 18 November 2014 for revised cost of Rs 2305 Lakh (without centages) and Rs 2630 Lakh (with centage).**

3.7.9.7 **The details sought by the Commission which were available with MSLDC were not shared by MSLDC till the time of filing of the present Petition i.e., for almost 6.5 years and MSLDC is now seeking approval of the same. As discussed above, this delay on part of MSLDC for submission of the relevant information sought the Commission in a timely manner raises questions regarding the seriousness on the part of MSLDC. Accordingly, the Commission is not inclined to approve the disallowed capitalisation as sought by MSLDC after a significant delay of over 6.5 years.**

3.7.10 Disallowed Capitalisation for non-DPR schemes for Infrastructure development

3.7.10.1 MSLDC has stated that in the past, the Commission disallowed certain non-DPR schemes due to the fact that Non-DPR capitalisation exceeded 20% of DPR schemes and on account of non-submission of DPR schemes. MSLDC has stated that from FY 2015-16 onwards, the Commission accepted the proposal of MSLDC and started approving the non-DPR schemes without any restriction of 20% of DPR capitalisation. Considering the Commission's decision to allow non-DPR capitalisation in excess of 20% of DPR capitalisation, MSLDC has requested the

Commission to approve the capitalisation as submitted by the Petitioner under previous true-up Petitions, without any disallowance.

3.7.10.2 **The Commission had examined the submissions of MSLDC and it is observed that, the Commission, considering the submissions of MSLDC in FY 2015-16 true-up Petition and to ensure that there is no adverse impact on the operational and technical capabilities of MSLDC to manage the grid operations effectively, had approved the non-DPR schemes without considering the restriction of 20% of approved DPR cost. However, that does not mean that the decision would be implemented retrospectively. Further, accepting MSLDC's submissions would mean opening up the past trued up ARRs which is not a desirable practise as per the regulatory framework unless the situation warrants it. The Commission, in the present case, does not feel it appropriate to implement its decision retrospectively (i.e. to make the decision of FY 2015-16 applicable to earlier year FY 2014-15 at this point in time) and also considering that MSLDC had not approached the Commission with such a request in the past. The period for which MSLDC is asking the retrospective approvals is well beyond 7 years and hence the Commission is not inclined to revisit its past decisions. The Commission directs MSLDC not to submit the same again since the same cannot be considered.**

3.8 Capitalisation

MSLDC's Submission

FY 2019-20

3.8.1 MSLDC, in its MYT Petition in Case No. 291 of 2019, had projected a capitalization of Rs. 1,048.36 Lakh for FY 2019-20 on provisional basis. The Commission had approved capitalization of Rs. 1,012.36 Lakh for FY 2019-20 in the provisional truing-up. However, the actual capitalization for FY 2019-20 is Rs. 531.24 Lakh.

3.8.2 Actual capitalization in FY 2019-20 is lower than the capitalization approved by the Commission in Case No. 291 of 2019 and this reduction is attributable to delayed capitalization towards two DPR schemes (80 RTU and DSM scheme), which got capitalized in the subsequent years.

3.8.3 As regards capitalisation towards non-DPR schemes, the schemes capitalised in MSLDC are mostly low value schemes (less than Rs. 100 Lakhs) and includes capitalisation of items procured on an intermittent basis. Considering the above, MSLDC has sought approval of the actual capitalisation for FY 2019-20 as given in the table below:

Table 27: Capitalisation for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Sr. No.	Project Title	Actual Capitalisation

Sr. No.	Project Title	Actual Capitalisation
DPR Schemes		
1	S/I/T/C of Hardware IT, Firewall server	138.35
Non-DPR Schemes		
1	S/I/T/C of BARCO LED based display wall	95.13
2	RTU & DC for SLDC Airoli	44.48
3	RTU & DC for ALDC Ambazari	56.34
4	S/I/T/C of automatic fire suppression	32.07
5	Development of online web based scheduling software	16.90
6	S&I of lead acid GEL VRLA battery system	56.71
7	S/I/T/C hardware, software licence for MERC Reg. RE & FBSM	58.71
8	General asset / infrastructure development	32.55
Total Capitalization		**531.24**

FY 2020-21 and FY 2021-22

3.8.4 The Commission approved capitalization of Rs. 1,922.80 Lakh for FY 2020-21 and Rs. 1,441 Lakh for FY 2021-22 in Case No. 291 of 2019. However, the actual capitalization was lower than approved amount. The breakup of actual capitalization as DPR and Non-DPR schemes is as shown in the Table below:

Table 28: Actual Capitalization for FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs Lakh)

Sr. No.	Project Title	Actual Capitalization
FY 2020-21		
DPR Schemes		
1	H/W S/W at control center	127.44
Non-DPR Schemes		
1	ICCP link b/w SLDC Airoli and REMC at SLDC	17.09
2	General asset / Infrastructure development	36.89
	Total Schemes Capitalization	**181.42**
FY 2021-22		
DPR Schemes		
1	Construction of new UCR wall (Compound wall)	35.41
2	H/W S/W at control center	120.36
3	Development of S/W for S&D , DS, SEA, DSM & Cloud	461.15

Sr. No.	Project Title	Actual Capitalization
4	70 SAS/RTUs Integration	24.78
Total DPR		**641.70**
Non-DPR Schemes		
1.	RE-DSM (REMC)	27.49
2.	RTU-DC SLDC Airoli and Ambazari (two schemes jointly)	1.94
3.	Web based software for STOA application	17.13
4.	ICCP link b/w SLDC Airoli and REMC at SLDC	45.94
5.	Watchman cabin at SLDC main gate	4.30
6.	S/I/C of video conference system at 3rd floor	4.63
7.	Active Dir management solution and maintenance at SLDC	13.10
8.	S/I/T/C of New 240 line Digital EPABX m/c	12.95
9.	General asset	31.51
Total Non-DPR		158.**99**
Total Schemes Capitalization		**800.69**

3.8.5 MSLDC has submitted the status of DPR and Non DPR Capex scheme, their progress and expected completion targets in the Petition. Actual Capitalization is lower than the capitalization approved by the Commission in Order in Case No. 291 of 2019 as few schemes could not be initiated due to change in requirement at MSLDC level as per situation prevailed. Also, COVID related lockdown restrictions impacted the working of MSLDC . Hence, execution of planned schemes got deferred.

Commission's Analysis and Ruling

3.8.6 MSLDC has submitted the Work Completion reports for the DPR schemes as well as major non-DPR schemes to ascertain the actual status of implementation and the put to use of assets against the capitalisation claimed in FY 2019-20, FY 2020-21 and FY 2021-22 which have been examined by the Commission.

3.8.7 The Commission observed a time overrun in some of the DPR schemes. There are some schemes which have been approved by the Commission in the year 2016, however, there is either partial or negligible or nil expenditure in these schemes during FY 2019 -20 and no capitalisation. MSLDC explained that the purpose of this scheme was configuration of MSETCL Substations in SCADA 4.5.1 at MSLDC, Kalwa and ALDC, Ambazari. For this purpose, RTUs and IEDs need to be installed in field Substations and communication links need to be commissioned by Field Office. Then, the configuration activity and point-to-point testing needs to be completed. The progress of this integration activity depends upon the requirement and request from MSETCL's field Office. Also, during COVID period, the activity for installation of RTUs & IEDs and establishment of the communication link got delayed. Presently 80 RTUs scheme is on the verge of completion and it may be completed by March 2023. In 70 RTUs scheme, 7 nos. of RTUs integration work has already been completed. The balance 63 RTUs integration order has been placed and its work is in progress. 70 RTUs scheme at MSLDC can be commissioned only after installation of RTUs / IED / Communication links at MSETCL field Substations. The project will be completed by March 2024. The Commission has noted the aforesaid submissions of MSLDC.

3.8.8 Further, it is observed that the capitalisation towards non DPR is in excess of 20% of capitalisation of DPR schemes. However, in the MYT Order in Case No. 291 of 2019, the Commission has decided not to restrict the non-DPR capitalisation at 20% of DPR capitalisation for MSLDC. The relevant extract of the MYT Order reads as follows:

> *"For any scheme with projected capital expenditure above Rs.100 Lakh, MSLDC is expected to submit a DPR for in-principle approval. The Commission observes that most of the capex schemes of MSLDC are small value schemes and Capitalisation against these is requirement based and periodic in nature. Further, the Commission is wary of the fact that MSLDC not only plays very critical role in ensuring the integrated operation of power system within the State but also responsible for real time operations for grid control and despatch of electricity within the State.* ***Further, MSLDC has to tackle operational and technological challenges to manage the increasing quantum of renewable energy. It is therefore essential that MSLDC's operations are not affected and it should be equipped to undertake necessary capital expenditure to meet the operational and technological challenges.*** *Therefore, the* ***Commission has reviewed MSLDC's request to approve the capitalisation proposed under DPR and non-DPR schemes as submitted and accordingly, decides not to restrict the non-DPR capitalisation at 20% of DPR capitalisation approved for the year.*** *Accordingly, the Commission approves capitalisation against DPR as well as non-DPR schemes as claimed by MSLDC, after verification from the audited annual accounts."*

3.8.9 Based on the above, the Commission approves capitalisation for FY 2019-20, FY 2020-21 and FY 2021-22 as shown in the below Table:

Table 29: Capitalisation for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Capitalisation	1,012.36	531.24	531.24	1,922.80	181.42	181.42	1,441.00	800.69	800.69

3.8.10 **The Commission approves Capitalisation of Rs. 531.24 Lakh for FY 2019-20, Rs. 181.42 Lakh for FY 2020-21 and Rs. 800.69 Lakh for FY 2021-22 on Truing up of ARR.**

3.9 Depreciation

MSLDC's Submission

3.9.1 The Commission has considered funding of capitalization from LDCD fund from FY 2018-19 onwards. Hence, the depreciation is claimed on the assets capitalized up to FY 2017-18. Thereafter, no depreciation is claimed for the assets capitalized from FY 2018-19 onwards.

3.9.2 Depreciation for FY 2019-20, FY 2020-21 and FY 2021-22 has been computed considering the actual depreciation rates derived on the basis of gross fixed assets as on 1 April 2017 and capitalization added during FY 2017-18. For example, the depreciation rate with respect to assets related to plant and machinery is derived based on actual depreciation amount reflected in audited account for FY 2017-18 with respect to GFA of plant and machinery.

3.9.3 The depreciation for IT equipment /software has been calculated separately @ 15% as per MYT Regulations, 2015. The IT related depreciation considers the impact of the asset Computer Software/IT equipment which was recognized by the Commission as 'IT Equipment' and had approved the depreciation at 15% in accordance with the MYT Regulation, 2015.

3.9.4 MSLDC in its MYT Petition under Case No. 291 of 2019 had claimed a depreciation of Rs. 290.55 Lakh for FY 2019-20 as against which the Commission approved depreciation of Rs. 167.01 Lakh in the said Order. The details of depreciation claim are given below.

Table 30: Depreciation for FY 2019-20, as submitted by MSLDC (Rs. Lakhs)

Particulars	MYT Order	Actual
Depreciation	167.01	290.55

3.9.5 As regards the query regarding claiming a GFA different than that approved by the Commission, it is stated that GFA as per actual up to 31 March 2017, as reflected in the audited accounts (before capitalization funded through LDCD fund) has been considered by the Petitioner in the present Petition like its earlier MYT Petition.

3.9.6 The Depreciation expenses for FY 2019-20 as claimed by MSLDC is given in the Table below:

Table 31: Depreciation for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	
	MYT Order	Petition
Depreciation	167.01	290.55

3.9.7 As against the approved depreciation of Rs. 142.40 Lakh for FY 2020-21 and Rs. 116.30 Lakh for FY 2021-22, MSLDC has claimed the depreciation of Rs. 290.46 Lakh and Rs. 242.82 Lakh, respectively as part of the truing up. The details are given below.

Table 32: Depreciation for FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2020-21			FY 2021-22		
	MYT Order	Actual	True-Up	MYT Order	Actual	True-Up
Depreciation	142.40	290.46	148.06	116.30	242.82	126.52

Commission's Analysis and Ruling

3.9.8 The Commission had sought clarification from MSLDC regarding the difference in the opening GFA for FY 2019-20 considered by MSLDC in the Petition and the closing GFA for FY 2018-19 approved by the Commission in its Order in Case No. 291 of 2019. MSLDC, in response to the query, quoted the extract from the Commission's Order in Case No. 291 of 2019 which mentioned the following:

"3.8.7 The Commission has sought clarification with regard to the difference in the opening balance as per Allocation Statement and the submission made by MSLDC and the difference in treatment of calculation of depreciation for FY 2017-18 and FY 2018-19 in Form 4 of the Regulatory formats. MSLDC has provided the clarification stating that there exists a difference of Rs. 1,069 Lakh in the Opening GFA of FY 2015-16 claimed by Petitioner against the Opening GFA of FY 2015-16 approved in Case 20 of 2016 due to disallowance of Capitalisation in past….."

3.9.9 MSLDC stated that the same reason is applicable in the present context as well.

3.9.10 The Commission has examined this issue and is of the opinion that MSLDC, in its Tariff Petitions, has to consider the opening values of GFAs which have been approved by the Commission in the past Orders. Submitting the Petition with opening values (GFA, Normative Loans, equity, etc.) different from those approved by the Commission in the earlier Orders leads to misrepresentation of the values in front of the stakeholders and hence needs to be avoided. Further, the Commission in the present Order has not considered MSLDC's request regarding approval of the past disallowed capitalisation which is the key reason for the difference in the opening values. **Accordingly, MSLDC, in the next Petition, should use only the opening values as approved by the Commission in the present Petition.**

3.9.11 Accordingly, the Commission has considered the closing GFA for FY 2018-19 approved in the MYT Order in Case No. 291 of 2019 which is considered as the opening GFA for FY 2019-20. The addition to GFA is considered based on the approved Capitalisation and utilisation of LDCD fund.

3.9.12 The Commission has computed the depreciation in accordance with the MYT Regulations, 2015 and MYT Regulation, 2019, as applicable, subject to the ceiling of 90% of GFA for individual asset classes and has approved the amount as given in the table below:

Table 33: Depreciation for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening Gross Fixed Assets	8,763.04	9,833.84	8,763.04	8,763.04	9,833.84	8,763.04	8,763.04	9,833.84	8,763.04
Add: Additional Capitalization during the year	-	-	-	-	-	-	-	-	-
Less: Retirement/Adjustments	-	-	-		-	-		-	-
Closing Gross Fixed Assets	**8,763.04**	**9,833.84**	**8,763.04**	**8,763.04**	**9,833.84**	**8,763.04**	**8,763.04**	**9,833.84**	**8,763.04**
Total Depreciation	**167.01**	**290.55**	**168.60**	**142.40**	**290.46**	**143.99**	**116.30**	**242.82**	**117.89**

* Capitalisation of FY 2019-20, FY 2020-21 and FY 2021-22 is funded through LDCD Fund and hence not considered for the purpose of computation of depreciation

3.9.13 **The Commission approves Depreciation of Rs 168.60 Lakh for FY 2019-20, Rs. 143.99 Lakh for FY 2020-21 and Rs. 117.89 Lakh FY 2021-22 on Truing up of ARR.**

3.10 Interest on Long Term Loans

MSLDC's Submission

3.10.1 The interest on the existing actual loan for MSLDC has been already. The loan in case of MSLDC is normative loan only. Further, the capitalization is funded from LDCD fund only, hence, no new loan has been added. The depreciation calculated for FY 2019-20, FY 2020-21 and FY 2021-22 has been considered as normative loan repayment.

3.10.2 For the purpose of estimation of interest cost corresponding to normative loans, opening normative loan amount as on 1 April, 2018 has been considered (as submitted in last MYT Petition by the Petitioner and as per justification submitted for GFA above). Further, MSLDC has considered the weighted average interest rate of the actual loan portfolio of MSETCL as communicated by MSETCL for computing the interest expenses for FY 2019-20, FY 2020-21 and FY 2021-22.

3.10.3 The interest on normative long-term loans claimed by MSLDC for FY 2019-20, FY 2020-21 and FY 2021-22 are as follows:

Table 34: Interest on Long Term Loans for FY 2019-20, FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition	MYT Order	MYT Petition
Opening Balance of Net Normative Loan	1161.41	1645.89	994.40	355.34	852.00	1064.88
Less: Reduction of Normative Loan due to retirement or replacement of assets	-	-	-	-	-	-

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition	MYT Order	MYT Petition
Addition of Normative Loan due to capitalization during the year	-	-	-	-	-	-
Repayment of Normative loan during the year	167.01	290.55	142.40	290.46	116.30	242.82
Closing Balance of Net Normative Loan	**994.40**	**1355.34**	**852.00**	**1064.88**	**735.70**	**822.06**
Average Balance of Net Normative Loan	1077.91	1500.61	923.20	1210.11	793.85	943.47
Weighted average Rate of Interest on actual Loans (%)	**10.12%**	**10.03%**	**10.12%**	**10.13%**	**10.12%**	**8.93%**
Interest Expenses	**109.08**	**150.51**	**93.43**	**122.58**	**80.34**	**84.25**

Commission's Analysis and Ruling

3.10.4 For the Truing-up of ARR for FY 2019-20, the closing loan for FY 2018-19 approved in the MYT Order in Case No. 291 of 2019 is considered as the opening loan for FY 2019-20. The capitalisation is funded through the LDCD Fund, hence no addition of normative loan is considered for FY 2019-20 and beyond. The repayment of normative loan is linked to the depreciation approved in the present Order. The Interest rate as considered by MSETCL in its MTR Petition is considered by MSLDC for computation of the interest expense on normative loans.

3.10.5 The Commission has noted the submissions and has considered the rate of interest as approved by the Commission for MSETCL in the MTR Order in Case No. 232 of 2022.

3.10.6 Based on the above, the Commission has approved the following interest on long term loan for FY 2019-20, FY 2020-21 and FY 2021-22:

Table 35: Interest on Long Term Loans for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	1,161.41	1,645.89	1,161.41	994.40	1,355.34	992.81	852.00	1,064.88	848.82
Add: Debt component of capitalisation during the year	-	-	-	-	-	-	-	-	-
Repayment of Normative loan during the year	167.01	290.55	168.60	142.40	290.46	143.99	116.30	242.82	117.89
Less: Reduction of Normative Loan due to retirement or replacement of assets	-	-	-	-	-	-	-	-	-
Closing Balance of Normative Loan	**994.40**	**1,355.34**	**992.81**	**852.00**	**1,064.88**	**848.82**	**735.70**	**822.06**	**730.92**
Weighted average Rate of Interest (%)	10.12%	10.03%	10.03%	10.12%	10.13%	10.13%	10.12%	8.93%	8.93%
Normative Interest Expenses	**109.08**	**150.51**	**108.03**	**93.43**	**122.58**	**93.28**	**80.34**	**84.25**	**70.54**
Actual Interest allocated by MSETCL to MSLDC	-	-	-	-	-	-	-	-	-
Total Interest Expenses	**109.08**	**150.51**	**108.03**	**93.43**	**122.58**	**93.28**	**80.34**	**84.25**	**70.54**

** Capitalisation of FY 2019-20, FY 2020-21 and FY 2021-22 is funded through LDCD Fund and hence no addition to normative loan is considered in FY 2019-20, FY 2020-21 and FY 2021-22*

3.10.7 **The Commission approves Interest on Long Term Loans of Rs. 108.03 Lakh for FY 2019-20, Rs. 93.28 Lakh for FY 2020-21 and Rs. 70.54 Lakh for FY 2021-22 on Truing-up of ARR. Further, the directions given in the depreciation**

section regarding the use of approved opening values needs to be followed MSLDC in the case of opening normative loans as well.

3.11 Return on Equity (RoE)

MSLDC'S Submission

<u>FY 2019-20</u>

3.11.1 MSLDC has worked out the RoE for FY 2019-20 in accordance with the Regulation 28 of the MYT Regulations, 2015 which reads as follows:

"28 Return on Equity

28.1 ...

28.2 Return on equity for the Transmission Licensee, Distribution Wires Business and MSLDC shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use, at the rate of 15.5 per cent per annum in Indian Rupee terms, and for the Retail Supply Business, Return on Equity capital shall be allowed on the amount of equity capital determined in accordance with Regulation 26 at the rate of 17.5 per cent per annum in Indian Rupee terms.

28.3 The return on equity shall be computed in the following manner:

(a) Return at the allowable rate as per this Regulation, applied on the amount of equity capital at the commencement of the Year; plus

(b) Return at the allowable rate as per this Regulation, applied on 50 per cent of the equity capital portion of the allowable capital cost, for the investments put to use in Generation Business or Transmission Business or Distribution Business or MSLDC, for such Year."

3.11.2 The RoE for FY 2019-20 has been calculated as per the opening equity as on 1 April 2018 (since from FY 2018-19 onwards, all capitalization is funded through LDCD fund only). Further, in accordance with the MYT Regulations, 2015, rate of 15.5% have been considered for computing RoE. Hence, the Return on Equity amount is Rs. 246.34 Lakh for FY 2019-20 against Rs. 196.45 Lakh approved in Case No. 291 of 2019.

3.11.3 RoE for FY 2019-20 is higher than approved RoE in Case No. 291 of 2019 because of difference of GFA considered by MSLDC in its submission.

3.11.4 The Return on Equity for FY 2019-20 as claimed by MSLDC is shown in Table below:

Table 36: Return on Equity for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	
	MYT Order	MTR Petition

Particulars	FY 2019-20	
	MYT Order	MTR Petition
Regulatory Equity at the beginning of the year	1267.45	1589.27
Capitalisation during the year		
Consumer Contribution and Grants used during the year for Capitalisation (LDC Fund)		
Equity portion of capitalisation during the year		
Reduction in Equity Capital on account of retirement / replacement of assets		
Regulatory Equity at the end of the year	1267.45	1589.27
Return on Equity Computation		
Return on Regulatory Equity at the beginning of the year	196.45	246.34
Return on Regulatory Equity addition during the year		
Return on Equity	**196.45**	**246.34**

FY 2020-21 and FY 2021-22

3.11.5 The Regulation 29 of the MYT Regulations, 2019 provides as follows:

"29 Return on Equity

29.1 Return on Equity for the Generating Company, Transmission Licensee, Distribution Wires Business and MSLDC shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use, at the rate of up to 15.5 per cent per annum in Indian Rupee terms, and for the Retail Supply Business, Return on Equity shall be allowed on the amount of equity capital determined in accordance with Regulation 27 at the rate of up to 17.5 per cent per annum in Indian Rupee terms:

***Provided that Return on Equity shall be allowed in two parts viz. Base Return on Equity, and Additional Return on Equity linked to actual performance**:*

***Provided further that Additional Return on Equity shall be allowed at time of truing up for respective year based on actual performance, after prudence check of the Commission**:"*

3.11.6 As regards, additional ROE for FY 2020-21 and FY 2021-22, MSLDC has submitted the proposal before the Commission vide its letter dated 16 April 2022. The detailed rationale regarding the performance indicators have been submitted. The proposal given by the Petitioner is: if MSLDC achieved 85 % of the actual target, MSLDC will be entitled to claim additional RoE of 1.5 %. On the basis of Performance Evaluation on Key Result Areas (KRAs), following weighted has been proposed.

