Data Gaps-Set-1

Petition of M/s Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for Final True up of ARR for FY 2019-20, FY 2020-21 & FY 2021-22, Provisional True up of ARR for FY 2022-23 and Revised Projections & ARR for FY 2023-24 to FY 2024-25. (Case No. 226 of 2022)

1. **Data Gaps on Energy Sales**

Data Gaps related to True-up of FY 2019-20

Query 1. Para 2.3.1: Category-wise sales for FY 2019-20. (Table-1)

b) **In addition to the above, Petitioner should submit the following in Excel format.**
    - **Circle-wise consumption recorded on other Feeders with AG consumers (along with information of connected load, no. of AG consumers)**

Data Gaps related to True-up of FY 2020-21

Query 9. Para 3.3.1: Category-wise sales for FY 2020-21. (Table-45)

b) **In addition to the above, Petitioner should submit the following in Excel format.**
    - **Circle-wise consumption recorded on other Feeders with AG consumers (along with information of connected load, no. of AG consumers)**

Data Gaps related to True-up of FY 2021-22

Query 15. Para 4.3 Page No.93

b) **In addition to the above, Petitioner should submit the following in Excel format.**
    - **Circle-wise consumption recorded on other Feeders with AG consumers (along with information of connected load, no. of AG consumers)**

MSEDCL Reply:

MSEDCL submits that inadvertently, the Other feeder's data provided earlier includes all other feeders (with & without Ag load) and excluding spare feeders, now sheet contains the details of Other feeders having Ag load only. MSEDCL requests the Hon'ble Commission to kindly the consider updated reply attached herewith in **Annexure Query 1(b), 9b(4) & 15b(4).**

Query 8. Format F13 FY 2019-20

b) **Petitioner should submit details of category-wise open access wheeled units (MU) during FY2019-20 and category-wise detailed break-up of revenue from various open access charges such as wheeling charges, cross-subsidy surcharge, additional surcharge.**

MSEDCL Reply:

b) Details of category-wise open access wheeled units (MU) during FY 2019-20 already submitted in Data Gaps reply. MSEDCL submits the herewith details of category-wise open access wheeled units (MU) during FY 2019-20 and category-wise detailed break-up of revenue from various open access charges such as wheeling charges, cross-subsidy surcharge, additional surcharge as attached in **Annexure Query 8b**. As regards additional surcharge, category-wise breakup of Rs. 368.50 Crs is provided in Annexure in addition to adjustment for part period billing of Rs. 207 Crs. As regards adjustment for past period billing it is submitted that payment made against the provision of Additional Surcharge refund made in FY 2018-19 in March 2019 billed in April 2019. A provision is made in FY 2018-19 in (GL 30200017). However, the effect of payment has been given to past billing. Therefore, the past billing expenditure of effect has been given to past billing adjustment.

Query 21. Para 5.3.2: Category-wise sales for FY 2022-23. (Table-140)

a) Petitioner has submitted the energy sales of agricultural consumers for FY 2022-23 as below:

Particulars	As per MYT Order	Actuals	Deviation
FY 2022-23	28,847.04	34,336.42	5,489.38

b) There is a significant deviation in agriculture sales w.r.t. the sales approved in MYT Order 322 of 2019. The petitioner should justify it with appropriate details of the methodology used for the computation of AG sales. Further, the Petitioner should provide a breakup of sales deviation to the metered and unmetered categories.

c) In addition to the above, Petitioner should submit the following details for H1 (Apr to Sep) for FY2022-23, 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 H1 of FY2022-23) of No. of AG consumers (metered and un-metered), connected load (HP) (metered and un-metered) and billed units (metered and un-metered)**

MSEDCL Reply:

(a) & (b) Break up of deviation in sales to metered category and deviation to unmetered category is attached herewith as **Annexure Query 21(a & b).**

c)

- 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)
  - Desired details are attached herewith in **Annexure Query 21(c)**

Query 23. Month-wise & Category-wise Revenue from sale of electricity for FY 2022-23

a) The Petitioner should provide the table of Month-wise and Category-wise break up of Sales and Revenue for FY 2022-23 (H1 actuals and Estimates for H2 of FY2022-23) with break-up of revenue components in terms of demand/fixed charge, energy charge, wheeling charge and other components of revenue.

<u>MSEDCL Reply:</u>

i. MSEDCL submits that month-wise and Category-wise sales for FY 2022-23 is already submitted in MTR Petition Formats Form 1 'F1 MSEDCL Excl DF Mon 22-23'.

ii. Month-wise and Category-wise break-up of revenue components for FY 2022-23 H1 actuals is attached herewith in **Annexure Query 23**.

Query 25. CAGR consideration for sales projection Para 6.3.4 (Table 175)

b) Further, Petitioner should provide its assessment of impact on sales on account of COVID lock-down restrictions during FY2021-22, particularly for HT-Industry, LT-Non-domestic and LT-Domestic consumer categories.

f) Petitioner should provide detailed information about projected growth in <u>New Load category such as – Electric Vehicles</u> charging stations installations (as on Nov 2022) (Contract Demand, no. of consumers, sales), pending applications as on date (Contract Demand, no. of consumers, sales), and projected EV installations/sales in FY2023-14 and FY2024-25 (Contract Demand, no. of consumers, sales).

g) Petitioner should provide detailed information about projected growth in <u>New Load category such as – Metro/Monorail/other public transportation</u> (as on Nov 2022) (Contract Demand, no. of consumers, sales), pending applications as on date (Contract demand, no. of consumers, sales), and projected EV installations in FY2023-14 and FY2024-25 (Contract Demand, no. of consumers, sales).

<u>MSEDCL Reply:</u>

b) MSEDCL submits that the reply to this data gap is attached herewith in **Annexure Query 25(b)**.

f) MSEDCL requests the Hon'ble Commission to kindly the consider following updated reply against the Query 25(g)

i. Details of EV charging stations installations (as on Nov 2022)

Voltage Level	Contract Demand (kVA)	No. of consumers (No.)	Sales (MU)
HT	33958	12	35.09
LT	8273	249	1.39

ii. Pending applications as on date

Particulars	Contract Demand (kVA)	No. of consumers (No.)	Sales (MU)
As on Nov.22	Nil	Nil	Nil

iii. Projected EV installation

Year	Voltage Level	Contract Demand (kVA)	No. of consumers (No.)	Sales (MU)
FY 2023-24	HT	37354	14	57.90
	LT	9100	330	2.24
FY 2024-25	HT	41089	16	63.69
	LT	10010	363	2.47

g) MSEDCL submits that the reply to this data gap shall be submitted subsequently

i. Details of Metro/Monorail/other public transportation (as on Nov 2022)

Voltage Level	Billing Demand (kVA)	No. of consumers (No.)	Sales (MU)
HT	19,261	102	56.53
EHV	5,883	4	12.96

ii. Pending applications as on date

Particulars	Contract Demand (kVA)	No. of consumers (No.)	Sales (MU)
HT	6500	1	#
EHV	56000	2	#

Pune - Two Nos. applications on EHV level (28 MVA each) at Technical Feasibility stage with MSETCL, Palghar – HT - High Speed Rail sanctioned - WIP

iii. Projected EV installation – Please refer reply to Query 25(f) above.
iv. Projected installation –Metro/Monorail/other public transportation

Year	Voltage Level	Billing Demand (kVA)	No. of consumers (No.)	Sales (MU)
FY 2023-24	HT	24,292	104	92
	EHV	4,635	6	21
FY 2024-25	HT	25,508	110	95
	EHV	4,867	7	22

3. Data Gaps on CAPEX and ARR

Other Expenses

Query 25. FY 2020-21 Section 3.20 (pg no 122) FY 2021-22 section 4.20 (pg no 177)

As per provision of Regulation 35.1 of MYT Regulation 2019, Petitioner is required to deposit the contingency reserve contribution in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the Year.

Petitioner need to submit the details of the contribution invested in the securities authorised under the Indian Trusts Act, 1882 and the date of investments.

However, it is noted that, as per para 5.19.2 of petition, due to financial crunch owing to COVID-19 pandemic, MSEDCL has not invested any amount towards contribution to contingency reserves for FY 2020-21 & FY 2021-22.

