



CIN -U40109MH2005SGC153645

Maharashtra State Electricity Distribution Co. Ltd.

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Ref. No.: SE/TRC/MYT-2024/01147

Date: 10.01.2025

To,
The Secretary,
Maharashtra Electricity Regulatory Commission,
13th Floor, Centre No. 1, World Trade Centre,
Cuffe Parade, Mumbai-400 005.

Subject: MSEDCL's Multi Year Tariff (MYT) Petition for Final True Up of ARR of FY 2022-23 & FY 2023-24, Provisional True Up of ARR of FY 2024-25 and Projections of ARR and determination of Tariff for the 5th Multi Year Tariff Control Period for FY 2025-26 to FY 2029-30 (Case no. 217 of 2024) – Submission of replies to Data Gaps Set-3 & Set-4.

Reference: 1. Letter no. SE/TRC/MYT-2024/37313 dated 29.11.2024.
2. Email dated 25.12.2024 & 04.01.2025 from MERC regarding Data Gaps Set-3 & Data Gaps Set-4 respectively.

Respected Sir,

As per the provisions of MERC (MYT) Regulation 2024, MSEDCL has submitted its Multi Year Tariff (MYT) Petition for Final True Up of ARR of FY 2022-23 & FY 2023-24, Provisional True Up of ARR of FY 2024-25 and Projections of ARR and determination of Tariff for the 5th Multi Year Tariff Control Period for FY 2025-26 to FY 2029-30 vide letter under reference (1). Hon'ble Commission vide its email under reference (2) has raised Data Gap Set-3 & Set-4 in respect of the said petition.

In this regards, MSEDCL is hereby submitting the replies to MYT Data Gaps Set-3 & Set-4 along with replies to balance queries of Data Gaps Set-1 & Set-2 , copy of which is enclosed herewith.

This may please be taken on record and be placed before Hon'ble Commission for its kind consideration.

Thanking you.

Encl: As above

Sd/-
Director (Commercial)
MSEDCL

Reply to Balance Data Gaps Set-1

Petition of M/s Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for Final True up of ARR for FY 2022-23 & FY 2023-24, Provisional True up of ARR for FY 2024-25 and Projections & ARR for 5th control period for FY 2025-26 to FY 2029-30. (Case No. 217 of 2024)

MSEDCL submits that the reply to balance query no. 24, 25, 26, 27, 29, 30, 31, 32, 43, 53, 63, 69, 74, 88, 92(c), 95(a), 100, 101 & 102 is incorporated in the revised petition.

MSEDCL had submitted the reply to data gap set 1 on 20th Dec 2024, the reply to balance queries is submitted as below.

Category Wise Sales –

Query 2. Para 2.3 Category Wise Sales for FY 2022-23 & FY 2023-24 & Table 1

- a. MSEDCL has submitted the energy sales of agricultural consumers for FY 2022-23 and FY 2023-24 as below:

Category	FY 2022-23			FY 2023-24		
	As per MYT Order	Actuals	Deviation	As per MYT Order	Actuals	Deviation
Agriculture Sales (MU)	27953.45	37666.04	9712.59 (34.74%)	28,176.6	41314.3	13137.70 (46.62%)

- b. There is a significant deviation in agriculture sales w.r.t. the sales approved in MTR Order Case no. 226 of 2022.
- c. MSEDCL was directed to maintain meter data of identified feeders or more feeders. Additionally, it has mentioned that the Commission will take detailed review of operationalization of Feeder Input Based Methodology for determination of sales at the time of truing-up of FY 2022-23 to FY 2024-25. Relevant extract of the MTR Order is as quoted below:

“The Commission, notes the submission of MSEDCL that it has filed appeal before the Hon’ble APTEL against the methodology adopted by the Commission for assessing the AG sales, however, the Hon’ble APTEL has not granted stay to the Commission’s MYT Order in Case 322 of 2020. So, MSEDCL was expected to follow the methodology adopted by the Commission while assessing the AG sales in this Petition. The Commission during public hearing has also expressed its displeasure for not following its directions. Accordingly, the Commission directs MSEDCL to maintain the meter data of identified feeders or more feeders and the Commission would undertake a detailed review of the operationalization of Feeder Input based methodology of determination of AG Sales at the time of truing up of the FY 2022-23 to FY 2024-25. The outcome of results and methodology finalised through this exercise shall form the basis for approval of AG sales for future years only.”

- d. In line with the above directive, MSEDCL should justify the same with appropriate details of

methodology used for computation of AG sales. Further, MSEDCL should provide break-up of deviation in sales to metered category and deviation to unmetered category.

- In addition to the above, MSEDCL should submit the following in Excel format.
 - Circle-wise consumption recorded on separated AG feeders (along with information of connected load, no. of AG consumers)
 - Circle-wise consumption recorded on Feeders with SDT (along with information of connected load, no. of AG consumers)
 - Circle-wise consumption recorded on Feeders in Single Phasing Scheme (along with information of connected load, no. of AG consumers)
 - Circle-wise consumption recorded on other Feeders with AG consumers (along with information of connected load, no. of AG consumers)
 - Circle-wise and month-wise details (for FY2022-23 and FY 2023-24) of AG consumers (metered and un-metered), connected load (HP) (metered and un-metered) and billed units (metered and un-metered)
 - Circle-wise consumption recorded on Feeders with SDT (along with information of connected load, no. of AG consumers)
- e. MSEDCL shall submit the feeder wise annual consumption data of 502 feeders selected for AG study conducted by Commission for FY 2022-23 & FY 2023-24.
- f. Further, in MTR Order Case no. 226 of 2022, MSEDCL is directed to complete exercise of installation of pre-paid meters and submit the action taken report. The relevant extract from MTR order is given below:

“the Commission expresses its displeasure that even after 3 years since issuance of MYT Order in Case No. 322 of 2019, the MSEDCL has not yet implemented pre-paid metering for agriculture with HVDS connections. There is no plan or timeline submitted for completion of this activity as on date.

The Commission hereby directs that MSEDCL should complete exercise of installation of pre-paid meters for agriculture consumers with HVDS connections expeditiously and submit action taken report along with next tariff filing exercise.”

- g. Accordingly, MSEDCL needs to submit the action taken report.

Distribution Losses

Query 4. Para 2.4 – Distribution Losses & Form 1.3

MSEDCL has submitted that the actual distribution loss (excluding EHV sales) achieved by MSEDCL for FY 2022-23 and FY 2023-24 are 16.49% & 17.95% against the approved figure of 14% and 13% respectively in the MTR Order.

Particulars	FY 2022-23 (Approved)	FY 2022-23 (Actual)	FY 2023-24 (Approved)	FY 2023-24 (Actual)
Distribution Loss	14%	16.49%	13%	17.95%

- a. It is understood that MSEDCL had filed an appeal before Hon'ble APTEL regarding issues related to AG sales. The matter is under sub judice. Hence, for scrutiny of the current petition, MSEDCL shall submit the methodology adopted by MSEDCL to estimate AG sales and distribution loss along with excel spreadsheet with detailed computations of circle-wise energy input, agriculture sales, and distribution loss for FY 2022-23 & FY 2023-24.

- b. In Form 1.3. the total MSEDCL Energy Input, Direct Sales, Total Output shall be summation of the circle wise respective numbers. MSEDCL to link the numbers and submit formula driven excel computation.

MSEDCL Reply:

Reply to Query 2d – AG Methodology and Query 4 Point a & b is attached as **Annexure Datagap Set 1_Query 2 & 4.**

Query 6. AG Sales

- a. MSEDCL in the petition has mentioned that the data of 1168 feeders (in addition to 529 Ag feeders) is considered for feeder input-based Index based Ag billing in Sept 2023 quarter and the data of same is displayed on the website.
- b. However, as per the directives given in the MTR Order Case no. 226of 2022, MSEDCL needs to incorporate such feeder wise data as a part of MYT Petition. The relevant extract of the same is reproduced below:

“Hence, the Commission is not inclined to consider this additional submission and is of the considered view to consider the feeder input based AG Index as approved under its MYT Order in Case 322 of 2019 for estimation of AG sales in present MTR purpose as well. Further, the Commission notes that improvements in the feeder-based input methodology, enhancement of sample size, selection of feeders strictly in accordance with the principles, methodology and conditions outlined under the MYT Order in Case 322 of 2019 is a continuous process for further refinements in assessment of AG sales, which MSEDCL should continue. MSEDCL should submit such information in public domain from time to time in accordance with conditions outlined under MYT Order and also incorporate the same as part of next tariff revision filing in timely manner.”

- c. Accordingly, MSEDCL needs to provide the data of the above feeders as part of the petition.

MSEDCL Reply:

MSEDCL submits that the requisite data for query 6 is attached as **Annexure Datagap Set 1_Query 6-1 and Annexure Datagap Set 1_Query 6-2.**

Query 7. Technical Losses

- a. MSEDCL submitted that it has computed the technical losses of 148 feeders out of 502 selected feeders and the computed average losses of these feeders comes to 8%.
- b. MSEDCL to justify the selection of only 148 feeders out of 502 feeders and basis of selection of 148 feeders. Additionally, MSEDCL shall also needs to provide the methodology adopted for computation of technical losses.

MSEDCL Reply:

MSEDCL submits reply to point a, b below:

MSEDCL has planned to complete the technical loss calculations of 533 MERC selected feeders. For accurate calculation of technical losses & energy losses index / percentage level of 11KV AG Feeders, following technical data is required / considered.

- Electrical Single line diagram starting from 33/11KV substations up to Distribution Transformer (11/0.415KV) including low Tension lines up to consumer level.

- Single line diagram containing complete electrical network information such as Transformer ratings, (11KV & 415V) distribution line conductor/cable type & size and length consumer no, connected load details (HP rating of AG connections).
- 11KV AG feeder peak loading information, metered data for complete day / month with hourly/30 min interval records.
- Usage of accurate Equipment database / technical parameters for performing network analysis on AG feeders.
- Considering the large data and voluminous work, till date 226 feeders loss calculation is completed and the remaining feeder loss calculation is in process.

Survey & Data Collection

MSEDCL gathered detailed electrical network data for creation of complete AG feeder model in software as mentioned above. This network data is fed, validated and verified for its correctness. All collected network data including connected AG consumers, their names, consumer numbers connected load rating in HP and connectivity to respective LT pole no. is available with MSEDCL in Excel sheets & PDF file format.

Loading of AG Feeders – Peak & MDAS (Profile)

Network Modeling in CYMDIST Software

MSEDCL have prepared detailed equipment library as per the OEM technical datasheet & available IEEE, IS & IEC standard data of various equipment. These technical parameters are being used to perform analysis. Using CYMDIST Software each AG feeder network model is created and respective data of each consumer is entered to software as Spot Loads (Connected KVA). Water pump HP Ratings are converted to KVA.

MSEDCL have system in place to measure and record the peak loading and loading at scheduled interval of each 11KV feeders. MSEDCL have decided to use this actual recorded data to compute actual technical and energy losses in the system.

The Peak loading data of each AG feeder is used to perform load demand allocation. The data used is Peak (Amp & PF) during that month.

It is also decided to use hourly, or 30 min scheduled interval measurement data of AG feeder for performing load demand allocation. Please find below the recorded demand data from our MDAS system which is being used to compute technical losses.

For detailed calculations daily and monthly Load profiles data is used.

MDAS (Meter Data Acquisition System) provided continuous load profiles over time. This system is instrumental in gathering real-time and historical data on feeder loads, voltage levels, and energy consumption patterns. We incorporated this dynamic load profile data to analyze the actual load variation across different time intervals.

Analysis – Load Demand allocation

The best worldwide technically proven methodology for power distribution network analysis is used. The Load demand allocation on measured load demand and connected load or consumptions KWH.

In this case since each consumer do not have specific energy meter installed, the HP rating of each consumer is considered as Connected KVA load and load demand allocation is performed based on Connected KVA method. Initially Peak load demand is allocated to the network by “Connected KVA” methodology and after performing power flow analysis losses are computed.

After that each interval record of 30 Min is used to perform load demand allocation in Time

series form and then losses are computed.

Analysis – Power Flow with Profile Data.

In this case CYMDIST provides option to perform Time-series analysis for 1 day (24 hours) or for week or for month or any selected range of date and time as per the profile data. We used monthly data for these AG feeders and perform Power/Load Flow analysis with Profiles to compute energy loss of that AG feeder.

Revenue from FY 2022-23 & FY 2023-24

Query 11. Category-wise Revenue for FY 2022-23 & FY 2023-24 (Table No. 37)

- a. It is observed that AG Sales increased significantly in FY 2022-23 & FY 2023-24 as compared to the approved sales whereas revenue from agriculture consumer category is not increased in the same proportion.