- Stakeholder Satisfaction – 47%
- Adequacy and Efficiency of Internal Processes – 28%
- Financial Prudence -15%

- Learning and growth aspects -10%

3.11.7 However, the proposal is yet to be approved. In absence of its approval, RoE @ 14% (base RoE only) has been considered. Further, as explained earlier, no additional equity has been considered as funding for capitalization is considered from LDC development fund. The Return on Equity for FY 2020-21 and FY 2021-22 is shown in Table below:

Table 37: Return on Equity for FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2020-21		FY 2021-22	
	MYT Order	**MTR Petition**	**MYT Order**	**MTR Petition**
Regulatory Equity at the beginning of the year	1267.45	1589.27	1267.45	1589.27
Equity portion of capitalization during the year				
Reduction in Equity Capital on account of retirement / replacement of assets				
Regulatory Equity at the end of the year	1267.45	1589.27	1267.45	1589.27
Return on Equity Computation				
Return on Regulatory Equity at the beginning of the year @14% (base RoE)	177.44	222.50	177.44	222.50
Return on Regulatory Equity addition during the year				
Total Return on Equity	**177.44**	**222.50**	**177.44**	**222.50**

Commission's Analysis and Ruling

3.11.8 The Commission has noted the submissions of MSLDC.

3.11.9 The closing equity for FY 2018-19 as approved in the MYT Order in Case No. 291 of 2019 is considered as the opening equity for FY 2019-20. As the additional capitalisation is funded through LDCD fund, no equity addition is considered during the period FY 2019-20 to FY 2021-22.

3.11.10For approval of RoE for FY 2019-20, the Commission has considered the rate of 15.5% on the opening approved equity as per MYT Regulations, 2015.

3.11.11As regards FY 2020-21 and FY 2021-22, the Commission notes that the MYT Regulations, 2019 do not specify any performance parameters for MSLDC for the additional return on equity. In this regard, the Commission in its Order in Case No. 291 of 2019 had directed as follows:

5.9.12 Accordingly there are various different KPIs identified by CERC and FOR for measuring the performance of the Load Despatch Centre, however, it is important for MSLDC also to study these KPIs and come up with its recommendations regarding the KPIs which can be considered by the Commission for linking it to the recovery of performance linked RoE.

The recommendations could be accompanied with an entire framework for measuring, comparing and validating the KPIs.

*5.9.13 In view of the above discussion, the **Commission hereby directs MSLDC to approach the Commission with the proposal to fix the performance norms or Key Performance Indicators based on which MSLDC will be entitled to claim Additional RoE of 1.5% at the time of truing up within 3 months of this Order**.*

3.11.12 **Thus, the Commission had directed MSLDC to approach the Commission with a proposal to fix up the performance norms or KPIs within 3 months of the aforesaid Order i.e. by the end of June 2020. The timely submission on part of MSLDC would have provided sufficient time for deliberations prior to fixing of the norms. However, MSLDC approached the Commission only in April 2022, i.e., after completion of the years FY 2020-21 and FY 2021-22 for which truing up is being considered in present Petition and a claim for additional RoE could have been made. Fixing a norm for a year on post facto basis after completion of that year is not appropriate. Further, the proposal was not supported by any data to help assess the performance. Also, the parameters proposed by MSLDC are subjective in nature and for finalization of norms of performance, objective parameters which can be measured in an unambiguous manner, need to be considered. Further, process of Ring fencing of MSLDC is yet to achieved which would enable it to monitor the above KRAs for performance evaluation. The Commission had directed MSLDC to submit a report on the progress in this matter, every six months, to the Commission. However, MSLDC has not complied with this directive on a periodic basis and only submitted the update at the time of filing of the MTR Petition.**

3.11.13 **In view of the above, the Commission is presently not allowing MSLDC to recover the additional RoE in absence of any framework to assess the performance. MSLDC is directed to resubmit its proposal within three months from the issue of this Order with a detailed proposal including similar framework operational in other parts of the country. MSLDC should also study the recommendations given in various reports issued by entities like the Forum of Regulators, etc. The framework should also outline how the data would be collated against the proposed parameters and process to be followed for validation of the performance data including timely compliances of Orders issued by the Commission. The framework will be applicable on a prospective basis only.**

3.11.14 RoE is computed at the rate 14% as submitted by MSLDC and is base RoE as per MYT Regulations, 2019. The same has been considered by the Commission for approving the RoE.

3.11.15 Considering the above, the RoE approved by the Commission for FY 2019-20, FY 2020-21 and FY 2021-22 is as shown in the table below:

Table 38: Return on Equity for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Regulatory Equity at the beginning of the year	1,267.45	1,589.27	1,267.45	1,267.45	1,589.27	1,267.45	1,267.45	1,589.27	1,267.45
Equity portion of capitalisation during the year	-	-	-	-	-	-	-	-	-
Reduction in Equity Capital on account of retirement / replacement of assets	-	-	-	-	-	-	-	-	-
Regulatory Equity at the end of the year	**1,267.45**	**1,589.27**	**1,267.45**	**1,267.45**	**1,589.27**	**1,267.45**	**1,267.45**	**1,589.27**	**1,267.45**
Return on Regulatory Equity rate (%)	15.50%	15.50%	15.50%	14%	14%	14%	14%	14%	14%
Return on Regulatory Equity at the beginning of the year	196.45	246.34	196.45	177.44	222.50	177.44	177.44	222.50	177.44
Return on Regulatory Equity addition during the year	-	-	-	-	-	-	-	-	-
Total Return on Equity	**196.45**	**246.34**	**196.45**	**177.44**	**222.50**	**177.44**	**177.44**	**222.50**	**177.44**

**Capitalisation of FY 2019-20 to FY 2021-22 is funded through LDCD Fund and hence no addition to equity during the respective years has been considered.*

3.11.16 **The Commission approves RoE of Rs. 196.45 Lakh for FY 2019-20, Rs. 177.44 Lakh for FY 2020-21 and Rs. 177.44 Lakh for FY 2021-22 on Truing up of ARR.**

3.12 Income Tax

MSLDC's Submission

3.12.1 MSLDC does not have a separate corporate existence i.e., it is not a separate Company and is being operated by MSETCL which is also being regulated by the Commission. Further, the expenditure/income pertaining to MSLDC activities is accounted separately in line with the Commission's directives for the purpose of regulatory reporting.

3.12.2 Neither a separate filing of Income Tax Returns in respect of MSLDC is done nor there is an allocation/claim of Income Tax towards MSLDC by MSETCL. However, in future if such allocation/claims are formulated, MSLDC shall claim the same in accordance with the applicable MYT Regulations. MSLDC requests the liberty to undertake the same as and when required.

3.12.3 In view of above, MSLDC has not claimed Income Tax for FY 2019-20, FY 2020-21 and FY 2021-22.

Commission's Analysis and Ruling

3.12.4 The Commission notes the submission of MSLDC in respect of Income Tax for FY 2019-20, FY 2020-21 and FY 2021-22 that MSLDC does not have a separate corporate status and is, therefore, not required to submit Income Tax returns and also that MSETCL has not allocated any Income Tax to MSLDC.

3.12.5 Accordingly, the Commission has not considered any expense towards Income Tax for FY 2019-20.

3.12.6 Further, the Regulation 34.2 of the MYT Regulation, 2019 states that the Return on Equity, including additional Return on Equity as allowed by the Commission under Regulation 29 of the MYT Regulations, 2019 shall be grossed up with the effective tax rate of respective financial year.

3.12.7 Considering MSLDC's submission, no grossing up of RoE has been considered presently for FY 2020-21 and FY 2021-22 on Truing up.

3.13 Non-Tariff Income

MSLDC's Submission

3.13.1 As regards non-Tariff income, MSLDC has received major earning from interest on investment made in deposit in Bank and earned interest on such deposits. However, as directed by the Commission in Case No. 291 of 2019, the interest on fixed deposit has not been considered while truing up. The observation of the Commission for not considering the interest income from investment is reproduced below.

"As noted by Commission in Case No. 171 of 2017, this income is primarily on account of the fixed deposits created from the surplus available with MSLDC. Considering the similar approach as adopted in MTR Order in Case No. 171 of 2017, the Commission is considering the holding cost on the surplus of FY 2017-18 for the respective year only and as discussed in para 3.17.5, therefore, the income on investments (fixed deposits) is not considered as part of the Non-Tariff Income for FY 2017-18, as it would amount to deducting this amount twice from the ARR."

3.13.2 The Petitioner has considered the interest rates offered by various banks for deposits kept by MSLDC. The weighted average interest rates of such fixed deposits, which is 6.54% for FY 2019-20, is considered for determination of interest income from LDCD fund. The amount of Rs. 340.71 Lakh is derived as interest income from LDCD fund, which is considered under non-tariff income for FY 2019-20. Other non-tariff income as per audited account is Rs. 70.86 Lakh for FY 2019-20. The Petitioner considers non-Tariff income of Rs. 411.58 Lakh in FY 2019-20 which includes the interest earned on LDCD fund. Similar approach is followed for working out the interest income for FY 2020-21 and FY 2021-22.

3.13.3 MSLDC has sought approval of the Non-Tariff Income at actuals, as follows:

Table 39: Non-Tariff Income for FY 2019-20, FY 2020-21 and FY 2021-22 as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition	MYT Order	MTR Petition
Non-Tariff Income	256.71	411.58	210.71	456.04	124.56	357.75

Commission's Analysis and Ruling

3.13.4 The Commission has noted the submission of MSLDC in respect of Non-Tariff Income. Further, it has verified the actual Non-Tariff Income from the audited Trial Balance of MSLDC for FY 2019-20, FY 2020-21 and FY 2021-22.

3.13.5 Based on the direction of the Commission in MYT Order in Case No. 291 of 2019, and previous Orders, MSLDC has created LDCD Fund from FY 2018-19. Accordingly, the surplus available with LDCD fund post utilisation of the amount for capitalisation is considered for calculation of Income from Fixed Deposit Receipts (FDR) at the average Interest rate on which the FDR is actually invested by MSLDC. The Commission has examined the details submitted by MSLDC and the detailed computation is as follows:

Table 40: Computation of Interest Rate on FDs for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
Average LDCD fund	5,324.85	6,297.12	6,676.33
Interest rate	6.54%	6.04%	5.20%
Income earned on LDCD fund	347.99	380.36	347.09

3.13.6 Accordingly, the Non-Tariff Income approved for FY 2019-20, FY 2020-21 and FY 2021-22 is as per the following table:

Table 41: Non-Tariff Income for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Non-Tariff Income	256.71	411.58	418.85	210.71	456.04	471.70	124.56	357.75	374.65

3.13.7 **The Commission approves Non-Tariff Income of Rs. 418.85 Lakh, Rs. 471.70 Lakh, Rs. 374.65 Lakh for FY 2019-20, FY 2020-21 and FY 2021-22, respectively on Truing up of ARR.**

3.14 Income from Open Access Charges

MSLDC's Submission

3.14.1 In accordance with the MYT Regulations, 2015, MSLDC has submitted the actual income from Open Access Charges of Rs. 1,365.87 Lakh for FY 2019-20 including rescheduling charges and rebate from prompt payment.

3.14.2 As per the provisions under the MYT Regulations, 2019, MSLDC submitted the actual income from Open Access Charges of Rs. 854.33 Lakh for FY 2020-21 and Rs. 1,572.47 Lakh for FY 2021-22 including Rescheduling Charges. The rebate given to the consumers is also included in this income.

3.14.3 In the FBSM framework (up to 10 October 2021), Rescheduling charges were calculated for the station as a whole during revisions for the same period /block. But in the DSM regime (from 11 October 2021), Rescheduling charges @ Rs. 2250 per unit per revision are calculated unit wise and block wise. In FBSM, Discoms paid to generators as per actual generation, whereas, in DSM, payment is as per schedule. However, in DSM regime, 14 Discoms plus 72 generators / sellers are paying scheduling/ re-scheduling charges. Further, in DSM, first time generators are involved in deviation ambit. So, to minimize the deviation charges, the generators are keen to revise their schedules as close as to their actual generation. Hence, number of revisions are more in DSM and that is reflected in income of FY 2021-22.

3.14.4 MSLDC has sought approval of the income from open access charges as given in the table below:

Table 42: Income from Open Access Charges for FY 2019-20, FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition	MYT Order	MTR Petition
Income from Open Access Charges	1,134.00	1,369.10	1,156.68	854.33	1,179.81	1,572.47

Commission's Analysis and Ruling

3.14.5 The Commission has examined the submission of MSLDC in respect of Income from Open Access Charges. Same has also been verified from the Audited Trial Balance for FY 2019-20, FY 2020-21 and FY 2021-22.

3.14.6 Accordingly, the Income from Open Access Charges approved for FY 2019-20, FY 2020-21 and FY 2021-22 is as shown below:

Table 43: Income from Open Access Charges for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Open Access Income from revised Scheduling Charges	1,042.00	814.13	814.13	1,062.84	518.29	518.29	1,084.10	934.47	934.47
Open Access Income from revised Re-scheduling Charges	92.00	554.97	554.97	93.84	342.83	342.83	95.72	643.01	643.01
Less: Rebate		3.23	3.23		6.79	6.79		5.01	5.01
Income from Open Access Charges	**1,134.00**	**1,365.87**	**1,365.87**	**1,156.7**	**854.33**	**854.33**	**1,179.82**	**1,572.47**	**1,572.47**

3.14.7 **The Commission approves Income from Open Access Charges of Rs. 1,365.87 Lakh, Rs. 854.33 Lakh and Rs. 1,572.47 Lakh for FY 2019-20, FY 2020-21 and FY 2021-22, respectively on Truing up of ARR.**

3.15 Income from Monthly Operating Charges

MSLDC's Submission

3.15.1 MSLDC has received actual income from Monthly Operating Charges of Rs. 2,902.08 Lakh for FY 2019-20, Rs. 3,388.77 Lakh for FY 2020-21 and Rs. 3,211.24 Lakh for FY 2021-22. Monthly Operating Charges for these years have been collected as per the Commission's Order in Case No. 291 of 2019.

Table 44: Income from Monthly Operating Charges for FY 2019-20, FY 2020-21 and FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20		FY 2020-21		FY 2021-22	
	MYT Order	MTR Petition	MYT Order	MTR Petition	MYT Order	MTR Petition
Income from Operating Charges	2,902.08	2,902.08	3,391.60	3,388.77	3,208.57	3,211.24

Commission's Analysis and Ruling

3.15.2 The Commission has examined the submission of MSLDC in respect of Income from Monthly Charges. It has also verified the same from the Audited Annual Accounts for FY 2019-20, FY 2020-21 and FY 2021-22.

3.15.3 The Income from Monthly Operating Charges approved for FY 2019-20, FY 2020-21 and FY 2021-22 is as shown below:

Table 45: Income from Monthly Operating Charges for FY 2019-20, FY 2020-21 and FY 2021-22, approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Income from Operating Charges	2901.97	2902.08	2902.08	3391.60	3388.77	3388.77	3208.57	3211.24	3211.24

3.15.4 **The Commission approves income from Monthly Operating Charges of Rs. 2902.08 Lakh for FY 2019-20, Rs. 3388.77 Lakh FY 2020-21 and Rs. 3211.24 Lakh FY 2021-22 on Truing up of ARR.**

3.16 Summary of Truing up for FY 2019-20, FY 2020-21 and FY 2021-22

MSLDC's Submission

3.16.1 Based on the above discussion, the head wise actual expenditure against actual receipts and surplus/ shortfall shown is summarized in the table below for FY 2019-20, FY 2020-21 and FY 2021-22, as submitted by MSLDC.

Table 46: MSLDC Final True-Up for FY 2019-20, as submitted by MSLDC (Rs. Lakh)

Sr.	Particulars	FY 2019-20

No.		MYT Order	MTR Petition	Deviation	Net Entitlement after sharing of gains /(losses)
1	Operation & Maintenance Expenses	2555.48	2675.33	119.85	2550.91
2	RLDC Fees and WRPC Charges	782.14	498.59	-283.55	498.59
3	Depreciation Expenses	167.01	290.55	123.54	290.55
4	Interest on Loan Capital	109.08	150.51	41.43	150.51
5	Interest on Working Capital	54.98	54.30	-0.68	18.10
6	Reactive Energy Charges paid to Generators/TSUs	0.00	0.00	0.00	0.00
7	Income Tax	0.00	0.00	0.00	0.00
8	**Total Revenue Expenditure**	**3668.69**	**3669.28**	**0.59**	**3508.67**
9	Return on Equity Capital	196.45	246.34	49.89	246.34
10	**Total Expenditure for MSLDC**	**3865.14**	**3915.62**	**50.48**	**3755.01**
11	Less: Non-Tariff Income	256.71	411.58	154.87	411.58
12	Less: Income from Open Access charges	1134.00	1365.87	231.87	1365.87
13	Less: Income from Reactive Energy Charges	0.00	0.00	0.00	0.00
14	**Annual Fixed Charges for MSLDC**	**2474.44**	**2138.17**	**-336.27**	**1977.56**
15	**Revenue**	**2901.97**	**2902.08**	**0.11**	**2902.08**
16	**Revenue Gap/(Surplus)**	**-427.53**	**-763.91**	**- 336.38**	**-924.52**

*after adjustment of gain/loss as explained in the relevant section above.

Table 47: MSLDC Final True-Up for FY 2020-21, as submitted by MSLDC (Rs. Lakh)

Sr. No.	Particulars	MYT Order	MTR Petition	Deviation	Net Entitlement after sharing of gains /(losses)
1	Operation & Maintenance Expenses	3403.73	3025.96	- 377.77	2800.49
2	RLDC Fees and WRPC Charges	874.41	511.83	-362.58	511.83
3	Depreciation Expenses	142.40	290.46	148.06	290.46
4	Interest on Loan Capital	93.43	122.58	29.15	122.58
5	Interest on Working Capital	67.58	54.53	-13.05	18.18
6	Reactive Energy Charges paid to Generators/TSUs	0.00	0.00	0.00	0.00
7	Income Tax	0.00	0.00	0.00	0.00
8	**Total Revenue Expenditure**	4581.55	4005.35	-576.20	3743.53
9	Return on Equity Capital	177.44	222.50	45.06	222.50
10	**Total Expenditure for MSLDC**	4758.99	4227.85	-531.14	3966.03
11	Less: Non-Tariff Income	210.71	456.04	245.33	456.04
12	Less: Income from Open Access charges	1156.68	854.33	-302.35	854.33
	Less: Income from Reactive Energy Charges	0.00	0.00	0.00	0.00
13	**Annual Fixed Charges for MSLDC**	3391.60	2917.48	-474.12	2655.66
14	**Revenue**	3391.60	3388.77	-2.83	3388.77
15	**Revenue Gap/(Surplus)**	**0.00**	**-471.29**	-471.29	**-733.11**

Table 48: MSLDC Final True-Up for FY 2021-22, as submitted by MSLDC (Rs. Lakh)

Sr. No.	Particulars	MYT Order	MTR Petition	Deviation	Net Entitlement after sharing of gains /(losses)
1	Operation & Maintenance Expenses	3021.35	3453.80	432.45	3116.32
2	RLDC Fees and WRPC Charges	1055.16	584.98	-470.18	584.98
3	Depreciation Expenses	116.30	242.82	126.52	242.82
4	Interest on Loan Capital	80.34	84.25	3.91	84.25
5	Interest on Working Capital	62.35	53.76	-8.59	17.92
6	Reactive Energy Charges paid to Generators/TSUs	0.00	0.00	0.00	0.00
7	Income Tax	0.00	0.00	0.00	0.00
8	**Total Revenue Expenditure**	4335.50	4419.61	84.11	4046.29
9	Return on Equity Capital	177.44	222.55	45.06	222.50
10	**Total Expenditure for MSLDC**	4512.94	4642.11	129.17	4268.79
11	Less: Non-Tariff Income	124.56	357.75	233.19	357.75
12	Less: Income from Open Access charges	1179.81	1572.47	392.66	1572.47
	Less: Income from Reactive Energy Charges	0.00	0.00	0.00	0.00
13	**Annual Fixed Charges for MSLDC**	3208.57	2711.89	-496.68	2338.56
14	**Revenue**	3208.57	3211.24	2.67	3211.24
15	**Revenue Gap/(Surplus)**	**0.00**	**-499.36**	**-499.36**	**-872.68**

Commission's Analysis and Ruling

3.16.2 Based on the discussion above, the summary of the Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22 approved by the Commission, is as shown below:

Table 49: Summary of Truing-up of ARR for FY 2019-20, FY 2020-21 and FY 2021-22 approved by Commission (Rs. Lakh)

Particulars	FY 2019-20			FY 2020-21			FY 2021-22		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	2,555.48	2,675.33	2,675.33	3,403.73	3,025.96	3,025.96	3,021.35	3,453.80	3,453.80
Depreciation Expenses	167.01	290.55	168.60	142.40	290.46	143.99	116.30	242.82	117.89
Interest on Loan Capital	109.08	150.51	108.03	93.43	122.58	93.28	80.34	84.25	70.54
Interest on Working Capital	54.98	54.30	54.91	67.58	54.53	57.42	62.35	53.76	56.30
RLDC Fees	782.14	498.59	498.59	874.41	511.83	511.83	1,055.16	584.98	584.98
Reactive Energy Charges paid to Generators/TSUs	-	-	-	-	-	-	-	-	-
Income Tax	-	-	-	-	-	-	-	-	-
Total Revenue Expenditure	**3,668.70**	**3,669.28**	**3,505.47**	**4,581.56**	**4,005.35**	**3,832.47**	**4,335.51**	**4,419.61**	**4,283.50**
Return on Equity Capital	196.45	246.34	196.45	177.44	222.50	177.44	177.44	222.50	177.44
Total Expenditure for MSLDC	**3,865.14**	**3,915.62**	**3,701.92**	**4,758.99**	**4,227.85**	**4,009.92**	**4,512.94**	**4,642.11**	**4,460.95**
Less: Non Tariff Income	256.71	411.58	418.85	210.71	456.04	471.70	124.56	357.75	374.65
Less: Income from Open Access charges	1,134.00	1,365.87	1,365.87	1,156.68	854.33	854.33	1,179.81	1,572.47	1,572.47
Less: Income from Reactive Energy Charges	-	-	-	-	-	-	-	-	-
Annual Fixed Charges for MSLDC	**2,474.43**	**2,138.17**	**1,917.20**	**3,391.60**	**2,917.48**	**2,683.88**	**3,208.57**	**2,711.89**	**2,513.83**
Less:Impact of sharing of Gain / Loss	-	116.68	169.95	-	88.13	85.86	-	-	252.35
Annual Fixed Charges for MSLDC	**2,474.43**	**2,021.49**	**1,747.25**	**3,391.60**	**2,829.35**	**2,598.02**	**3,208.57**	**2,711.89**	**2,261.47**
Revenue approved/actual	1,879.60	2,902.08	2,902.08	1,690.80	3,388.77	3,388.77	2,901.97	3,211.24	3,211.24
Revenue gap/(surplus)	**594.83**	**(880.59)**	**(1,154.83)**	**1,700.80**	**(559.43)**	**(790.75)**	**306.60**	**(499.36)**	**(949.77)**

3.16.3 The detailed analysis underlying the Commission's approval for individual ARR elements is set out above. The variation in the ARR sought by MSLDC and that approved by the Commission in this Order is mainly on account of lower approval of Depreciation, Interest on Loan and RoE vis-à-vis that sought by MSLDC. This is attributable to consideration of the opening GFA of FY 2019-20 as per audited accounts rather than the regulatory approved GFA by MSLDC in its submission which was not accepted by the Commission. Further, the Non-Tariff Income is considered after including the interest rate on average LDCD Fund.