As regulations in case of non-investment of amount of contribution to contingency reserves in authorised securities for two consecutive years, then the contribution to contingency reserves shall not be allowed in calculation of ARR from the subsequent year onwards. Petitioner need to submit its view on the above provisions of the Regulations.

<u>MSEDCL Reply:</u>

It is submitted that MSEDCL is not getting full recovery of the revenue receivable from consumers. MSEDCL is managing its working capital requirement need by availing STL/MTL/LTL working capital loans from banks and financial institutions. As such MSEDCL can invest the amount of contingency reserve only if it gets sufficient quantum of loan from banks or financial institutions. MoP through its guidelines on additional prudential norms has restricted working capital borrowings @ 35% of the revenue which MSEDCL already crossed the same. Hence, MSEDCL is getting difficulties in availing loan and not able to invest the amount of contingency reserve. Secondly, MSEDCL's financials has been badly affected by the consequences of COVID-19 pandemic.

Considering the above difficulty and COVID-19 impact, it is requested to Hon'ble Commission to consider positively and not to disallow contingency reserve amount and further provide relaxation from the last proviso to Regulations 35.1 of the MERC MYT Regulation, 2019.

Query 44. General

The petitioner is to provide the necessary documentary evidence to validate the investments made in contingency reserve.

<u>MSEDCL Reply:</u>

Please refer to reply submitted to 'Query 3_25' above.

(Further, for FY 2019-20, necessary documentary evidence already provided at Annexure 6 of the MTR Petition)

Contribution to contingency reserve FY 2022-23

Query 60. Table 158 (pg no 227)

As per provision of Regulation 35.1 of MYT Regulation 2019, Petitioner is required to deposit the contingency reserve contribution in securities authorised under the Indian Trusts Act, 1882 within a period of six months of the close of the Year.

Petitioner need to submit the details of the contribution invested in the securities authorised under the Indian Trusts Act, 1882 and the date of investments.

However, it is noted that, as per para 5.19.2 of petition, due to financial crunch owing to COVID-19 pandemic, MSEDCL has not invested any amount towards contribution to contingency reserves for FY 2020-21 & FY 2021-22.

As regulations in case of non-investment of amount of contribution to contingency reserves in authorised securities for two consecutive years, then the contribution to contingency reserves shall not be allowed in calculation of ARR from the subsequent year onwards. Petitioner need to submit its view on the above provisions of the Regulations.

MSEDCL Reply:

Please refer to reply submitted to 'Query 3_25' above.

Capex & Capitalization for FY 2023-24 & 2024-25

Query 64. Para 6.22 / Table 200 (Capex & Capitalization)

The Petitioner has submitted the capex and capitalisation for FY 2023-24 and FY 2024-25:

	FY 23-24	FY 23-24	FY 24-25	FY 24-25
	Approved	Projected	Approved	Projected
Capital Expenditure	-	17,857.23	-	19,961.71
Capitalisation	2,090.36	17,294.95	2,090.36	20,287.05

a) **The petitioner needs to provide details of capex approved by the Commission during MYT and MTR period with ref of approval in table below:**

Sr.	Particulars of capex approved	Amount of approved Capex in Rs. Lakh	MERC approval Ref.

Petitioner also need to provide the year wise of phasing of expenditure approved by the Commission.

MSEDCL Reply:

The details of Capex approved by Hon'ble Commission is attached herewith in **Annexure Query 64(a)**.

Contribution to contingency reserves

Query 67. Para 6.30.2 (pg no 285) (contribution to contingency reserve)

As per para 6.30.2 of petition, MSEDCL submits that due to financial crunch owing to COVID-19 pandemic, it has not invested any amount towards contribution to contingency reserves for FY 2020-21 and FY 2021-22. As per regulations in case of non-investment of amount of contribution to contingency reserves in authorised securities for two consecutive years, then the contribution to contingency reserves shall not be allowed in calculation of ARR from the subsequent year onwards.

MSEDCL Reply:

Please refer to reply submitted to 'Query 3_25' above.

Data Gaps-Set-2

Petition of M/s Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) for Final True up of ARR for FY 2019-20, FY 2020-21 & FY 2021-22, Provisional True up of ARR for FY 2022-23 and Revised Projections & ARR for FY 2023-24 to FY 2024-25. (Case No. 226 of 2022)

Query 1. Power Purchase Quantum from Renewable Sources

Power Purchase from RE sources was reduced significantly than it was approved in MYT Order.

Particulars	MYT Approved (MUs)	Actual/ Projections (MUs)
FY 2019-20	**15,718**	**12,826.99**
FY 2020-21	**20,272**	**14,918.1**
FY 2021-22	**24,164**	**16,955.69**
FY 2022-23	**27,246**	**19,881.63**
FY 2023-24	**31,679**	**26,408.96**
FY 2024-25	**37,111**	**29,475.67**

MSEDCL shall justify if reduction in RE quantum resulted in an increase in APPC due to costly power purchase from other conventional sources.

Further, MSEDCL shall provide rationale for reduction in RE purchase for True-up years FY 2019-20, FY 2020-21 and FY 2021-22. Further, details of contracted generators (for catering demand of present Control period) where SCOD has been extended with rationale in following table:

Name of RE Generator	Contracted capacity (MW)	Date of opening of price bid/e-RA	Date of filing of Petition for adoption of tariff	Date of MERC Order	Planned SCOD	Extended SCOD	Existing Status (Commissioned/Part Commissioned or otherwise)

MSEDCL Reply:

FY 2019-20:

Source	FY 2018-19 (Actual) (MU)	FY 2019-20 (Actual) (MU)	Increase/ (Decrease) (MU)
Hydro (NCE)	315.60	327.52	11.92
Wind	6619.70	6,371.06	(248.64)
Bagasse based Cogen.	4173.81	2,622.06	(1551.75)
Biomass	488.89	368.40	(120.49)
MSW	0.97	0.85	(0.12)
Total Non-Solar	**11,598.97**	**9,689.89**	**(1909.08)**
Solar	1942.65	3,117.78	1175.13
Solar Rooftop	15.00	19.32	4.32
Total Solar	**1957.64**	**3,137.10**	**1179.46**
Total	**13556.62**	**12,826.99**	**(729.63)**

I. It is evident from the above table that generation from the bagasse based co-generation projects is very less which is around 50% as compared to previous year i.e. FY 2018-19. There was drought situation in the districts such as Ahmednagar, Solapur and Marathwada region due to which crushing was less and also generation was less. Many of the sugar factories were not even started crushing. Whereas some of the districts such as Kolhapur, Sangli and Satara were flooded. Due to water logging in this area for very longer period, the crop was damaged and hence, there was less crushing and eventually less generation.

II. MSEDCL has contracted 6783 MW and 2272 MW capacity (as on 31.03.2020) with Non-Solar and Solar Generators respectively and the details as below:

Sr. No.	Non-Solar RE Sources	Contracted capacity (as on 31.03.2019)	Capacity Addition during FY 19-20	Contracted capacity (as on 31.03.2020)
1	**Wind**	4457	-643	3814
2	**Small Hydro**	295	12	307
3	**Bagasse (Co-gen)**	2306	112	2418
4	**Biomass**	236	-8	228
5	**MSW**	16	0	16
Total Non-Solar		7310		**6783**
6	Solar	1527	1155	2272

(-) sign indicates expiry of long-term EPA.

III. From the above table, it is clear that the contracted capacity (as on 31 March 2020) was sufficient for fulfilment of RPO Compliance. However, due to natural factors such as changes in climate and requisite power not received from the Generators, the actual resulting CUF / PLF is not at par with the normative CUF / PLF, which eventually affected the actual generation from RE-sources and leads towards lower generation.

IV. Further, wind EPAs with 495.3 MW capacity expired during FY 2019-2020. Hence less power procurement during FY 2019-20.

V. In view of the above, MSEDCL submits that reasons for lower generation during FY 2019-20 as compared to MYT approved were due to changes in climate and requisite power not received from the generators.