Particulars	Approved in MYT Order Case No. 226 of 2022	As per Petition	Deviation
FY 2022-23			
LT AG Sales (MUs)	27,190	36,843	9,654
Revenue from LT Agriculture Consumer Category (INR Crores)	11,895.48	12,843.01	947
FY 2023-24			
LT AG Sales (MUs)	27,405	39,561	12,156
Revenue from LT Agriculture Consumer Category (INR Crores)	11,074.52	18,475.02	7400

- b. MSEDCL shall justify the claim of AG sales and revenue from AG consumers with appropriate rationale.

MSEDCL Reply:

Reply to query 11 point a, b

MSEDCL submits that for justification for FY 22-23 and FY 23-24 the AG sales are categorized as below:

FY	AG_CATEGORY	Sale
FY 22-23	LT-AG (FEEDER-INDEX)	1579
	LT-AG (METERED)	22553
	LT-AG (UN-METERED)	12503
	LT-POULTRY/HIGHTECH	208
	Total	36843
		Sale
FY 23-24	LT-AG (FEEDER-INDEX)	4604
	LT-AG (METERED)	24116
	LT-AG (UN-METERED)	10629
	LT-POULTRY/HIGHTECH	212
	Total	39561

Revenue of FY 2023-24 is on higher side due to Feeder Index Methodology since unmetered consumers billed as per metered tariff are as follows:

Mar 2023 – 94,636 Consumers -4,71,926 HP

Mar 2024 – 2,49,324 Consumers – 12,38,574HP

The unmetered tariff is higher than metered tariff. Due to billing of these consumers on metered tariff the revenue decreases.

Query 14. Distribution Losses for FY 2024-25

- a. MSEDCL has submitted that the actual distribution loss (excluding EHV sales) achieved by MSEDCL for FY 2024-25 is 16.35% against the approved figure of 12% in the MTR Order.

Particulars	FY 2024-25 (Approved)	FY 2024-25 (Actual)
Distribution Loss	12%	16.35%

- b. MSEDCL needs to justify the increase in the estimated losses in FY 2024-25.

MSEDCL Reply:

MSEDCL has submitted that it has been putting best endeavors for lowering the Distribution Losses to the lowest possible level. However, loss reduction is a slow process and becomes increasingly difficult for the loss levels to come down after a particular level. The change in sales mix also impact the distribution losses. MSEDCL submits that it has achieved a significant reduction in distribution losses during recent years.

MSEDCL submits it endeavours for taking Distribution Losses to the lowest possible level and has taken various initiative to limit the rise in tariffs rates by curtailing Distribution Loss, accurate billing of proper reading of unutilized energy, increasing collection efficiency, limiting Operations and maintenance expenses and implementing latest technology for efficient management for reduction of Distribution losses.

Provisional True-up of FY 2024-25

MYT Projections for FY 2025-26 to FY 2029-30

Query 16. 4.3 Sales Projections for Control Period

- a. MSEDCL needs to clarify if the RA plan submitted as Annexure 15 is the revised RA plan according to the MERC letter dated. 18.11.2024
- b. It is observed the sales considered in the MYT petition are in variance with the projections considered in RA plan submitted as part of the MYT petition. MSEDCL to clarify the reason for variance.
- c. MSEDCL needs to provide detailed justification/basis for sales projection in MYT petition.

MSEDCL Reply:

- a. It is to submit that the RA plan submitted in Annexure 15 is as per the original RA plan submitted by MSEDCL to MERC vide letter CE/PP/RA-2024/32503 dated 15.10.2024.
- b. In RA Plan submitted to Hon'ble Commission, MSEDCL has projected its category-wise sales in the Resource Adequacy Plan, which includes Distribution Franchisee (DF) Sales which is sales made by distribution franchisees under various categories and Open Access (OA) Sales which is sales to consumers who access power through open access under each

category. While projecting these sales, the expected impact of solar pumps addition and rooftop solar systems has been considered at the Transmission periphery level.

- c. In the MYT, as MSEDCL has to determine the tariff of MSEDCL's consumers category-wise sales (excluding OA) for which the tariff is determined by the Hon'ble Commission. As a result, in MYT the projected sales excluded OA sales components in their respective categories and DF sales are considered as a single aggregated input and are excluded from the detailed category-wise break up. Further While projecting these sales, the impact of solar pumps and rooftop solar systems has been considered at the consumer level.
- d. The RA requires MSEDCL to demonstrate its capacity requirements to meet future demand. Thus, to provide an accurate assessment, the study considers category-wise DF sales and Open Access sales as part of the demand projections.
For MYT Petition MSEDCL is required to consider the sales under MSEDCL's own consumer categories and input based sales for DF area

Query 17. 4.18 (Distribution Losses for the Control Period)

- a. It is understood from the submission that MSEDCL has considered the projections for distribution loss from FY 2024-25 to FY 2034-35 as submitted in the MSEDCL's Resource Adequacy Plan (**Annexure 15**).
- b. In table 142, it is observed that proposed distribution losses for the control period do not match with the projections of distribution losses given in the MSEDCL's RA plan. MSEDCL shall justify the same.

FY	As per Petition (Table No. 142)	MSEDCL'S RA Plan
FY 2025-26	15.54%	13.6%
FY 2026-27	15.28%	13.4%
FY 2027-28	15.04%	13.2%
FY 2028-29	14.79%	13.1%
FY 2029-30	14.55%	12.9%

- c. MSEDCL to provide justification and the basis for distribution loss considered in MYT petition.

MSEDCL Reply:

- a. In the Resource Adequacy (RA) Plan, the distribution loss is projected based on historical data of aggregate distribution losses including EHV. To ensure accuracy, a time series model (SARIMA) has been trained using monthly distribution loss data spanning from FY11 to FY24, with the exception of the COVID-19 years, as these years had abnormal consumption patterns. The trajectory of distribution loss considered in RA Plan is as below:



In the MYT (Multi-Year Tariff) Petition, the distribution loss is calculated based on power injection at various voltage levels and consumer sales projections. The projections are prepared in accordance with the format prescribed by the Hon'ble Commission for projecting distribution losses.

Other Queries

Query 20. OA Sales (Conventional)

- a. In table-112, the value of OA sales (Conventional) does not match with the OA sales given in the OA Sales deduction (Excel File). Also, it needs to provide justification for the reduction in OA conventional sales. After the FY 2024-25, the reduction in conventional OA sales is considered as 8%.

MSEDCL Reply:

MSEDCL submits that the Hon'ble commission to consider the OA Sales (Non-Conventional) in MUs are as below:

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	Projected	Projected	Projected	Projected	Projected
OA Sales (Conventional)	4,026	4,034	4,042	4,049	4,057

Conventional OA sales are declining fueled by significant capital investment expected in renewable energy sector in the coming years, coupled with increasing environmental compliance requirement

Query 21. OA Sales (Non-Conventional)

- a. In table-112, the value of OA sales (Conventional) does not match with the OA sales given in the OA Sales deduction (Excel File).

MSEDCL Reply:

- a. MSEDCL submits that the Hon'ble commission to consider the OA Sales (Non-Conventional) as represented in the table below (in MUs). The same is considered in revised petition.

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	Projected	Projected	Projected	Projected	Projected

Particulars	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	Projected	Projected	Projected	Projected	Projected
OA Sales (Non-Conventional)	4,941	6,196	7,313	8,332	9,154

Query 22. 4.19 (Energy Balance for control Period)

- In table 144, the values for OA sales (Conventional & Renewables) do not match with the values given in OA Sales deduction (Excel File) for the whole Control Period. MSEDCL needs to clarify the values of OA sales considered in the Energy Balance.
- Also, MSEDCL needs to check the calculation of Energy Balance for the whole Projected period.

MSEDCL Reply:

- MSEDCL submits that the Hon'ble commission to consider the OA Sales (Non-Conventional) as represented in the excel file, the same is also represented below for reference. The same is also represented below for ready reference.

Particular	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
OA Sales Conventional	4,026	4,034	4,042	4,049	4,057
OA Sales Non-Conventional	4,941	6,196	7,313	8,332	9,154
Total OA Sales	8,967	10,230	11,355	12,381	13,211

MSEDCL submits that the calculation for the final Energy Balance for the whole projected period is recalculated and submitted in revised petition.

Query 50. Power Purchase Projections (Based on MoD) for FY 2025-26 to FY 2029-30

It is observed that MSEDCL submitted the power purchase projections based on Merit Order Dispatch Principles and considered MoD stack for projections. Thus, MSEDCL requires to submit the month-wise MoD stack along with necessary assumptions such as PLF & PAF considered, Fuel availability considered, technical minimum, Auxiliary consumption considered, plant outages, etc. for the whole Projected Period i.e., FY 2025-26 to FY 2029-30 (in the excel Format).

MSEDCL Reply:

MSEDCL submits that the variable cost for thermal/gas generators of NTPC stations is forecasted based on the Compound Annual Growth Rate (CAGR) of the last 5 years. If the CAGR exceeds 5%, it is capped at 5%. For MSPGCL stations, the variable cost used is based on the figures provided in their Multi-Year Tariff (MYT) petition for the 5th control period. In the case of Independent Power Producers (IPP), the variable cost is adjusted according to changes in the law. Based on these forecasts, the yearly Merit Order Dispatch (MoD) stack is prepared for power dispatch in alignment with the monthly requirements. Since the MoD stack is forecasted on a yearly basis, the monthly MoD stack mirrors the forecasted yearly MoD stack and is used to schedule power dispatch as needed each month.

Furthermore, MSEDCL has used the actual average availability of generating stations/units from

2020 to 2024 to calculate the Plant Availability Factor (PAF) of power stations. By considering the actual availability of power stations in the calculation of power availability, factors such as fuel availability, plant outages, and other related issues are automatically incorporated into the PAF considered.

Additionally, the approved auxiliary consumption for power stations/units has been considered as per the Hon'ble Commission's MTR order. For Independent Power Producers (IPPs), the auxiliary consumption is based on the terms outlined in their Power Purchase Agreements (PPAs). A technical minimum of 55% is applied to coal-based thermal stations/units, while the Uran gas plant is considered a must-run plant due to the "take or pay" fuel agreement between MSPGCL and GAIL. The Kawas and Gandhar gas plants will be dispatched based on peak requirements, i.e., after all contracted resources have been fully utilized.

The year wise Merit Order Dispatch (MoD) stack, along with key assumptions such as Plant Availability Factor (PAF), technical minimum, and auxiliary consumption, for the 5th control period from FY 2025-26 to FY 2029-30, is annexed as **Annexure Datagap Set 1_Query 50**.

ARR Components FY 2022-23

Query 56. Para 2.15, Table 37 of petition, Audited Accounts Note 37 (Pg no 707):

- a. Depreciation claimed in petition Rs 2,769.53 Cr which does not match with audited account Note 37 (Rs 3661.40 Cr).
- b. MSEDCL needs to rectify any error or provide reconciliation for the same.
- c. In the Form 5 of MYT Format, it has mentioned that the distribution licensee to submit certification from the Statutory Auditor for the capping of depreciation at ninety per cent of the allowable capital cost of the asset.
- d. MSEDCL needs to provide the same for FY 2022-23.
- e. MSEDCL is also required to provide asset-wise depreciation data including but not limited to GFA, depreciation, accumulated depreciation, capitalization date, asset description, etc. for the financial year 2022-23, from SAP system.

MSEDCL Reply:

Reply for point c & d

MSEDCL submits that the Statutory Auditor Certificate is attached as **Annexure Datagap Set 1_Query 56 c & d**.

Query 73. Para 2.15, Table 37 of petition, Audited Accounts Note 37 (Pg no 913)

- a. Depreciation claimed in petition Rs 2,725.39 Cr which does not match with audited account Note 37 (Rs 3626.97 Cr).
- b. MSEDCL needs to rectify any error or provide reconciliation for the same.
- c. In the Form 5 of MYT Format, it has mentioned that the distribution licensee to submit certification from the Statutory Auditor for the capping of depreciation at ninety per cent of the allowable capital cost of the asset.
- d. MSEDCL needs to provide the same for FY 2023-24.
- e. MSEDCL is also required to provide asset-wise depreciation data including but not limited to GFA, depreciation, accumulated depreciation, capitalization date, asset description, etc. for the financial year 2023-24, from SAP system.

MSEDCL Reply:

Reply for point c & d

MSEDCL submits that the Statutory Auditor Certificate is attached as **Annexure Datagap Set 1_Query 73 c & d.**

Query 86. Table 87: Capitalization for FY 2024-25

- MSEDCL to automate Total Capitalization amount in Form 4.3 using a summation formula.
- MSEDCL has estimated capitalization of Rs. 12,673.90 Crore for FY 2024-25, whereas Commission approved capitalization for FY 2024-25 is Rs 2386.54 Crore MSEDCL needs to provide proper justification for the significant deviation of Capitalization from the Commission approved figure.
- MSEDCL should provide capitalization details of Estimated other Assets as claimed by MSEDCL for FY 2022-23.