3.16.4 **Accordingly, on Truing-up of ARR a net Surplus of Rs. 1154.83 Lakh, Rs. 790.75 Lakh and Rs. 949.77 Lakh for FY 2019-20, FY 2020-21 and FY 2021-22 respectively, has been approved for respective years and which is considered towards contribution to the LDCD Fund.**

3.17 LDCD fund

MSLDC's Submission

3.17.1 The utilization from LDCD fund is considered as capitalization during the year. The LDCD fund at the end of FY 2019-20 is considered as starting fund amount for FY 2020-21.

Table 50: LDCD fund as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
LDCD fund at the starting of year	4,657.25	5762.15	6313.85
Add: Apportionment of gap to be recovered as per Case No. 20 of 2016	711.62		
Less: Revenue Gap / (Surplus) of the Year as submitted in the present Petition	- 924.52	-733.11	-872.68
Less: Utilisation of LDCD Fund	531.24	181.42	800.69
LDCD fund at the end of year	**5762.15**	**6313.85**	**6385.84**
Average LDCD fund	5209.70	6038.00	6349.84
Interest rate	6.54%	6.04%	5.20%
Income earned on LDCD fund – transferred to non-tariff income	340.71	364.70	330.19

3.17.2 The Petitioner has calculated the interest income on the basis of average LDCD fund during FY 2019-20, FY 2020-21 and FY 2021-22. The same amount is already considered as non-tariff income by the Petitioner.

Commission's Analysis and Ruling

3.17.3 The Commission has accepted the submission of MSLDC. Closing balance of the LDCD fund for FY 2018-19 is considered as the opening balance of FY 2019-20. The capitalisation during the year is funded utilising the LDCD fund. The income earned from LDCD fund is considered as non-tariff income. Below are the details of the LDCD fund based on trued-up expenses.

Table 51: LDCD fund as approved by Commission (Rs. Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22
LDCD fund at the starting of year	4,657.25	5,992.46	6,601.79
Add: Apportionment of gap to be recovered as per Case No. 20 of 2016	711.62	-	-
Less: Revenue Gap / (Surplus) of the Year as submitted in the present Petition	-1,154.83	-790.75	-949.77
Less: Utilisation of LDCD Fund	531.24	181.42	800.69
LDCD fund at the end of year	**5,992.46**	**6,601.79**	**6,750.87**

4 PROVISIONAL TRUING UP OF ARR FOR FY 2022-23

4.1 Background

4.1.1 ARR projections for FY 2022-23 for MSLDC were approved vide MYT Order dated 30 March 2020 in Case No. 291 of 2019 in accordance with the MYT Regulations, 2019.

4.1.2 In the present Petition, MSLDC has sought provisional Truing-up of ARR for FY 2022-23 based on actual unaudited expenses from April 2022 to September 2022 (6 months) and estimates for various expenses and revenue for balance months of FY 2022-23, in accordance with the MYT Regulations, 2019.

4.1.3 The analysis underlying the Commission's approval is set out in the following Sections.

4.2 Operation and Maintenance Expenses

MSLDC's Submission

4.2.1 Regulation 96 of the MYT Regulations, 2019 provide for projection of O&M expense on a normative basis for MSLDC:

"96.2 The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-up Operation and Maintenance expenses after adding/deducting the share of efficiency gains/losses, for the three Years ending March 31, 2019, excluding abnormal Operation and Maintenance expenses, if any, subject to prudence check by the Commission:

Provided that the average of such Operation and Maintenance expenses shall be considered as Operation and Maintenance expenses for the Year ended March 31, 2018, and shall be escalated at the respective escalation rate for FY 2018-19 and FY 2019-20, to arrive at the Operation and Maintenance expenses for the base year ending March 31, 2020:

Provided further that the escalation rate for FY 2018-19 and FY 2019-20 shall be computed by considering 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the respective past five financial years as per the Labour Bureau, Government of India.

96.3 At the time of true-up for each Year of this Control Period, the Operation and Maintenance expenses shall be derived on the basis of the Final Trued-up Operation and Maintenance expenses after adding/deducting the sharing of *efficiency gains/losses, for the year ending March 31, 2020, excluding abnormal expenses, if any, subject to prudence check by the Commission, and shall be considered as the Base Year Operation and Maintenance expenses:*

Provided that the Operation and Maintenance expenses for each subsequent year shall be determined by escalating these Base Year expenses of FY 2019-20 by an inflation factor with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India, as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, to arrive at the permissible Operation and Maintenance expenses for each year of the Control Period:

Provided further that, in the Truing-up of the O&M expenses for any particular year of the Control Period, an inflation factor with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India, as reduced by an efficiency factor of 1% or as may be stipulated by the Commission from time to time, shall be applied to arrive at the permissible Operation and Maintenance expenses for that year."

4.2.2 In accordance with the above Regulation, the base year is FY 2019-20. However, the O&M expenses due to wage revision have increased and employee expenses as per new scale have been reflected in FY 2020-21 and FY 2021-22. However, in FY 2019-20, employee salary with new scale had been paid from October 2019 only, hence, full year employee expenses with new scale are not captured. Therefore, MSLDC has considered average O&M expenses, before gain and loss, and after deducting wage revision arrear payment of FY 2020-21 and FY 2021-22 as base O&M expenses for FY 2020-21. The Commission is requested to accept the aforesaid approach and relax the provisions under 'Regulations 105: Power to Relax'. If this approach is not adopted, , the projected expenses would be lower than actual expenses of FY 2021-22, which would not be appropriate . This is also due to fact that the O&M expenses after gain/loss has been reduced significantly due to different setting of normative expenses.

4.2.3 Further, for projecting the O&M expenses for FY 2021-22 and FY 2022-23, the escalation factors of 3.57% and 4.17%, respectively have been considered. The escalation factor is derived after considering the WPI and CPI of relevant year and after deducting 1% from the resultant escalation factor.

4.2.4 For deriving inflation factors, the Commission has considered the WPI and CPI index of past five years. It has been observed that the Labour Bureau, an attached office of the Ministry of Labour & Employment, Government of India, has released the new series of Consumer Price Index for Industrial Workers (CPI-IW) with base year 2016. The new series of CPI (IW) with base 2016=100 has replaced the existing series with base 2001=100. In the Press Information Bureau (PIB) release dated 22 October 2020, it was noted that 2.88 would be the linking factor vis-a-vis the new series with the old series.

4.2.5 The CPI index is modified accordingly to consider all data with base 2001=100.

Table 52: WPI and CPI index of past five years and derived escalation factor as submitted by MSLDC

Particulars	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
WPI						
Index	111.6	114.9	119.8	121.8	123.4	139.4
Growth / inflation	1.73%	2.96%	4.26%	1.67%	1.31%	12.97%
Average of five years					*2.39%*	*4.63%*
CPI						
Index	276.00	284.00	300.00	323.00	339.84	357.12
Growth / inflation	4.15%	2.90%	5.63%	7.67%	5.21%	5.08%
Average of five years					*5.11%*	*5.30%*
Weighted average					**4.57%**	**5.17%**
Effective escalation factor after 1% reduction					**3.57%**	**4.17%**

4.2.6 Thus, for projecting the provisional true-up figure for FY 2022-23, MSLDC has considered the O&M expenses of FY 2020-21 as base (average of FY 2020-21 and FY 2021-22) and escalated the same with relevant escalation factors. On the basis of above, MSLDC has requested the Commission to approve the approach considered by it.

4.2.7 Further, MSLDC has estimated additional O&M expenses (over and above as per projection methodology stated above) for newly added functions. MSLDC has submitted the details of schemes, operational expenses estimated, cost benefit analysis of scheme as against capex schemes and savings in O&M expenses in the Petition.

4.2.8 Further, MSLDC has claimed additional O&M expenses for new scheme functions from FY 2022-23 onwards. Summary of the same is as below:

Table 53: Additional Operation & Maintenance expenses claimed by MSLDC from FY 2022-23 (Rs. Lakh)

Scheme name	FY 2022-23	FY 2023-24	FY 2024-25

Scheme name	FY 2022-23	FY 2023-24	FY 2024-25
Demand Forecasting Services	-	4.84	44.84
Alert Messaging System	-	11.80	17.70
RE Forecasting Services	34.25	46.13	87.69
Dynamic Stability Study for Mumbai Islanding	-	97.94	-
AMC of SCADA system (Netra-240)	51.71	78.84	66.72
AMC of SCADA system(T-4)		25.00	25.00
Total Additional O&M expenses	**85.96**	**304.55**	**241.95**

4.2.9 Based on the above, the total O&M expenses for FY 2022-23 claimed by MSLDC is summarised below:

Table 54: Operation & Maintenance expenses for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2022-23		
	MYT Order	MTR Petition	Provisional True-Up Requirement
Normative O&M Expenses	2594.87 + 523.01 (Estimated impact of wage revision on base employee expenses)	3,326.50	
Additional O&M Expenses		85.96	
Total O&M Expenses	**3,117.88**	**3,412.46**	**294.58**

Commission's Analysis and Ruling

4.2.10 The Commission has examined the submission of MSLDC in respect of proposed methodology for estimation of O&M expenses. MSLDC has sought deviation from the methodology for computation of normative O&M expenses as specified in the MYT Regulations, 2019. The main concern of MSLDC is the lower recovery of O&M expenses as the base year O&M expenses (FY 2019-20) as per the provisions of MYT Regulations, 2019 do not entirely capture the impact of wage revision and thus may result in a loss to MSLDC due to lower recovery of O&M expenses after sharing of losses. However, in order to maintain consistency in its approach, the Commission is not inclined to deviate from the approach adopted by the Commission while approving the normative O&M expenses for the 4th Control Period through its MYT Order.

4.2.11 It is also important to note that while approving the projections for O&M expenses for the 4th Control period in its MYT Order in Case No. 291 of 2019, the Commission, in addition to the normative O&M expenses worked out in accordance with the MYT Regulations, 2019, had also approved the expected payment towards wage revision arrears (for FY 2020-21) and the estimated impact of wage revision on base employee expenses for all the years of the control period. Accordingly, the approach adopted by the Commission in its Order appropriately addresses the concerns of MSLDC.

4.2.12 Accordingly, as discussed in para 3.3.24 and 3.3.25 of this Order, the Commission has recomputed the impact of wage revision on the base employee cost for FY 2020-21 and the same was escalated for the future period considering the appropriate WPI-CPI linked escalation factor worked out in line with the provisions of the MYT Regulations, 2019 to work out the wage revision impact on the employee cost for FY 2022-23 and future years.

4.2.13 Accordingly, the Commission intends to continue with the same approach for approving the revised normative O&M expenses for rest of the years of the 4th Control Period which is consistent with the approach adopted in the MYT Order. The Commission has considered the previous year's net entitlement after sharing of efficiency gains and losses as the base year value in accordance with the MYT Regulations, 2019.

4.2.14 As FY 2022-23 is still ongoing, the rate of escalation considered for computing the FY 2022-23 O&M expenses is same as that considered for FY 2021-22 i.e. 4.12%.

4.2.15 As explained in the previous section, the revised impact of wage revision has been computed based on actual wage revision arrears submitted by MSLDC. For FY 2022-23, the impact of wage revision for FY 2021-22 has been escalated using the relevant escalation factor. This has been considered for approval over and above the normative O&M expenses.

4.2.16 Further, the Commission has analysed the submission of MSLDC regarding request for additional O&M expenses over and above the normative O&M expenses.

4.2.17 The Regulation 96.6 of the MYT Regulations, 2019 provides the following with regards to the additional O&M expenses:

> *"96.6 The MSLDC* ***may undertake Opex schemes for system automation, new technology and IT implementation, etc., and, such expenses may be allowed over and above normative O&M Expenses****, subject to prudence check by the Commission:*
> *Provided that the* ***MSLDC shall submit detailed justification, cost benefit analysis of such schemes as against capex schemes, and savings in O&M expenses, if any****."*

4.2.18 In the above context, the Commission has gone through the details submitted by MSLDC regarding these additional expenses. Observations of the Commission on these additional expenses are summarised below:

- **Alert Messaging Scheme:**
    - This scheme proposed by MSLDC focusses on streamlining the communication among various stakeholders under emergencies and for broadcasting System Alerts.

- MSLDC has proposed to develop the Software and host the same on Cloud.
- Under OPEX, the cost of Cloud services, AMC, SMS charges, etc. have been proposed.
- However, it is observed that MSLDC is yet to submit a DPR or OPEX Scheme for development of associated software for in principle approval of the Commission. In absence of an approved DPR or Opex Scheme, the Commission is not inclined to approve the capital expenditure/capitalisation or Opex planned against this scheme.
- Consequently, the operational expenditure against this scheme is also not presently considered for approval.
- MSLDC can approach the Commission with DPR or Opex Scheme and seek approval for the same. Based on the prudence check, the Commission may approve the DPR or Opex Scheme as per MYT Regulations 2019 and the consequent operational expenditure which may be claimed by MSLDC in the subsequent Petition with adequate justification.

- **Demand Forecasting Services:**
  - MSLDC has proposed to develop State specific Demand Forecasting model and provide Month-ahead, Week-ahead, Day-ahead and Intra-Day demand forecasts for the State.
  - The proposed system shall be web-based, hence, no infrastructure will be required.
  - The Demand Forecasting Services shall be availed from expert vendors for 3 years.
  - MSLDC has stated that the proposed work will enable it to fulfil the regulatory requirements of the Grid Code Regulations , 2020.
  - These services shall enable MSLDC to dispatch generators in the Grid more techno-commercially and enhance the performance of the System Operators to maintain stable and reliable grid in real time.
  - **Considering the nature of these services, the Commission approves the associated expenses as Opex Scheme as per MYT Regulations 2019 subject to MSLDC submitting detailed justification, cost benefit analysis of such scheme and savings in O&M expenses, if any, during final truing up of FY 2022-23 .**
- **RE Forecasting Services:**
  - As per the Regulation No. 5.12 of the MERC (Forecasting, Scheduling & Deviation Settlement for Solar & Wind Generation) Regulations, 2018, MSLDC is mandated to carry out RE Forecasting.

  - RE forecasting is presently carried out in REMC System through external agencies.
  - For 66 Nos. of Pooling Substations (PSS), the charges are covered under grant, whereas for additional PSS, the charges are to be borne by MSLDC. Hence, these charges have been proposed in the OPEX.
  - Presently, total 128 Nos. of PSS are operational.. As day by day RE installation is increasing, the number of PSS will increase. Hence, the cost would increase in near future. The grant is available till December 2023. Hence, from January 2024 onwards, the forecasting charges for all the PSS is to be borne by MSLDC. Hence, there would be an increase in the cost for the FY 2024-25.
  - The Commission observes that these services are important to enable MSLDC to undertake its obligations under the existing MERC Regulations. While presently, the cost for 66 nos. of PSS are covered under the grant till December, 2023, however, subsequently the entire cost will have to be borne by MSLDC.
  - **Considering the nature of these services, the Commission approves the associated expenses as Opex Scheme as per MYT Regulations 2019 subject to MSLDC submitting detailed justification, cost benefit analysis of such scheme and savings in O&M expenses, if any, during final truing up of FY 2022-23 .**

- **Dynamic Stability Study for Mumbai Islanding:**
  - MSEDCL stated that on the backdrop of Mumbai partial Grid failure occurred on 12 October, 2020, all the Committees viz. High Level Committee (**HLC**), Central Electricity Authority and Government of Maharashtra have recommended to validate various relay settings in Mumbai Islanding Scheme through Dynamic Stability Studies.
  - Hence, budgetary offers from IIT-Mumbai, VJTI and Siemens were called and based on the comparative statement, administrative approval has been received from the Competent Authority for providing Order to VJTI for carrying out said studies.
  - MSLDC has stated that with the studies, appropriate settings for various relays i.e. Under Frequency Relay (**UFR**), Rate of Change of Frequency (**ROCOF**) Relay for Load shedding in island, relay settings to avoid tripping of internal generating units etc. will be obtained through which Mumbai island would be survived.
  - Thus, with execution of the said scheme, Mumbai Islanding Scheme settings can be validated and modified, thereby increasing the survival of the island operation and increasing the reliability and reduction of load loss in Mumbai.

- MSLDC has stated that the recommendations from these studies will go a long way in supporting the steps being taken by various stakeholders for ensure that the grid failure does not take place. The outcome of the study may also lead to identifying requirements for introducing system automation, new technology and IT implementation, etc.
- Considering the nature and criticality of these expenses and also the recommendations of the various committees, the Commission deems it appropriate to approves these expenses.

- **AMC of SCADA system (Netra-240) and AMC of SCADA system (T-4)**
    - MSLDC has stated that these schemes are not like the other OPEX schemes proposed by it and the claimed expenditure is additional expenditure with respect to present AMC cost. Hence, additional O&M cost is claimed. Hence, this expenditure cannot be compared with respect to capex . It can be termed as additional O&M expenditure and not purely OPEX scheme.
    - The Commission has examined the nature of these schemes and the nature of expenditure proposed to be recovered as additional O&M expenditure. It is observed that there has been an increase in the AMC expenses over the period of time and MSLDC has requested to allow the increased AMC expenses over and above the normative O&M expenses. However, the Commission is of the view that this expenditure is like any other ongoing expenditure towards AMC expenses and these expenses keep on increasing over the years. Further, these expenses are already being incurred by MSLDC and increased incidence of these expenses does not fit into the type/nature of expenses envisaged to be undertaken under the additional O&M expenses as per the Regulation 96.6 of MYT Regulations, 2019. MSLDC should include these expenses as part of the normal O&M expenses and seek appropriate treatment during the truing up process within the overall ambit of the MYT Regulations, 2019.

4.2.19 Thus, the additional O&M expense approved by the Commission is as below:

Table 55: Additional Operation & Maintenance expenses, approved by Commission (Rs. Lakh)

Scheme name	FY 2022-23	FY 2023-24	FY 2024-25
Demand Forecasting Services	0.00	44.84	44.84
Alert Messaging System	0.00	0.00	0.00
RE Forecasting Services	34.25	46.13	87.69
Dynamic Stability Study for Mumbai Islanding	0.00	97.94	0.00
AMC of SCADA system (Netra-240)	0.00	0.00	0.00
AMC of SCADA system(T-4)	0.00	0.00	0.00
Total Additional O&M expenses	**34.25**	**188.91**	**132.53**

4.2.20 Based on the above effective escalation factor, revised impact of wage revision and additional O&M expenses, the Commission has recomputed the normative O&M expenses for FY 2022-23 as below:

Table 56: Normative Operation and Maintenance expenses for FY 2022-23, as approved by the Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Normative O&M Expenses	2,594.87	3,326.50	3,190.72
Impact of wage revision	523.01		*
Additional O&M Expenses		85.96	34.25
Total O&M Expenses	**3117.88**	**3412.46**	**3224.97**

**includes impact of wage revision added in FY 2020-21*

4.2.21 **The Commission approves O&M expenses of Rs. 3,224.97 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.3 Interest on Working Capital

MSLDC's Submission

4.3.1 The methodology specified in the MYT Regulations, 2019 has been considered for calculation of IoWC for FY 2022-23. The IoWC shall be payable on normative basis not withstanding that MSLDC has not taken any working capital loan from any outside agency.

4.3.2 The SBI base rate (MCLR) prevailing as on the date of filing the Petition (8.05% applicable for November 2022) plus 150 basis point has been considered for calculation of IoWC as given in the Table below:

Table 57: Interest on Working Capital for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Working Capital Requirement	**694.77**	**675.66**
Rate of Interest (% p.a.)	9.55%	9.55%
Interest on Working Capital	**66.35**	**64.53**

Commission's Analysis and Ruling

4.3.3 The normative Interest on Working Capital is considered in accordance with the MYT Regulations, 2019. The normative O&M expenses including the impact of wage revision on base employee expenses and the additional O&M expenses approved by the Commission in this Order have been considered for computing the working capital requirement instead of only normative O&M expenses considered by MSLDC. Further, the receivable considered is as per revenue approved in the MYT Order in Case No. 291 of 2019 for FY 2022-23 similar to that claimed by MSLDC in the present Petition.

4.3.4 The Commission has considered the 1 year MCLR as on date of filing of Petition and the said rate is 7.95%. After adding 150 basis points to this, as per the Regulations, the interest rate for computing the IoWC works out to 9.45%.

4.3.5 Accordingly, the IoWC approved for FY 2022-23 is given in the table below:

Table 58: Interest on Working Capital for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
One month of O&M expenses	259.82	240.72	268.75
One and half months of receivables	434.94	434.95	434.95
Total Working Capital Requirement	**694.76**	**675.66**	**703.69**
Interest Rate (%)	9.55%	9.55%	9.45%
Interest on Working Capital	**66.35**	**64.53**	**66.50**

4.3.6 **The Commission approves Interest on Working Capital of Rs. 66.50 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.4 RLDC Fees

MSLDC's Submission

4.4.1 RLDC Fees and Charges for FY 2022-23 are payable as approved by CERC as per the provisions of the CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2019. WRLDC had filed a Petition before the CERC for determination of WRLDC charges for FY 2019-20 to FY 2023-24 and the CERC has issued the Order on 9 June, 2021. WRLDC is currently billing the users as per the said Order.

4.4.2 As per present mechanism, MSEDCL has been paying the bill to WRLDC and MSLDC is reimbursing the same to MSEDCL. Considering the average monthly expenses for January to March 2022 period, RLDC charges for FY 2022-23 have been estimated:

Table 59: RLDC Fees and WRPC Charges for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
RLDC Fees	1195.43	651.52

Commission's Analysis and Ruling

4.4.3 For the purpose of provisional Truing up, the Commission has considered the RLDC Fees as proposed by MSLDC for FY 2022-23 subject to True up.

4.4.4 The approved RLDC Fees are as shown in the following table:

Table 60: RLDC Fees for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
RLDC Fees and WRPC Charges	1195.43	651.52	651.52

4.4.5 **The Commission approves RLDC Fees and WRPC Charges of Rs. 651.52 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.5 Capitalisation

MSLDC's Submission

4.5.1 Capitalization of Rs. 1,203 Lakh for FY 2022-23 was approved by the Commission in the MYT Order in Case No. 291 of 2019. MSLDC has now revised its capitalization estimates for FY 2022-23 considering capitalization anticipated for various existing as well as new schemes during the year. Accordingly, for the purpose of provisional truing up of FY 2022-23, revised estimate for capitalization to the tune of Rs. 1,169.41 Lakh is submitted.

4.5.2 Capital Expenditure and Capitalisation towards DPR and Non DPR schemes as proposed by MSLDC for FY 2022-23 is given in the table below.