FY 2020-21:

Source wise breakup of approved and actual generation:

Source	FY 2020-21 (Approved) (MU)	FY 2020-21 (Actual) (MU)	Increase/ (Decrease) (MU)
Non-Solar	13283	10025	(3258)
Solar	6989	4893	(2096)
Total	**20271**	**14918**	**(5353)**

Non-Solar:

S. No.	Generation Source	Commissioned (as on 31.03.2020)	Capacity Commissioned during FY 20-21	Commissioned capacity as on 31.03.2021	MERC Normative CUF /PLF	Expected Generation for FY 20-21	Actual Non-Solar Power Purchase for FY 20-21
	Non – Solar	MW	MW	MW	%	MU	MU
1	**Wind**	3095	-207	2888	30%	7862	5533.11
2	**Small Hydro**	301	10	311	30%	804	400.55
3	**Bagasse (Co-gen)**	2301	38	2339	60%	8018	3747.11
4	**Biomass**	174	-16	158	80%	1163	344.02
5	**MSW**	4	0	4	80%	28	0.09
	Total Non-Solar	**5875**		**5700**		**17875**	**10024.97**

Note: Computation of expected generation for FY 19-20 is based on 100% generation from the plant Commissioned on or before 31.03.2020 and 50% generation from the plant commissioned during FY 20-21.

I. From the above table, it is clear that the actual generation is very less compared to expected generation. This is may be, due to natural factors such as changes in climate and requisite power not received from the Generators, the actual resulting CUF / PLF is not at par with the normative CUF / PLF, which eventually affected the actual generation from non-solar RE sources and lead towards lower generation.

II. Due to COVID-19 pandemic situation, Scheduled Commercial operation date of about 726 MW wind power projects has been extended. Due to delay in project commissioning power purchase through competitive tariff is being delayed.

III. Further, 200 MW post expiry wind tender floated however, no bid capacity received due to poor response from the bidders.

IV. In addition to the above, reasons for variation in generation is due to less wind generation may be due to contract violation of O&M between Wind Generator and Wind Developer issues or due to major breakdown and low wind.

V. Further, wind EPAs with 220.25 MW capacity expired during FY 2020-2021 and wind generators opted for open access NOC which further worsen the situation.

VI. Generation from Bagasse is also less due to COVID-19, there were issues related labour those are required for cutting and transporting the sugar cane from the field to sugar plant. This resulted in delay in start of crushing season and also sugar factories were not able to run at full capacity.

VII. During FY 2020-21, 43.5 MW capacity of bagasse projects EPA's expired and also 38 MW capacity of projects were not commissioned.

VIII. It is to note here that MSEDCL signed PSA with SECI for 500 MW wind power projects and it was expected to commission on 29.02.2020 but the projects are yet to be commissioned. This delay was due to impact of COVID-19 Pandemic and due to reasons attributable to developers.

Entity	Capacity (MW)	PSA Date	SCOD as per PSA	Status
SECI	500	31-08-2018	29-02-2020	Not Commissioned

Solar:

Generation Source	Commissioned (as on 31.03.2020)	Capacity Commissioned during FY 20-21	Commissioned capacity as on 31.03.2021	MERC Normative CUF	Expected Generation for FY 20-21	Actual Solar Power Purchase for FY 20-21
Solar	**2272**	**169**	**2439**	28%	**5780.02**	**3027.13**

Note: Computation of expected generation for FY 19-20 is based on 100% generation from the plant Commissioned on or before 31.03.2020 and 50% generation from the plant commissioned during FY 20-21.

I. From the above table, it is clear that the actual generation is very less compared to expected generation. This is may be, due to natural factors such as changes in climate and requisite power not received from the Generators, the actual resulting CUF is not at par with the normative CUF, which eventually affected the actual generation from solar generators and lead towards lower generation.

II. It is to mention that during FY 2020-21, only 250 MW capacity contracted and no new capacity commissioned. Hence less power received during FY 2020-21.

III. In addition to the above, due to pandemic situation of Covid-19, blanket extension of 5 (five) months from 25th March 2020 to 24th August 2020 has been given to all Renewable Energy projects. This has resulted in zero capacity addition which in turn lower generation during FY 2020-21.

IV. Due to COVID-19, there were issues related to labour to do O&M activities in solar projects. Also due to variation in solar radiations the actual generation from solar projects is very less compared to approved generation.

FY 2021-22:

Source wise breakup of approved and actual generation:

Source	FY 2021-22 (Approved) (MU)	FY 2021-22 (Actual) (MU)	Increase/ (Decrease) (MU)
Non-Solar	14309	11471	(2838)
Solar	9855	5485	(4370)
Total	**24164**	**16956**	**(7208)**

Non-Solar:

S.No.	Generation Source	Commissioned (as on 31.03.2021)	Capacity Commissioned during FY 21-22	Commissioned capacity as on 31.03.2022	MERC Normative CUF /PLF	Expected Generation for FY 21-22	Actual Non-Solar Power Purchase for FY 21-22
	Non – Solar	MW	MW	MW	%	MU	MU
1	**Wind**	2888	-62	2826	30%	7508	6068.25
2	**Small Hydro**	311	1	312	30%	819	591.01
3	**Bagasse (Co-gen)**	2339	68	2407	60%	8201	4486.81
4	**Biomass**	158	-71	87	80%	858	324.85
5	**MSW**	4	0	4	80%	28	0.25
	Total	**5700**		**5636**		**17414**	**11471.16**

Note: Computation of expected generation for FY 20-21 is based on 100% generation from the plant Commissioned on or before 31.03.2021 and 50% generation from the plant commissioned during FY 21-22.

I. From the above table, it is clear that the actual generation is very less compared to expected generation. This is may be, due to natural factors such as changes in climate and requisite power not received from the Generators, the actual resulting CUF / PLF is not at par with the normative CUF / PLF, which eventually affected the actual generation from non-solar RE sources and lead towards lower generation.

II. Due to COVID-19 pandemic situation, Scheduled Commercial operation date of wind power projects has been extended. Due to delay in project commissioning power purchase through competitive tariff is being delayed.

III. As mentioned above, around 1000 MW wind power capacity addition considered but not achieved due to poor response in the wind power tenders floated during FY 2020-21 and FY 2021-22. Hence, no capacity added during FY 2021-22.

IV. During FY 2021-22, MSEDCL had floated tender for procurement of 500 MW & 342 MW wind power from wind generators post expiry of EPA but contracted only 173.75 MW.

V. In addition to the above, wind EPAs with 141 MW capacity expired during FY 2021-2022 and wind generators opted for open access NOC which further worsen the situation.

IX. It is to note here that MSEDCL signed PSA with SECI for 500 MW wind power projects and it was expected to commission on 29.02.2020 but the projects are yet to be commissioned. This delay was due to impact of COVID-19 Pandemic and due to reasons attributable to developers.

Entity	Capacity (MW)	PSA Date	SCOD as per PSA	Status
SECI	500	31-08-2018	29-02-2020	Not Commissioned

VI. It is also to highlight that generation from non-fossil fuel based co-generation (Bagasse) projects is very less and not at par with the normative PLF due to impact of COVID-19 and reasons attributable to bagasse generators.

VII. It is pertinent to mention that Biomass projects EPAs with 71 MW capacity which is around 50% of total capacity expired during FY 2021-22.

Solar:

Generation Source	Commissioned (as on 31.03.2021)	Capacity Commissioned during FY 21-22	Commissioned capacity as on 31.03.2022	MERC Normative CUF	Expected Generation for FY 21-22	Actual Solar Power Purchase for FY 21-22
Solar	**2439**	**780**	**3219**	28%	**6939**	**5484.53**

Note: Computation of expected generation for FY 20-21 is based on 100% generation from the plant Commissioned on or before 31.03.2021 and 50% generation from the plant commissioned during FY 21-22.

I. From the above table, it is clear that the actual generation is very less compared to expected generation. This is may be, due to natural factors such as changes in climate and requisite power not received from the Generators, the actual resulting CUF is not at par with the normative CUF, which eventually affected the actual generation from solar generators and lead towards lower generation.

II. COVID-19 pandemic resulted delay in commissioning of solar projects for which contracts signed before FY 2021-22.

III. Solar generation in MUs is not as expected due to variation in radiation according to climate conditions for that time period.