MSEDCL Reply:

- MSEDCL submits the capitalization details of Estimated other Assets as claimed for FY 2024-25 are as below:

Sr. No.	Particulars	Estimate 2024-25 (Rs. Cr.)
1	Estimated Capitalization	12751.95
2	Capitalization as per Form 4	12673.90
	Other Assets	0.00
3	Land	3.57
4	Lease hold land	0.90
5	Buildings	14.79
6	Vehicles	3.76
7	Furniture & Fixtures	5.81
8	General Assets	
9	Other Civil Works	23.01
10	Computer Software	0.00
A	Total (2 to 10)	12,725.74
11	Hydraulic Works	0.00
12	Batteries & Charging	0.03
13	Communication Equipment	0.99
14	IT Equipment	25.12
15	Office Equipment	0.06
B	Total (11 to 15)	26.21
	Total (A+B)	12,751.95

ARR Projection from FY 2025-26 to FY 2029-30

Query 104. Para 4.29

- a. MSEDCL is to provide the basis for the value of escalation of 5% considered for Other Expenses.

MSEDCL Reply:

- a. MSEDCL submits that it has considered a nominal rise of 5% over previous year based on the 5% increase considered by the Hon'ble Commission in previous MYT/ MTR Orders.

Query 105. Para 4.31

MSEDCL is to provide the basis for the value of escalation of 5% considered for incentives and discounts.

MSEDCL Reply:

MSEDCL submits that it has considered a nominal rise of 5% over previous year based on the 5% increase considered by the Hon'ble Commission in previous MYT/ MTR Orders.

Query 106. Para 4.35

MSEDCL is to provide the basis for the value of escalation of 5% considered for each item of NTI.

MSEDCL Reply:

MSEDCL submits that it has considered a nominal rise of 5% over previous year based on the 5% increase considered by the Hon'ble Commission in previous MYT/ MTR Orders.

Query 119. Implementation of Demand Side Management Measure

- a. As per the Regulation 104.3, distribution licensee to submit its existing level of own energy consumption and provide the trajectory for the reduction of such own energy consumption in the Control Period. The relevant extract from the Regulation is given below:

"104.3 The Distribution Licensee shall submit its existing level of own energy consumption and Energy Conservation measure at the beginning of the Control Period and provide the trajectory for the reduction of such own energy consumption through the implementation of Energy Efficiency improvement scheme/plan under Capital Expenditure or Opex Expenditure as part of the MYT Petition alongwith the target of Energy Efficiency related savings, and monitoring plan in line with principles provided the MERC (Demand Side Management Implementation Framework) Regulations, 2010 as amended from time to time.

Provided that, the Distribution Licensee shall submit its Energy Efficiency Programmes' /Scheme's Cost Effectiveness Assessment for the expected trajectory."

- b. MSEDCL has neither submitted its existing level of energy consumption nor submitted trajectory for the reduction of own consumption for control period. MSEDCL to submit the same.

MSEDCL Reply:

MSEDCL submits that reply to the query is attached as **Annexure Datagap Set 1_Query 19.**

Query 120. Form 20 & 22

MSEDCL has not submitted Form No. 20 & Form No. 22 with the MYT Petition. MSEDCL needs to submit Form 20 & 22.

MSEDCL Reply:

MSEDCL submits that Form 20 and Form 22 are incorporated in the revised petition model. However, MSEDCL requests Hon'ble Commission that in Form 20 regarding columns for deviation, controllable, uncontrollable and net entitlement with reasoning would be difficult to provide in excel format and hence requests to consider the same incorporated in the petition. However, MSEDCL shall compile the same and submit subsequently.

Query 121. Voltage Wise Asset Allocation

- a. MSEDCL is required to provide voltage-wise asset details in accordance with the prescribed MYT formats. As per the MERC MYT Regulation 2024, a detailed methodology for asset allocation has been outlined. Furthermore, MSEDCL was directed in previous tariff orders to submit voltage-wise tariff details. However, MSEDCL has not taken adequate steps to comply with these requirements.
- b. MSEDCL is requested to provide justification for not undertaking voltage-wise asset bifurcation and explain the reasons for non-submission of the MYT forms. Additionally, MSEDCL is required to submit the voltage-wise asset details in the prescribed MYT formats along with prescribed documents/information.

MSEDCL Reply:

MSEDCL submits that it is exploring the possibility to bifurcate the voltage wise assets to the extent possible and requests Hon'ble Commission to consider the same.

Query 123. Special Trajectory of certain variables

- a. As per MERC MYT Reg. 2024, the MSEDCL needs to submit trajectory for certain variables. The extract from the regulations is reproduced below:

"7.1 The Commission, while approving the Multi-Year Tariff Petition, may stipulate a trajectory for certain variables, including but not limited to transmission losses, distribution losses, Reliability Indices, System Average Interruption Frequency Index (SAIFI), System Average Interruption Duration Index (SAIDI) to monitor and report the supply availability and wires availability, Aggregate Technical and Commercial Losses (AT&C Loss), collection efficiency, and payment efficiency."

- b. Accordingly, MSEDCL needs to provide trajectory of certain variables.

MSEDCL Reply:

- b. MSEDCL submits that the AT&C trajectory submitted vide reference no SE/TRC/MYT-2024/39521 dt. 20th Dec 2024 was as per MoP. Whereas MSEDCL submits the revised trajectory as below:

Target	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
AT&C	15.05%	14.98%	14.77%	14.55%	14.29%

Reply to Balance Data Gaps Set-2

Petition of M/s Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for Final True up of ARR for FY 2022-23 & FY 2023-24, Provisional True up of ARR for FY 2024-25 and Projections & ARR for 5th control period for FY 2025-26 to FY 2029-30. (Case No. 217 of 2024)

MSEDCL submits that the reply to balance query no. 1 & 2 is incorporated in the revised petition.

MSEDCL had submitted the reply to data gap set 2 on 24th Dec 2024, the reply to balance query is submitted as below:

Section 1: Data Gaps on Energy Sales & Revenue MYT Projections for FY 2025-26 to FY 2029-30

Query 1. Form: Revised RA Plan

- a. It has been observed that MSEDCL has added some hard punch numbers in the agriculture sales (L41:P41) and subtracted hard punch numbers in 'LT-POULTRY/HIGHTECH' (Cell K30) categories in the 'Revised RA Sales' MSEDCL needs to clarify on the same.

Query 2. Form: Revised Sales Proj. Incl. DF

- a. While projecting the revised sales for FY 2025-26 to FY 2029-20, MSEDCL has adjusted the sales from EV, Rooftop and Solar Pump in the different categories using the hard-punched percentage figures in column K. MSEDCL needs to submit the justification of these percentage numbers.

MSEDCL Reply:

Reply to query 1(a) & 2(a)

MSEDCL submits that Demand forecasting was conducted using sophisticated modelling techniques, following a top-down approach. First, comprehensive forecasts were developed for each major category. These category-level projections were then distributed among their respective subcategories, with the allocation based on each subcategory's historical proportion of total category sales.

Section 2: Data Gaps of Tariff Design & Methodology

Tariff Design & Methodology

Query 3. 6.4 – ToD proposal

- a. The MERC MYT Regulations, 2024, has provided indicative time slots and tariffs for ToD charges. Further, it has mentioned that distribution licensee needs to propose category-wise ToD tariff after assessing the growth in the demand. The relevant extract is reproduced below:

*“Provided that Distribution Licensee may propose seasonal ToD tariff in its Tariff Petition:
Provided further that the distribution licensee to propose their ToD time slots with slot-wise*

rebate/penalty at the time of MYT or MTR Tariff filing subjected to compliance of the applicable MoP Rules: Provided further that the Commission at the time of MYT Order proceedings may extend the applicability of the ToD Tariff to the other consumer categories after assessing the growth in the demand.”

- b. MSEDCL has proposed category wise different ToD tariffs/rebates in MYT petition. MSEDCL needs to provide detailed calculation undertaken for the category-wise ToD study and submit the rationale behind the same.
- c. MSEDCL needs to provide 24-hour load curve for each month during the last 5 years. MSEDCL also needs to provide the monthly/hourly variation in power purchase cost against the 24-hour load curve for each month during the last 5 years.
- d. Further, MSEDCL needs to provide projected hourly source-wise incremental variable cost calculation for the years in 5th Control Period. MSEDCL also needs to provide the basis for Average category-wise hourly consumption during each time slab as shown in the Petition.

MSEDCL Reply:

Reply to queries a & b:

MSEDCL submits that the detailed calculation for ToD is incorporated in the revised petition..

Reply to query c:

MSEDCL submits that the requisite information is attached as **Annexure Datagap Set 2_Query 3c.**

Reply to query d:

MSEDCL submits that the requisite information is attached as **Annexure Datagap Set 2_Query 3d.**

Query 4. 6.6 – Grid Support Charges

- a. MSEDCL has proposed Grid Support Charges in the MYT Petition. However, to ensure transparency and accuracy, MSEDCL is required to provide a detailed Excel-based calculation, explicitly outlining each component of the formula utilized to compute Grid Support Charges.

MSEDCL Reply:

- a. MSEDCL submits that the detailed calculation is incorporated in the revised petition. The excel based calculations for Grid Support Charges are attached as **Annexure Datagap Set 2_Query 4.**

Query 5. 6.17 – Tariff for LT and HT– Electric Vehicle (EV) Charging Stations

- a. There In the Para 6.17 of the MYT Petition, MSEDCL has proposed single part Tariff for EV charging stations categories. However, in the revenue calculations, MSEDCL has considered two-part tariff for EV charging station categories. MSEDCL is required to clarify and confirm the proposed tariff applicability, as an inconsistency has been identified in the MYT petition.

MSEDCL Reply:

- a. MSEDCL submits that it has proposed single part tariff for EV charging station categories.

Query 7. Form – Input CSS, CSS FY 2025-26 to FY 2029-30, Rev from CSS

- a. There is #REF! error in some cells of the mentioned sheets. MSEDCL needs to rectify the error.

MSEDCL Reply:

MSEDCL submits that the error is rectified and same is incorporated in the revised petition.

Query 8. Modified ACoS

- a. MSEDCL's projection of Franchisee Revenue from the Proposed Tariff for the 5th Control Period is lower than the Franchisee Revenue at the Existing Tariff. However, the sales of distribution franchisees have been increasing over the years. MSEDCL must provide a justification for this discrepancy and, if necessary, re-evaluate the revenue from franchisees at the proposed tariff.

MSEDCL Reply:

- a. MSEDCL submits that it had calculated the revenue from distribution franchisee incorporating only Annual Indexation Ratio. Tariff Indexation Ratio was not included in the calculations. MSEDCL submits that it has now calculated the revenue incorporating both the Annual Indexation Ratio and Tariff Indexation Ratio.

Query 9. Table No. 177 and Modified ACoS

- a. In It has mentioned that % of revenue from Fixed/ Demand Charges to total revenue is proposed to increase from 20% in FY 2025-26 to 30% in FY 2029-30.

Year	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
%age of revenue from Fixed/ Demand Charges	20%	22.5%	25%	27.5%	30%
Fixed Expense as ratio of ARR	45.0%	43.8%	43.9%	45.0%	46.8%

- b. However, in the Modified ACoS sheet, % of revenue from fixed charges to total revenue shown are different. MSEDCL needs to clarify and revisit the numbers shown in Modified ACoS sheet.

MSEDCL Reply:

MSEDCL has revisited the numbers and has made necessary changes accordingly in the revised petition.

Query 10. Wheeling Charges

- a. An inconsistency has been detected between the Wheeling Charges proposed in the Petition and those applied in revenue computations for the control period (Form no. 13) as well as for the computation of Grid Support Charges. MSEDCL needs to reconcile the numbers and rectify the error.

MSEDCL Reply:

MSEDCL submits that the necessary corrections are done and incorporated in the revised petition.

Section 3: Power Purchase Expense

Excel Formats

Query 11. MYT Excel Formats – Output sheet

- a. Many rows in the Power Purchase Excel formats esp. in Output sheet has hard punched numbers. For e.g. – Previous PP Cost, ARR (As per Hourly MoD), Revenue from Sale of Surplus Power, etc.
- b. MSEDCL needs to properly link the numbers and submit formula driven excel computation.

MSEDCL Reply:

MSEDCL submits that the necessary corrections are done and incorporated in the revised petition.

True Up for FY 2022-23 & FY 2023-24

Power Purchase

Query 12. Power Purchase Plan

- a. The Commission vide its letter dated 18 November 2024 directed to revisit its ST-DRAP, MT-DRAP planning along with proposed power procurement and file the revised RA plan along with MYT filing. MSEDCL shall submit the compliance of the letter dated 18 November 2024.

MSEDCL Reply:

- a. MSEDCL has submitted the compliance vide letter ED(Comm)/RA/40079 dated 30.12.2024 is attached as **Annexure Datagap Set 2_Query 12.**

Section 5: Data Gaps on Capex and ARR

Contribution to Contingency Reserve

True Up for FY 2022-23

Query 13. Form ARR Summary cell F23

Contribution to contingency reserve provided in ARR Summary cell F23 in excel model is a hard punch number. MSEDCL needs to provide proper linkage to it.