Table 61: Capital Expenditure and Capitalisation for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Project Code	Capital expenditure	Capitalisation
a) DPR Schemes		
(i) In-principle approved by MERC		
SLDC - SITC of 80 RTU	24.78	32.95
S/I/T/C of auto FSS and MS at ALDC Ambazari	115.85	226.79
70 SAS/ RTUs integration	100.00	60.00
DSM	107.00	
(ii) Yet to receive in-principle MERC approval		
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b) Non-DPR Schemes		
RTU-DC SLDC Airoli and Ambazari (two schemes jointly)		0.73
S/I/T/C of electric wiring and A/c Equipment		0.13
S/I/T/C of 3 DCs	13.27	44.24
S/I/T/C 2 No of elevator at MSLDC Airoli	15.27	38.18
Vehicle parking shed	20.20	20.20
S/I/T/C of New 240 line digital EPBAX	6.30	6.30
DG set with DDC in new SLDC building	62.61	62.61
S/I/T/C of video wall display unit 2X2	51.49	51.49
S/I/T/C of 7 No of Backup appliance	99.50	99.50
S/I/T/C of 7 No of desktop computer with MS office licence	8.09	8.09

Project Code	Capital expenditure	Capitalisation
S/I/T/C of anti-virus software along with server	15.00	15.00
S/I/T/C of video conferencing system at SLDC conference room	16.00	16.00
Development of new MSLDC website and hosting on cloud	10.00	10.00
7 LED screen at control room to show operational data	49.00	49.00
Integration of 20 DC at SLDC Airoli and ALDC	70.00	70.00
S/I/T/C VC at control room	22.34	22.34
Integration of NEW S/S at SLDC Airoli and ALDC SCADA (27 RTU integration)	20.00	
PSSE system study software (2nd keys)	49.00	49.00
State specific customization in REMC software and allied additional requirement of hardware through change order	70.80	70.80
Life extension of new MSLDC building	47.06	47.06
Staff recreation and rejuvenation facilities	45.00	45.00
BMS Automation	90.00	90.00
Battery set with charger	10.00	10.00
Security cabin	3.00	3.00
ALDC Misc expenses - landscaping, water supply, Testing equipment, VC, staff recreation	16.00	16.00
ALDC IT infrastructure	5.00	5.00
Total	**1162.56**	**1169.41**

4.5.3 MSLDC has submitted the details of various schemes in the MTR Petition.

4.5.4 In the MYT Order, the Commission has not restricted the non-DPR capitalization upto 20% of the DPR capitalization considering that these schemes relate to the daily operations of MSLDC, and to ensure that the operations of MSLDC are not adversely affected and it is equipped to undertake necessary capital expenditure to meet the operational and technological challenges. This approach has been adopted by the Commission in its earlier Tariff Orders also.

4.5.5 A significant portion of schemes capitalised within MSLDC are of low value (less than Rs. 100 Lakhs) and includes capitalisation of items procured on a continuous basis. Thus, considering the varied and intermittent nature of asset addition of lower value, it is difficult to prepare a DPR for the same.

4.5.6 In view of the above and based on the details of various projects submitted above, MSLDC requests the Commission to allow the capitalization proposed towards non-DPR scheme as claimed in the present Petition and without applying the criteria of 20% in case of MSLDC, as per approach adopted in Case No. 291 of 2019.

Commission's Analysis and Ruling

4.5.7 The Commission has examined the submissions of MSLDC in respect of capitalisation claimed for both DPR and non-DPR schemes. MSLDC has provided scheme-wise details in its Petition outlining the nature of the works being undertaken and the progress of work.

4.5.8 It is observed that there is a cost overrun in the DPR scheme of Supply, Installation, Testing and Commissioning of auto Fire Suppression System and Monitoring System at ALDC Ambazari. The approved cost of the DPR is Rs. 1.55 Cr. whereas there has been claim towards capitalization of Rs. 2.26 Cr. for FY 2023. It is also observed that MSLDC, vide its letter dated 21 July 2022, MSLDC had informed about revised cost of the DPR considering the additional material/works. As per advice of Fire Adviser and Chief Fire Officer, MSETCL, the quantity of gas cylinders and gas quantity had to be increased during execution of the work. MSLDC has also obtained administrative approval towards the extension of work order amounting to Rs. 67.38 Lakh. In light of the above, the cost of DPR stands revised to Rs. 2.28 Cr. Thus, the claimed capitalization of Rs. 2.26 Cr. is within the revised cost of Rs. 2.28 Cr. The Commission has taken into consideration the submissions made by MSLDC and considering the fact the additional material/work is as per the Fire Adviser and Chief Fire Officer, the Commission allows the capitalization towards this scheme subject to truing up in future Tariff proceeding.

4.5.9 It is also observed that the capitalisation towards non-DPR schemes is more than 20% of capitalisation of approved DPR schemes. However, in the MYT Order in Case No 291 of 2019, the Commission has decided not to restrict the non-DPR capitalisation upto 20% of DPR capitalisation for MSLDC. Relevant extract of the MYT Order reads as under:

> *"For any scheme with projected capital expenditure above Rs.100 Lakh, MSLDC is expected to submit a DPR for in-principle approval. The Commission observes that most of the capex schemes of MSLDC are small value schemes and Capitalisation against these is requirement based and periodic in nature. Further, the Commission is wary of the fact that MSLDC not only plays very critical role in ensuring the integrated operation of power system within the State but also responsible for real time operations for grid control and despatch of electricity within the State. Further, MSLDC has to tackle operational and technological challenges to manage the increasing quantum of renewable energy. It is therefore essential that MSLDC's operations are not affected and it should be equipped to undertake necessary capital expenditure to meet the operational and technological challenges. Therefore, the Commission has reviewed MSLDC's request to approve the capitalisation proposed under DPR and non-DPR schemes as submitted and accordingly, decides not to restrict the non-DPR capitalisation at 20% of DPR capitalisation approved for the year. Accordingly, the Commission approves capitalisation against DPR as well as non-DPR schemes as claimed by MSLDC, after verification from the audited annual accounts."*

4.5.10 Having said the above, the Commission has examined the status of work for non-DPR schemes based on information shared by MSLDC in its Petition Based on the review, it is observed that implementation of many of the non-DPR schemes are in progress and may not be completed in FY 2022-23. Therefore, the capitalisation of the schemes is deferred to FY 2023-24 for the purpose of provisional truing-up of FY 2022-23. The Commission shall revisit the actual capitalisation by MSLDC for FY 2022-23 while truing–up the actual expenses. The table below outlines the capital expenditure and capitalisation shifted to FY 2023-24.

Table 62: Capital Expenditure and Capitalisation moved to FY 2023-24 by the Commission (Rs. Lakh)

Project Code	Capital Expenditure	Capitalisation
S/I/T/C of video conferencing system at SLDC conference room	16.00	16.00
S/I/T/C of 3 DCs	13.27	44.24
Development of new MSLDC website and hosting on cloud	10.00	10.00
Integration of 20 DC at SLDC Airoli and ALDC	70.00	70.00
Life extension of new MSLDC building	47.06	47.06
Staff recreation and rejuvenation facilities	45.00	45.00
BMS Automation	90.00	90.00
Battery set with charger	10.00	10.00
Total	**301.33**	**332.30**

4.5.11 In view of the above, the capital expenditure schemes approved by the Commission for FY 2022-23 are as below:

Table 63: Capital Expenditure Schemes approved for FY 2022-23 by the Commission (Rs. Lakh)

Project Code	Capital Expenditure	Capitalisation
a) DPR Schemes		
(i) In-principle approved by MERC		
SLDC - SITC of 80 RTU	24.78	32.95
S/I/T/C of auto FSS and MS at ALDC Ambazari	115.85	226.79
70 SAS/ RTUs integration	100.00	60.00
DSM	107.00	
b) Non-DPR Schemes		
RTU-DC SLDC Airoli and Ambazari (two schemes jointly)		0.73
S/I/T/C of electric wiring and A/c Equipment		0.13
S/I/T/C 2 No of elevator at MSLDC Airoli	15.27	38.18
Vehicle parking shed	20.20	20.20
S/I/T/C of New 240 line digital EPBAX	6.30	6.30
DG set with DDC in new SLDC building	62.61	62.61
S/I/T/C of video wall display unit 2X2	51.49	51.49
S/I/T/C of 7 No of Backup appliance	99.50	99.50
S/I/T/C of 7 No of desktop computer with MS office licence	8.09	8.09
S/I/T/C of anti-virus software along with server	15.00	15.00
7 LED screen at control room to show operational data	49.00	49.00
S/I/T/C VC at control room	22.34	22.34
PSSE system study software (2nd keys)	49.00	49.00
State specific customization in REMC software and allied additional requirement of hardware through change order	70.80	70.80
Security cabin	3.00	3.00
ALDC Misc expenses - landscaping, water supply, Testing	16.00	16.00
ALDC IT infrastructure	5.00	5.00
Integration of NEW S/S at SLDC Airoli and ALDC SCADA (27 RTU integration)	20.00	
Total	**861.23**	**837.10**

4.5.12 Based on the above, the Commission approves capitalisation for FY 2022-23 as shown in the below Table:

Table 64: Capitalisation for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Capitalisation	1203.00	1169.41	837.10

4.5.13 **The Commission approves Capitalisation of Rs. 837.10 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.6 Depreciation

MSLDC's Submission

4.6.1 The capitalization during FY 2022-23 is assumed to be funded through LDCD fund; hence, the depreciation on asset capitalized during FY 2022-23 has not been considered. Depreciation for FY 2022-23 has been computed considering the depreciation rates as derived based on actual depreciation and asset addition up to FY 2017-18, as already explained in the previous section.

4.6.2 The projected depreciation for FY 2022-23 is Rs. 237.09 Lakh as against the Commission's approved depreciation of Rs. 114.02 Lakh in Order in Case No. 291 of 2019. The revised depreciation for FY 2022-23 is given below.

Table 65: Depreciation for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Depreciation	114.02	237.09

Commission's Analysis and Ruling

4.6.3 The Commission has considered the closing GFA for FY 2021-22 approved in this Order as the opening GFA for FY 2022-23.

4.6.4 The addition to GFA for FY 2022-23 is not considered for computation of depreciation as the capitalization during FY 2022-23 is considered to be funded from LDCD Fund.

4.6.5 The Commission has considered the MSLDC's submission with respect to the Computer Software being categorized as IT equipment carrying a depreciation rate of 15%.

4.6.6 The Commission has computed the depreciation in accordance with the MYT Regulations, 2019 subject to the ceiling of 90% of GFA for individual asset classes separately and has approved the depreciation for FY 2022-23 as given in the table below:

Table 66: Depreciation for FY 2022-23 approved by the Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Gross Fixed Assets	8,763.04	9,833.84	8,763.04
Add: Additional Capitalization during the year*		0.00	0.00
Less: Retirement/Adjustments		0.00	0.00
Closing Gross Fixed Assets	8,763.04	9,833.84	8,763.04
Total Depreciation	**114.02**	**237.09**	**115.60**

* Capitalization for FY 2022-23 is funded from LDCD Fund and hence not considered for the purpose of computation of depreciation.

4.6.7 **The Commission approves Depreciation of Rs. 115.60 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.7 Interest on Long Term Loans

MSLDC's Submission

4.7.1 The debt requirement for the proposed capital expenditure in FY 2022-23 is envisaged to be funded through normative loans only, and no additional loan allocation from MSETCL has been considered for FY 2022-23 as there is no outstanding additional loan allocated.

4.7.2 The capitalization for FY 2022-23 is being funded through LDCD Fund. Accordingly, no new additional normative loan has been considered for FY 2022-23.

4.7.3 For the purpose of computation of interest expense for FY 2022-23, interest expense pertaining to normative loan for capitalisation upto FY 2017-18 has been considered.

4.7.4 MSLDC has considered the weighted average rate of interest as available for FY 2021-22, as informed by MSETCL. In accordance provisions of the MYT Regulations, 2019, the repayment of loan has been considered equivalent to depreciation claimed during the year, as derived above.

4.7.5 The interest on loan for FY 2022-23 as submitted by MSLDC is shown in Table below:

Table 67: Interest on Long Term Loan for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Interest on Long-Term Loan	68.68	62.82

Commission's Analysis and Ruling

4.7.6 Regulation 30 of the MYT Regulations, 2019 specifies that the repayment of loan shall be equal to the depreciation allowed in the respective years, and repayment is to be considered from the first year of commercial operation of the project.

4.7.7 Further, as per the stand taken by the Commission in the MYT Order in Case No. 291 of 2019 and also in the truing up for FY 2019-20 to FY 2021-22 in the present Order, the weighted average rate of interest of MSETCL which is 8.93% for FY 2022-23 as approved by the Commission in MSETCL's MTR Petition in Case No. 232 of 2022 has been considered. This is the weighted average rate of Interest of MSETCL's loan portfolio at the beginning of FY 2022-23 in line with the provisions of the MYT Regulations, 2019.

4.7.8 For provisional truing-up of ARR for FY 2022-23, the closing loan for FY 2021-22 approved in this Order has been considered as the opening loan for FY 2022-23. The Commission has approved capitalisation of Rs. 837.10 Lakh. However, as the said capitalisation is funded through LDCD Fund, no addition of normative loan is considered for FY 2022-23.

4.7.9 Based on the above, the Commission has approved the following interest on long term loan for FY 2022-23:

Table 68: Interest on Loan for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	735.70	822.06	730.92
Add: Debt component of capitalisation during the year*	0.00	0.00	0.00
Repayment of Normative loan during the year	114.02	237.09	115.60
Less: Reduction of Normative Loan due to retirement or replacement of assets	0.00	0.00	0.00
Closing Balance of Normative Loan	**621.68**	**584.97**	615.33
Weighted average Rate of Interest (%)	10.12%	8.93%	8.93%
Normative Interest Expenses	**68.68**	**62.82**	60.11
Actual Interest allocated by MSETCL to MSLDC	0.00	0.00	0.00
Total Interest Expenses	**68.68**	**62.82**	**60.11**

* Capitalization for FY 2022-23 funded from LDCD Fund and hence no addition to the debt component during the year is considered.

4.7.10 **The Commission approves Interest on Long Term Loans of Rs. 60.11 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.8 Return on Equity

MSLDC's Submission

4.8.1 Regulation 29 of MYT Regulations, 2019 specifies the rate of return on equity allowable for MSLDC on the equity capital pertaining to assets put to use. This Regulation also outlines the manner in which the return on equity has to be computed considering the equity capital at the beginning of the year and that added during the year.

4.8.2 The capitalization is assumed to be funded through LDCD fund and hence, no new equity would be added during FY 2022-23. The equity, as considered for FY 2021-22, is considered for FY 2022-23 also. Hence, RoE projected for FY 2022-23 is based on the opening equity as on FY 2018-19 only and no new equity is added owing to the projected capitalization.

4.8.3 MSLDC has considered RoE at the rate of 14% on the opening equity. The projected RoE for FY 2022-23 is shown in the table below:

Table 69: Return on Equity for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Return on Equity Computation		
Return on Regulatory Equity at the beginning of the year	177.44	222.50 (on the basis of GFA of Rs 1589.27 lakh)
Return on Regulatory Equity addition during the year		0.00

Particulars	MYT Order	MTR Petition
Total Return on Equity	177.44	222.50

Commission's Analysis and Ruling

4.8.4 The closing equity for FY 2021-22 approved in this Order is considered as the opening equity for FY 2022-23. There is no addition to equity during the year as the capitalisation during the year is being funded through LDCD fund.

4.8.5 Considering the above, the RoE approved by the Commission for FY 2022-23 is as shown in the table below:

Table 70: Return on Equity for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Regulatory Equity at the beginning of the year	1,267.45	1,589.27	1,267.45
Equity portion of capitalisation during the year*		0.00	0.00
Reduction in Equity Capital on account of retirement / replacement of assets		0.00	0.00
Regulatory Equity at the end of the year	**1267.45**	**1589.27**	**1,267.45**
Return on Regulatory Equity at the beginning of the year	177.44	222.50	177.44
Return on Regulatory Equity addition during the year		0.00	0.00
Total Return on Equity	177.44	222.50	177.44

*****Capitalization for FY 2022-23 funded from LDCD Fund and hence no addition to equity is envisaged for the FY 2022-23.

4.8.6 **The Commission approves Return on Equity of Rs. 177.44 Lakh on provisional Truing up of ARR for FY 2022-23.**

4.9 Income Tax

MSLDC's Submission

4.9.1 In context of MSLDC's submissions regarding Income Tax in the previous chapters, MSLDC has not projected any Income Tax for FY 2022-23.

Commission's Analysis and Ruling

4.9.2 The Commission notes that MSLDC does not have a separate corporate status and is, therefore, not required to submit Income Tax returns. The MYT Regulations, 2019 have enabling provisions to take into account any allocations/ claims by MSETCL towards Income Tax. The Commission shall consider them, if any, after prudence check, at the time of True up.

4.9.3 Further, the Regulation 34.2 of the MYT Regulation, 2019 states that the rate of Return on Equity, including additional rate of Return on Equity as allowed by the Commission under Regulation 29 of the MYT Regulations, 2019 shall be grossed up with the effective tax rate of respective financial year.

4.9.4 Considering MSLDC's submission, no grossing up of RoE has been consider presently.

4.10 Non-Tariff Income

MSLDC's Submission

4.10.1 Based on Regulation 98 of MERC Regulations, 2019, the Non-Tariff Income is projected for FY 2022-23.

4.10.2 The non-tariff income, except interest from LDCD fund, for FY 2022-23 is proposed to be same level as per actual Non-Tariff income received by MSLDC in FY 2021-22. As discussed in earlier sections, interest income from LDCD fund, on average LDCD fund basis during FY 2022-23, is also considered under Non-Tariff income.

4.10.3 The Non-Tariff Income as proposed is outlined in the following table.

Table 71: Non-Tariff Income for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Interest on LDCD Fund	41.94	311.30
Other Non-Tariff Income	14.90	27.56
Non-Tariff Income	**56.84**	**338.86**

Commission's Analysis and Ruling

4.10.4 The Commission has noted the submission of MSLDC in respect of Non-Tariff Income.

4.10.5 As discussed in earlier section, the Commission has considered the interest on surplus available in LDCD Fund as Non-Tariff Income. Accordingly, the interest at the rate of 5.20% is considered on an average LDCD Fund balance during FY 2022-23.

4.10.6 Also, the Non-Tariff income as approved during truing up for FY 2021-22 (excluding Interest on LDCD fund) of Rs. 27.56 Lakh has been approved, subject to prudence check at the time of true-up.

4.10.7 The Commission approves the Non-Tariff Income for FY 2022-23, subject to True up, as given in the table below:

Table 72: Non-Tariff Income for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Interest on LDCD Fund		311.30	349.05
Other Non-Tariff Income		27.56	27.56
Total Non-Tariff Income	**56.84**	**338.86**	**376.61**

4.10.8 **The Commission approves Non-Tariff Income of Rs. 376.61 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.11 Income from Open Access Charges

MSLDC's Submission

4.11.1 MSLDC has estimated income from Open Access Charges of Rs. 1,203.41 Lakh for FY 2022-23 which is same as that approved in Case No. 291 of 2019.

Table 73: Income from Open Access Charges for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Income from Open Access Charges	1,203.41	1,203.41

Commission's Analysis and Ruling

4.11.2 The Commission has examined the submission of MSLDC in respect of Income from Open Access Charges and considered the same as submitted by MSLDC for provisional Truing up of FY 2022-23, subject to prudence check at the time of true-up.

Table 74: Income from Open Access Charges for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Open Access Income from Scheduling Charges	1,105.78	1,105.78	1,105.78
Open Access Income from Re-scheduling Charges	97.63	97.63	97.63
Income from Open Access Charges	**1,203.41**	**1,203.41**	**1,203.41**

4.11.3 **The Commission approves Income from Open Access Charges of Rs. 1,203.41 Lakh on provisional Truing up of ARR for FY 2022-23.**

4.12 Income from Monthly Operating Charges

MSLDC's Submission

4.12.1 MSLDC has estimated income from Monthly Operating Charges of Rs. 3,479.56 Lakh for FY 2022-23 as approved in Case No. 291 of 2019. The income from Monthly Operating Charges projected for FY 2022-23 is as shown in the following table.

Table 75: Income from Monthly Operating Charges for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Particulars	MYT Order	MTR Petition
Income from Monthly Operating Charges	3,479.56	3,479.56

Commission's Analysis and Ruling

4.12.2 The Commission has examined the submission of MSLDC in respect of Income from Monthly Operating Charges and approves the same as submitted by MSLDC for provisional True-up of ARR for FY 2022-23 as given in the table below:

Table 76: Income from Monthly Operating Charges for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Income from Operating Charges	3,479.56	3,479.56	3,479.56

4.12.3 **The Commission approves Income from Monthly Operating Charges of Rs. 3,479.56 Lakh on provisional Truing up of ARR for FY 2022-23**.

4.13 Summary of Provisional Truing up of ARR for FY 2022-23

MSLDC's Submission

4.13.1 Based on the above discussion, the head-wise projected expenses for FY 2022-23 for provisional true up as submitted by MSLDC are summarised in the table below:

Table 77: Summary of Provisional Truing up for FY 2022-23, as submitted by MSLDC (Rs. Lakh)

Sr. No.	Particulars	MYT Order	MTR Petition	Provisional Truing Up Requirement
1	Operation & Maintenance Expenses	3117.88	3412.46	294.58
2	Depreciation Expenses	114.02	237.09	123.07
3	Interest on Loan Capital	68.68	62.82	-5.86
4	Interest on Working Capital	66.35	64.53	-1.82
5	RLDC Fees and WRPC Charges	1195.43	651.52	-543.91
6	Reactive Energy Charges paid to Generators/TSUs			0.00
7	Income Tax			0.00
8	**Total Revenue Expenditure**	**4562.36**	**4428.42**	**-133.94**
9	Return on Equity Capital	177.44	222.50	45.06
10	**Total Expenditure for MSLDC**	**4739.80**	**4650.92**	**-88.88**
11	Less: Non-Tariff Income	56.84	338.86	282.02
12	Less: Income from Open Access Charges	1203.41	1203.41	0.00
13	Less: Income from Reactive Energy Charges			0.00
14	**Annual Fixed Charges for MSLDC**	**3479.56**	**3108.64**	**-370.92**
15	**Revenue approved/actual**	**3479.56**	**3479.56**	**0.00**
16	**Stand-alone Revenue gap / (surplus)**	**0.00**	**-370.92**	**-370.92**

Commission's Analysis and Ruling

4.13.2 Based on the discussion above, the summary of the Provisional Truing up of ARR for FY 2022-23 approved by the Commission is as shown below:

Table 78: Summary of Provisional Truing-up of ARR for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order
Operation & Maintenance Expenses	3,117.88	3,412.46	3,224.97
Depreciation Expenses	114.02	237.09	115.60
Interest on Loan Capital	68.68	62.82	60.11
Interest on Working Capital	66.35	64.53	66.50
RLDC Fees and WRPC Charges	1,195.43	651.52	651.52
Reactive Energy Charges paid	0.00	0.00	0.00
Income Tax	0.00	0.00	0.00
Total Revenue Expenditure	**4,562.36**	**4,428.42**	**4,118.69**
Return on Equity Capital	177.44	222.50	177.44
Total Expenditure for MSLDC	**4,739.80**	**4,650.92**	**4,296.13**
Less: Non-Tariff Income	56.84	338.86	338.86
Less: Income from Open Access charges	1,203.41	1,203.41	1,203.41
Less: Income from Reactive Energy Charges	0.00	0.00	0.00
Gross Annual Fixed Charges for MSLDC	**3,479.56**	**3,108.64**	**2,716.12**
Revenue approved/actual	2,901.97	3,479.56	3,479.56
Revenue gap/(surplus)	**577.59**	**-370.92**	**-763.44**

4.13.3 The detailed analysis underlying the Commission's approval for individual ARR elements is set out above however, the variation in the ARR sought by MSLDC and that approved by the Commission in this Order is mainly on account of lower approval of depreciation, Interest on Loan and RoE vis-à-vis that sought by MSLDC for the reasons pertaining to difference in opening GFA of FY 2017-18 considered by MSLDC and that considered by the Commission as per past Regulatory approvals. Further, the Non-Tariff Income is considered after considering interest income on the average LDCD Fund available during FY 2022-23 and as stated in MYT Order in Case No. 291 of 2019.