Another main reason for lower generation during FY 2020-21 and FY 2021-22 is due to extension in SCOD for all renewable energy projects. Details of contracted generators (for catering demand of present Control period) where SCOD has been extended with rationale is provided as **Annexure Query 1**.

Query 2. Carrying Cost Computation (Petition Table No. 225)

Carrying cost shall be computed based on regulatory principles.

Although expenses and revenue is being accounted on accrual basis, it has been understood that for certain claims like Change in Law, MSEDCL has been booking the expenses on cash basis. It has been observed that although MSEDCL has made cumulative payments towards Change in Law in a financial year but in books of account it is booked under respective years. This leads to situation of claiming carrying cost on such amount booked in previous years without incurring such expenses. This needs to be corrected appropriately. Therefore, MSEDCL may claim Change in Law expenses in power purchase expenses of financial year in which it has actually incurred and for reconciliation with audited account shall submit details of change in law amount booked into Audited Accounts in following format:

Audited Account	Total Power Purchase expenses	Change in Law Claim booked					Balance PP Expenses claimed in ARR
		Name of Generator	Principal Amount	Carrying Cost	LPS	Paid On date	
A	b	c	d	e	f	g	h = b-(c+d+e+f)
FY 2019-20		Generator A					
		Generator B					
		……					
FY 2020-21							
FY 2021-22							

PP Expenses for other finical years shall be considered based on above principle

MSEDCL Reply:

MSEDCL submits that Financial Statements of MSEDCL for financial year 2019-20 to 2021-22 have been prepared in accordance with the provisions of the Companies Act, 2013, Indian Accounting Standards (Ind AS) notified under the Companies (Indian Accounting Standards) Rules, 2015 issued by Ministry of Corporate Affairs under sections 133 read with section 469 of the Companies Act, 2013 (18 of 2013) and considering the principles determined / applied by Maharashtra Electricity Regulatory Commission (MERC) while determining tariff, to the extent applicable for accounting.

As per the above provisions, accounts are prepared based on accrual of Income and Expenditure till the books are open considering of the principal of Event Occurring After Balance Sheet Date.

Above accounting principles are adopted for accounting of all the expenses including Change in Law claims and revenue as well. Expenditure including Change in Law claims and revenue is accounted on accrual basis and is claimed in ARR for that respective financial year when the liability is incurred, irrespective of payment dates. Carrying cost is claimed on the total ARR as per clause 33 of MYT Regulation 2019.

Following table shows that MSEDCL has accounted for change in law claims on accrual basis.

FY 2019-20 Rs.Cr.

Particulars	As per Cell No. Q193	As per Note 29	Difference
a) Regular bills	53965	56047	2082
b) Change in Law - Taxes Duties	986	986	
c) Change in Law -Coal Shortfall	3400	3400	
Total PP (excl. Transmission & Reactive Charges)	58001	60083	2082

Reconciliation Items

Particulars	Rs. Cr.
RPO provision not in Form 2	2004
Excess RE provision reversed	-64
FBSM Provision	145
Excess RE DPC provision reversed	-3
Total	2082

FY 2020-21 Rs.Cr.

Particulars	As per Cell No. Q201	As per Note 29	Difference
a) Regular bills	50615	51398	783
b) Change in Law - Taxes Duties	822	822	
c) Change in Law -Coal Shortfall	1624	1624	
Total PP (excl. Transmission & Reactive Charges)	52751	53534	783

Reconciliation Items

Particulars	Rs. Cr.
Restatement due to RPO	1351
RPO provision of prior period	-703
Rebate considered	169
POSOCO Reactive charges considered in Transmission charges	1
Provisions related to RE not considered in restatement	-35
Total	783

FY 2021-22 Rs.Cr.

Particulars	As per Cell No. Q193	As per Note 31	Difference
a) Regular bills	56641	52234	-4406
b) Change in Law - Taxes Duties	1497	1497	
c) Change in Law -Coal Shortfall	8177	8177	
Total PP (excl. Transmission & Reactive Charges)	66185	61779	-4406

Reconciliation Items

Particulars	Rs. Crs.
RPO provision reversal	-4410
WRLDC Charges	4.30
WRPC Reactive Charges	(0.17)
Other charges	(0.32)
Total	-4406

The generator wise details of above Change in Law claims made on accrual basis in respective financial year from FY 2019-20 to FY 2021-22 is provided in the Table below.

FY	Name of Generator	Coal Shortfall (Form 6)	T&D (Form 6)	TOTAL
2019-20	Adani Power Maharashtra Ltd.	3343.50	692.52	4036.02
	GMR Warora Energy Ltd.	56.40	51.27	107.67
	JSW Energy Ltd.	0.00	44.00	44.00
	Rattan India Power Ltd. (450 & 750)		101.05	101.05
	Coastal Gujrat Power Ltd.		97.02	97.02
	Sai Wardha Power Generation Pvt. Ltd.			0.00
	TOTAL	**3399.90**	**985.86**	**4385.76**
2020-21	Adani Power Maharashtra Ltd.	1624.08	512.61	2136.70
	GMR Warora Energy Ltd.	0.00	55.25	55.25
	JSW Energy Ltd.	0.00	41.80	41.80
	Rattan India Power Ltd. (450 & 750)		74.81	74.81
	Coastal Gujrat Power Ltd.		105.31	105.31
	Sai Wardha Power Generation Pvt. LTd.		32.21	32.21
	TOTAL	**1624.08**	**821.99**	**2446.08**
2021-22	Adani Power Maharashtra Ltd.	7920.72	948.30	8869.02
	GMR Warora Energy Ltd.	57.70	57.05	114.75
	JSW Energy Ltd.	0.00	19.88	19.88
	RattanIndia Power Ltd. (450 & 750)	198.30	370.39	568.69
	Coastal Gujrat Power Ltd.		52.49	52.49
	Sai Wardha Power Generation Pvt. Ltd.		49.17	49.17
	TOTAL	**8176.72**	**1497.29**	**9674.01**

It is submitted that Late payment surcharge paid is accounted separately under separate accounting head. It is calculated on daily outstanding balance compounded monthly as per PPA provisions. However, the same is not reflected in Change in Law amount claimed as above for each year.

Query 3. FY 2019-20

In Order to assess the COVID-19 impact, MSEDCL shall submit billing data as below:

A) Billing amount from 1 March 2020 to 20 March 2020

B) Billing amount from 21 March 2020 to 31 March 2020

<u>MSEDCL Reply:</u>

MSEDCL submits that the reply to this data gap will be submitted subsequently.

Query 4. General

MSEDCL need to provide data related to recovery pattern during Covid-19 pandemic period and Post Covid period for FY 2020-21 and FY 2021-22.

Covid-19 Period	Demand (Rs. Crores)	Sales (Mus)	Collection (Rs. Crores)
April-20			
May-20			
…			
Post Covid-19 Period**	**Demand (Rs. Crores)**	**Sales (Mus)**	**Collection (Rs. Crores)**
**** Months from which demand is restored needs to be considered.**			

<u>MSEDCL Reply:</u>

MSEDCL submits that the reply to this data gap is attached in **Annexure Query 4**.

DUE_MONTH	Demand (Rs. Crs.)	Collection (Rs. Crs.)	Sale (MU)
Apr-20	1290.70	2734.57	7499.77
May-20	5403.57	3858.09	8557.75
Jun-20	5866.09	4238.25	8781.89
Jul-20	5015.92	4235.59	8520.10
Aug-20	7396.88	6101.66	8597.98
Sep-20	10703.45	8075.64	8916.84
Oct-20	6667.18	6196.09	9565.85
Nov-20	5923.70	5568.07	8975.65
Dec-20	8574.51	6977.25	9465.95
Jan-21	5856.11	6411.34	10149.13
Feb-21	5529.68	7600.67	9679.34

DUE_MONTH	Demand (Rs. Crs.)	Collection (Rs. Crs.)	Sale (MU)
Mar-21	9218.36	10475.19	10803.16
Grand Total	**77446.15**	**72472.40**	**109513.42**
Apr-21	5588.62	6556.75	9455.63
May-21	6642.87	5851.71	9191.96
Jun-21	8992.91	8431.84	12058.14
Jul-21	6305.30	6689.05	9117.04
Aug-21	5900.07	6291.90	9065.71
Sep-21	9308.15	8186.86	11449.37
Oct-21	6218.17	6713.89	9350.50
Nov-21	8106.55	7400.42	8605.28
Dec-21	7487.98	7450.89	11905.99
Jan-22	6127.10	6479.38	9104.46
Feb-22	7555.50	6917.77	8756.99
Mar-22	7216.04	7727.40	13951.18
Grand Total	**85449.25**	**84697.87**	**122012.25**

Query 5. General

MSEDCL shall provide the details of the assets depreciated up to 70% and consider the reduced rate of depreciation if assets are depreciated beyond 70% as per the MYT Regulations, 2019.