MSEDCL Reply:

MSEDCL submits that the requisite updates have been made and incorporated in the revised petition model.

True Up for FY 2022-23

O&M Expenses

Query 14. Form F3.1

Impact of Wage revision linking missing in Form F3.1 cell H15 and H55.

MSEDCL Reply:

MSEDCL submits that the requisite updates have been made and incorporated in the revised petition model.

ARR projection from FY 2025-26 to FY 2029-30

Additional Surcharge refund for FY 2025-26 to FY 2029-30

Query 15. Form AS & RLC refund

There are hard punch numbers in the cell G4 to I4 and G10 to K10 in Form AS & RLC refund. MSEDCL need to rectify it.

MSEDCL Reply:

The Hon'ble Supreme Court vide Order dated 10.12.2021 in Civil Appeal No 5074/5075 of 2019 directed to refund ASC for Group Captive Consumers. Given the huge liability on MSEDCL, such charges were to be adjusted in the future wheeling charges bills. The total refund amount for ASC is expected to be refunded over multiple fiscal years. The amount refunded in FY 2024-25 is a certain portion of the total. Based on this, the remaining refund is projected to be processed from FY 2025-26 onwards.

The total refund amount for RLC is expected to be refunded over multiple fiscal years. The amount refunded in FY 2024-25 is a certain portion of the total. Based on this, the remaining refund is projected to be processed from FY 2025-26 to FY 2029-30.

Query 16. Form 11

The calculation of Contribution to Contingency Reserve in cell O14 to S14 of form 11 is not clear and don't have clear linkages. MSEDCL need to rectify it.

MSEDCL Reply:

MSEDCL submits that the requisite updates have been made and incorporated in the revised petition model.

Query 17. Table 168 Combined ARR for Supply and Wires Business for the Control Period and Form ARR Summary

Income from Open Access Charges does not match with the Form ARR Summary of the excel cell P37 to T37 to Petition Table 168 Combined ARR for Supply and Wires Business for the Control Period.

MSEDCL Reply:

MSEDCL submits that the requisite updates have been made and incorporated in the revised petition.

Additional Surcharge refund for FY 2025-26 to FY 2029-30

Query 23. 15.6, 15.7, 15.8 & 15.9

- a. MSEDCL has proposed expenditure under these schemes for provisional true-up against the approved nil amount. Further, MSEDCL has proposed ERP SAP S4 Hana for projection period. MSEDCL has issued more than Rs. 200 Cr. LoA for implementation of these schemes.
- b. Further details of modalities for funding like subsidy component, debt/ equity (internal accrual) needs to be provided.

MSEDCL Reply:

- b. MSEDCL submits that The Business Analytics and demand forecasting , SAP s4 HANA, Procurement of SD wan , are operating under RDSS IT OT scheme ,as per the sanctioned letter of Power Finance Corp. Ltd. Vide letter no. 02:10: RDSS:2021:1 MSEDCL Dt.22.09.2022 60% amount approved cost of works would be provided by Govt of India and balance cost of the works or(over and above cost of DPR)has to be arranged through loan from PFC/REC. And the Enterprise GIS & network Analysis solution is funded through Internal resources. The PFC sanction letter is attached as **Annexure Datagap Set 2_Query 23b.**

Query 25. Smart Meter Roll-out Plan

- a. MSEDCL to submit details of its Smart meter roll-out plan, if any.

MSEDCL Reply:

- a. MSEDCL hereby submits that the revised Smart Meter Rollout plan is attached as **Annexure Datagap Set 2_Query 25.**

Query 26. DSM Regulations

- a. The Commission has notified DSM Regulation on 19.11.2024. In the said Regulation. the Commission has provided Demand Flexibility Portfolio Obligation (DFPO). MSEDCL needs to factor in DFPO target while working out power purchase basket. As per Regulation 4(b) of DSM Regulations, Distribution Licensees are mandated to submit block estimates and budget to implement DF/DSM portfolio in MYT Petition. MSEDCL to kindly provide details of the same as they are missing in the Petition.

MSEDCL Reply:

- a. MERC has given target for demand flexibility portfolio obligations (DFPO) set-up with a following specific trajectory in DSM as per MERC (Demand Flexibility and Demand Side Management – Implementation Framework, Cost-effectiveness Assessment; and Evaluation, Measurement and Verification) Regulations, 2024

Year	2024-25	2025-26	2026-27	2027-28	2028-29
Peak Demand (MW)	24100	25460	27732	30520	33521
DPFO target in %	1.5%	1.5%	2.0%	2.5%	3.5%

GoM & MSEDCL have undertaken various solar projects such as separation of Agriculture feeder and Solarization of feeder, Off-grid solar pump installation for day-time power supply to farmers. The Solar Photovoltaic Water Pumping Systems Project and Agricultural Feeder Solarization Project with conventional agriculture connections aims to provide Day time reliable and quality power supply, and possibility of reducing the electricity tariffs paid by farmers and cross subsidy burden on the industrial and commercial consumers. Additionally, it presents a compelling solution to address the challenges faced by farmers in accessing reliable irrigation. Similarly, to reduce network cost, MSEDCL has initiated new scheme of installation Off grid solar pump. These project aims to improve water efficiency, enhance agricultural productivity, and contribute to sustainable rural development.

MSEDCL is implemented various scheme like MSKPY, KUSUM-B and Now Magel Tyala Saur Krushi pump yojana.

- GoM has resolved that vide GR dated 15.03.2024 stated that installation 5 lacs off grid solar pump for next 5 years with funding from AIB Loan. In this way total 10,00,000 pump is to be installed next 5 years.
- Till date installed Capacity wise pump Off-grid Solar pump progress till 23.12.2024

Capacity (HP)	Total (Nos.)
3	2,35,014
5	78,632
7.5	26,271
Total	3,39,917

- If We assume that Farmers utilize the 60% energy for the irrigation purpose for the farm. 40% energy is underutilization. To utilize the underutilization power MSEDCL is proposing Universal Solar Pump Controller (USPC).
- Balanced energy can be utilized other agricultural work like Battery Charging, Solar Thresher, Bulk Milk Chiller, Solar refrigeration Cold storage, Cutter or any other work.
- MSEDCL has target of installation of 10,00,000 pumps. if we provide USPC to all of grid Solar pumps.
- If we consider Cost of USPC is Rs 35000. Cost of project will be Rs 3500 Crs
- Cost benefit analysis as below:

S. No.	Description	3HP	5HP	7.5HP	Total	Units
1	No. of Pumping Systems (3 HP)	120000	60000	20000	200000	Nos.
2	Solar PV Capacity Per Pump	360.00	288.00	135.60	783.6	MWp
3	Annual Energy Generation Considering CUF 19 % for the year	599.18	479.35	225.69	1304.22	MUs
4	Annual savings to Discom on electricity cost for electric pump operation for 3 HP pump (3 kw), 200 days, 12 Hrs. per day, 15% T&D losses @Rs. 3.68/kWh for the year	704.92	563.94	265.52	1534.38	MUs
5	If we consider 60% Solar generation Consumed per year	422.95	338.36	159.31	920.62	MUs

S. No.	Description	3HP	5HP	7.5HP	Total	Units
6	Excess Energy after consumption per year	281.97	225.58	106.21	613.76	MUs
7	Discom Savings per year	259.41	207.53	94.74	561.68	Crs
8	Reduction in Peak Demand Reduce in MW	32.19	25.75	12.12	70.06	MWp

Considering Savings of DISCOM payback for the project is 5.5 years.

- It also helps to reduce the demand of 70.06 MW per year.
- If We consider installation of 200000 installation per year and we consider 100% utilization of power irrigation and USPC then reduction peak demand will as below:

Year	2024-25	2025-26	2026-27	2027-28	2028-29
Peak Demand (MW)	24100	25460	27732	30520	33521
DPFO target in %	1.5%	1.5%	2.0%	2.5%	3.5%
DPFO target in MW	361.5	381.9	554.64	763	1173.24
Achievement in MW	604.26	1208.52	1812.78	2417.04	3021.3

Data Gaps Set-3

Petition of M/s Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for Final True up of ARR for FY 2022-23 & FY 2023-24, Provisional True up of ARR for FY 2024-25 and Projections & ARR for 5th control period for FY 2025-26 to FY 2029-30. (Case No. 217 of 2024)

Section 1: RA Related Data Gaps

MSEDCL MYT Petition FY 2025-26 to FY 2029-30

Query 1. Factors Influencing the Demand Forecast

- a. It is observed the sales considered in the MYT petition are in variance with the projections considered in RA plan submitted as part of the MYT petition. MSEDCL to clarify the reason for variance.
- b. MSEDCL needs to provide detailed justification/basis for sales projection in MYT petition.

MSEDCL Reply:

- a. MSEDCL submits that the RA plan submitted in Annexure is as per the original RA plan submitted by MSEDCL to MERC vide letter CE/PP/RA-2024/32503 dated 15.10.2024.

In RA Plan submitted to Hon'ble Commission, MSEDCL has projected its category-wise sales in the Resource Adequacy Plan, which includes Distribution Franchisee (DF) Sales which is sales made by distribution franchisees under various categories and Open Access (OA) Sales which is sales to consumers who access power through open access under each category. While projecting these sales, the expected impact of solar pumps addition and rooftop solar systems has been considered at the Transmission periphery level.

In the MYT, as MSEDCL has to determine the tariff of MSEDCL's consumers category-wise sales (excluding OA) for which the tariff is determined by the Hon'ble Commission. As a result, in MYT the projected sales excluded OA sales components in their respective categories and DF sales are considered as a single aggregated input and are excluded from the detailed category-wise break up. Further While projecting these sales, the impact of solar pumps and rooftop solar systems has been considered at the consumer level.

The RA requires MSEDCL to demonstrate its capacity requirements to meet future demand. Thus, to provide an accurate assessment, the study considers category-wise DF sales and Open Access sales as part of the demand projections.

For MYT Petition MSEDCL is required to consider the sales under MSEDCL's own consumer categories and input based sales for DF area.

- b. MSEDCL has considered the sales projected in the RA Plan as the base for projecting the sales for the MYT Control Period. The sales projected in the RA Plan is inclusive of Open Access sales, which has been excluded to arrive at the projected sales for the MYT Petition purpose.

Further, the sales projected in the RA plan did not include the sales against EVs, Solar Roof top and Solar Pump sets. MSEDCL has accordingly included the sales against EVs, Solar Rooftop and Solar Pump sets in the sales projected for RA Plan to arrive at the sales projection for MYT Petition. The adjustments against EVs, Solar Rooftop and Solar Pump sets have been adjusted/ corrected against the sales of various consumer categories

wherever it is observed that the trend is un-reasonable, or these is any recent developments which may require such adjustments, so that the total Sales (excluding OA) as per RA Plan is aligned with the Sales projected for MYT Petition.

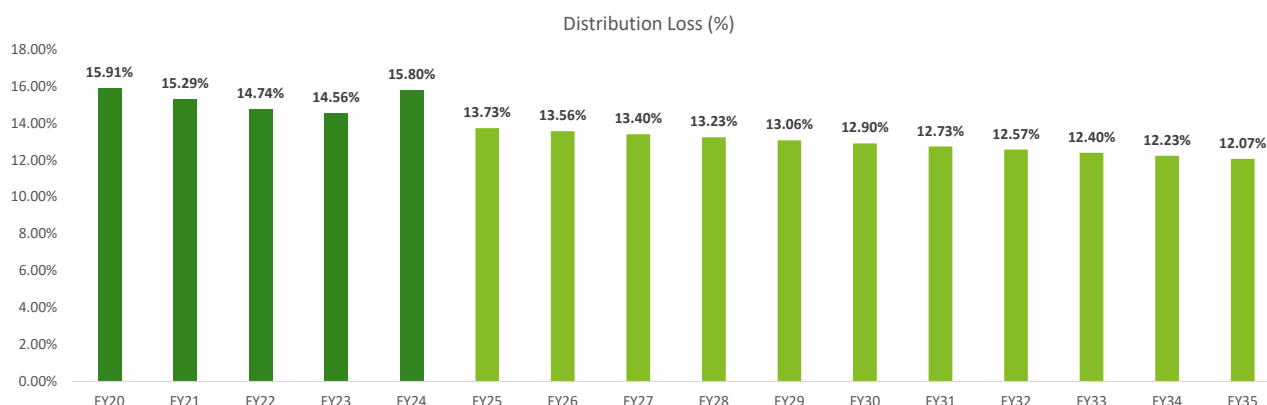
Query 2. Trajectory for Distribution Losses

- MSEDCL has considered the projections for distribution loss from FY 2024-25 to FY 2034-35 as submitted in MSEDCL's Resource Adequacy Plan (Annexure 15).
- However, in table 142 of the Petition, MSEDCL has proposed distribution losses for the control period which are not matching with the projections given in MSEDCL's RA plan. MSEDCL should justify the same. MSEDCL is required to provide the justification and the basis for distribution loss considered in MYT petition.