4.13.4 As against a Revenue surplus of Rs. -370.92 Lakhs projected by MSLDC, there is a Revenue Surplus of **Rs. -763.44 Lakh** provisionally approved as per the provisions of MYT Regulations 2019 in this Order by the Commission. Thus, on Provisional Truing-up of ARR for FY 2022-23, a net Surplus of **Rs. -763.44 Lakh** which is considered towards contribution to the LDCD Fund.

4.13.5 Accordingly, a Revenue Surplus of **Rs. -763.44 Lakh** is approved on Provisional Truing-up of ARR for FY 2022-23

5 REVISED ARR FORECAST FOR FY 2023-24 AND FY 2024-25

5.1 Background

5.1.1 MSLDC has submitted revised projections of revenue and expenses for FY 2023-24 and FY 2024-25, under Regulation 4.2 of MYT Regulations, 2019. Certain deviations and relaxations have been sought in the principles and parameters specified in the Regulations and are discussed below.

5.1.2 MSLDC had envisaged certain infrastructure development to be undertaken in the remaining part of the 4th Control Period in the MYT Order. MSLDC has submitted the updated status of the same, corresponding capital expenditure and financing plans in accordance with Regulation 95 of the MYT Regulations, 2019.

5.1.3 The analysis underlying the Commission's approval is set out below.

5.2 Operation & Maintenance Expenses

MSLDC's Submission

5.2.1 As explained in the previous section, the approach adopted for the projection of O&M expenses for FY 2022-23 on the basis of O&M expenses for the base year is proposed to be continued for projections of O&M expenses for FY 2023-24 and FY 2024-25 as well. Following the above approach, average of true-up O&M expenses, before adding/deducting the share of efficiency gains/losses of FY 2020-21 and FY 2021-22 has been calculated. The derived average O&M expenses has been escalated, with suitable escalation factor.

5.2.2 The escalation factor has been derived with 20% weightage to the average yearly inflation derived based on the monthly Wholesale Price Index of the respective past five financial years as per the Office of Economic Advisor of Government of India and 80% weightage to the average yearly inflation derived based on the monthly Consumer Price Index for Industrial Workers (all-India) of the past five financial years as per the Labour Bureau, Government of India. For deriving the escalation factor for the period, the factor for FY 2022-23 has been considered.

5.2.3 Further, MSLDC has claimed additional O&M expenses for new scheme functions from FY 2022-23 onwards. Summary of the same is as below:

Table 79: Additional Operation & Maintenance expenses claimed by MSLDC from FY 2023-24 and FY 2024-25 (Rs. Lakh)

Scheme name	FY 2023-24	FY 2024-25
Demand Forecasting Services	4.84	44.84
Alert Messaging System	11.80	17.70
RE Forecasting Services	46.13	87.69
Dynamic Stability Study for Mumbai Islanding	97.94	-
AMC of SCADA system (Netra-240)	78.84	66.72

Scheme name	FY 2023-24	FY 2024-25
AMC of SCADA system(T-4)	25.00	25.00
Total Additional O&M expenses	**304.55**	**241.95**

5.2.4 Considering the escalation factor and above O&M expenses, the normative expenses are derived as follows:

Table 80: Normative O&M Expenses for FY 2023-24 and FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Normal O&M Expenses	2677.77 + 539.72 (Estimated impact of wage revision on base employee expenses)	3465.10	2763.33 + 556.96 (Estimated impact of wage revision on base employee expenses)	3609.47
Additional O&M Expenses		304.55		241.95
Total O&M Expenses	**3217.49**	**3769.65**	**3320.29**	**3851.42**

Commission's Analysis and Ruling

5.2.5 The Commission has examined the submission of MSLDC in respect of methodology for estimation of O&M expenses. MSLDC has sought deviations from the methodology for computation of normative O&M expenses specified in the MYT Regulations, 2019. However, as discussed in paras 4.2.10 to 4.2.13 of this Order, the Commission has continued the approach adopted in the MYT Order in Case No. 291 of 2019 to ensure consistency and predictability of approach. The approach adopted by the Commission has already been discussed in the referred paragraphs. Accordingly, the Commission has considered the previous year's net entitlement after sharing of gains and losses as the base year value.

5.2.6 As FY 2022-23 is still ongoing, the rate of escalation considered for computing the FY 2022-23 O&M expenses is same as that considered for FY 2021-22 i.e. 4.12%. The same escalation factor is considered for FY 2023-24 and FY 2024-25.

5.2.7 Further, as explained in the previous section (Provisional True-up of FY 2022-23), the revised impact of wage revision on the base employee cost has been computed based on actual wage revision arrears submitted by MSLDC. For FY 2023-24 and FY 2024-25, the impact of wage revision for previous year has been escalated using the relevant escalation factor.

5.2.8 Further, the Commission has analysed the submission of MSLDC regarding additional O&M expenses and the approvals in this regard have been elaborated in paras 4.2.17 to 4.2.19 of this Order. Thus, the additional O&M expense approved by the Commission is as below:

Table 81: Additional Operation & Maintenance expenses for FY 2023-24 and FY 2024-25, approved by Commission (Rs. Lakh)

Scheme name	FY 2023-24	FY 2024-25
Demand Forecasting Services	44.84	44.84
Alert Messaging System	0.00	0.00
RE Forecasting Services	46.13	87.69
Dynamic Stability Study for Mumbai Islanding	97.94	0.00
AMC of SCADA system (Netra-240)	0.00	0.00
AMC of SCADA system(T-4)	0.00	0.00
Total Additional O&M expenses	**188.91**	**132.53**

5.2.9 Based on the above effective escalation factor, revised impact of wage revision and additional O&M expenses, the Commission has recomputed the normative O&M expenses for FY 2023-24 and FY 2024-25 as below:

Table 82: Operation and Maintenance expenses for FY 2023-24 and FY 2024-25, as approved by the Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order*	MYT Order	MTR Petition	Approved in this Order*
Normative O&M Expenses	2,677.77	3,465.10	3,322.18	2,763.33	3,609.47	3,459.06
Impact of wage revision	539.72			556.96		
Additional O&M Expenses		304.55	188.91		241.95	132.53
Total O&M Expenses	**3,217.49**	**3,769.65**	**3,511.09**	**3,320.29**	**3,851.42**	**3,591.59**

**includes impact of wage revision added in FY 2020-21*

5.2.10 **The Commission approves O&M expenses of Rs. 3,511.09 Lakh for FY 2023-24 and Rs 3,591.59 Lakh for FY 2024-25 which includes the normative O&M expenses and additional O&M expenses.**

5.3 Interest on Working Capital

MSLDC's Submission

5.3.1 In accordance with the Regulation 32.5 of MYT Regulations, 2019, MSLDC has computed the IoWC for FY 2023-24 and FY 2024-25.

5.3.2 MSLDC has considered the interest rate of 9.55%, i.e. current base rate (MCLR) of 8.05% plus 1.5% as per MYT Regulations, 2019

5.3.3 The working capital and interest computation as submitted by MSLDC for FY 2023-24 and FY 2024-25 are shown in the table below:

Table 83: Interest on Working Capital for FY 2023-24 and FY 2024-25 submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Interest on Working Capital Requirement	737.78	696.73	759.83	765.55
Rate of Interest (% p.a.)	9.55%	9.55%	9.55%	9.55%
Interest on Working Capital	**70.46**	**66.54**	**72.56**	**73.11**

Commission's Analysis and Ruling

5.3.4 As per Regulation 32.5 of MYT Regulations, 2019, the working capital requirement includes one and half months expected revenue from Annual Fixed Charges. Therefore, past period claims and surplus/gap, if any, has to be considered while determining the expected working capital requirement.

5.3.5 The normative O&M expenses approved for the control period have been considered for working out the working capital requirement in accordance with the MYT Regulations, 2019. This includes the impact of wage revision on the base employee cost approved by the Commission.

5.3.6 The interest rate for working capital requirement is considered as per MYT Regulations, 2019 at 9.45% (7.95% Base Rate (MCLR) on the date of filing the Petition + 150 basis points).

5.3.7 Considering the above, the amount approved by the Commission toward IoWC computed for FY 2023-24 and FY 2024-25 is as given in the table below:

Table 84: Interest on Working Capital for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
One month of O&M expenses		250.75	292.59		261.19	299.30
One and Half months of receivables		445.99	384.56		504.36	412.72
Total Working Capital Requirement	**737.78**	**696.73**	**677.15**	**759.83**	**765.55**	**712.02**
Interest Rate (%)	9.55%	9.55%	9.45%	9.55%	9.55%	9.45%
Interest on Working Capital	**70.46**	**66.54**	**63.99**	**72.56**	**73.11**	**67.29**

5.3.8 **The Commission approves Interest on Working Capital of Rs. 63.99 Lakh for FY 2023-24 and Rs. 67.29 Lakh for FY 2024-25.**

5.4 RLDC Fees

MSLDC's Submission

5.4.1 The CERC had finalized the fees and charges for WRLDC for the Tariff period FY 2019-20 to FY 2023-24 under CERC (Fees and Charges of Regional Load Despatch Centre and other related matters) Regulations, 2019 through its Order dated 9 June 2021.

5.4.2 Currently, RLDC fees is billed under the said Order. It has been observed that the WRLDC Fees approved by CERC are increasing at a growth rate of around 4.8% over the period from FY 2021-22 to FY 2023-24 as shown below:

- FY 2021-22: Rs. 6,282.54 Lakhs
- FY 2022-23: Rs. 6,698.22 Lakhs
- FY 2023-24: Rs. 6,900.27 Lakhs
- **CAGR: 4.80%**

5.4.3 Based on the above analysis, MSLDC has assumed 5% escalation in RLDC fees for FY 2023-24 and FY 2024-25.

5.4.4 Accordingly, MSLDC has sought approval of the proposed RLDC Fees for FY 2023-24 and FY 2024-25 and it will approach the Commission with the actual numbers at the time of Truing up.

Table 85: RLDC Fees for FY 2023-24 and FY 2024-25 submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
RLDC Fees and Charges	1,361.35	684.10	1,361.35	718.30

Commission's Analysis and Ruling

5.4.5 The Commission has noted the submission of MSLDC in respect of RLDC Fees for FY 2023-24 and FY 2024-25 and has considered the same for approval, subject to True up.

Table 86: RLDC Fees for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
RLDC Fees	1361.35	684.10	684.10	1361.35	718.30	718.30

5.4.6 **The Commission approves RLDC Fees of Rs. 684.10 Lakh for FY 2023-24 and Rs. 718.30 Lakh for FY 2024-25.**

5.5 Capitalisation

MSLDC's Submission

5.5.1 MSLDC had planned various schemes for implementation in the 3rd Control Period i.e. FY 2016-17 to FY 2019-20 and submitted for approval vide its MYT Petition in

Case No. 20 of 2016. Subsequently, the actual capitalisation for FY 2017-18 to FY 2018-19 was approved in the MYT Order in Case No. 291 of 2019. In present MTR Petition, MSLDC has submitted its progress and actual capitalisation for the period FY 2019-20 to FY 2021-22. MSLDC has capitalised many schemes and implementation of other schemes is in progress. Considering the actual capitalisation achieved in the past period and the progress made so far, there has been some revision in the capitalisation proposed during balance period of the 4th Control Period. For the ensuing years, viz. FY 2023-24 and FY 2024-25, MSLDC proposes the Capital Expenditure and Capitalization considering the past progress and new schemes to be implemented in future.

5.5.2 In addition to the various ongoing DPR and non-DPR schemes, MSLDC envisages capital expenditure and capitalisation towards several new schemes. The schemes planned for the ensuring years have been projected as per the requirement of different sections of MSLDC together with ALDC.

5.5.3 While proposing the Capital Expenditure plan, MSLDC has taken due care to club together different schemes of similar nature and proposed several new DPR schemes. DPRs for those new schemes are under preparation and shall be submitted in due course for approval of the Commission. Further, there were certain schemes whose estimated value is less than the threshold value of Rs. 100 Lakh which have been shown as non-DPR schemes.

5.5.4 The Commission is requested to allow the non-DPR capitalisation as claimed in the present Petition and not apply the criteria of 20% ceiling of approved DPR capitalisation in line with the detailed rationale provided in the Petition.

5.5.5 The summary of the Capital expenditure and Capitalisation plan envisaged by MSLDC for FY 2023-24 and FY 2024-25 is given in the following table:

Table 87: Summary of the Projected Capitalisation for FY 2023-24 and FY2024-25 as submitted by MSLDC (Rs. Lakh)

Project details	**Expenditure**	**Capitalization**
FY 2023-24		
a) DPR Schemes		
(i) In-principle approved by MERC		
70 SAS/ RTUs integration	122.00	162.00
DSM		107.00
(ii) Yet to receive in-principle MERC approval		
Development of alert messaging software at MSLDC	172.28	172.28
Renovation and modernization of existing SCADA at SLDC and ALDC	4000.00	4000.00
b) Non-DPR Schemes		
Integration of NEW S/S at SLDC Airoli and ALDC SCADA (27 RTU integration)	75.50	95.50
Upgradation of WAMS	20.00	20.00
CCTV, Security system, voice recording	15.00	15.00
Life extension of Krishna and Kaveri building	40.00	
Structural strengthening of new MSLDC building	95.00	
Energy efficient building upgradation and solar lighting	40.00	
Furniture and office equipment	7.00	7.00

Project details	Expenditure	Capitalization
staff recreation and rejuvenation activity	15.00	
IT infrastructure (Firewall, 2 No of FTP, WIFI device, new desktop and laptop)	75.00	75.00
Hardware for reserve and ancillary services software (GAMS software)	50.00	
Development of load forecasting software	14.16	
ALDC Misc. expenses - landscaping, rooftop solar scheme, CCTV, staff recreation, office furniture	39.00	39.00
Development of reserve and ancillary service software for intrastate generation (GAMS)	50.00	50.00
REC	50.00	50.00
Total	**4879.94**	**4792.78**
FY 2024-25		
a) DPR Schemes		
(i) In-principle approved by MERC		
DSM	48.58	48.58
(ii) Yet to receive in-principle MERC approval		
Class I type staff quarter and guest house and recreation hall and gymnasium	1000.00	
Replacement of existing VPS at ALDC	0.00	0.00
Renovation and modernization of existing SCADA at SLDC and ALDC	4000.00	4000.00
b) Non-DPR Schemes		
Life extension of Krishna and Kaveri building		40.00
Structural strengthening of new MSLDC building		95.00
Energy efficient building upgradation and solar lighting		40.00
Staff recreation and rejuvenation activity	5.00	20.00
Hardware for reserve and ancillary services software (GAMS software)		50.00
Development of load forecasting software	14.16	28.32
S/I/T/C for 2 nos. of CISCO routers and switches for SCADA MPLS	90.00	90.00
S/I/T/C of new desktop laptop	25.00	25.00
Building renovation and modernisation/life extension of building	20.00	20.00
Furniture for office and equipment	7.00	7.00
A/C Plant	60.00	60.00
UPS system	20.00	20.00
ALDC Misc expenses - life extension of building, Testing equipment, furniture	23.00	23.00
Total	**5,312.74**	**4,566.90**

5.5.6 The detailed break-up of the projected capitalisation for SLDC Kalwa and ALDC Ambazari into various sub-schemes has been provided in the Petition submitted by MSLDC.

Commission's Analysis and Ruling

5.5.7 The capitalisation proposed by MSLDC for FY 2023-24 and 2024-25 includes few schemes for which the DPR is already approved and the work is in progress. Also there are other schemes for which MSLDC is yet to submit DPRs. As regards the ongoing schemes, the Commission has considered the capitalisation as proposed by MSLDC for the purpose of approval in FY 2023-24 and FY 2024-25.

5.5.8 Further, MSLDC has proposed capital expenditure and capitalisation of Rs. 172.28 Lakh in FY 2023-24 for development of alert messaging software at MSLDC. The DPR of this scheme is yet to be submitted to the Commission for approval. Since the justification, cost/benefit etc. for the said scheme is yet to be examined, the capitalisation against this scheme is not being considered by the Commission at this point in time. As and when MSLDC submits the said DPR, it shall be taken up for scrutiny as per the relevant Regulations.

5.5.9 MSLDC has also proposed capital expenditure and capitalisation on the scheme related to Renovation and Modernization of existing SCADA at SLDC and ALDC in FY 2023-24 and FY 2024-25 with a capital expenditure of Rs 4,000 Lakh each year.

5.5.10 As submitted by MSLDC, the objective of this scheme is upgradation and replacement of the present SCADA System at SLDC Airoli and ALDC Ambazari with a new SCADA and latest IT security measures with state of art technology. The earlier proposed expenditure on this scheme was Rs. 14 Crores which was just an estimation. Subsequently, M/s Power system Operation Corporation Ltd. (**POSOCO**) requested MSLDC to be a part of ULDC scheme. Under this arrangement, POSOCO shall act as consultant for new SCADA at no consultancy cost and MSETCL has to pay the project cost for replacement of MSLDC SCADA system discovered through open tendering process by WRLDC. The region wise package tendering shall be carried out by POSOCO for the stakeholders under Western region viz Gujarat, Madhya Pradesh, Chhattisgarh, Goa and WRLDC. For this purpose, CGM, WRLDC has proposed MSLDC to sign MOU with POSOCO to confirm willingness to participate in the project of Unified up-gradation/replacement of SCADA/EMS in Western Region. Thus, initially upgradation work was to be undertaken by the State on its own, however, afterwards it was decided to go with POSOCO under ULDC SCADA scheme for SCADA upgradation work. MSLDC is now participating in ULDC SCADA as per the in-principle approval for participation in ULDC scheme through POSOCO for upgradation of existing SCADA /EMS. i.e. SITC of new SCADA at SLDC, Airoli & ALDC Ambazari obtained vide BR. NO.144/09 dated 29 December 2020 and revised B.R. NO. 149/21 dated 14 October 2021.

5.5.11 MSLDC also stated that the technical specifications were finalized by WRLDC considering latest technological & architectural aspects used in SCADA & IT industry and the BOQ is finalized by SLDC. WRLDC was requested to provide the tentative cost estimate of New SCADA system. WRLDC consulted with M/s. GE for the tentative cost estimate. Budgetary estimate is proposed based on costs provided by WRLDC from M/s. GE. The budgetary offer is around Rs 78.14 Crore including Software cost of Rs. 49.57 Crore and Hardware cost of Rs 17.30 Crore. MoU has been signed between POSOCO and MSLDC for participation in ULDC SCADA project of WR region, on 14 October 2021. Considering the above, Rs 40 Crore per year has been estimated by MSLDC during the two-year period.

5.5.12 The Commission has noted the submissions of MSLDC with regards to the scheme and the progress of work. It is also noted that the DPR of this scheme is not yet submitted for approval of the Commission. Since, the capitalization towards this scheme is projected by MSLDC from FY 2023-24 onwards, MSLDC should have submitted its DPR for in principle approval of the Commission. Although such DPR is yet to be submitted, MSLDC has commenced the preparatory activities such as signing of MoU, obtaining Board approval, finagling technical specifications and BOQ, obtaining estimates etc. Further, it seems that other States in the Western Region are also going ahead with the implementation of the same project. Hence, as an exception, the Commission is inclined to consider the capitalization towards this scheme although the DPR is to be submitted by MSLDC. The Commission is also cognisant of the importance of this project for the operational requirements of MSLDC. Therefore, the Commission in the interim has approved 50% of the total proposed capitalisation for the two years. MSLDC may approach the Commission with DPR and cost benefit analysis for approval. Upon approval, the total value of the scheme may be considered under truing-up of FY 2023-24 and FY 2024-25, subject to prudence check.

5.5.13 Further, as discussed in previous section in the para 4.5.9 of the Order, certain capitalisation planned towards the non-DPR schemes in FY 2022-23 was shifted to FY 2023-24 as the schemes are unlikely to be completed in FY 2022-23. This capitalisation will be included in the non-DPR scheme related capitalisation approved for FY 2023-24.

Table 88: Capitalisation shifted to FY 2023-24, approved by Commission (Rs. Lakh)

Project Code	Capitalisation
S/I/T/C of video conferencing system at SLDC conference room	16.00
S/I/T/C of 3 DCs	44.24
Development of new MSLDC website and hosting on cloud	10.00
Integration of 20 DC at SLDC Airoli and ALDC	70.00
Life extension of new MSLDC building	47.06
Staff recreation and rejuvenation facilities	45.00
BMS Automation	90.00
Battery set with charger	10.00
Total	**332.30**

5.5.14 Accordingly, the Commission approves the Capitalisation for FY 2023-24 and FY 2024-25 as shown in the following table:

Table 89: Scheme-wise Capitalisation for FY 2023-24 to FY2024-25 approved by Commission (Rs. Lakh)

Name of the Scheme	Capitalisation
	FY 2023-24
Approved DPR Schemes	
70 SAS/ RTUs integration	162.00
Development of S/W for S&D , DS, SEA, DSM & Cloud	107.00
(ii) Yet to receive in-principle MERC approval	
Development of alert messaging software at MSLDC	-
Renovation and modernization of existing SCADA at SLDC and ALDC	2,000.00
b) Non-DPR Schemes	
Integration of NEW S/S at SLDC Kalwa and ALDC SCADA (27 RTU integration)	95.50
Upgradation of WMS	20.00
CCTV, Security system, voice recording	15.00
Furniture and office equipment	7.00
IT infrastructure (Firewall, 2 No of FTP, WIFI device, new desktop and laptop)	75.00
ALDC Misc expenses - landscapping, rooftop solar scheme, CCTV, staff recreation, office furniture	39.00
Development of reserve and ancillary service software for intrastate generation (GAMS)	50.00
REC	50.00
S/I/T/C of video conferencing system at SLDC conference room	16.00
S/I/T/C of 3 DCs	44.24
Development of new MSLDC website and hosting on cloud	10.00
Integration of 20 DC at SLDC Airoli and ALDC	70.00
Life extension of new MSLDC building	47.06
Staff recreation and rejuvenation facilities	45.00
BMS Automation	90.00
Battery set with charger	10.00
Total	**2,952.80**

Name of the Scheme	Capitalisation
	FY 2024-25
Approved DPR Schemes	
Development of S/W for S&D , DS, SEA, DSM & Cloud	48.58
(ii) Yet to receive in-principle MERC approval	
Renovation and modernization of existing SCADA at SLDC and ALDC	2,000.00
b) Non-DPR Schemes	
Life extension of Krishna and Kaveri building	40.00
Structural strengthening of new MSLDC building	95.00
Energy efficient building upgradation and solar lighting	40.00
staff recreation and rejuvination activity	20.00
Hardware for reserve and ancillary services software (GAMS software)	50.00
Development of load forecasting software	28.32
S/I/T/C for 2 nos of CISCO routers and switches for scada MPLS	90.00
S/I/T/C of new desktop laptop	25.00
Building renovation and modernaisation/ Life extension of building	20.00
Furniture for office and equipment	7.00
A/C Plant	60.00
UPS system	20.00
ALDC Misc expenses - life extension of building, Testing equipment, furniture	23.00
Total	**2,566.90**

Table 90: Capitalisation for FY 2023-24 to FY2024-25 approved by Commission (Rs. Lakh)

Particulars	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Capitalisation	306.00	4792.78	2952.80	320.00	4566.90	2566.90

5.5.15 **The Commission approves Capitalisation of Rs. 2952.80 Lakh for FY 2023-24 and Rs. 2566.90 Lakh for FY 2024-25.**

5.6 Utilisation of the LDCD Fund

MSLDC's Submission

5.6.1 The capitalization for FY 2023-24 to FY 2024-25 is proposed to be funded through LDCD fund, considering the proposed capitalization and amount of LDCD fund. Subsequent claims for RoE, interest on loans and depreciation have not been projected by MSLDC for the asset created from LDCD fund. For those years, only assets created up to FY 2017-18 have been considered for the purpose of depreciation, interest on loan and RoE. Considering the LDCD fund amount at the starting of FY 2024-25 (Rs. 794.57 Lakh) and asset creation projected during the year (Rs. 4566.90 Lakh), partial asset (of Rs. 794.57 Lakh) would be created from the fund. For remaining asset (Rs. 3772.33 Lakh), which is not funded through LDCD fund, depreciation, interest on loan and RoE have been calculated. So, in FY 2024-25, depreciation, interest on loan and RoE have been calculated on old asset created up to FY 2017-18 and new asset created in FY 2024-25, without the support of LDCD fund.