MSEDCL Reply:

MSEDCL submits that the reply to this data gap is attached in **Annexure Query 5**.

Query 6. General

Whether MSEDCL has evaluated refinancing option as Rate of Interest is higher for loan taken from REC/ PFC?

MSEDCL shall submit efforts taken for refinancing of loan.

MSEDCL Reply:

Yes. MSEDCL submits that it has evaluated refinancing option. MSEDCL has quantified total long term loan of Rs. 4000 Crs for refinancing, for this MSEDCL has identified Investment Banking Agencies. If MSEDCL get refinancing loan at bank competitive rate from other FI's, then MSEDCL will avail refinancing option. At present refinancing process is under way.

Query 7. Audited accounts restatement

During TVS, it has been submitted that MSEDCL has restated the Audited Accounts of FY 2018-19. MSEDCL need to confirm if there will be any impact of accounts restatement?

MSEDCL Reply:

MSEDCL submits that as per Indian Accounting Standard – (Ind As) 8 - Accounting Policies, Changes in Accounting Estimates and Errors - As per Ind As 8 if any error or omission result in prior period expenses then, such prior period expenses shall be adjusted in the year in which pertains.

Effect of Restatement in FY 2021-22 has been given in FY 2020-21 & FY 2019-20 only. FY 2018-19 was restated in FY 2020-21.Restatment of FY 2018-19 is mainly on account of DPS which is out of purview of ARR.

Query 8. General

As per provisions of Supply Code Regulations, Distribution Licensee is allowed to recalculate SD amount for each financial year and raise additional SD bill to respective consumer. In this regard, MSEDCL shall submit following details:

Particulars	Opening level of SD Amount			Additional SD Bills issued (Rs. Cr.)	Amount Paid Against Additional SD		
	In Cash (Rs. Cr.)	In BG (Rs. Cr)	Total		In Cash (Rs. Cr)	In BG (Rs. Cr)	Total
FY 2019-20							
FY 2020-21							
FY 2021-22							

MSEDCL Reply:

MSEDCL hereby submits the details of SD & additional SD amount for each financial year in the prescribed format;

Particulars	Opening level of SD Amount			Additional SD Bills issued (Rs. Cr.)	Amount Paid Against Additional SD		
	In Cash (Rs. Cr.)	In BG (Rs. Cr)	Total		In Cash (Rs. Cr)	In BG (Rs. Cr)	Total
FY 2019-20	7477.13	1091.68	8568.81	1000.52	158.14	0.00	158.14
FY 2020-21	7993.89	1227.50	9221.39	0.00	0.00	0.00	0.00
FY 2021-22	8364.13	1206.83	9570.96	857.89	60.01	0.00	60.01

Query 9. Other Expenses (Payable to DSL towards damages in terms of Arbitral Award dt. 18.06.2004) (MTR format 6B)

MSEDCL shall submit details of such expenses and verify if the claim of other expense payable to DSL towards damages in terms of Arbitral Award is eligible under other expenses.

<u>MSEDCL Reply:</u>

MSEDCL submits that it has inadvertently mentioned ‘Payable to DSL towards damages’, actually the subject expenses are towards reimbursement of direct and indirect cost, loss of profit, arbitration cost as per the Court Order/ Arbitrator Order in respect of M/s. Maha Active Engineers (I) Private Ltd., and M/s Pratibha Construction Engineers & Contractors JV with M/s Pratik Township & Infra Projects Pvt. Ltd. The details of the same are attached in **Annexure Query 9**.

Query 10. AG Sales (FY 2019-20 to FY 2024-25)

AG Sales shall be estimated based on methodology adopted by the Commission in MYT Order 322 of 2019.

The Commission in its MYT Order in Case No.322 of 2019 directed MSEDCL to submit detailed roadmap and action plan for undertaking activities for operationalizing feeder input based AG billing.

Further, it has been explicitly pointed out that the outcome of results and methodology finalised through AGWG study shall form basis for approval of AG sales from FY 2019-20 onwards. Relevant extract of the MYT Order is as quoted below:

> ***“4.2.36 Under the circumstances, the Commission would undertake a detailed review of the operationalisation of Feeder Input based methodology of determination of AG Sales at the time of MTR, as per roadmap and action plan put in place by MSEDCL. The outcome of results and methodology finalised through this exercise shall form the basis for approval of AG sales from FY2019-20 onwards, during truing up exercise to be carried out at time of MTR.”***

It was expected that MSEDCL will implement the roadmap and bring more feeders under ambit of feeder-input based energy accounting to further improve the estimation of AG consumption. Clearly minimum data set requirement will be of 502 feeders.

Accordingly, MSEDCL needs to revise the estimation of AG Sales and work out revised energy balance, distribution loss etc.

<u>MSEDCL Reply:</u>

MSEDCL submits that the reply to this data gap will be submitted subsequently.

Query 11. Power Purchase from Adani Power & Carrying Cost Computation

Claim against compensation towards deallocation of Lohara Coal Block (INR ~ 1,329 Crores) to Adani Power: Whether the amount claimed is the principal amount paid by MSEDCL or it is with interest?

Carrying cost computation against the claim shall be submitted separately.

<u>MSEDCL Reply:</u>

It is submitted that, the amount of Rs. 1329 Crs. is towards principal claim. The amount paid on ad hoc basis against APML's claims (prior to Hon. APTEL's judgment in the matter dtd. 05.10.2020).

- M/s. APML have claimed carrying cost **<u>on monthly compounding interest basis.</u>**
- Hon'ble Commisison in its order dated 18.12.2018 in Case No. 295 of 2018 allowed carrying cost as under –

  The Commission allows APML to claim the carrying cost in respect of relief granted earlier under the Order dated 07 March, 2018 in Case No. 189 of 2013 and 140 of 2014 for domestic coal shortfall till 31 March, 2017, at the rate applicable for working capital interest calculation as per the MYT Regulations applicable to the relevant periods.

MERC has given the same ruling in order in Case no. 290 of 2018 dated 07.02.2019, Case No. 68 of 2012 dated 06.09.2019 for SHAKTI & De-allocation of Lohara coal block compensation respectively.

The computations of carrying cost is provided as **Annexure Query 11**. The carrying cost claimed by APML on compounding interest basis is provided in table A of **Annexure Query 11**; Approximate carrying cost on assuming without admitting the principle claims of APML (Rs. 14892 Crs.) on simple interest basis is given in table B of **Annexure Query 11**; the approximate principle calculations and carrying cost as per MSEDCL is given in table C of **Annexure Query 11.**

Query 12. Carrying Cost on Change in Law claims

Carrying cost on Change in Law compensation is allowed from date of actually incurring such expenses till the Order of Court allowing such Change in Law. Therefore, in case filing of Petition is delayed, then it may lead to increase in carrying cost.

In reply to data gaps, while justifying difference between generator's claim amount and amount agreed by it, MSEDCL stated that it is due to generator not submitting claims as per Order of the Commission. As generator continues to claim such amount and MSEDCL is not agreeing for the same, it is akin to dispute between parties. MSEDCL shall provide generator wise details of such issues and amount involved in following format:

Name of Generator	**Issue of Dispute / disagreement**	**Bill date from which such dispute has arisen**	**Amount involved**	**Whether this dispute is pending before any court**	
				If Yes, whether court has stayed Order of lower court	**If No, what action is taken by MSEDCL to redress the grievance**

MSEDCL shall further explained that if such dispute is pending for long time and MSEDCL has not approached adjudicating forum, then how such issue will be addressed. And in case such issue is ultimately decided by court with carrying cost, then who should bear the burden of carrying cost accrued on account of MSEDCL's delay in approaching adjudicating forum?