FY	As per MYT Petition (Table No. 142)	MSEDCL'S revised RA Plan
FY 2025-26	15.54%	13.6%
FY 2026-27	15.28%	13.4%
FY 2027-28	15.04%	13.2%
FY 2028-29	14.79%	13.1%
FY 2029-30	14.55%	12.9%

MSEDCL Reply:

- MSEDCL In the Resource Adequacy (RA) Plan, the distribution loss is projected based on historical data of aggregate distribution losses including EHV. To ensure accuracy, a time series model (SARIMA) has been trained using monthly distribution loss data spanning from FY11 to FY24, with the exception of the COVID-19 years, as these years had abnormal consumption patterns. The trajectory of distribution loss considered in RA Plan is as below:



- As per the Resource Adequacy Report, 2024 submitted by MSEDCL to the commission on 15th October 2024, Distribution loss percentage is forecasted from FY 2024-25 to FY 2034-35 based on the Time Series Model (SARIMA) trained on monthly data of distribution losses from FY 2010-11 to FY2023-24, excluding the covid-19 Years. Furthermore, the RA projections are aggregated with EHV sales. For the 5th control period MSEDCL has projected losses at distribution level utilizing only distribution sales which exclude EHV sales. The revised distribution losses for the MYT period as below:

FY	As per MYT Petition (Table No. 142)	Revised MYT petition
FY 2025-26	15.54%	15.05%
FY 2026-27	15.28%	14.98%
FY 2027-28	15.04%	14.77%
FY 2028-29	14.79%	14.55%
FY 2029-30	14.55%	14.29%

Query 3. 6.4 – Sales Projection for Control Period

- It is observed the sales considered in the MYT petition are in variance with the projections considered in RA plan submitted as part of the MYT petition. MSEDCL to clarify the reason for variance.
- MSEDCL needs to provide detailed justification/basis for sales projection in MYT petition.

FY	As per MYT petition	MSEDCL's Revised RA Plan
FY 2025-26	149338	159161
FY 2026-27	157043	168855
FY 2027-28	164441	178156
FY 2028-29	171985	187484
FY 2029-30	180369	197073

MSEDCL Reply:

- MSEDCL submits that the RA plan submitted in Annexure is as per the original RA plan submitted by MSEDCL to MERC vide letter CE/PP/RA-2024/32503 dated 15.10.2024.

In RA Plan submitted to Hon'ble Commission, MSEDCL has projected its category-wise sales in the Resource Adequacy Plan, which includes Distribution Franchisee (DF) Sales which is sales made by distribution franchisees under various categories and Open Access (OA) Sales which is sales to consumers who access power through open access under each category. While projecting these sales, the expected impact of solar pumps addition and rooftop solar systems has been considered at the Transmission periphery level.

In the MYT, as MSEDCL has to determine the tariff of MSEDCL's consumers category-wise sales (excluding OA) for which the tariff is determined by the Hon'ble Commission. As a result, in MYT the projected sales excluded OA sales components in their respective categories and DF sales are considered as a single aggregated input and are excluded from the detailed category-wise break up. Further While projecting these sales, the impact of solar pumps and rooftop solar systems has been considered at the consumer level.

The RA requires MSEDCL to demonstrate its capacity requirements to meet future demand. Thus, to provide an accurate assessment, the study considers category-wise DF sales and Open Access sales as part of the demand projections.

- MSEDCL has considered the sales projected in the RA Plan as the base for projecting the sales for the MYT Control Period. The sales projected in the RA Plan is inclusive of Open Access sales, which has been excluded to arrive at the projected sales for the MYT Petition purpose.

Further, the sales projected in the RA plan did not include the sales against EVs, Solar Roof top and Solar Pump sets. MSEDCL has accordingly included the sales against EVs, Solar Rooftop and Solar Pump sets in the sales projected for RA Plan to arrive at the sales projection for MYT Petition. The adjustments against EVs, Solar Rooftop and Solar Pump

sets have been adjusted/ corrected against the sales of various consumer categories wherever it is observed that the trend is un-reasonable, or there is any recent developments which may require such adjustments, so that the total Sales (excluding OA) as per RA Plan is aligned with the Sales projected for MYT Petition.

The revised MYT sales are given below (excl. DF & OA):

FY	As per MYT petition (MUs)	Revised MYT petition (MUs)
FY 2025-26	149,338	149,441
FY 2026-27	157,043	157,148
FY 2027-28	164,441	164,548
FY 2028-29	171,985	172,092
FY 2029-30	180,369	180,480

Query 4. Estimation of Power Purchase Cost for Control Period

- a. It is observed that MSEDCL has considered the MoD Principles for determination of Power Purchase. Further, MSEDCL has submitted that cost of power procured through TBCB route based on the CERC escalation rates given in PPAs. However, MSEDCL is required to submit the Month-wise MoD stacks and basis of the power procurement rates for cost estimation from all the generating stations. (some of the generating station information have been given).

MSEDCL Reply:

- a. MSEDCL has forecasted the yearly MoD stack and for the MoD stack, the variable rates of generators are projected.
 - i. The variable cost for thermal/gas generators of NTPC stations is forecasted based on the Compound Annual Growth Rate (CAGR) of the last 5 years. If the CAGR exceeds 5%, it is capped at 5%.
 - ii. For MSPGCL stations, the variable cost used is based on the figures provided in their Multi-Year Tariff (MYT) petition for the 5th control period.
 - iii. In the case of Independent Power Producers (IPP), there are various components such as scalable charges, non-scalable charges, Change in Law, etc.
 - (a) The non scalable energy charges, transportation charges, fuel handling charges etc. are considered as per PPA.
 - (b) The scalable energy charges, transportation charges, fuel handling charges etc. CAGR of 5 years i.e. Sep-19 to Sep-24 is considered for projection.
 - (c) For CIL T&D, CIL Coal Shortfall and CIL Fly Ash transportation rates as per MoD of Oct-24 is considered and a CAGR of 3% is added for projection.
 - (d) For USD \$ rate, the CAGR of 3.29% is considered in the Case of CGPL & JSW.
 - (e) For GMR & CGPL being inter-state power purchase, average transmission loss of 3.25% is considered and rates are gross up accordingly.

Based on these forecasts, the yearly Merit Order Dispatch (MoD) stack is prepared for power dispatch in alignment with the monthly requirements. The projection for MYT period is made of hourly MoD.

Query 5. 6.17 – RPO Compliance

- a. MSEDCL has not mentioned how it would meet RE specific RPO targets for 5th Control Period i.e., FY 2025-26 to FY 2029-30.

- b. MSEDCL should submit the RPO compliance plan in line with Resource Adequacy Plan for the 5th Control Period in the revised MYT Petition.

MSEDCL Reply:

Reply to 5(a) & 5(b)

MSEDCL submits that RPO plan is in line and the same is attached as **Annexure Datagap Set 3_Query 5a.**

Query 6. Form: Revised RA Plan

- a. It has been observed that MSEDCL has added some hard punch numbers in the agriculture sales (L41:P41) and subtracted hard punch numbers in 'LT-POULTRY/HIGHTECH' (Cell K30) categories in the 'Revised RA Sales' MSEDCL needs to clarify on the same.

MSEDCL Reply:

- a. MSEDCL submits that Demand forecasting was conducted using sophisticated modelling techniques, following a top-down approach. First, comprehensive forecasts were developed for each major category. These category-level projections were then distributed among their respective subcategories, with the allocation based on each subcategory's historical proportion of total category sales.

Data Gaps Set-IV

Petition of M/s Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for Final True up of ARR for FY 2022-23 & FY 2023-24, Provisional True up of ARR for FY 2024-25 and Projections & ARR for 5th control period for FY 2025-26 to FY 2029-30. (Case No. 217 of 2024)

Section 1: Energy Sales & Revenue

MYT projections for FY 2025-26 to FY 2029-30

Unmetered AG

Query 1. Unmetered AG Connection

- a. It is observed that, MSEDCL is issuing unmetered AG connections despite of specific prohibition by Commission vide various Order since 2012. MSEDCL has released nearly 1.6 lakh unmetered AG connections during FY 2022-23 & FY 2023-24. Further, the metered AG connection during these 2 years is approx. 1 lakh which are lesser than unmetered AG connections. The Commission has repetitively given directions to MSEDCL for not realizing unmetered AG connections. The relevant extract from the order is reproduced below:

“The Commission is of the view that, releasing unmetered connections instead of converting unmetered to metered connection, is non-compliance of the Commission’s directions. The Commission expresses its strong displeasure for non-compliance by MSEDCL on the directions of the Commission and directs MSEDCL to initiate the internal enquiry for releasing the un-metered Ag connections during FY 2020-21 and FY 2021-22 and submit the Zone-wise compliance report to the Commission within six months from the date of this Order.”

- b. It has mentioned in the MYT Petition that, GoM has issued “AG Policy” in FY 2020-21 and MSEDCL is releasing the unmetered AG connections based on that policy. However, the Commission in its MTR Order in the Case No. 226 of 2022 dtd. 30.03.2023 has directed MSEDCL to release only metered AG connection.
- c. Since, the Commission has issued directive (to issue only metered AG connections) after the AG Policy release, releasing new unmetered AG connections is violation of the directive.
- d. MSEDCL to provide valid reason for releasing more than 1.5 lakhs new unmetered AG connections during FY 2022-23 & FY 2023-24.

MSEDCL Reply:

Reply to point a to d

MSEDCL always follows the directives issued by the Hon’ble Commission from time to time. Further, MSEDCL is a Govt. of Maharashtra undertaking company, therefore, any policy framed by Govt. of Maharashtra vide Government Resolutions also needs to be followed by MSEDCL. For releasing connections to Ag paid pending consumers paid after 01.04.2018, Govt. of Maharashtra passed the resolution no. संकीर्ण-२०२०/प्र.क्र.१२१/ऊर्जा-५, दि. १८.१२.२०२० of Ag Pump Connections Policy-2020. In the said GR under paragraph (E) – Metering at Sr. No. (3) it is mentioned that,

- a. "कृषी ग्राहकांचे मिटरिंग तसेच त्यांची देखभाल करताना येणाऱ्या अडचणी लक्षात घेऊन इतर वाहिन्यांवरील (उच्चदाब

वितरण प्रणाली व्यतिरिक्त) कृषी ग्राहकांना विना मिटर वीज पुरवठा करण्यात येईल. अशा कृषी ग्राहकांना त्यांचा जोडभार व वाहिनीवरील वीज वापराच्या अनुषंगाने फिडर इंडेक्सच्या माध्यमातून वीज वापर तपासून वीज बिल देण्यात येईल."

Therefore, in view of the above GR and considering the difficulties arising while carrying out metering of Ag pump connections and maintenance of Ag pump connections, un-metered electricity connections are released to Ag consumers excluding Ag pump connections on HVDS line. Accordingly, from FY 2020-21 to FY 2023-24, 2,88,328 nos. of unmetered Ag pump connections are released, and 1,92,538 nos. of metered Ag pump connections are also released as per availability of energy meters. Therefore, MSEDCL was not intentionally violating the directives of the Hon'ble Commission. The time period of Ag Pump Connection Policy-2020 ended on 31st March-2024. After 31st March-2024, metered connections are released to 37,095 nos. of Ag consumers and no un-metered Ag connections are released during FY 2024-25 till date.

Query 2. Unmetered AG Sales

- a. MSEDCL in its replies to data gap set 1 has provided the consumption of MERC approved 502 feeders for FY 2022-23 & FY 2023-24. However, MSEDCL has not provided the connected load to these feeders. In this case, MSEDCL needs to submit quarter-wise, zone-wise AG dominated Feeder details (Consumption and connected load) used for computation of unmetered AG sales for FY 2022-23 & FY 2023-24
- b. Further, MSEDCL needs to clearly mention in its petition shall about AG index used (Units/HP/Annum) for calculation of unmetered AG sales.
- c. MSEDCL in the petition has mentioned that the data of 1168 feeders (in addition to 529 Ag feeders) is considered for feeder input-based Index based Ag billing in Sept 2023 quarter and the data of same is displayed on the website.
- d. However, as per the directives given in the MTR Order Case no. 226 of 2022, MSEDCL needs to incorporate such feeder wise data as a part of MYT Petition. The relevant extract of the same is reproduced below:

*"Further, the Commission notes that improvements in the feeder-based input methodology, enhancement of sample size, selection of feeders strictly in accordance with the principles, methodology and conditions outlined under the MYT Order in Case 322 of 2019 is a continuous process for further refinements in assessment of AG sales, which MSEDCL should continue. **MSEDCL should submit such information in public domain from time to time in accordance with conditions outlined under MYT Order and also incorporate the same as part of next tariff revision filing in timely manner.**"*

- e. As per the directive given in MTR Order, MSEDCL has failed to provide the above-mentioned data as a part of MYT petition. Further, in the replies to data gaps set 1, MSEDCL has mentioned that compliance of the said directive has been submitted under para 2.14 of MSEDCL's reply to submission for Suo Moto hearing on review of compliance of various directions issued by Hon'ble Commission in case no 226 of 2022 dated 1st July 2024.
- f. The submission in the Sou-moto hearing is reproduced below –

"MSEDCL submits that, details regarding meter data of identified Feeders shall be submitted during filing of upcoming MD Petition. However, the information of directives regarding AG index methodology is submitted to Hon'ble Commission Vide letter Ref. No. Director (O)/FDR Index Billing/ No. 13498 dated 07.05.2024

and is attached as Annexure-I."