5.6.2 Accordingly, the details of amount of LDCD fund created and its utilisation for Capitalisation as proposed by MSLDC is given in table below:

Table 91: LDCD Fund details as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24	FY 2024-25
LDCD fund at the starting of year	5,587.35	794.57
Utilisation of LDCD Fund	4,792.78	794.57
LDCD fund at the end of year	794.57	0.00
Average LDCD fund	**3,190.96**	**397.29**
Interest rate	5.20%	5.20%
Income earned on LDCD fund	**165.93**	**20.66**

Commission's Analysis and Ruling

5.6.3 The Commission has considered LDCD fund for funding the capitalisation and interest earned on the balance LDCD Fund is passed on to the Beneficiaries as Non-Tariff Income.

5.6.4 Further, as the Commission has not entirely approved the capitalisation proposed by MSLDC in FY 2023-24 and FY 2024-25, the LDCD fund available at the beginning of FY 2023-24 is sufficient to fund the entire capitalisation approved by the Commission for FY 2023-24 and FY 2024-25. The balance LDCD fund is carried forward to the next control period for utilisation as per the guidelines of the Commission.

5.6.5 The Commission has also considered the interest income on the available LDCD fund considering the actual rate of interest approved by the Commission for FY 2021-22 in this Order. Accordingly, the summary of the LDCD fund utilisation and the estimated interest income approved by the Commission is outlined in the table below:

Table 92: LDCD Fund utilisation approved by Commission (Rs. Lakh)

Particulars	FY 2023-24	FY 2024-25
LDCD fund at the starting of year	6,677.21	3,724.41
Add: Apportionment of gap to be recovered as per Case No. 20 of 2016	-	-
Less: Revenue Gap / (Surplus) of the Year as submitted in the present Petition	-	-
Less: Utilisation of LDCD Fund	2,952.80	2,566.90
LDCD fund at the end of year	**3,724.41**	**1,157.51**
Average LDCD fund	5,200.81	2,440.96
Interest rate	5.20%	5.20%
Income earned on LDCD fund	**270.38**	**126.90**

5.7 Depreciation

MSLDC's Submission

5.7.1 MSLDC has calculated depreciation for FY 2023-24 and FY 2024-25 in accordance with Regulation 28 of the MYT Regulations, 2019.

5.7.2 The depreciation has been calculated as per rates derived based on actual depreciation of FY 2017-18 amount and asset value for asset not funded through LDCD fund. In FY 2024-25, partial asset is supposed to be funded without LDCD fund, for which depreciation is claimed. For asset addition during any year, average value of asset has been assumed for depreciation.

5.7.3 For computer software/IT equipment, 15% rate of depreciation has been assumed as per earlier directive of Commission.

5.7.4 For the asset created through LDCD fund, no depreciation has been considered as per directives of the Commission in the MTR Order.

5.7.5 The depreciation for FY 2023-24 and FY 2024-25 as estimated by MSLDC is given in the Table below:

Table 93: Depreciation for FY 2023-24 and FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Particulars	FY2023-24		FY2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Depreciation	116.38	202.90	127.63	249.72

Commission's Analysis and Ruling

5.7.6 The Commission has allowed LDCD fund to be used for funding capitalisation for the 4th Control Period and is sufficient to meet capitalisation approved for FY 2023-24 and FY 2024-25. Accordingly, the Commission has not considered any addition to GFA to the extent of utilization of LDCD fund for these years. In case, MSLDC incurs funds in excess of LDCD fund balance, the same shall be assumed to be funded through debt and equity and hence would be eligible to claim depreciation, interest on loan and RoE on truing-up subject to prudence check.

5.7.7 The Commission has allowed the depreciation as per the rates derived based on actual depreciation for FY 2017-18 and asset value for asset.

5.7.8 The Commission has computed the depreciation in accordance with the MYT Regulations, 2019 subject to the ceiling of 90% of GFA for individual asset classes separately and has approved the following amount:

Table 94: Depreciation for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening Gross Fixed Assets	8,763.04	9,833.84	8,763.04	8,851.80	9,833.84	8,763.04
Add: Additional Capitalization during the year	88.76	0.00	0.00	320.00	3,772.33	0.00
Less: Retirement/Adjustments			0.00			0.00
Closing Gross Fixed Assets	8,851.80	9,833.84	8,763.04	9,171.80	13,606.17	8,763.04
Total Depreciation	**116.38**	**202.90**	**115.51**	**127.63**	**249.72**	**114.13**

5.7.9 **The Commission approves Depreciation of Rs. 115.51 Lakh for FY 2023-24 and Rs. 114.13 Lakh for FY 2024-25**.

5.8 Interest and Finance Charges

MSLDC's Submission

5.8.1 There are no actual loans for MSLDC. The debt requirement for asset not funded through LDCD fund is proposed to be as per debt: equity ratio of 70:30 as given in Regulation 27 of MYT Regulations, 2019 and the debt is considered as normative loan.

5.8.2 The debt requirement for part of the proposed capital expenditure in the FY 2024-25 is envisaged to be funded through normative loans based on 70:30 debt: equity ratio. The depreciation computed in line with the MYT Regulations, 2019 is considered as loan repayment for each year.

5.8.3 MSLDC has considered the interest rate of 8.93% and same is as per information available from MSETCL for FY 2021-22. The interest expenses increase in FY 2024-25 due to the fact that additional normative loan is considered for capitalization, without availing LDCD fund. The interest on Loan for FY 2023-24 and FY 2024-25 is shown in Table as below:

Table 95: Interest on Long-Term Loans for FY 2023-24 and FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Interest and finance Expenses	60.17	43.18	62.30	140.87

Commission's Analysis and Ruling

5.8.4 The closing loan for FY 2022-23 approved in this Order is considered as the opening loan for FY 2023-24. The repayment for each year is considered equivalent to the depreciation approved for the respective year, in this Order.

5.8.5 No addition to normative loan is considered on the capital expenditure and capitalisation approved for FY 2023-24 and FY 2024-25 to the extent it is funded through the LDCD Fund. No interest cost is admissible on such capitalisation funded through the LDCD Fund. For funding requirements beyond those funded through LDCD fund, a debt : equity ratio of 70:30 may be considered.

5.8.6 As discussed earlier, the interest rate considered for normative loans of MSLDC is the weighted average rate of interest of MSETCL considered for FY 2023-24 and FY 2024-25 as per the MSETCL's MTR Petition in Case No. 232 of 2022 and as approved by Commission for MSETCL. This rate is 8.93% and the same is considered for computing the interest on loans for FY 2023-24 and FY 2024-25 for MSLDC.

5.8.7 Based on the above, the interest on loan approved by the Commission for the period FY 2023-24 and FY 2024-25 is as given in the Table below:

Table 96: Interest on Loan Capital for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Opening Balance of Normative Loan	621.68	584.97	615.33	567.43	382.07	499.82
Add: Debt component of capitalisation during the year	62.13	0.00	0.00	224	2640.63	0.00
Repayment of Normative loan during the year	116.38	202.90	115.51	127.63	249.72	114.13
Less: Reduction of Normative Loan due to retirement or replacement of assets		0.00	0.00		0.00	0.00
Closing Balance of Normative Loan	**567.43**	**382.07**	**499.82**	**663.8**	**2772.97**	**385.69**
Weighted average Rate of Interest (%)	10.12%	8.93%	8.93%	10.12%	8.93%	8.93%
Normative Interest Expenses	**60.17**	**43.18**	**49.79**	**62.3**	**140.87**	**39.54**

5.8.8 **The Commission approves Interest on Long Term Loans of Rs. 49.79 Lakh for FY 2023-24 and Rs. 39.54 Lakh for FY 2024-25**.

5.9 Return on Equity

MSLDC's Submission

5.9.1 MSLDC has worked out the Return on Equity (RoE) for FY 2023-24 and FY 2024-25 in accordance with the MYT Regulations, 2019. RoE is based on the projected year-wise equity quantum. Up to FY 2023-24, no new equity has been added as yearly capitalization are assumed to be funded through LDCD fund. Hence, opening equity amount prevailing during FY 2023-24 is continued in FY 2024-25. In FY 2024-25, partial capitalization is assumed from LDCD fund (as per availability of fund) and therefore, 30% of remaining capitalization (not funded from LDCD fund) is projected as additional equity.

5.9.2 MSLDC has considered RoE at rate of 14% on the opening equity as well as on 50% of the equity contribution during year, which is 30% of the asset addition during the year.

5.9.3 The additional RoE of 1.5% will be claimed after actual data is available based on approved guidelines of the Commission.

5.9.4 The projected RoE for period from FY 2023-24 and FY 2024-25 as claimed by MSLDC is given in the table below:

Table 97: Return on Equity for FY 2023-24 and FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Return on Equity	179.31	222.50	187.89	301.72

Commission's Analysis and Ruling

5.9.5 The Commission has considered the closing equity for FY 2022-23 approved in this Order as the opening equity for FY 2023-24.

5.9.6 No addition to normative equity is considered on the capital expenditure and capitalisation approved for FY 2022-23 and FY 2023-24 to the extent it is funded from the LDCD Fund. No RoE is admissible on such capitalisation funded from the LDCD Fund. For funding requirements beyond those funded through LDCD fund, a debt : equity ratio of 70:30 may be considered.

5.9.7 In accordance with the MYT Regulations, 2019, the Commission has considered a rate of 14% for computing the Base RoE as per Regulation 29.2 of MYT Regulations, 2019 as claimed by MSLDC.

5.9.8 Accordingly, the RoE approved by the Commission for FY 2023-24 and FY 2024-25 as given in the Table below:

Table 98: Return on Equity for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Regulatory Equity at the beginning of the year	1,267.45	1,589.27	1,267.45	1,294.08	1,589.27	1,267.45
Equity portion of capitalisation during the year	26.63	0.00	0.00	96.00	1,131.70	0.00
Reduction in Equity Capital on account of retirement / replacement of assets		0.00	0.00		0.00	0.00
Regulatory Equity at the end of the year	**1,294.08**	**1,589.27**	**1,267.45**	**1,390.08**	**2,720.97**	**1,267.45**
Return on Regulatory Equity at the beginning of the year	177.44	222.50	177.44	181.17	222.50	177.44
Return on Regulatory Equity addition during the year	1.86	0.00	0.00	6.72	79.22	0.00
Total Return on Equity	**179.31**	**222.50**	**177.44**	**187.89**	**301.72**	**177.44**

5.9.9 **The Commission approves Return on Equity of Rs. 177.44 Lakh for FY 2023-24 and Rs. 177.44 Lakh for FY 2024-25**.

5.10 Income Tax

MSLDC's Submission

5.10.1 In line with MSLDC's submissions regarding Income Tax in the previous chapters relating to truing up for past year, MSLDC has not claimed Income Tax for the period FY 2023-24 and FY 2024-25.

Commission's Analysis and Ruling

5.10.2 The Commission notes that MSLDC does not have a separate corporate status and is, therefore, not required to submit Income Tax returns. The MYT Regulations, 2019 have enabling provisions to take into account any allocations/ claims by MSETCL towards Income Tax. The Commission shall consider them, if any, after prudence check, at the time of True up.

5.10.3 The Commission has not made any projections towards Income Tax for the remaining part of the 4th Control Period. Accordingly, the RoE is not grossed up by the effective tax rate for the year.

5.11 Non-Tariff Income

MSLDC's Submission

5.11.1 Non-Tariff income as estimated for FY 2022-23 is considered for FY 2023-24 and FY 2024-25. The interest income from LDCD fund is considered as Non-Tariff Income, as considered by the Commission. The details are already provided under paragraph deals with 'LDCD fund'.

5.11.2 The projected Non-Tariff Income for FY 2023-24 and FY 2024-25 is shown in the table below:

Table 99: Non-Tariff Income for FY 2023-24 and FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	**MTR Petition**	**MYT Order**	**MTR Petition**
Non-tariff income	20.47	193.49	14.90	48.22

Commission's Analysis and Ruling

5.11.3 The Commission has reviewed the projections made by MSLDC for Non-Tariff Income.

5.11.4 As discussed in earlier section, the Commission has considered the interest on surplus available in LDCD Fund as Non-Tariff Income. Accordingly, the interest at the rate of 5.20% is considered on an average LDCD Fund balance during FY 2022-23.

5.11.5 Also, the Non-Tariff income as approved during truing up for FY 2021-22 (excluding Interest on LDCD fund) of Rs. 27.56 Lakh has been considered for FY 2023-24 and FY 2024-25, subject to prudence check at the time of true-up.

5.11.6 Considering the above, the Commission has approved the Non-Tariff Income as shown in the Table below:

Table 100: Non-Tariff Income for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Interest on LDCD Fund	5.56	165.93	270.38		20.66	126.90
Other Non-Tariff Income	14.90	27.56	27.56	14.90	27.56	27.56
Total Non-Tariff Income	**20.46**	**193.49**	**297.94**	**14.90**	**48.22**	**154.46**

5.11.7 **The Commission approves Non-Tariff Income of Rs. 297.94 Lakh for FY 2023-24 and Rs. 154.46 Lakh for FY 2024-25**.

5.12 Income from Open Access Charges

MSLDC's Submission

5.12.1 MSLDC has considered income from Open Access Charges including scheduling / re-scheduling charges for FY 2023-34 and FY 2024-25 as approved by the Commission in Case No. 291 of 2019. The same is given below.

Table 101: Income from Open Access Charges for FY 2023-24 and FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Particulars	FY 2023-24		FY 2024-25	
	MYT Order	MTR Petition	MYT Order	MTR Petition
Income from Open access	1,227.48	1,227.48	1,252.03	1,252.03

Commission's Analysis and Ruling

5.12.2 The Commission has examined the submission of MSLDC in respect of Income from Open Access Charges and considered the same as submitted by MSLDC for FY 2023-24 and FY 2024-25, subject to prudence check at the time of true-up.

Table 102: Income from Open Access Charges for FY 2022-23 approved by Commission (Rs. Lakh)

Particulars	FY 2023-24			FY 2024-25		
	MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
Open Access Income from Scheduling Charges	1,127.89	1,127.89	1,127.89	1,150.45	1,150.45	1,150.45
Open Access Income from Re-scheduling Charges	99.58	99.58	99.58	101.58	101.58	101.58
Income from Open Access Charges	**1,227.48**	**1,227.48**	**1,227.48**	**1,252.03**	**1,252.03**	**1,252.03**

5.12.3 **The Commission approves Income from Open Access Charges of Rs. 1,227.48 Lakh for FY 2023-24 and Rs. 1,252.03 Lakh for FY 2024-25.**

5.13 Summary of Annual Fixed Charges for FY 2023-24 and FY 2024-25

MSLDC's Submission

5.13.1 Based on the above discussion, the head wise projected expenses for FY 2023-24 and FY 2024-25 are summarised in Table below:

Table 103: Summary of Annual Fixed Charges for FY 2023-24 and FY 2024-25 submitted by MSLDC (Rs. Lakh)

S. No	Particulars	FY 2023-24		FY 2024-25	
		MYT Order	MTR Petition	MYT Order	MTR Petition
1	Operation & Maintenance Expenses	3,217.49	3769.65	3,320.29	3851.42
2	Depreciation Expenses	116.38	202.90	127.63	249.72
3	Interest on Loan Capital	60.17	43.18	62.30	140.87
4	Interest on Working Capital	70.46	66.54	72.56	73.11
5	RLDC Fees and WRPC Charges	1,361.35	684.10	1,361.35	718.30
6	Reactive Energy Charges paid to Generators/TSUs				
7	Income Tax				
8	**Total Revenue Expenditure**	**4,825.85**	**4766.36**	**4,944.13**	**5033.42**
9	Return on Equity Capital	179.31	222.50	187.89	301.72
10	**Total Expenditure for MSLDC**	**5,005.15**	**4988.85**	**5,132.02**	**5335.14**
11	Less: Non-Tariff Income	20.47	193.49	14.90	48.22
12	Less: Income from Open Access charges	1,227.48	1227.48	1,252.03	1252.03
13	Less: Income from Reactive Energy Charges				
	Gross Annual Fixed Charges for (AFC) MSLDC	**3,757.21**	**3567.88**	**3,865.10**	**4034.89**

Commission's Analysis and Ruling

5.13.2 Based on the Commission's analysis and rulings set out above, the summary of the revised estimates of Annual Fixed Charges for MSLDC for FY 2023-24 and FY 2024-25 is as shown in the following Table:

Table 104: Summary of Annual Fixed Charges for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Sr. No.	Particulars	FY 2023-24			FY 2024-25		
		MYT Order	MTR Petition	Approved in this Order	MYT Order	MTR Petition	Approved in this Order
1	Operation & Maintenance Expenses	3,217.49	3,769.65	3,511.09	3,320.29	3,851.42	3,591.59
2	Depreciation Expenses	116.38	202.90	115.51	127.63	249.72	114.13
3	Interest on Loan Capital	60.17	43.18	49.79	62.30	140.87	39.54
4	Interest on Working Capital	70.46	66.54	63.99	72.56	73.11	67.29
5	RLDC Fees and WRPC Charges	1,361.35	684.10	684.10	1,361.35	718.30	718.30
6	Reactive Energy Charges paid to Generators/TSUs		0.00	0.00		0.00	0.00
7	Income Tax		0.00	0.00		0.00	0.00
8	**Total Revenue Expenditure**	**4,825.85**	**4,766.36**	**4,424.48**	**4,944.13**	**5,033.42**	**4,530.84**
9	Return on Equity Capital	179.31	222.50	177.44	187.89	301.72	177.44
10	**Total Expenditure for MSLDC**	**5,005.15**	**4,988.85**	**4,601.92**	**5,132.02**	**5,335.14**	**4,708.29**
11	Less: Non-Tariff Income	20.47	193.49	297.94	14.90	48.22	154.46
12	Less: Income from Open Access charges	1,227.48	1,227.48	1,227.48	1,252.03	1,252.03	1,252.03
13	Less: Income from Reactive Energy Charges		0.00	0.00		0.00	0.00
14	**Gross Annual Fixed Charges**	**3,757.21**	**3,567.88**	**3,076.50**	**3,865.10**	**4,034.89**	**3,301.79**

5.13.3 The detailed analysis underlying the Commission's approval for individual ARR elements is set out above however, the variation in the ARR sought by MSLDC and that approved by the Commission in this Order is mainly on account of reasons such as impact of wage revision not approved separately as sought by MSLDC. Further, there is lower approval of depreciation, Interest on Loan and RoE vis-à-vis that sought by MSLDC in view of funding of Capitalisation from LDCD Fund for the entire Control Period. Consideration of the opening GFA as per the audited accounts by MSLDC as against regulatory approved GFA also impacts the cost approvals. Moreover, the Non-Tariff Income is considered after including income on surplus of LDCD Fund which was not considered by MSLDC.

5.13.4 **Accordingly, the Commission approves Annual Fixed Charges of Rs. 3,076.50 Lakh for FY 2023-24 and Rs. 3,301.79 Lakh for FY 2024-25**.

6 SHARING OF MSLDC CHARGES AND DETERMINATION OF MSLDC FEES

6.1 Sharing of MSLDC Charges

MSLDC's Submission

6.1.1 As per Regulation 99.1 of the MYT Regulations, 2019, MSLDC Charges payable by the Transmission System Users shall be computed on the basis of base Transmission Capacity Rights (**TCR**) which is calculated using the average of Coincident Peak Demand (**CPD**) and Non-Coincident Peak Demand (**NCPD**).

6.1.2 The data for base TCR (i.e. average of CPD & NCPD) for the period from FY 2018-19 to FY 2021-22 is submitted below:

Table 105: Base TCR for past four years (MW)

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Base TCR	21,416	21,260	20,457	23,418

6.1.3 Considering the above data, the cumulative average growth rate (CAGR) is worked out as 3.02%. The CAGR has been used to project the base TCR as given below:

Table 106: Projected base TCR for next control period (MW)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Base TCR	24,127	24,856	25,608

6.1.4 The sharing of base TCR prevailing during FY 2021-22 is given below:

Table 107: Sharing of base TCR as per MSLDC

Transmission System Users	Sharing of base TCR
MSEDCL	86.415%
TPC-D	3.172%
AEML-D	5.751%
BEST	2.983%
Indian Railway	1.528%
Mindspace Properties	0.029%
Gigaplex Properties	0.015%
KRC infrastructure	0.011%
Nidar Utilities	0.010%
MADC	0.047%
E ON Phase-1	0.025%
E ON Phase-2	0.010%
JNPT	0.002%

Transmission System Users	Sharing of base TCR
Laxmipati Balaji	0.002%
Total	**100.00%**

6.1.5 Considering the above sharing of base TCR and ARR proposed, the yearly charges to be paid by the TSUs are given below:

Table 108: Sharing of MSLDC Charges for FY 2023-24 to FY 2024-25, as submitted by MSLDC (Rs. Lakh)

Users	FY 2023-24	FY 2024-25
MSEDCL	3083.17	3486.73
TPC-D	113.19	128.00
AEML-D	205.18	232.04
BEST	106.42	120.35
Central Railway (Indian Railways)	54.50	61.64
Mindspace Business Parks Pvt. Ltd. (MBPPL)	1.04	1.17
Gigaplex Estates Pvt. Ltd. (GEPL)	0.55	0.62
KRC Infrastructure Projects and Private Ltd	0.40	0.45
Nidar Utilities Panvel LLP	0.35	0.40
Maharashtra Airport Development Corporation	1.69	1.91
E ON Phase-1	0.89	1.00
E ON Phase-2	0.37	0.42
JNPT	0.06	0.07
Laxmipati Balaji	0.09	0.10
Total	**3,567.88**	**4,034.89**

6.1.6 Further, as per the MYT Regulations, 2019, MSLDC Charges per MW per month shall be computed in accordance with the following formula:

$$\textit{Monthly MSLDC Charges (Rs. / MW / Month)} = [AFC(u)(t) \div \sum[\textit{Base TCR}(u)]\,(t)] \div 12$$

6.1.7 Accordingly, the projected MSLDC Charges works out as under:

Table 109: Proposed MSLDC Charges for FY 2023-24 to FY 2024-25, as submitted by MSLDC

Monthly MSLDC Charges	FY 2023-24	FY 2024-25
Total MSLDC Charges (Rs. Lakh)	3,567.88	4,034.89
Base Transmission Capacity Right (MW)	24,856	25,608
Proposed MSLDC charges (Rs/MW/Month)	1,196.18	1,313.04

Commission's Analysis and Ruling

6.1.8 The Regulation 99.1 of MYT Regulations 2019 outlines the formula for computation of the MSLDC charges payable by the Transmission System Users.