<u>MSEDCL Reply:</u>

The detailed description of disputes between generators and MSEDCL are as follows:

Rattan India

<u>Issue of Dispute / disagreement</u>

Despite clear rulings of this Hon. Commission in case No. 240 of 2022, M/s. RPL have submitted claims by wrongly computing on following issues.

1. **GCV (Gross Calorific Value):**
RIPL has not considered Celling of GCV loss of 300 kcal /Kg while considering ARB GCV for calculations as directed by Ld. MERC for period after April-2020 onwards vide order dated 16.11.2021 in Case No. 240 of 2020.
2. **Carry forwarding of unutilized coal to next months:**
RIPL has not considered closing stock of linkage coal in the months June-2017, July-2017 and Dec-2017 as opening stock in next months as coal available under FSA.
3. **SHR (Station Heat Rate):**
RIPL in month of Jan-21 & Feb-21 has not considered superior SHR among MYT and actual as per the principal laid down by Ld. MERC order dated 16.11.2021 in Case No. 240 of 2020.
4. **Schedule Generation:**
RIPL has considered wrong generation for calculations of impact. MSEDCL is relying on DSM regulation and considering Schedule data through DSM software from SLDC website since October 2021. Before Oct 2021 MSEDCL has considered injected units as provided by SLDC however there is mismatch in injected units considered by RIPL in the month of May 16, Jul 16, Aug 17, Oct 17 and Dec 17.
5. **Carrying Cost:**
RPL is claiming carrying cost on monthly compounding basis. MERC vide order dated 16.11.2021 in Case No. 240 of 2020 at para 27.4 has clearly held that Carrying cost shall be computed at the rate of Interest on Working Capital on simple interest basis. Further, as per MYT Regulations 2015 and 2019 carrying cost shall be at simple interest. However, RPL has considered wrong interest rate from the period April/May 2018 onwards and carrying cost is claimed by M/s. RPL on monthly compounding basis contrary to MERC rulings.
6. **Incorrect computation by RPL for arrival of quantity at washery intake:**
RPL has derived the quantity at washery intake by considering the quantity received at plant end and by grossing up considering yield loss. As per directives of MERC MSEDCL considered the Quantity and GCV of coal before washing i.e. at the washery intake as per MERC order dated 16.11.2021. However, Consideration of quantity in RR for deriving the quantity at Washery intake considering (grossing up with) yield loss may not serve purpose as Majority of GCV Certificates are linked up with coal invoices only and consideration of RR will further lead to improper mapping of coal quantity with GCVs. For consideration of grossed up quantity as per RPL proper mapping of RRs with GCVs is required which in turn required proper mapping of RR with coal invoices.

7. **Non consideration of Negative impact of CIL components:**
   Negative components in Change in law rates in claim towards taxes and duties considered by MSEDCL e.g. Busy Season Surcharge as these components were part of quoted tariff which RPL is recovering from MSEDCL and subsuming the same in base price is covered through CERC index. However, RPL has not considered the same. MSEDCL has rightly considered Negative components of Busy Season surcharge and Development Surcharge in Change in law rates used for computing change in law for taxes and duties.
8. **Differences in Imported Coal indices and Benchmark:**
   There is difference in landed cost of imported coal considered by MSEDCL and RPL due to consideration of MERC Approved Indices / Benchmark for imported coal by MSEDCL while RPL is relied upon coal invoices.
9. **Differences in Landed Cost of FSA Coal:**
   RPL has not considered unapproved component such as sizing charges, stowing excise duty, Evacuation facility charges, Vikas Upkar and Paryavaran Upkar in Landed cost of FSA. Non consideration of unapproved component in landed cost of FSA coal leads to claiming the same from MSEDCL if it is not applicable to the alternate coal.

GMR Warora

<u>Issue of Dispute / disagreement</u>

1. **Non-consideration of 300 kcal/kg ceiling**

GWEL has not considered Celling of GCV loss of 300 kcal /Kg while considering ARB GCV for calculations for period after April-2020 onwards as per APTEL Judgment dated 11.03.2021 in Appeal No. 353 of 2019 which is based on its another judgment in Appeal No. 182 of 2019 dated 14.09.2020 in the matter of APML. APTEL in judgment dated 14.09.2020 directed MERC to pass consequential order and MERC vide order dated 10.12.2020 in MA 53 of 2020 in Petition No.189of 2013 inter alia directed that difference between ADB and ARB GCV should not be more than 300 Kcal/Kg (degradation loss of GCV). Accordingly, MSEDCL has considered GCV as higher of ADB-300 and ARB GCV. However, M/s. GMR is only considering ARB GCV for calculations

Name of Generator	Sr. No.	Issue of Dispute / disagreement	Bill date from which such dispute has arisen	Dispute Amount involved * (Rs. Crs.)	Whether this dispute is pending before any court	
					If Yes, whether court has stayed Order of lower court	If No, what action is taken by MSEDCL to redress the grievance
Rattan India .	I	Non consideration of ceiling limit of 300 for GCV for period April-2020 onwards	From 01.03.2015 in respect of NCDP claims	#	NA	1. The calculations are being carried out as per Hon. APTEL's judgment dated 13.11.2020 in Appeal No. 264 of 2018 and MERC consequential
	Ii	Carry forwarding of unutilized coal to next months		46		

	iii	Non consideration of Lowest SHR (Station Heat Rate) as per MYT or Actual		#		order dated 16.11.2021 in Case No.240 of 2022. MSEDCL has filed civil appeal against APTEL judgments dtd. 13.11.2020 in Hon. Supreme Court wherein issues of SHR, GCV, computation on monthly basis and shortfall in supply of domestic coal under NCDP 2013 for the period even beyond 31st March 2017 are disputed. The issue is sub judice and the computations are not yet final as such. 2. MSEDCL vide various emails & letters dtd. 23.12.2021, 01.02.2021, 23.02.2022, 18.07.2022, 17.06.2022 & 25.11.2022 and meeting dtd. 23.05.2022 and 30.09.2022 has already informed M/s. RPL about discrepancies in RPL's claims.
	iv	Scheduled generation at interconnection point		#		
	V	Working of Carrying Cost: Compounding or simple interest basis.		342.91		
	Vi	Incorrect computation by RPL for arrival of quantity at washery intake.		103.9		
	Vii	Non consideration of Negative impact of CIL components		102.4		
	Vii	Differences in Imported Coal indices and Benchmark		1.2		

**The amount involved is worked out on best efforts basis and is approximate.*
 # Impact not assessed in monetary terms.

APML

<u>Issue of Dispute / disagreement</u>

1. **Allocation of FSA coal in 1180 MW Capacity**

   APML is allocating the total available coal under 1180 MW FSA among the unit 1 (660 MW) & unit 2 (520 MW) on the basis of MW capacity and calculating the coal shortfall impact for unit 1 & unit 2 separately instead of calculating compensation for 1180 MW capacity as a whole. Hon. MERC in its order dtd. 07/03/2018 in case no 189 of 2013 para 92 (a) & consequential order thereof in MA 53 dtd. 10.12.2020 at para no. 18.3 (A) has clearly given calculation methodology for 1180 MW capacity. The allocation followed by APML among unit 1& 2 is creating pseudo shortfall under unit 1 of 1180 MW FSA and it is contrary provision 4.1.1 of FSA.
2. **Computation of Carrying cost**

   APML is calculating carrying cost on monthly compounding interest basis instead of simple interest basis contrary to Hon. MERC rulings.
3. **Washery Charges**

   APML is claiming washery charges of linkage coal in coal shortfall claims. Washery charges are not allowed by any order of this Hon. Commission in any order for APML.