- g. It appears that MSEDCL has not adequately addressed the issue, as evident from the published data on their website. MSEDCL needs to provide Feeder-wise data as mentioned above as a part of MYT Petition.

MSEDCL Reply:

Reply to query 2-a,b,c,d,e,f & g:

MSEDCL submits that the requisite data for said query is attached as **Annexure Datagap Set 1_Query 6-1** and **Annexure Datagap Set 1_Query 6-2**.

Query 3. 4 Standby Charges

- a. MSEDCL has proposed standby charges of approximately Rs. 396 Cr. for each year in the 5th Control Period. However, these charges are currently accounted for under Revenue from Tariff. Since standby charges are not recovered through consumer tariffs, MSEDCL must reclassify them as a separate revenue head, "Revenue from Standby Charges," and update the revenue gap tables accordingly.

MSEDCL Reply:

- a. MSEDCL submits that it is a Public Company in the category of 'State Government Company' registered under the Companies Act 1956, with the main objectives of developing, operating and maintenance of distribution system for supplying electricity to the consumers in its area of supply. It has to maintain its accounts as per Indian Accounting standards (IND AS). The Accounts representation and maintenance is subject to audit by the auditors. The Standby charges are the revenue component of the company. The presentation of standby charges in the ARR sheet and the effect thereto has to be examined by the auditors before it is incorporation. Hence, MSEDCL submits that it shall vet the effect of such incursion in ARR from the auditors and shall take necessary action accordingly.

Tariff Design & Methodology

Query 4. Tariff Design & Methodology

- a) ToD Tariff - MSEDCL has indirectly proposed hike in the tariff through ToD structure. MSEDCL also needs to furnish the rational/justification for the rates proposed and the impact on overall ToD revenue and ABR for HT-Ind/ LT-Ind with proposed ToD slabs/rates to be separately submitted.
- b) Grid Support Charges/Introduction of kVAh billing to LT, etc. – MSEDCL needs to provide impact of various proposed initiatives under Tariff Design & Methodology chapter on overall revenue and ABR.

MSEDCL Reply:

- a. MSEDCL submits that the detailed rational / justification for rates proposed is incorporated in the revised petition in Chapter 6 – "Tariff Design & Methodology"
- b. MSEDCL submits that the impact of various proposed initiatives under Tariff Design & Methodology chapter on overall revenue and ABR is incorporated in the revised petition.

Query 5. Additional Surcharge

- c) MSEDCL has proposed the additional surcharge for 5th control period.
- d) Under the RA plan and overall power procurement planning, MSEDCL has proposed capacity addition of 15000 MW over & above existing contracted capacity.
- e) MSEDCL needs to justify the requirement of additional surcharge between Rs. 1.40/unit to Rs. 1.59/unit.

MSEDCL Reply:

MSEDCL submits that, In case of unforeseen disruption of supply or in case of planned shut down or in case of breakdown of generating plant, these consumer need power supply as the industrial load will continue as per production plan and cannot be shutoff abruptly as it could led to wastage of material or damage to machinery etc.

Therefore, they retain MSEDCL contract demand and in case of power failure from generator, they draw the required power straight from the MSEDCL grid.

In case of such Unscheduled Interchange (UI) from the state grid, they are liable to pay penal charges as per Regulation 19.2 of the MERC (DOA) Regulations, 2016 specified under Over drawal.

The charges may be equal to Temporary connection charges (higher than normal industrial tariff).

But there is always a fall back arrangement available for the open access consumers as above especially for such partial open access consumers connected to the state grid.

Here, we can see that without giving notice to MSEDCL power gets drawn from the grid by the virtue of having continuous connection with the state grid (although at higher price), but the instantaneous power requirement gets fulfilled.

Thus, in case of partial open access consumers, also, MSEDCL cannot escape from its Obligation to Supply. The open access consumer can at any time turn to MSEDCL and draw power from the grid. Thus, MSEDCL has tied up considerable quantum of power through PPAs.

The OA consumption has increased, the OA capacity operational in the State is almost 3450 MW.

The increase in OA Capacity From FY 2021-22 to FY 2024-25 (up-to Nov-24) is as below:-

Month	No. of consume rs.	MW	Mus	Month	No. of consume rs.	MW	Mus	Month	No. of consume rs.	MW	Mus
21-Apr	211	1375	426	22-Apr	274	1713	538	23-Apr	323	2137	563
21-May	213	1440	477	22-May	274	1751	615	23-May	344	2253	616
21-Jun	219	1478	480	22-Jun	277	1767	554	23-Jun	354	2254	663
21-Jul	226	1478	486	22-Jul	286	1794	557	23-Jul	365	2356	655
21-Aug	231	1501	487	22-Aug	288	1826	574	23-Aug	362	2344	680
21-Sep	220	1488	451	22-Sep	293	1869	496	23-Sep	372	2425	640
21-Oct	232	1514	460	22-Oct	296	1967	505	23-Oct	376	2412	633
21-Nov	239	1541	458	22-Nov	303	1971	469	23-Nov	377	2378	570
21-Dec	240	1576	467	22-Dec	304	1939	484	23-Dec	377	2397	607
22-Jan	247	1567	497	23-Jan	312	2061	510	24-Jan	396	2507	635
22-Feb	259	1637	478	23-Feb	317	2091	494	24-Feb	412	2585	639
22-Mar	261	1644	540	23-Mar	315	2072	586	24-Mar	420	2612	710
Total			5706	Total			6383	Total			7612

Month	No. of consumers.	MW	Mus
Apr-24	439	2715	683
May-24	444	2688	732
Jun-24	460	2763	679
Jul-24	490	3082	750
Aug-24	362	2344	753
Sep-24	528	3411	780
Oct-24	547	3449	786
Nov-24	550	3475	782
Total			5944

Further, the Commission has notified MERC (DOA) (Second Amendment) Regulation, 2023 dated 10.11.2023, wherein the eligibility criteria has been reduced from 1 MVA to 100 KW. The details of consumers with Contract demand 100 KW willing to avail open access is as below:-

CATEGORY	CONSUMER (Nos)	SANCTION_LOAD (KW)
HT INDUSTRIES	9409	15631205.3
HT COMMERCIAL	2867	1938632.95
HT SEASONAL_INDUSTRIES	578	180124.97
HT PUBLIC_WATER_WORK	963	677849.74
HT PUBLIC_SERVICE	1571	1173488.54
HT RAILWAY/METRO/MONO	104	173428.67
HT RESIDENTIAL	302	204060.23
HT EV_CHARGING_STN	41	84613
HT TOTAL	15835	20063403.4
LT RESIDENTIAL	1759	276361.96
LT COMMERCIAL	3431	453806.7
LT INDUSTRIAL	5861	1068389.02
LT PUBLIC_SERVICES	972	126220.43
LT PUBLIC_WATER_WORK	108	18322.44
LT EV_CHARGE_STATION	72	8992
LT TOTAL	12203	1952092.55
Grand Total	28232	22048158.62

With the increase in OA transactions, the obligation of the Distribution Licensee in terms of power purchase commitments has been and shall continue to be stranded, and there will be an unavoidable obligation and incidence to bear the fixed costs consequent to such commitments. Such fixed cost of power purchase has to be expected to be incurred with reasonable certainty, and also that such fixed cost of power purchase cannot be recovered from OA consumers through Wheeling Charges or Stand-by Charges.

Power Purchase Expense

Query 6. RPO Compliance of Past period

- In the MTR Order in the Case No. 226 of 2022, dtd. 31.03.2023, the Commission has provided the extension for compliance of RPO shortfall for FY 2020-21 & FY 2021-22 till the end of 4th Control Period. The relevant extract from the Order is reproduced

below:

Accordingly, the **Commission directs MSEDCL to carry forward standalone shortfall** of Solar RPO compliance of 60.40 MUs and shortfall of Non-Solar RPO of 3883.01 MUs for FY 2020-21 in upto FY 2024-25. Further the Commission also directs MSEDCL to carry forward shortfall of Solar RPO compliance of 1176.57 MUs and shortfall of Non-Solar RPO of 3838.43 MUs for FY 2021-22 in upto FY 2024-25. The Commission also directs that, MSEDCL shall meet of the above shortfall of RPO compliance for FY 2020-21 and FY 2021-22 alongwith earlier shortfall and standalone RPO compliance of respective years of the forth control period. Further, the Commission emphasizes that, MSEDCL needs to take all efforts to enter into PPAs with RE generators **to meet its shortfall of RPO compliance by the end of this control period**. The Commission is not inclined to give any further carry forward for meeting RPO shortfall of this control period in the next control period.

- b. However, MSEDCL has not mentioned anything about its past RPO shortfall in this petition. Additionally, MSEDCL requested to exempt RPO shortfall for FY 2022-23 & FY 2023-24.
- c. Despite, extending the timeline, MSEDCL is unable to consider its past year shortfall in its MYT Petition. MSEDCL must provide justification for non-consideration of past RPO shortfall approved in the MTR Order.

MSEDCL Reply:

Reply to query a & b:

As per MTR Order in Case No. Case No. 226 of 2022, dated 31.03.2023, the RPO compliance approved by the Commission for FY 2020-21 and FY 2021-22 is as shown in the table below:

Particulars	Standalone Shortfall		Cumulative RPO (Surplus)/ Short fall till end of FY (in MUs)
	Solar (in MUs)	Non-Solar (in MUs)	
(Surplus)/ Shortfall Till FY 2019-20	4321	6115	10436
FY 2020-21	60	3883	14379
FY 2021-22	1177	3838	19394
Total	5558	13837	

There was cumulative shortfall of 19394 Mus for fulfilment of RPO targets. Out of 19394 Mus, there was shortfall of 5557.64 MUs for meeting Solar targets and shortfall of 13836.70 MUs for meeting Non-Solar targets. As per the CUF determined by Hon'ble Commission, the required capacity for meeting the solar shortfall of 5557.64 MUs was 2264 MW (@28% CUF) and for Non-solar shortfall of 13836.70 MUs was 6577 MW (@24% Avg CUF for non-solar).

RPO Compliance: FY 2022-23

RPO status Apr-22 to Mar-23 (Provisional)							
Net GEC in Mus	Particulars	Non-Solar (Including Mini- micro Hydro)		Solar		Total	
		Mus	%	Mus	%	Mus	%
145690	Target	16754	11.50	11655	8.00	28410	19.50
	Achievement	12539	8.61	10481	7.19	23020	15.80
	Shortfall (-)/ Surplus	-4216	-2.89	-1174	-0.81	-5390	-3.70

RPO Compliance: (FY 2023-24)

Net GEC in Mus	Particulars	Non-Solar (Including Mini- micro Hydro)		Solar		Total	
		Mus	%	Mus	%	Mus	%
159660	Target	18361	11.50	16764	10.50	35125	22.00
	Achievement	11113	6.96	11640	7.29	22753	14.25
	Shortfall (-)/ Surplus	-7248	-4.54	-5124	-3.21	-12372	-7.75

RPO Compliance: Table A

Particulars	Standalone Shortfall		Cumulative RPO (Surplus)/ Short fall till end of FY (in MUs)
	Solar (in MUs)	Non-Solar (in MUs)	
(Surplus)/ Shortfall Till FY 2019-20	4321	6115	10436
FY 2020-21	60	3883	14379
FY 2021-22	1177	3838	19394
FY 2022-23	1174	4216	24784
FY 2023-24	5124	7248	37156
Total (in MUs)	11856	25301	37156
In MW	4830	12026	16856

From above table, it is to submit that, there is cumulative shortfall of 37156 Mus towards fulfilment of RPO targets. Out of 37156 Mus, there is shortfall of 11856 Mus towards fulfilment of Solar RPO targets and shortfall of 25301 Mus towards fulfilment of Non-Solar RPO targets. Hence, the required capacity for fulfilment of Solar RPO shortfall is 4830 MW (calculated at 28% CUF, as determined by Hon'ble Commission) and Non-Solar RPO shortfall is 12026 MW (calculated at 24% CUF, as determined by Hon'ble Commission)

Accordingly, MSEDCL has contracted sufficient RE power for fulfilment of cumulative RPO shortfall. Following table shows the MSEDCL's RE Capacity contracted and commissioned as on Nov'2024:

Sr. No.	Source	Contracted Capacity (MW)	Commissioned Capacity (MW)
1	Wind	3386	2759
2	Bagasse based Co-generation	2827	2690
3	Biomass	37	37
4	Small Hydro	307	304.
5	Solar (Centralised)	14206	3706
	Solar (MSKVY)	1531	614
	Solar (Kusum A)	196	4
	Solar (Kusum C)	108	89
	Solar (MSKVY 2.0)	8150	55
	Total Solar	24191	4468
6	Wind-Solar Hybrid	4331	225
7	RTC/Storage	1468	0
8	Municipal Solid waste	17	4
Total A		36565	10487

In view of above MSEDCL submits that the sufficient RE power i. e. 36565 MW is contracted till Nov'24. Further, this is to submit that, apart from above, PPA signing of 6027 MW capacity under MKKVY 2.0 is under process. Also, the power generated from Solar pumps (till Oct'24 374 MW capacity) and rooftop solar (till Oct'24 2562 MW capacity) is also considered for fulfillment of Distributed RPO target.