The Regulation 99.1 also specifies that the MSLDC Charges are to be shared between the TSUs considering the average of CPD and NCPD for the year and in case of Long Term OA users, the allotted capacity should be considered in lieu of the average monthly CPD and NCPD. The methodology for determination of the Base Transmission Capacity Rights (TCR) is also outlined in Regulation 99.1 of the MYT Regulations, 2019.

6.1.9 The TCR, apart from sharing of the MSLDC charges is also used for sharing of the Total Transmission System Cost (TTSC) amongst the Transmission System Users (TSU). The Regulation 64.2 of the MYT Regulations outlines the methodology for computation of the Base TCR. The formula prescribed in Regulation 64.2 is same as that prescribed in Regulation 99.1 of MYT Regulations, 2019. As the Commission determines the TCR in the Intra-State Transmission System Tariff Order as per the provisions of Regulation 64.2, the same is also considered for sharing the SLDC charges in the present Order.

6.1.10 The Commission has elaborated the methodology for determination of the Base Transmission Capacity Rights (TCR) and sharing proportion of the Transmission Charges amongst the Beneficiaries, in its Intra-State Transmission System Tariff Order in Case No. 239 of 2022. The Commission has applied the same considerations for the sharing of the MSLDC Charges, and accordingly considered the Base TCR for TSUs for FY 2023-24 and FY 2024-25 as shown in the following Table:

Table 110: Base Transmission Capacity Rights (MW) as considered by Commission for FY 2020-21 to FY 2024-25

Transmission System User	FY 2023-24		FY 2024-25	
	TCR (MW)	TCR (%)	TCR (MW)	TCR (%)
MSEDCL	22,179.26	85.894%	23,060.61	86.019%
TPC-D	857.41	3.320%	883.13	3.294%
AEML-D	1,531.17	5.930%	1,577.10	5.883%
BEST	778.70	3.016%	802.07	2.992%
Indian Railways	412.77	1.599%	417.42	1.557%
Mindspace Properties	13.00	0.050%	14.00	0.052%
Gigaplex Properties	5.50	0.021%	5.50	0.021%
KRC Infrastructure	6.00	0.023%	6.50	0.024%
Nidar Utilities	4.50	0.017%	5.50	0.021%
MADC	15.00	0.058%	16.00	0.060%
EON Phase-1	9.00	0.035%	10.00	0.037%
EON Phase-2	7.00	0.027%	8.00	0.030%
JNPT	1.50	0.006%	2.00	0.007%
Laxmipati Balaji (LBSCML)	0.80	0.003%	0.95	0.004%
Total Transmission Capacity Rights of all TSUs	**25,821.62**	**100.000%**	**26,808.78**	**100.000%**

6.1.11 Based on the approved AFC, the sharing of MSLDC Charges as approved by the Commission for FY 2023-24 and FY 2024-25 are given in the Table below:

Table 111: Sharing of MSLDC Charges for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Transmission System Users	FY 2023-24	FY 2024-25
MSEDCL	2,642.54	2,840.17
TPC-D	102.16	108.77
AEML-D	182.43	194.24
BEST	92.78	98.78
Indian Railways	49.18	51.41
Mindspace Properties	1.55	1.72
Gigaplex Properties	0.66	0.68
KRC Infrastructure	0.71	0.80
Nidar Utilities	0.54	0.68
MADC	1.79	1.97
EON Phase-1	1.07	1.23
EON Phase-2	0.83	0.99
JNPT	0.18	0.25
Laxmipati Balaji (LBSCML)	0.10	0.12
Total	**3,076.50**	**3,301.79**

6.1.12 The Regulation 99.2 of MYT Regulations, 2019 specifies the formula for computation of the SLDC charges per MW per month. The MSLDC charges as approved above for FY 2023-24 and FY 2024-25 needs to be billed to the TSUs on a monthly basis as given in the table below.

Table 112: MSLDC Charges for FY 2023-24 and FY 2024-25 approved by Commission

Monthly MSLDC Charges	Units	FY 2023-24	FY 2024-25
Total MSLDC Annual Fixed Charges	Rs. Lakhs	3,076.50	3,301.79
Base Transmission Capacity Rights	MW	25,821.62	26,808.78
MSLDC Charges	Rs./MW/Month	992.87	1,026.34

6.1.13 This Order is applicable from 1 April, 2023. MSLDC shall collect the MSLDC charges for each calendar month from the TSUs as per the timeline provided in the Regulations, with the first monthly period commencing from April 2023, as follows:

Table 113: Recovery of Annual Fixed Charges for FY 2023-24 and FY 2024-25 approved by Commission (Rs. Lakh)

Transmission System Users	FY 2020-21		FY 2021-22	
	Annual	Monthly	Annual	Monthly
MSEDCL	2,642.538	220.211	2,840.167	236.681
TPC-D	102.155	8.513	108.767	9.064
AEML-D	182.430	15.203	194.238	16.186
BEST	92.778	7.732	98.783	8.232
Indian Railways	49.180	4.098	51.410	4.284
Mindspace Properties	1.549	0.129	1.724	0.144
Gigaplex Properties	0.655	0.055	0.677	0.056
KRC Infrastructure	0.715	0.060	0.801	0.067
Nidar Utilities	0.536	0.045	0.677	0.056
MADC	1.787	0.149	1.971	0.164
EON Phase-1	1.072	0.089	1.232	0.103
EON Phase-2	0.834	0.070	0.985	0.082
JNPT	0.179	0.015	0.246	0.021
Laxmipati Balaji (LBSCML)	0.095	0.008	0.117	0.010
Total Transmission Capacity Rights of all TSUs	**3,076.504**	**256.375**	**3,301.795**	**275.150**

6.2 MSLDC Fees and Charges

MSLDC's Submission

6.2.1 As per the MYT Regulations, 2019, MSLDC Fees and Charges comprise the following,:

- Registration or Connection Fees per connection from all Users connecting to the InSTS;
- Scheduling Fees per day for intra-State Short Term Open Access (STOA) transactions;
- Re-scheduling Fees for each revision in schedule after the finalization of schedules by MSLDC on a day-ahead basis, or for non-submission of schedule as per State Grid Code requirements;
- STOA Application Processing Fees;
- Any other Fees approved by the Commission from time to time.

6.2.2 **Registration or Connection Fees:** The Commission in its MYT Order in Case No. 291 of 2019 has approved Registration or Connection Fees at the rate of Rs. 20,000 per connection for connecting to the Intra- State Transmission System (InSTS). The registration charges shall be a one-time fee payable at the time of registration or seeking connection to InSTS. This will be applicable for all generating companies, distribution licensees and transmission open access users. MSLDC has requested to continue the levy and recover the said fees/charges.

6.2.3 **Scheduling and Re-Scheduling Fees:** MSLDC requested to retain the Scheduling Fee of Rs. 2,250 per day and Re-Scheduling Fees of Rs. 2,250 per revision as approved under MYT Order in Case No. 291 of 2019.

6.2.4 **Short Term Open Access Application Processing Fees:** MSLDC requested to retain the Short Term Open Access (STOA) Application Processing Fee of Rs.7500 per application as approved under MYT Order in Case No. 291 of 2019.

6.2.5 **Renewable Energy Certificate Processing Fees:** MSLDC requested to retain the Renewable Energy Certificate Processing Fee of Rs.1000 per application as approved under MTR Order in Case No. 291 of 2019.

Commission's Analysis and Ruling

6.2.6 The Commission has noted the submissions of MSLDC, set out above, with regard to the Fees. MSLDC has not proposed any new Fee and sought continuation of levy of all the existing Fees at the rates approved by the Commission.

6.2.7 As mentioned at para. 2.2.22 of this Order, the Commission has allowed the reduction in the rescheduling charges to below 50% of the present level for the time being. Rest pf the charges are being approved as proposed by MSLDC.

6.2.8 **Accordingly, the Commission approves the following Fees as given in the table below:**

Table 114: Fees for FY 2023-24 and FY 2024-25 approved by the Commission

Particulars	Existing Fees	Fees approved in this Order
Registration/Connection Fees	Rs. 20,000 Per Connection	Rs. 20,000 Per Connection
Scheduling Fees	Rs. 2,250 Per Day	Rs. 2,250 Per Day
Re-Scheduling Fees	Rs. 2,250 Per Revision	Rs. 1,000 Per Revision
STOA Application processing Fees	Rs.7,500 per Application	Rs.7,500 per Application
REC Application Processing Fees	Rs 1,000 Per Application	Rs 1,000 Per Application

The Late Payment Surcharge / Delayed Payment Charge leviable by MSLDC shall be as per the charges specified for delayed payments by TSUs under the MYT Regulations, 2019.

7 COMPLIANCE OF EARLIER DIRECTIVES, AND FURTHER DIRECTIVES

7.1 Background

7.1.1 The Commission gave certain directives to MSLDC in the MTR order in Case No 171 of 2017 and MYT Order in Case No. 291 of 2019. The directives, the status of compliance, and further directions of the Commission are set out below.

7.2 Ring-fencing and Autonomy

Directive

7.2.1 The Commission in its MTR order in Case No 171 of 2017 had noted the following:

> *"The Commission appreciates the initiatives undertaken by MSETCL to accord more autonomy to MSLDC especially in terms of making a separate bank account for SLDC operational; delegation of power of Executive Director to CE, SLDC for higher financial autonomy and autonomy for deputing SLDC staff for training and obtaining prior consent of CE, SLDC for posting or transfer of any SLDC employee. However, it is not clear whether the Commission's comments in this matter have been brought to the notice of the State Government and MSEB Holding Co. Ltd. The Commission expects MSETCL to bring the comments of the Commission in respect of ring-fencing and autonomy of MSLDC to the notice of the State Government and MSEB Holding Co. Ltd. and MSLDC is directed to submit a report on the progress in this matter, every six months, to the Commission."*

In the MYT order, in Case No. 291 of 2019, the Commission directed MSETCL to complete the entire process of Ring-fencing and providing complete Autonomy at the earliest. MSLDC was directed to submit a report on the progress in this matter, every six months, to the Commission.

MSLDC's Response and Additional Submission

7.2.2 As on date, notification, by State Government w.r.t formation of separate company for SLDC as per Section 32 of the EA is yet to be issued. However, pending such notification, MSETCL has taken several initiatives in order to achieve financial and operational autonomy to MSLDC.

- MSEB Holding Company Ltd. (**MSEB HCL**) vide Resolution No. 790/2018 dated 28 December 2018 has formulated a committee.
- Further MSEB HCL vide Resolution No. 816/2019 dated 18 June 2019 has accepted the recommendations of the committee and approval of to Board was accorded for the following, viz.
  i. *separation of the State Load Despatch Centre (SLDC) from MSETCL on the same lines as formation of Power System Operation Corporation (POSOCO) and its separation from Power Grid Corporation of India Ltd (PGCIL)*

ii. *Creation of a separate representative Board structure for governance of SLDC on lines of a wholly-owned subsidiary for its independent system operation in accordance with the Electricity Act, 2003 and National Electricity Policy;*

iii. *Creation the post of 'Executive Director' under MSEB Holding Company Limited to head the SLDC after its formation as a separate entity;*

iv. *Approaching the Government of Maharashtra for obtaining necessary approvals, sanctions, permission, etc. as may be required for this purpose; and*

v. *Engagement of any legal, financial, accounting, management or other advisors/consultants/Project managers by whatever name called in connection with the subject;*

- Subsequent to above activities MSEB-HCL has formulated a committee (vide office order no MSEBHCL / CS/0508/ dated 7 August 2019) under Chairmanship the Director (Operations) MSETCL for undertaking further activities related to MSLDC separation from MSETCL.
- The core group constituted held its meeting on 31 August 2019. The core group had decided the following:
  a. The Chief Engineer (SLDC) to prepare and submit detailed information pertaining to the Establishment of SLDC within three weeks.
  b. The Chief Engineer (SLDC) in consultation with Director (Operations) MSETCL to seek approval of the Board of Directors of the MSETCL at the ensuing meeting.
  c. The Chief Engineer (SLDC) to prepare the terms of reference (ToR) of Consultant / Advisor to be engaged in connection with the Subject; For this purpose, reference may be sought from POSOCO and HPLDC etc.
  d. The Chief Engineer (SLDC) in consultation with the core group to prepare the draft of proposal to be submitted to the Government of Maharashtra in accordance with the GR No. sha.sa.u. 10.12/pr.kr.28/saa.u dated 08.01.2014
- MSETCL Board of Directors vide Resolution no. 137/32 dated 5 September 2019 has taken note of MSEB- HCL board resolution No. 816/2019 dated 18 June 2019.
- Accordingly, after approval of the Board of MSETCL, a proposal was submitted by MSEB HCL to the Additional Chief Secretary (Energy) on 17 October 2019 for approval of the State Government (Annexure 6). The summary of the letter is given below.
  a. Transferring the function of State Load Despatch Centre from the Maharashtra State Electricity Transmission Company to the new company

so that the provisions of the Electricity Act, 2003 can be implemented properly and in accordance with the Electricity Act, 2003. Also the "Girish Pradhan Committee" constituted by the Ministry of Power, Government of India has also recommended setting up of a new company for load dispatch centres in its recommendations.

b. Under Articles 5, 17, 22, 34 etc. of the Memorandum of Association of the Company, various powers have been conferred on the Company regarding creation, implementation, management, supervision, control of new subsidiaries.

c. Based on the Board of Directors Resolution No. 816/2019, it has been decided to form an independent company and the new company will be a wholly-owned subsidiary of the company. The Board of Directors of MSETCL has also given the consent in this regard.

d. The newly formed company (Maharashtra State Load Despatch Centre) will be financially independent and will not have any financial investment from the government. Also, the said company will not incur any kind of financial liability to the government.

e. In reality, the new company will be created by dividing the manpower, infrastructure and related equipment included in the MSETCL. There will be no direct or indirect new investment by the government.

f. In order to make load dispatch centres financially and technically independent and autonomous and considering the commercial interest of electricity in the state, it is necessary to separate them from MSETCL (STU).

The Petitioner has submitted the present status of activities pertaining to Ring Fencing as given above. The Petitioner shall update the Commission with regard to further progress in this area from time to time, after receiving information from the State Government.

Commission’s Observations, and further Directions

7.2.3 The Commission has noted the submission of MSLDC. It is observed that the process of Ring fencing has not moved ahead at the pace it was expected. Further, the Commission had directed MSLDC to submit a report on the progress in this matter, every six months, to the Commission. However, MSLDC has not complied with this directive on a periodic basis and only submitted the update at the time of filing of the MTR Petition. MSLDC needs to ensure that the directives of the Commission are complied with in a timely manner.

7.2.4 Further, to assess the level of autonomy enjoyed by MSLDC in its day-to-day operations, the Commission sought certain additional details from MSLDC. The queries raised by the Commission and the responses received from MSLDC are summarised below:

a. MSLDC to provide details regarding the present status of ring fencing at MSLDC covering the details of the administrative, operational and financial autonomy from its parent organisation i.e. MSETCL

MSLDC Response:

MSLDC re-submitted the details of the present status of ring-fencing which was earlier submitted in response to compliance with the directives which outlines the steps initiated by MSLDC for achieving ring fencing and the present status of the same.

Additionally, MSLDC has submitted that MSETCL has accorded autonomy to MSLDC in terms of opening and operating a separate bank account for SLDC operation. Further, the delegation of power of Executive Director to CE, SLDC for higher financial autonomy and autonomy for deputing SLDC staff for training and obtaining prior consent of CE, SLDC for posting or transfer of any SLDC employee has been provided.

Further, the post of 'Executive Director' under MSEB Holding Company Limited is created. Presently Mr Shashikant Jewalikar, CE MSETCL is holding charge of ED MSLDC.

b. MSLDC to outline if there are any operational, financial, administrative dependencies on the parent organisation.

MSLDC Response:

MSLDC submitted that it has full financial autonomy to incur expenditure and invest surplus fund as per MERC directives. Further, most of the work proposals approved at MSLDC level and only a few proposals which are above certain limit mentioned in the GO-I is sent to Parent company i.e. MSETCL for approval. Number of such cases are very few.

c. MSLDC to clarify if it has separate bank accounts (separate from MSETCL) for collecting revenue or incurring expenses.

MSLDC Response:

MSLDC submitted that there is separate bank account for SLDC operation.

d. Does MSLDC have separate working capital limits with banks to fund its requirements.

MSLDC Response:

MSLDC submitted that at present, it utilises its own funds to fulfil Working Capital requirement, however, in case of need for working capital funding in future, MSLDC can approach the banker for the same.

e. MSLDC to explain the cash flow of various revenues and expenses? Whether it is through MSETCL account? Or MSLDC independent account? Whether MSETCL consent is required for utilization of amount for different expenses?

MSLDC Response:

As regards the cash flow, major expenditure is pertaining to Operation & Maintenance expenses, RLDC Fees and WRPC Charges etc. and as regards the cash-inflow, major income are Income from Open Access charges, Income from Investments/LDCD fund, Registration fee (incl. REC and DSM registration), REMC QCA Registration fee, Income from Sale of Scrap and Other Miscellaneous Receipts etc. There is separate and independent bank account for SLDC operation. Further, no consent is required from MSETCL for utilisation of day today expenditure.

7.2.5 The Commission has noted the response of MSLDC and observes that MSLDC enjoys a certain level of autonomy in the day-to-day operations and the dependency on the parent organisation (MSETCL) is limited to a few elements. However, it is intended that MSLDC achieves complete autonomy as envisaged under the EA 2003. Accordingly, MSLDC is directed to pursue this matter with the competent authorities and submit a report on the progress in this matter, every six months, to the Commission. In the absence of such compliance and complete autonomy as envisaged under EA 2003, the Commission is constrained to restrict the additional RoE as per MYT Regulations 2019 as discussed in preceding part of the Order.

7.3 Technology and Operational Systems Upgradation

Directive

7.3.1 The Commission has noted the submissions of MSLDC in respect to technology and Operational System Upgradation. MSLDC was directed to update the Commission and submit the status report every year. MSLDC was directed to strictly follow the timelines specified by the Commission for providing status update.

MSLDC's Reply

7.3.2 MSLDC in its earlier submissions in Case No. 171 of 2017 had submitted its initiatives towards continuous technology upgradation and operational system upgradation. MSLDC had stated that it is a member of various Committees formed under WRPC (where POSOCO is also a member), which includes the SCADA Committee of the Western Region. The SCADA Committee regularly discusses various issues, including the issue of technology upgradation and operation systems required for addressing present and future challenges emerging from market and other developments. Further, MSLDC is also member of URTDSM (Unified Real-time Dynamic State Measurement) scheme of PGCIL and closely associated in its implementation at MSLDC. The interaction with POSOCO at all levels is a continuous process and is going on seamlessly for addressing the day to day operational and long-term challenges. MSLDC in its earlier submissions in Case No. 291 of 2019 had submitted its initiatives towards continuous technology upgradation and operational system upgradation. Further, MSLDC would like to submit specific initiatives for meeting the various challenges.

- **REMC:** Under Green Energy Corridor initiative of the Ministry of Power, Government of India has entrusted responsibility of implementation of Renewable Energy Management Centre (**REMC**) in all RE rich states including Maharashtra. PGCIL is nominated as Nodal Agency for REMC implementation. Implementation by PGCIL includes deployment of Hardware and REMC Application Software at Control Centre which will be funded through Grant Benefit Scheme from Indo-German consortium. The real time data required for REMC from RE generators/pooling stations shall be in scope of respective states to be arranged through concerned RE Generators. Forecasting & Scheduling Software has been implemented in the State w.e.f. 1 July 2019 on trial basis and implemented commercially w.e.f. 6 January 2020. As on date 128 Nos. of PSS having installed capacity of 7618 MW (Wind: 4992 MW; Solar: 2626 MW) has been registered in REMC and scheduling of the said capacity is carried out through REMC.

  At the time of DPR preparation, MSLDC had identified 66 Nos. of RE Pooling Sub-stations connected to intra-state transmission system for availing forecasting services. However, day by day, the RE installation is increasing and hence, to integrate the additional capacity for forecasting, separate order for availing Power & Weather forecasting services has been issued to the vendor vide PO No. 3100040986 dt: 07-08-2022. Thus, forecasting of total 121 Nos. of PSS having installed capacity of 7381 MW (Wind: 4992 MW; Solar: 2389 MW) is presently carried out through REMC. As the estimated number of PSS for the year 2022 has increased above 121, administrative approval for integration of additional PSS (20 Nos. for 2022 & 34 Nos. for 2023) for availing forecasting services has been sought. The forecasting of remaining 7 Nos. of PSS has been started. Thus, provision of additional 13 Nos. and 27 Nos. of PSS is available for year 2022 and year 2023 respectively.

- The **DSM Regulations** were notified by the Commission on 1 March 2019, wherein the Commission has specified the date for coming into force of these Regulation which shall not be later than 1st April 2020. After the notification from the Commission, the budgetary offer for developing DSM software were sought from various software developers. After tendering, the contract was finalized and total cost quoted by the vendor includes the cost of DSM software development along with integration DSM software with other software, Cloud hosting charges and AMC cost for three years post expiry of 03 years warranty period.

- **Addressing difficulties in FBSM:** The Commission had issued final Order in

Case No. 297 of 2018 wherein MSLDC is directed to consider the rate of power purchased from the Power Exchange and Captive Power Plants (CPPs) for Weighted Average System Marginal Price (WASMP) calculation in FBSM bills. Therefore, MSLDC had awarded work order to M/s SIEPL (formerly L&T) to carry out necessary changes in the software so as to incorporate those changes along with some feature for speeding up processing time. Accordingly, a new patch has been developed on .NET platform to speed up the process of reports downloading along with bill generation and also reduced frequent instances of software malfunctioning. Also additions of new deemed distribution licensees along with some modification in the modules related to scheduling billing was undertaken for multi-tasking & smooth functioning.

- **Monthly Transmission Loss assessment through SAP-ERP:** MSETCL and MSLDC had developed a system for loss computation on monthly basis through ERP-EAS system and Transmission System Loss figures for last month are being displayed on MSLDC website by 20th of every month. However, Transmission Loss Accounting is one of the module developed in the DSM software and as per the Commission's Suo-Motu order dated 7 October 2021, the commercial settlements as per the DSM Regulations commenced in the State from 11 October 2021. The monthly Transmission Loss is calculated through this module from the month of October-2021.