4. **Change in law on Auxiliary Consumption in 1320 MW PPA.**
APML has claimed change in law in respect of Aux. Consumption against 1320 MW PPA. As per the provisions of 1320 MW PPA, the entire capacity of unit 2 & 3, without auxiliary consumption is the contracted capacity. APML in proceeding in case no 122 of 2015 before Hon. MERC has already agreed that, "As long as any of the Units 1, 4 and 5 is in operation, the Auxiliary consumption of Unit 2 & 3 shall be met from Unit 1,4 and 5 and the gross generation of Unit 2 & 3 shall be considered as supplied against the 1320 MW PPAs." APML has also agreed that, 215 MW balance capacity of the plant covers the auxiliary consumption for all the 4 PPAs. As per Article 19 1320 MW PPA, change in law compensation on energy supplied from alternate source i.e. units other than identified in RFP is not allowed. Hon. MERC has clearly disallowed change in law on auxiliary consumption under 1320 MW PPA vide order dated 07.03.2018 in case no.123 of 2017 & order dtd. 15.01.2019 in case no 289 of 2018 read with order dated 05.03.2018 in case no.122 of 2015. However, APML is wrongly claiming the change in compensation on auxiliary consumption under 1320 MW PPA.
5. **Change in law on alternate source energy for 1320 MW PPA**
APML is claiming change in law compensation on account of domestic coal shortfall towards supply from alternate sources i.e. from units 1, 4 & 5 in the matter of 1320MW PPA which is contrary to the provisions in the PPA.
6. **Claim of coal shortfall on power supplied from source other than Tiroda (other PPAs)**
APML has claimed change in law compensation on account of domestic coal shortfall on energy supplied from sources other than Tiroda station for 1200 MW, 125 MW & 440 MW PPAs. FSAs entered into by APML are for generation and supply from Tiroda plant only. MERC has allowed compensation for shortfall in supply of coal under FSA. Hon. MERC in its order dtd. 07/03/2018 in case no 189 of 2013 para 92 (a) & consequential order thereof in MA 53 dtd. 10.12.2020 at para no. 18.3 (A) has clearly held that, scheduled generation at interconnection point is to be considered for calculation of compensation. Further, change in law compensation on account of domestic coal shortfall has to be calculated considering the coal required for the generation from respective capacity at Tiroda plant vis-à-vis coal supplied under respective FSAs to said capacities. Hence, coal shortfall compensation towards coal shortfall cannot be claimed for energy supplied from any source other than Tiroda station.
7. **Erroneous accounting of Cost of IPT coal and normative transportation**
APML is wrongly converting the coal cost on GCV equivalence basis considering GCV of imported coal at Tiroda keeping the actual domestic IPT coal quantum used at Tiroda and claiming the transportation cost for a distance of Dahej to Tiroda on entire domestic coal quantum including taxes and duties.
Hon. MERC vide order dtd. 28.11.2020 in case no 132 of 2020 read with order dtd. 11.09.2021 in case no 9 of 2021 has given directions regarding commercial accounting of IPT coal (Domestic linkage coal of Adani Mundra (APML)) utilized at Tiroda. It is evident from APML's petition / APML rejoinder in case no 132 of 2020 as

well as para no 19.7, 20.1, 20.2, 20.4, 20.9, 20.10, 20.11 from the order dtd. 28.11.2020, the cost of equivalent imported coal (quantity determined on GCV equivalence basis) used at Mundra in lieu of IPT coal used at Tiroda is to be commercially accounted at Tiroda plant. The transportation cost is payable on the quantum of imported coal derived on GCV equivalence basis.

8. Claiming of IPT cost in the absence of generation at Mundra

Further, APML has been accounting the IPT coal utilized at Tiroda at imported coal prices even if there is no generation and no consumption of imported coal for supply to Haryana Discoms from Mundra plant. There was no generation and supply to Haryana Discoms from Mundra plant during the months Sept 2021 to April 2022 & Sept 2022 onwards and APML is still lifting the coal under linkage (FSA) for supply of power to Haryana Discoms, transferring & utilizing it at Tiroda plant & claiming IPT coal at higher rates. Present cost of imported coal is Rs. 22667/MT. This is pointed out by MSEDCL on which APML replied that,

i. *"There was no supply of power to Haryana Discoms during the month of December 2022. The coal details provided to MSEDCL is consumed in Adani Power (Mundra) plant for supply of power under other PPAs. Same coal would have been utilized if there was supply of power to Haryana Discoms during the month."*

Further, APML is considering the actual domestic quantity of IPT coal, its coal cost is converted in the proportion to GCV of domestic IPT coal & imported coal utilized at Tiroda (at present it is considering GCV of 5000 kcal/kg as there is no actual imported coal utilized at Tiroda). Further, transportation cost from Dahej to Tiroda along with taxes and duties on transportation is considered without producing any documents of such expenses and payment of such taxes and duties to government department.

Further, recently, APML informed that the 6 sister companies of Adani Power Limited including APML are amalgamated into Adani Power Ltd. from the appointed date 1st Oct 2021.

Hon. MERC has opined that Adani Mundra has billed APML for imported coal on GCV equivalence basis. APML has paid such expenses and booked it in its Audited Accounts. Hon. MERC further opined that, APML is eligible to claim the coal and transportation costs for IPT coal in its change in law compensation stating that, Adani Mundra and Adani Tiroda are two separate legal entities.

Now, upon amalgamation the status of Adani Power Maharashtra Limited as a separate legal entity cease to exist from the effective date i.e. appointed date and as per order dated 28.11.2020 APML cannot raise claim towards normative transportation cost. However, APML is still claiming higher cost of IPT coal.

To sum up APML is wrongly claiming the higher coal cost from MSEDCL as under –

ii. Wrongful conversion of IPT basic coal cost on the basis of GCV of imported coal utilized at Tiroda when actually utilized and / or 5000 kcal /kg when there is not actual imported coal utilized at Tiroda,

iii. Wrongful consideration of IPT coal cost considering domestic quantity utilized at Tiroda, transportation cost from Dahej to Tiroda that too with taxes and duties specially when only normative transportation cost is to be claimed where no actual taxes and duties are paid to any government department,
iv. Wrongfully claiming the higher imported coal cost when there is no actual utilization of coal at Mundra plnat for generation and supply to Haryana Discoms,
v. Subsequent to Amalgamation of APML into APL there is no separate legal existence of APML. Hence, there is not the case of billing of imported coal cost by Adani Mundra to Adani Tiroda.

9. **Calculation of SHR** : APML follows wrong method of calculation of net SHR as below-

i) $\dfrac{\text{Gross SHR as per MYT}}{\text{(1 - Aux as per MYT)}}$ ii) $\dfrac{\text{Gross SHR actual}}{\text{(1- Aux as per Actual)}}$

And considers Lower of above i) & ii).

MSEDCL calculates SHR considering the principles followed by Commission in its order dtd. 10.12.2020 in MA 53 & 54 of 2020 which was further clarified by Hon. MERC in dated 16.11.2021 in case no 240 of 2020 at 29.3 (e) as follows –

ii. $\dfrac{\text{1. Gross SHR: (lower of actual or MYT)}}{\text{1. (1-Aux. Con. (lower of actual or MYT)}}$

10. **SHR & GCV for 800 MW**
APML is not following the consequential orders in case no 53 & 54 for consideration of SHR & GCV for 800 MW capacity. As Hon. APTEL's judgment in Lohara matter dated 05.10.2020 in the appeal No. 340 and 354 of 2019 based on APTEL's judgment in A.No. 116 of 2019, GCV for linkage coal procured under SHAKTI FSA for 800 MW and SHR for 800 MW shall be as per consequential order dated 10.12.2020 in MA 53 and 54 of 2020.

As per the consistent methodology approved by Hon. MERC from time to time, the carrying cost is payable on the change in law claims from the date of occurrence of event till the date of approval by appropriate commission.

Accordingly, the carrying cost is payable on M/s. APML's change in law claims towards shortfall in domestic coal is as under –

Claim	Reference of Hon. MERC / APTEL order	Date of occurrence of event	Date of Order
NCDP	189 of 2013	26/07/2013	07-03-2018
	Consequential order in MA 53		10-12-2020
SHAKTI	290 of 2018	01/04/2018	07-02-2019
	Consequential order in MA 54		10-12-2020
Lohara	68 of 2012	From COD	06-09-2019
	Hon. APTEL order in A.No. 340 & 354 of 2019		05-10-2020

APML have claimed carrying cost on its claims upto original orders of Hon. MERC initially. Pursuant to APTEL's judgments and consequential orders of MERC, APML has claimed carrying cost on differential claims. APML's claims are as below –

Rs. Cr.