MSEDCL had floated tenders in FY 2021-22 to 2022-23 for capacity around 12050 MW for procurement of Solar Power. Against the same 1499 MW Solar Power were contracted by MSEDCL and 25.66 MW capacity has been commissioned as on 31.03.2023. Further, during FY 2022-23, 3250 MW tenders were cancelled due to discovery of high tariff rate.

The contracted capacity of RE sources for Non-solar RPO is well sufficient for fulfilment of Non-Solar RPO Compliance. However, due to natural factors beyond the control of MSEDCL viz. Changes in climate and operational factors of RE Generators, the actual resulting CUF / PLF is not at par with the normative CUF / PLF, which eventually affects the actual generation from non-solar RE-sources and leads towards shortfall in meeting RPO target.

Further, MSEDCL executed Power Sale Agreement with SECI for procurement of 500 MW wind power, out of which Wind power from only 58 MW is receiving against the said PSA. Remaining balance wind power of 442 MW is terminated by SECI. Also, only 274 MW wind power projects are commissioned against MSEDCL's 500 MW wind tender, balance capacity of 226 MW is not commissioned. Despite MSEDCL's effort, the RE

Power was not be injected due to delay /non-commissioning/ no or poor response and infirm nature of RE sources to the bid floated by MSEDCL.

Reply to query c:

a) MTR Order in the Case No. 226 of 2022 dated 31.03.2023

‘.....Further, the Commission emphasizes that, MSEDCL needs to take all efforts to enter into PPAs with RE generators to meet its shortfall of RPO compliance by the end of this control period.

b) MERC (RPO, its Compliance and Implementation of REC Framework) (First Amendment) Regulations, 2024.

Amendment to Regulation 6 of the Principal Regulations: (6 Operating Period The Operating Period of the RPO framework specified under these Regulations shall commence from 1 April, 2020 and shall be valid until 31 March, 2025.)

Substitution of Regulation 6 of the Principal Regulations:

“The Operating Period of the RPO framework specified under these Regulations shall commence from 1st April, 2020 and shall be valid until 31st March, 2030”

From above provisions of MERC Regulations, the control period shall be valid until 31.03.2030. Hence, it is submitted that MSEDCL will fulfil this cumulative shortfall till 31.03.2030.

A) Following table shows the capacity addition planning alongwith existing RE projects which is in line with Resource Adequacy planning submitted by MSEDCL:

Table B

Source	Commissioned Capacity as on 31.03.2024 (MW)	Capacity addition expected from PPA executed + Consent Given + Tender under process /planned (MW)						Capacity Addition planned (MW)	Total (MW)
		FY-24-25	FY-25-26	FY-26-27	FY-27-28	FY-28-29	FY-29-30		
Large-Hydro	2636	183	0	109	313	104	0	709	3345
PSP-BSES Storage	250	0	0	0	0	1750	2074	3824	4074
Wind	2855	0	0	0	0	0	0	0	2855
Solar	4331	1279	9587	13180	1000	3000	0	28045	32377
Hybrid	0	0	300	780	3264	0	0	4344	4344
FDRE	0	0	0	1468	0	0	0	1468	1468
Bagasse+Biomass	2731	180	0	345	345	0	0	870	3601
Small Hydro	314	3	0	0	0	0	0	3	317
Sub-Total -A	13118	1645	9887	15882	4922	4854	2074	39263	52381
Solar pump	100	374	374	560	560	560	187	2615	2715
Rooftop	1950	281	399	559	782	1095	1533	4649	6599
Sub-Total -B	2050	655	773	1119	1342	1655	1720	7264	9314
Total	15168	2300	10660	17001	6264	6509	3794	46527	61695

From above table , it is to submit that the capacity addition planned for fulfilment of RPO targets available is 46527 MW and including the present commissioned capacity (as on 31.03.2024) , the total available capacity at the end of FY 2029-30 will be 61695 MW.

B) The details of planned capacity addition is as below:

Capacity Addition Plan - Hydro

Sr No	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	Subansari Hydro Electric Project	183	10-02-2012	FY 2024-25
2	Pakaldul HEP	100	Consent given	FY 2027-28
3	Ratle Hydroelectric Project	213	Consent given	FY 2027-28
4	Kwar HEP	54	Consent given	FY 2028-29
5	Dugar HE Project	50	Consent given	FY 2028-29
6	Kiru HE Project	109	Consent given	FY 2026 (March)
7	Sawalkot HE Project	323	Consent given	FY 2033 (July 2032)
8	Dibang Multipurpose Project	288	Consent given	FY 2031-32
Total -Hydro		1320		

Capacity Addition Plan - Small Hydro

SrNo	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	Small Hydro	3.2	0	0
Total Small Hydro		3		

Capacity Addition Plan -PHSP/BESS (Storage)

SrNo	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	MSEDCL PHSP Tender (JSW & TPL)	3500	PPA executed	50% capacity - 2028-29, 100% capacity FY 2029-30
2	Sardar Sarover PSP capacity	324	Consent given	FY 2029-30
3	BESS	750	LoA issued	2026-27
Total PSP/Storage		4574		

Capacity Addition Plan - Solar

SrNo	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	Existing Centralised Tender (Intra state)	925	PPA Executed	FY 2024-25
2	MSKVY -1	250	PPA Executed	FY 2024-25
3	KUSUM-A	29.7	PPA Executed	FY 2024-25
4	KUSUM-C	74	PPA Executed	FY 2024-25
5	Grid connected solar (Inter state) (NHPC)	1475	PPA Executed in April -24 & May-24	FY 2026-27

6	MSKVY 2.0 - phase-I	9144	PPA Executed - 7185 MW	FY 2025-26
7	MSKVY 2.0 - phase-II	5077	LOI issued - 4795 MW	FY-2026-27
8	Solar Tender Phase-X Intra	400	LoA issued	FY 2025-26
9	KUSUM-A	42.5	LoA issued	FY 2025-26
10	Gird connected inter-state(NTPC)	1600	1600 (Anboto-300, Apprava-300, JSW-700, avada-300)	FY-2026-27
11	SJVNL	1200		2026-27
14	SECI -tranche -XIII	700	PSA -JSW 700	2026-27
18	MSEDCL Thermal + Solar Tender	5000	PPA executed	2026-27, 2027-28, 2028-29
19	Solar (Inter/Intra) Tender phase-11	150		FY 2026-27
20	LIS (Intra)	885		FY 2026-2027
21	MSKVY 2.0 - phase-II	1093	Tender under process	FY 2026-2027
Total Solar		28045		

Capacity Addition Plan - Bagasee

SrNo	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	Bagasee (MoU Route)	180	PPA Executed	FY 2024-25
2	Bagasee (MoU Route)	690		FY 2026-2027
Total Bagasee		870		

Capacity Addition- Hybrid

SrNo	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	Hybrid- Wind -Solar	300	PPA Executed	FY 2025-26
2	Hybrid-Wind-Solar (NTPC)	780	PPA - 780 MW (ACME -300, Sprang - 250, Junipar-230)	FY-2026-27
3	Hybrid-Wind-Solar	3264	PPA executed	FY 2027-28
Total Hybrid		4344		

Capacity Addition- FDRE

SrNo	Power Plant/Entity	Capacity (MW)	PPA status /Consent Given /Tender under Pipeline	Expected COD
1	FDRE (SJVN)	1468	PPA Executed	FY 2026-27

From above table, it is to submit that the for fulfillment of 43.33% Total RPO targets, the required Mus will be 92848 and accordingly, for fulfillment of RPO targets as per MERC RPO amendment Regulations, 2019, 44163 MW will be required.

Parameters	Capacity in MW
Capacity addition expected from PPA executed + Consent Given + Tender under process /planned (MW)-Table B	61695
Requirement at the end of FY 2029-30 (in MW)-As per resource adequacy Planning (Table C) (Calculated at 24% CUF)	44163
Surplus in MW	17532
Required capacity to meet earlier shortfall till March 2024 (MW) (Table A)	16856
Surplus at the end of FY 2029-30	676

In view of above, it is to submit that, MSEDCL will fulfill its RPO targets along with earlier cumulative RPO shortfall and MSEDCL will be in surplus of 676 MW till the end of FY 2029-30 towards fulfillment of total RPO compliance.

Contribution to Contingency Reserve

Query 7. Contribution to Contingency Reserve (FY 2023 & FY 2024)

- a. MSEDCL needs to provide details of security deposit received during FY 2022-23 & FY 2023-24 in the following format.

Years	Security Deposit Billed	Security Deposit Received (Rs. Cr.)	
		Cash	BG/Other Mode
FY 2022-23			
FY 2023-24			

MSEDCL Reply:

MSEDCL submits the details as requisite below:

Years	Security Deposit Billed	Security Deposit Received (Rs. Cr.)	
		Cash	BG/Other Mode
FY 2022-23	5556.95	1850.57	1059.76
FY 2023-24	6378.45	2143.79	962.14

Note:

- SD demanded is inclusive of First SD _Additional SD demanded during the year.
- SD received figures are taken as per figures available in Annual Accounts (SAP Module)
- As the BG/LC figures are not available in SAP SD balance, the yearly addition of BG/LC is calculated on the basis of closing balance available in IT report as on Mar-22, Mar-23 & Mar-25.

Statement of Security Deposit as on Mar-23 & Mar-24 (As per Annual Accounts of MSEDCL)

FY 22-23 (as on Mar-23)		
Sr. No	Particular	Amount (Rs. Cr.)
1	Op. Balance	9063.10

2	Receipt	1850.57
3=1+2	Total	10913.67
4	Refund	311.88
5=3-4	Cl. Balance	10601.79

FY 23-24 (as on Mar-24)		
Sr. No	Particular	Amount (Rs. Cr.)
1	Op. Balance	10601.79
2	Receipt	12143.79
3=1+2	Total	12745.58
4	Refund	427.54
5=3-4	Cl. Balance	112318.04

The statement of Security Deposit received during FY 2022-23 & FY 2023-24 is as below:

FY 22-23 (as on Mar-23)			
Category	SD Demand	Cash	BG/ LC
HT	2317.28	1070.07	1059.76
LT	3239.67	723.64	0
Total	5556.95	1793.72	1059.76

FY 23-24 (as on Mar-24)			
Category	SD Demand	Cash	BG/ LC
HT	2132.69	1215.06	962.14
LT	4245.75	813.12	0
Total	6378.45	2028.18	962.14

Note:

- SD demanded is inclusive of First SD + Additional SD demanded during the year
- SD received in cash figures is inclusive of First SD plus Additional SD received during the year as per IT report.
- As the BG/LC figures are not available in SAP SD balance, the yearly addition of BG/LC is calculated on the basis of closing balance available in IT report as on Mar-22, Mar-23, Mar-25.

Capex

Query 8. Capitalization

- It is observed that historical per year capitalization of MSEDCL is in the range of Rs.3,500 Cr. to Rs. 4,500 Cr.
- However, MSEDCL has proposed more than Rs. 65,000 Cr. capitalization during 5th Control Period. For the first three years of the control period, the proposed capitalization is approx. Rs. 52,000 Cr. This proposed capitalization is comparatively higher and not following the historical trend.
- Considering the lower capitalization in past years, MSEDCL needs to justify the execution plan for higher capex execution as proposed for 5th Control Period and provide the details of the planning manpower requirement.
- Further, MSEDCL needs to provide the data for past 5 years of progress in the physical infrastructure through capitalization such as increase in LT:HT line length, no. of augmented substations, increase in connected load (MVA), no. of added feeders, transformers, switching stations, etc. Also, MSEDCL to provide plan for improvement in physical infrastructure through capitalization in 5th Control Period.