- **IT infrastructure:** For establishment of Security Operation Centre (SOC), Video Wall Display Unit along with desktop Computers are required in SOC Room at SLDC Airoli. Further, high end desktops are required for carrying out VAPT (Vulnerability Assessment and Penetration Testing) of Web Applications and SCADA applications. For this purpose, Work order was issued on 31 March 2022 in FY 2021-2022. Further MSLDC has initiated process of developing new mahasldc.in website and hosting it on cloud. Further, for protection of SCADA network from any cyber threat, 2 Nos. of NGFW Firewalls has been proposed to be procured before end of support of existing Firewall i.e., before 24 January 2024. In view of development of new MAHASLDC website, the servers need to be upgraded with latest H/W configurations in FY 2023-2024. 2 No's of Cisco routers needs to be procured before end of life of existing Cisco routers.

- **Renovation and modernization of existing SCADA at SLDC and ALDC:**

  SLDC control center: SLDC control center is responsible for the grid management in real time operations; this activity is just like ATC (Air Traffic Control) in the aviation. The SCADA system provides the system operator a real time view of the power system with exception/alarms and status of various network elements. Any mishap or failure of the SCADA system in real time operation may lead to improper grid handling & wrong decisions which may impact on technical as well as commercial aspects. Present SCADA System is in operation at SLDC Airoli and ALDC Ambazari since 7 January 2013 and its

AMC has been extended up to 7 July 2025. The present SCADA system has been in service for more than 7 yrs. As per CERC regulations, the service life defined for a SCADA system is 7 years and hence the present SCADA system has lived its service life.

Due to technological advances following limitations are also observed in the present SCADA system:

a. Hardware support for existing Servers has become critical as software availability of old hardware has become rare. Easy availability of spares of hardware's has become scares. The OEM stopped manufacturing server spares as it is old technology.

b. Data storage limitations

c. Multiple user access to SCADA is limited.

d. Remote Access to servers through VPN is not possible in Present System.

e. As user interface is Linux based in present system, it's not user friendly for operators. Graphical User-interface is not handy, comfortable like windows-based system. New Systems with Window based User interface which is more operation friendly are available these days.

f. Reports generation as per Operators requirements is not possible

g. Processing speed is low

h. Availability of hardware Spares has become difficult, due to technological up gradations with time

In view of above, the present SCADA System at SLDC Airoli and ALDC Ambazari is essential to be upgraded and replaced by new SCADA and latest IT security measures with state of art features and functionalities & compatible to large number of MSETCL RTUs /CPP/IPPs which may be integrated in SCADA in near future.

POSOCO (Power system Operation Corporation Limited) has requested MSLDC to be a part of Unified Load Despatch Center Scheme (ULDC scheme). Under this arrangement POSOCO shall act as consultant for new SCADA for Western region LDCs at no consultancy cost and MSETCL/ STUs has to pay the project cost for replacement of MSLDC/RLDCs SCADA system discovered through open tendering process by WRLDC.

- **DLR application in WAMS System**

The Development of software tools for DLR application in WAMS System by reputed government engineering institutions in Maharashtra to provide Decision support systems using Artificial Intelligence/Machine learning/Data Analytics for control room operator at SLDC, Airoli is under process. The Dynamic Line Rating (DLR) system to ascertain real time loading capacity of critical lines. A brief description of the DLR using Synchrophasor technology and AI tools is given below:

a. The PMU data-based DLR as transmission line temperature monitoring tool with an intended application towards facilitating dynamic line rating. The tool is required to estimate and track the temperature of a 3-phase transmission line segment. The novelty of this temperature monitoring tool is that no additional temperature measurement sensors are required to be placed along the line. The tool is based on an algorithm which gives accurate resistance estimates in presence of bias errors in the measurement sensors. The performance of the tool is demonstrated utilizing data from PMUs installed at both the ends of line. The temperature estimates given by the monitoring tool can predict the dynamic thermal state of the line for forecasted power-flow scenarios.

b. To improve the accuracy of estimates, Machine learning tools is used. This application is selected to utilize some critical transmission lines up to thermal limits as the thermal limits are based on conductor temperatures which depends upon ambient temperatures, wind speed and solar irradiance settings for transmission line overloads can be varied seasonally based on DLR data. DLR using AI/ML is having advantage of higher accuracy.

c. DLR offers many applications and benefits to the existing powers system. One such characteristic is to reduce congestion in the power system and utilisation of total transmission capacity / available transfer capacity of the power system as it improves efficiency by optimal utilisation of the lines. DLR can contribute to improved MMR region TTC/ATC by effectively utilizing existing capacity of lines. The MMR TTC/ATC of approximately 1750 MW/1800 MW along with DLR of the lines selected viz. 400 kV Airoli-Talegaon ckt, 400 kV Padge - Airoli ckt I, 400 kV Padge - Airoli ckt II and 400 kV Kharghar-Talegaon can be effectively utilized dynamically to manage the Mumbai region internal power generation as currently static parameters are in consideration.

- **Alert Messaging:** One of the recommendations of the Committee constituted by the Govt. of Maharashtra for analyzing the Mumbai Grid Disturbance occurred on 12.10.2020 was related to alert messaging depending on the situation. Based on the same, pilot project for three months was initiated by MSLDC. After analyzing the results, a scope of work of the scheme has been proposed to expand the scope of said system for the whole State for generating alerts in case of:
    - Tripping or any 765kV, 400kV Transmission elements viz. Lines, ICTs.
    - Demand Curtailment in the event of heavy Overdrawal, Load-Generation imbalance of any Discom, etc.

    - RE Curtailment in the extreme emergency conditions,
    - Mumbai Transmission Constraints.

- **Scheduling Software:** The Commission has notified MERC (Deviation Settlement Mechanism and Related Matters) Regulation 2019 on 1 March 2019. For the implementation of DSM Regulation in the State of Maharashtra, SLDC has developed web-based scheduling Software which is commercially commenced from 11 October 2021.

  Generators with installed capacity exceeding 25 MW and (Distribution Companies) Discoms have been brought under deviation regime in the state of Maharashtra. As per the applicability, Generators enter their day ahead availability and Discoms enter their forecasted drawal through web access of DSM- scheduling software. As per the constraints/condition both sellers & buyers have access to revise their schedules in the software.

  The schedule to State entities is published for 1-to-96-time blocks by considering Merit Order Despatch (MoD) Principle as below:

  a. The day ahead Load-Generation balance is achieved through this scheduling software by decentralized MoD operation (Discom-wise) by considering all resources and drawl of respective State Discoms.

  b. In intra-day, Load-Generation balance is achieved automatically by auto-operation of decentralized MoD for each 15-minute time block.

  The time block-wise deviation is computed for all State Entities, based on the actual meter readings made available by State Transmission Utility (STU) at State Energy Accounting Centre at MSLDC by way of Automated Meter Reading (AMR) facilities and the implemented schedule of the state entities in DSM software.

- **Web-based Outage Management System:** Web-based Outage Management System for processing of various planned outages on Transmission elements has been developed and implemented w.e.f. 1 August 2018. Thereafter, MSLDC has developed Emergency outage system in Web-based Outage Management System and same is implemented w.e.f. 8 March 2021. Standard operating procedure for Outage planning and separate procedure for planned outage management for Mumbai and MMR Region is developed and published on MSLDC Website.

Commission's Observations, and further Directions

7.3.3 The Commission has noted the submissions of MSLDC. The Commission had directed MSLDC to submit a report every year to update the Commission regarding the technology and operational system upgradation. However, MSLDC has not complied with this directive on a periodic basis and only submitted the update at the time of filing of the MTR Petition. MSLDC needs to ensure that the directives of the Commission are complied with in a timely manner. Accordingly, MSLDC is once again directed to submit a report every year to update the Commission regarding the technology and operational system upgradation.

7.4 Preparedness of SLDC in handling future challenges

Directives

7.4.1 The Commission in its order on Case no. 291 of 2019 had directed as follows:

> *"The Commission has noted the submissions of MSLDC.* ***MSLDC should update the Commission on the aforementioned initiatives on a quarterly basis****. Further, MSLDC has filed a Petition recently which is registered as Case No. 59 of 2020 on 25 February, 2020, seeking extension of time to re-compute the Weighted Average System Marginal Price (WASMP) for the period from FY 2011-12 to FY 2017-18 after including the rate of power purchased from the Power Exchange and CPPs and subsequent issuance of bills with revised WASMP as per Order dated 26 September 2019 in Case No 297 of 2018. The Commission will take appropriate view in the said matter. However, MSLDC shall adhere to the timeline of One Year prescribed by the Commission for computation of the Fixed Cost Reconciliation (FCR) Pool Volume and FCR Pool Value for the period from FY 2011-12 to FY 2017-18 and issue the final bills for settlement of fixed charge reconciliation pool amongst State Pool Participants."*

MSLDC's Reply

7.4.2 Subsequent to submission made under Case No. 291 of 2019, MSLDC has taken following initiatives.

- **Timely issuance of FBSM bills:** Weekly FBSM bills up to fourth week of December-18 issued (Total 88 bills issued). Outsourcing personnel recruited by MSLDC for speeding up the FBSM billing work which resulted in issuance of nearly 6-8 bills per month instead of only 2-3 bills earlier. Replica of application server prepared which enabled more operation to be performed by engineer. New Database server installed with high end features.
- **Implementation of F&S and DSM for Solar & Wind Generation Regulations-2018:** The Commission has notified MERC (Forecasting, Scheduling and DSM for Solar and Wind Generation) Regulations 2018 on 20 July 2018. The Regulations is commercially implemented in the state form 6 January 2020. Total 10 numbers of Qualifying Co-ordinating Agencies (QCA) are registered and total Pooling Sub-Station (PSS) are 128. At present, 4644 MW for wind and 2522 MW for Solar are scheduled. MSLDC issues the weekly REDSM bills on Monthly basis. MSLDC has issued REDSM bills up to the month of August-2022.

- **Establishment of Cyber Security Operation Centre (CSOC) at MSLDC Airoli:** Cyber security is one of the most prominent challenges faced by the power sector nowadays. Establishment of Cyber Security Operation Center (CSOC) is in progress at SLDC Maharashtra. CSOC will be having information security team responsible for monitoring and analyzing the security posture of SLDC Maharashtra. The Manpower deployed for SOC will operate 24x7 and collect, monitor, analyses, investigate and remediate security incidents related to Cyber Security.

  For establishment of the SOC procurement of Cyber Security Tools such as SIEM, Next Generation Firewalls, EDR, WAF, Anti-Advanced Persistent Threats (APT) etc. by Corporate Office is in progress.

  For monitoring of Logs in CSOC, this office has procured the Video Wall Display Unit (2x2) with Controller and management software. Further this office has initiated the process for infrastructure development of CSOC Room.

- **Technology and Operational System Upgradation**
  Active Directory Implementation: Active Directory Management Solution has been implemented by this office, in order to have centralized user administration & implementation of Centralized Policy in respect of Cyber Security. This office has implemented the centralized password management policy with the help of Active Directory. Active Directory is also useful for Centralized Access Control implementation. Remote Access, USB and other controls has been restricted using the concept of a domain with the help of Active Directory.

  Automated Backup System Implementation: Implementation of Automated Backup System is under process by the MSLDC. Considering the critical applications hosted at MSLDC Data Centre, it is necessary to have the automated backup system in place for the critical applications and data. This system will be responsible for automated backup based on the predefined backup schedule such as daily, weekly & monthly. Backup Strategy for incremental backup, full backup and BMR (Bare Metal Recovery) will be designed. Additionally, backup will also be taken on Tape Library automatically. Tapes can be placed at ALDC Ambazari or any other Location at periodic interval. In case of any disaster occurs to the Backup Appliance, Data can be recovered through Tapes.

- **Telecommunication Systems:** Complete real-time data of the State and Regional Grid is of prime importance for enabling the Power System Operator to take real-time decisions for monitoring and issuing instructions to field Engineers for controlling the Maharashtra State Power System. Presently, Maharashtra State has managed to capture 37% (including 100% 400kV and 765kV S/s visibility, 71% visibility of 220kV S/s, 14.3% visibility of 132kV, 110kV and 100kV S/s) of the complete real-time data of the Maharashtra State

Power Grid. Redundancy of Communication Links has been ensued at DC Level for ensuring least downtime of real-time SCADA data. Fiber Optic and VSAT Communication medium are presently utilized for capturing the real-time data of Maharashtra State Power System. ACI&P Office (C.O.) is planning for 100% real-time of SCADA data for all MSETCL Substations.

- **Cyber Security:** Cyber security is one of the most prominent challenges faced by SCADA System Engineers. Modern SCADA Systems are demilitarized into Internal and External Demilitarized Zones for overcoming Cyber intrusion and safeguarding the core SCADA Systems. The various measures taken for ensuring Cyber Security include:
    - Conducting third-party VA-PT audit periodically and as per requirement.
    - Installing Cyber Security SIEM tools for monitoring Cyber intrusion in Cyber SOC.
    - Complying with the directives issued by CSK (Cyber Swachchata Kendra).
    - Imparting Cyber Awareness to OT personnel through various Certification Programs.
    - User authentication.
    - User authorization.
    - Restricting remote access.
    - IT-OT air-gapping.
    - Restricting the number of active ports (open).
    - Periodically resetting crucial System passwords.
    - Maintaining records for every change made in the system.
    - Restricting unauthorized access to telemetry/SCADA Server Rooms, etc.

  NPTI has organized various Certification and training Programs for imparting Cyber Security Awareness to the SCADA Engineers working in SLDCs and Field Engineers working in environments where OT controls are commissioned. ACI&P Office (C.O.) is planning for 100% real-time of SCADA data for all MSETCL Substations.

- **Islanding Scheme displays:** As per instructions from HLC and latest CERC directives, it is mandatory to create SCADA displays for enabling Power System Operators to monitor the vital parameters for maintaining healthiness of the various islands in the State. Maharashtra SLDC has prepared the islanding displays for Uran Islanding Scheme and Mumbai Islanding Scheme. Nagpur Islanding Scheme is still in planning stage and awaiting completion.

- **Integration of URTDSM data in SCADA System**: The data of URTDSM System is to be made available in SCADA System thus enabling the Power System Operator to take a glance of real-time PMU data for real-time monitoring of Maharashtra State Power System.

- **Implementation of Reactive Energy Accounting Framework:** The Commission has issued notification on 9 March 2022 in the matter of Implementation of Reactive Energy Accounting Framework for Intra-State Hydro Electric Generating Stations in terms of the applicable provisions of the MERC (State Grid Code) Regulations, 2020. Vide this notification, the Commission has directed for implementation of mechanism for Accounting and Settlement of Reactive Energy Charges shall be introduced in phased manner and in the first phase of this mechanism, only Hydro Generators are covered when operated under condenser mode operation under instructions from MSLDC. The implementation of instruction based Reactive Energy Accounting for Intra-State Hydro Electric Generating Stations commenced from 14 March 2022 as per notification dated 9 March 2022. As on 11 October 2022, MSLDC has issued 29 weeks Reactive Energy bills (total amount paid is Rs 730.28 Lakhs) to MSPGCL as per the time line specified in the notification.

Commission's Observations, and further Directions

7.4.3 The Commission has noted the submission of MSLDC. Further, MSLDC should update the Commission on the aforementioned and other initiatives taken up by MSLDC on a quarterly basis.

7.5 Reactive Energy Charges

Directives

7.5.1 The Commission directed MSLDC to implement settlement mechanism as per provisions of State Grid Code. The settlement of the reactive energy was not implemented in the past. In the absence of any recovery mechanism, MSLDC had not received any payments towards these charges. However, the Commission is approving the costs claimed by all the Generators and Licensees in their respective ARRs for the past period, subject to prudence check, it is not proposed to undertake any settlement of the Reactive Energy Pool and the charges for the past period i.e. up to FY 2019-20. As regard applicability of reactive energy charges mechanism for future period, i.e. FY 2020-21 onwards, would be in accordance with the procedure for accounting and settlement of Intra- State reactive energy charges which would be notified separately by the Commission.

MSLDC's Reply

7.5.2 In Case No 291 of 2019, MSLDC has submitted that it has taken up the issue of reactive energy balance and reactive energy pool settlement. The Commission has notified the "Implementation of Reactive Energy Accounting Framework for Intra-

State Hydro Electric Generating Stations in terms of the applicable provisions of the MERC (State Grid Code) Regulations, 2020" on 9 March 2022.

- The Generating Stations were required to inject/absorb the reactive energy into the grid on the basis of machine capability as per the directions of MSLDC. Also, as per the Regulation 70.2 of MYT Regulations 2019, the reactive energy exchange, only if made as per the directions of MSLDC for the applicable duration (injection or absorption) shall be compensated/levied by the/ to the Generating Station, as specified in the applicable State Grid Code Regulations.
- MSLDC, vide its letter dated 23 December 2021 had submitted its preparedness for partial implementation of Reactive Energy Accounting Mechanism for Hydro Generators. Accordingly, MSLDC tested the reactive energy accounting model for the reactive power injected/absorbed by hydro generator. MSPGCL had requested for payment for the above model through the DSM pool. MSLDC on 27 January 2022, had submitted draft procedure and the DSM Working Group discussed with key stakeholders on 31 January 2022.
- The DSM Working Group further submitted its report on 22 February 2022 providing its views on the commencement of Reactive Energy Accounting framework. Based on the Commissions directives to introduce the Reactive Energy Accounting in phased manner starting from March 22, and starting from the hydro projects, MSLDC had initiated the weekly accounting. The payment of reactive energy charges to MSPGCL from DSM pool is also initiated by MSLDC and had paid Rs. 730.28 Lakhs till 11.10.2022.
- Further for implementation of 100%-meter data through Automatic Meter Reading (AMR) is underway which will facilitate further recording and billing of reactive energy. Reactive Energy data of 220 nos. non-AMR is not available to MSLDC. MSLDC is further studying the reactive energy compensation requirements and any status on preparedness for operationalize the subsequent phase of Reactive Energy Accounting framework.

Commission's Observations, and further Directions

7.5.3 The Commission notes the submissions of MSLDC. MSLDC shall update the Commission regarding the progress made towards operationalisation of the Reactive Energy Account Framework including timelines envisaged for the implementation on a quarterly basis.

7.6 Submission of DPRs for new schemes and in-principle approved to lapsed schemes

Directives

7.6.1 The Commission directed MSLDC to approach the Commission for revised in-principle approval for the lapsed scheme along with justification for delay for such schemes. Further, in respect of new schemes for which DPRs were not submitted, MSLDC was directed to submit the same within three months.

MSLDC's Reply

7.6.2 After the order on Case no. 291 of 2019, MSLDC has submitted following new DPRs for fresh approval, the details of which are already covered in previous sections.

- Development of software for scheduling & despatch, deviation settlement and state energy accounting activities
- Automatic fire suppression system with monitoring system for SCADA and various equipment at ALDC

7.6.3 Further, the Petitioner has submitted the DPR for Alert Messaging System. The Petition will submit the remaining DPRs, as projected under future capitalization scheme, in time before implementation of those schemes after preparation of DPRs before the Commission.

7.6.4 For lapsed scheme of Sub-LDCs, the Petitioner has not projected any expenditure up to FY 2024-25. The Petitioner will discuss the matter internally and if any new development happens in between, the Petitioner will surely inform the Commission in this regard. Also, regarding the 'Class I type staff quarter & Guest House, Recreation Hall & Gymnasium' scheme, which was not approved earlier, the Petitioner has projected only capital expenditure in FY 2024-25 (last year in the present control period). The Petitioner is planning to implement scheme step by step depending on the requirement and financial expenses. The DPRs will be prepared and submitted before the Commission before implementation.

Commission's Observations, and further Directions

7.6.5 The Commission has noted the submission of MSLDC. Further, MSLDC is directed to follow the guidelines notified by the Commission vide Maharashtra Electricity Regulatory Commission (Approval of Capital Investment Schemes) Regulations, 2022 for capex approvals.

7.7 Commission's rulings regarding non-compliance of Directives by MSLDC

7.7.1 The Commission has examined the status of compliance of MSLDC with the directives issued by the Commission in its previous MYT Order. Based on the review it has been observed that MSLDC has not been complying with many of the directives in a timely manner and has not been submitting the periodic updates on various activities as sought by the Commission including ring fencing of MSLDC. This is being viewed as non-compliance of MSLDC of the directives by the Commission and which needs to be treated according to the provisions of the Electricity Act, 2003.

7.7.2 Accordingly, the Commission in the present Order has already initiated such action by not allowing MSLDC to recover the additional RoE in absence of any framework to assess the performance as per MYT Regulations 2019. As per the directive in the past MYT Order, MSLDC was required to approach the Commission with a proposal to fix up the performance norms or KPIs within 3 months of the MYT Order i.e. by the end of June 2020. The timely submission on part of MSLDC would have provided sufficient time for deliberations prior to fixing of the norms. However, MSLDC approached the Commission only in April 2022, i.e., after completion of the years FY 2020-21 and FY 2021-22 for which truing up is being considered in present Petition.

7.7.3 In view of the non-compliance, MSLDC has been directed to resubmit its proposal within three months from the issue of this Order with a detailed proposal and it has also been clarified that the framework to be approved by the Commission will be applicable on a prospective basis only. Further, in the absence of complete autonomy to MSLDC as envisaged under EA 2003, it would be difficult to monitor the performance evaluations required for allowing additional RoE as per MYT Regulations 2019 as discussed in preceding part of the Order.

7.7.4 The Commission in the future as well will treat the non-compliance to directives very seriously and initiate action for any non-compliance as deemed appropriate including the penalty as envisaged under provisions of EA2003.

New (in addition to the pending) Directives to MSLDC

7.8 Submission of revised proposal to determine the key performance indicators/ norms for claiming the return on equity

7.8.1 In Section 3.11.12 of this Order, the Commission has directed MSLDC to approach the Commission with the proposal to fix the performance norms or Key Performance Indicators based on which MSLDC will be entitled to claim Additional RoE of 1.5% at the time of truing up within 3 months of this Order.

8 APPLICABILITY OF THE ORDER

This Order shall come into effect from 1 April, 2023.

The Petition of the Maharashtra State Load Despatch Centre in Case No. 233 of 2022 stands disposed of accordingly. The Fees and Charges approved in this Order shall remain in effect till any subsequent revision.

Sd/-	Sd/-	Sd/-
(Mukesh Khullar)	**(I. M. Bohari)**	**(Sanjay Kumar)**
Member	**Member**	**Chairperson**

(Abhijit Deshpande)
Secretary

Appendix – I

List of persons at the Technical Validation Session (TVS) on 24 November, 2022

Sr. No.	Name	Organisation
1.	Shri S.V. Jaltare	MSLDC
2.	Shri M.B. Bhagwat	MSLDC
3.	Shri Eknath Dengale	MSLDC
4.	Shri Surendra Pimparkhedkar	Consultant for MSLDC
5.	Ms Seema Dubewar	MSLDC
6.	Shri Anand Dhavale	Consultant for MERC

Appendix – II

List of persons at the Public Hearing on 24 January, 2023

Sr. No.	Name	Organisation
1.	Shri Shashank Jewalikar	MSLDC
2.	Shri M.B. Bhagwat	MSLDC
3	Seema Dubewar	MSLDC
4.	Shri Surendra Pimparkhedkar	Consultant for MSLDC