MSEDCL Reply:

Reply to point a & b

For the first three years of the control period, the proposed capitalization is approx. Rs. 52,000 Cr. This proposed capitalization is comparatively higher and not following the historical trend. Most of the Capex schemes having huge capex like RDSS Rs.39000 cr., ADB Rs.7600 cr., AIIB Rs 1588 cr., System strengthening of MSKVY 2.0 under RDSS Rs.2978 cr., DPDC -TSP, OTSP, SCP, Non-Tribal schemes Rs.5000 cr., TSP grant substation scheme Rs.460 cr. (approximately). Apart from these schemes MSEDCL has planned for implementation of "New Consumer FY 2025-26 to 29-30 Rs.2250 cr. during projected period. Accordingly based on Capex projection the Capitalization is being estimated for the Control Periods. The details of first three years of the control period for approx. Rs. 52000 cr. is as below:

MAJOR SCHEME IMPACT ON CAPITALISATION FOR CONTROL PERIOD FOR FIRST 3 YEARS				
				Annexure "A"
SCHEME NAME	CAPEX (FY 24-25)	CAPEX FOR (FY 2025-26 TO FY 27-28)	CAPITALISATION FOR (FY 2025-26 TO FY 27-28)	SCHEME TENURE
RDSS	7,275.61	29,598.47	29,237.28	FY 2021-22 to 2025-26
AIIB	152.87	1,375.81	1,428.68	FY 2024- TO 2029
ADB	2,280.00	5,320.00	7,600.00	FY 2024- TO 2029
MSKVY 2.0 Under RDSS	298.7	2,680.20	2,680.20	-
New Consumers 2025-2030	-	2,250.00	2,150.00	FY 2025 TO 2030
System Strengthening (MSKVY 2.0)	1,092.73	1,033.00	1,450.00	-
TSP Grant substation scheme	-	460.00	445.00	-

DPDC / Non-Tribal	774.41	2,819.63	2,720.00	-
DPDC / SCP (Loan up to 2012-13)	187.87	684.03	720.00	-
DPDC / TSP + OTSP	118.97	433.17	450.00	-
DDF	600	1,800.00	1,817.00	-
Total	12,781.16	48,454.31	50,698.16	

Sr. No.	Scheme Name	CAPEX FOR (FY 2025-26 TO FY 27-28)	CAPITALISATION FOR (FY 2025-26 TO FY 27-28)
A	SCHEMES AS PER ANNEXURE "A"	48,454.31	50,698.16
B	OTHER SCHEMES:		
1	New consumers	-	124.98
2	Evacuation of Power from EHV Substation	83.00	93.46
3	System strengthening work in Metropolitan Area	29.00	54.20
4	Incomer Metering-IM	-	1.89
5	Underground works of extended area of Baramati Municipal Corporation	-	9.10
6	MIDC Network Strengthening	100.00	124.84
7	Underground works under System Strengthening in Gondia, Bhandara and Nagpur 1st Phase	12.00	24.21
8	RDSS-Dvp of Particular Vulnerable Tribal Grp(PVTG)	-	10.30
9	Nagpur OH to UG	236.30	225.00
10	SIDBI Cluster Development Fund (CDF)	200.00	210.00
11	Special Assistance-Nagpur & Pune System Strengthening	135.73	139.73
12	New Consumers 2025-2030		
13	Evacuation of Power from EHV Substation (Phase-III)	130.81	135.81
14	Evacuation of Power from EHV Substation (Phase-IV)	150.00	151.00
15	Approval for installation of Rooftop solar at MSEDCL owned Building such as offices, substations, stores, Rest house and CFC's for total pf 50MW	142.25	199.50
16	Substation Monitoring System	124.24	124.24
17	Electric Vehicle Charging Stations	0.51	0.51

Sr. No.	Scheme Name	CAPEX FOR (FY 2025-26 TO FY 27-28)	CAPITALISATION FOR (FY 2025-26 TO FY 27-28)
18	Implementation of Electric Vehicle Charging Infrastructure operation Centre (IT)	0.60	0.60
19	NBSP SIM services	26.73	26.73
20	Procurement of IT infra	37.50	37.50
21	Implementation of solar Roof top project for the Prakashgad Building Bandra	0.36	0.36
22	Cloud Infrastructure	-	-
	Total	1,409.02	1,693.96
	TOTAL CAPITALISATION	49,863.33	52,392.11

Reply to point c & d

Execution Plan:

The Capitalization considered on the basis of past trend of Capitalization which majorly constitute the DPDC Scheme funded by GoM, RDSS Scheme sanctioned by GoI & Infrastructure development plan for release of new connection / enhancement of load.

The works sanctioned under various schemes are executed through tendering process. All these tenders would be Turn-Key Tenders & the works will be carried out through the outside Agencies / through empaneled agencies. Only Supervision of all these works is to be done by the MSEDCL & it will be carried out by existing MSEDCL employees.

The Supervision hierarchy is as under:

- Chief Engineer (Dist.), C.O.
- Superintending Engineer (Dist.), C.O.
- Executive Engineer (Dist.), C.O.
- Chief Engineer (O&M), Zone.
- Superintending Engineer (O&M), Circle.
- Executive Engineer (O&M), Division.
- Add.Ex. Engr / Dy. Ex. Engr of Subdivision
- Asst. Engineer of Section.

d. MSEDCL submits that the infrastructure developed in last 5 years is attached as Annexure_Datagap_Set_4_Query 8d.

Total tentative physical infrastructure to be added during the 5th control period:

- New Substation: 1490 Nos.
- Augmentation of Power T/F: 1203 Nos.
- Additional Power T/F: 961 Nos.
- New DTs: 223205 Nos.

- Aug. of DTs: 48621 Nos.
- New HT Line: 191181 Km
- New LT Line: 87116 Km

Query 9. No DPR Schemes

- a. MSEDCL needs to register Non-DPR schemes as per MERC (Approval of Capital Investment Schemes) Regulations, 2022. The relevant extract from the regulation is reproduced below:

All Non-DPR Schemes shall be required to be registered with the Commission on quarterly basis in physical form, till the commencement of the web-portal referred in Regulation 19 of these Regulations, after which the Schemes shall be registered on the web portal:

- b. It has been noted that MSEDCL has failed to submit any Non-DPR schemes for registration. MSEDCL is required to provide a justification for non-compliance with the MERC regulation.
- c. As per the regulation, non-registered Non-DPR schemes are ineligible for final approval. MSEDCL must provide a compelling reason for the Commission to consider capitalization of unregistered non-DPR schemes for FY 2022-23 and FY 2023-24 during the final true-up.

MSEDCL Reply:

MSEDCL clarifies that the non-registration of certain Non-DPR schemes was not intentional. Efforts have been made to comply with the MERC (Approval of Capital Investment Schemes) Regulations, 2022, and several schemes have already been registered as required. The details of the registered schemes are provided below for reference.

Regarding the schemes that remain unregistered, the reasons for non-registration are detailed below. MSEDCL remains committed to adhering to the MERC regulations and will take all possible steps to address this gap.

Non DPR Schemes Details of MERC Registration			
Sr. No.	Scheme Name	Registration of Non-DPR Scheme (Yes / No)	Justification for non-registration
1	MIDC Interest free Loan Scheme	Yes	Hon'ble Commissions approval taken vide MERC/CAPEX/2017-18/4783 dated 28th Nov, 2017. The same is attached as Annexure_Datagap_Set_4_Query 9-1 .
2	Rural Electrification	No	100 % grant receives from GOM every year for the removal of backlog of Ag pumps & Electrification from the notified backlog districts. However, no funds are received from GoM under this scheme since the FY 2018-19, therefore, some capital works carried out in emergency from the internal source of MSEDCL, hence the scheme is not registered with Hon'ble Commission. Further, no monetary benefits are envisaged under
3	Ag Pump Back log	No	

Non DPR Schemes Details of MERC Registration			
Sr · N o.	Scheme Name	Registr ation of Non- DPR Schem e (Yes / No)	Justification for non-registration
			<p>this scheme as the scheme is implemented as social obligation for removal of backlog of Ag pump energization and fulfil universal service obligation under section 43 (Duty to Supply on Request) of the Electricity Act 2003.</p> <p>Therefore, MSEDCL humbly request Hon'ble Commission to consider the capitalization done under this scheme for the true up period of FY 2022-23, FY 2023-24 & 2024-25.</p>
4	DDF/NON DDF	No	<p>The DDF/ Non-DDF schemes are either consumer funded or investment is done on accrual basis as per the request from consumers. MSEDCL implements DDF/Non-DDF Scheme on request of individual or group of applicant/consumers that are on the same/contiguous premise/s and requesting power supply through Dedicated Distribution Facility (DDF) / Non DDF as per provisions of MERC Supply Code Regulations, 2021. Relevant part of the regulations is reproduced below.</p> <p><i>"4.3.3 Where an Applicant opts for DDF for his premises, the Distribution Licensee shall be authorized to recover all expenses reasonably incurred on such works from the Applicant."</i></p> <p>.... Thus, it is to mention that MSEDCL implements DDF Scheme as per the requirement of individual or group of applicant/consumers that are on the same/contiguous premise/s and requesting power supply through Dedicated Distribution Facility (DDF)</p> <p>Further MSEDCL implemented the Non-DDF CC&RF Scheme for providing infrastructure to provide power supply to new consumer's/group of consumers who want early connection's & opts to execute the work and bears the cost of infrastructure then the refund of the cost of infrastructure given by way of adjustment through energy bills.</p> <p>Accordingly, MSEDCL submits that there is no control of MSEDCL on consumer opting for DDF / Non-DDF hence MSEDCL has not registered DDF / Non-DDF scheme covered under non-DPR.</p>
5	Electric Vehicle Charging Stations	Yes	Hon'ble Commissions approval taken vide MERC/CAPEX/2021-22/548 dated 15th Dec, 2021. The same is attached as Annexure_Datagap_Set_4_Query 9-2.
6	Implementation of Electric Vehicle Charging Infrastructure operation Centre (IT)	Yes	Hon'ble Commissions approval taken vide MERC/CAPEX/2021-22/548 dated 15th Dec, 2021. The same is attached as Annexure_Datagap_Set_4_Query 9-2.
7	NBSP SIM	No	NBSP SIM Services is a regular activity catering to

Non DPR Schemes Details of MERC Registration			
Sr · N o.	Scheme Name	Registr ation of Non- DPR Schem e (Yes / No)	Justification for non-registration
	services		Automatic Meter Reading. Registration of above scheme to MERC under Non-DPR scheme is under process.
8	GIS network Analysis	No	Earlier, MSEDCL submitted DPR of the GIS&NA scheme for RDSS approval. Approval of the same is not received under RDSS. Submission of above scheme to MERC for in-principal approval is under process.
9	Procurement of IT infra	No	LOAs are placed for procurement of IT infra equipment such as Computers, Printers, Laptops etc. for office use of MSEDCL employees.
10	Implementation of solar Roof top project for the Prakashgad Building Bandra	Yes	Letter No. CE (Infra)/RTS/Bandra/1317 dated 09 th Jan, 2025 is submitted for registration to the Hon'ble Commission. The same is attached as Annexure_Datagap_Set_4_Query_9-3 .
11	Cloud Infrastructure	No	The Cloud infrastructure project involves hosting of various MSEDCL business applications including Billing, ERP, Website etc. Submission of above scheme to MERC for in-principal approval is under process.

Other Queries

Query 10. MYT Excel Formats

- a. MSEDCL needs to provide the following MYT Excel formats with revised submission.
 - a. F1.1 (Wheeling Forecast) - For 5th Control Period.
 - b. F1.2 (Voltage wise sales) - For 5th Control Period.
 - c. F1.3(Distribution Losses) - For 5th Control Period.
 - d. F1.5 (Demand & Supply Position) – For True-up, Provisional True-up and 5th Control Period.
 - e. F2.3 (AT&C losses for 5th Control Period) - Not submitted in the Excel Format.
 - f. F16 (Billing & Collection Efficiency) -
 - g. F17 (Trajectory for Billing & Collection Efficiency) - For 5th Control Period.
 - h. F20 (ToD tariff for Control Period) - For 5th Control Period.

MSEDCL Reply:

MSEDCL submits that the following forms have been incorporated in the revised petition model: Form 1.1, Form 1.2, Form 1.5, Form 2.3 & Form 22 (ToD). However, MSEDCL requests Hon'ble Commission that regarding Form 1.3, Form 16 & Form 17, for control period, it would be difficult to provide and compile the data with circle wise information. Hence, MSEDCL requests to consider the same and shall be submitted subsequently.

Due to voluminous data, all annexures to balance queries of Data Gap Set 1 & 2 and Data Gap Set 3 & 4 are uploaded in Drive and the link of the same is provided as below;

https://drive.google.com/drive/folders/1o8x8lVr6rZKclL3Vi8ADv5WhhGeJH04i?usp=drive_link