Grand Total claims with carrying cost up to Dec-20			
Particulars	**As per MERC order cumulative Total Claim**	**As per consequential order**	**Differential claimed subsequent to Consequential and APTEL orders**
Principal	9,411	14,892	5,480
Carrying cost	3,965	6,053	2,087
Total	**13,376**	**20,945**	**7,567**
Claims from Jan 21 to Nov 22	**-**	**6528**	**-**
Gross Total claim upto Nov 22	**13,376**	**27,473**	**7,567**

- M/s. APML have claimed carrying cost **on monthly compounding interest basis.**
- Hon. MERC's in its order dated 18.12.2018 in Case No. 295 of 2018 allowed carrying cost as under –

  The Commission allows APML to claim the carrying cost in respect of relief granted earlier under the Order dated 07 March, 2018 in Case No. 189 of 2013 and 140 of 2014 for domestic coal shortfall till 31 March, 2017, at the rate applicable for working capital interest calculation as per the MYT Regulations applicable to the relevant periods.

  MERC has given the same ruling in order in case no 290 of 2018 dtd. 07.02.2019, 68 of 2012 dtd. 06.09.2019 for SHAKTI & De-allocation of Lohara coal block compensation.
- APML has claimed carrying cost of Rs. 6053 Crs. on principle claims of Rs. 14892 Crs. However, the carrying cost as per methodology approved by Hon. MERC comes to the tune of Rs. ~3700 Crs. (Approx. without adjusting any payment made from time to time.
- M/s. APML have claimed carrying cost inconsistent with the applicable orders.

Deviations in claims –

- Despite clear rulings of this Hon. Commission, M/s. APML have submitted claims by computing impact by following wrong / erroneous methodology –

Name of Generator	Sr. No.	Issue of Dispute / disagreement	Bill date from which such dispute has arisen	Dispute Amount involved * (Rs. Crs.)	Whether this dispute is pending before any court	
					If Yes, whether court has stayed Order of lower court	If No, what action is taken by MSEDCL to redress the grievance
Adani Power Maharashtra Ltd.	i	Allocation of base coal (FSA) available under 1180 MW FSA (Unit 1 & 2 (Part)	From 26/07/2013 in respect of NCDP / SHAKTI claims and from April 2013 in respect of Lohara claims	675	NA	At present, the calculations are being carried out as per Hon. APTEL's judgment in the matters. MSEDCL have filed civil appeals in Hon. Supreme Court and are pending. These appeals are against APTEL judgments dtd. 14.09.2020, 28.09.2020 & 05.10.2020 in NCDP, SHAKTI & Lohara matters respectively. Wherein issues of SHR, GCV, restrictions of compensation for shortfall beyond 75%, SHAKIT Policy and de-allocation of Lohara coal block are disputed. Hon. Supreme Court initially issued status quo on 26.02.2021 in the matter. Further Hon. SC on 31.01.2022 directed to pay 50% against claims. The matters are pending before Hon. Supreme Court. MSEDCL has filed appeal in APTEL against Hon. MERC's IPT order in case no 132 of 2020 & 9 of 2021 dtd. 28.11.2020 & 11.09.2021. Further, MSEDCL has already communicated vide e-mail dtd. 05.03.2021 & letter dtd. 06.08.2021 regarding wrongful claims to APML. M/s. APML have not replied. Until the matters are decided by Hon. Supreme Court, the claims are not final.
	ii	Working of Carrying Cost: Compounding or simple interest basis.		3000		
	iii	Compensation of additional cost incurred on coal procured through washery mode		525		
	iv	Applicability of Auxiliary Consumption for 1320 MW PPA.		1250		
	v/vii	Scheduled generation at interconnection point: - Generation from alternate sources other than Tiroda.		600		
	Vii	Method of conversion of IPT coal Quantity, Cost & GCV.		6500		
	Viii	Computation of Net SHR		#		
	ix	Basis for 800 MW (Unit 2- 140 MW) & Unit 3 - GCV & SHR		#		

**The amount involved is worked out on best efforts basis and is approximate.*
Further, the amount involved is subject to change according to permutation combinations.
 # Impact not assessed in monetary terms.

Query 13. Actual Interest on Working capital claimed in FY 2020-21

MSEDCL has submitted interest on working capital which is higher than it was approved in MYT Order for FY 2020-21.

MSEDCL shall provide the following details in MS Excel spreadsheet:

1. **Month wise working capital requirement (Opening & Closing Balance)**
2. **Source of funding**
3. **Tenure**
4. **Applicable Interest rate**

Further MSEDCL shall justify how working capital requirement has reduced from FY 2021-22 onwards. Further for justifying its claim, MSEDCL shall submit above said monthly date for FY 2019-20 and FY 2021-22 to show its regular working capital requirement.

MSEDCL Reply:

MSEDCL submits the detailed month wise working capital requirement (Opening & Closing Balance), source of funding, tenure, applicable interest rate in excel format as an **Annexure Query 13**.

Query 14. Non-tariff income in FY 2020-21

MSEDCL shall clarify the reason of reduction in non-tariff income in FY 2020-21

MSEDCL Reply:

MSEDCL submits that from the details provided as per the annexure, it can be seen that the non-tariff income for the FY 2020-21 is not reduced if we exclude the restatement of Prior-period Income of Rs. 60.94 Crs in FY 2019-20. The details are attached in **Annexure Query 14**.

Query 15. General

MSEDCL to provide energy drawn/ injected into the grid and break up of DSM and ADSM charges for FY 2021-22 and FY 2022-23.

MSEDCL should provide impact on DSM charges due to RE Schedule replaced with actual injection.

MSEDCL Reply:

The details of MSEDCL drawl during the FY 2021-22 with effect from 11.10.2021 and FY 2022-23 up to Sep-2022 and break up of DSM and ADSM charges for FY 2021-22 and FY 2022-23 are as mentioned below:

Year	Month	Scheduled Drawal (MUS)	Actual Drawal (MUS)	Deviation Energy (MUS)	Charges for Deviation(INR)	Total Applicable Addl. Charges for Deviation (INR)	Total Charges for Deviation (INR)
FY 2021-22							
2021	10	7797	7848	51	25,54,18,015	9,10,36,932	34,64,54,947
2021	11	11588	11586	-1	8,39,93,484	6,21,46,765	14,61,40,249
2021	12	11638	11596	-42	-97,24,914	3,54,89,930	2,57,65,016
2022	1	12221	12132	-89	-13,94,86,985	1,91,53,648	-12,03,33,337
2022	2	12081	11961	-120	-27,89,55,997	95,37,216	-26,94,18,781
2022	3	12563	12490	-73	-239021972	45235266	-193786706
Total for FY 2021-22		**67888**	**67613**	**-274**	**-327778369**	**262599757**	**-65178612**
FY 2022-23							
2022	4	16466	16438	-28	62062669	173698292	235760961
2022	5	14449	14472	23	19,72,43,077	11,73,01,207	31,45,44,284

2022	6	12681	12604	-77	-19,24,85,414	4,46,79,334	-14,78,06,080
2022	7	10876	10802	-74	-14,40,71,205	5,21,55,607	-9,19,15,598
2022	8	11384	11349	-35	-20,66,191	8,20,40,746	7,99,74,555
2022	9	10,972	10,823	-148	-38,68,34,531	1,52,58,284	-37,15,76,247
Total for FY 2022-23		**76,828**	**76,488**	**-339**	**-46,61,51,595**	**48,51,33,470**	**1,89,81,875**

The break-up of DSM and ADSM charges for FY 2021-22 and FY 2022-23 is as follows:

Particulars	**FY 21-22**	**FY 22-23**
DSM charges excluding ADSM	-32.78	-46.62
ADSM Charges	26.26	48.51
Total	**-6.52**	**1.90**

It is submitted that the balance deviation charges of Rs. -229.82 Cr. is on account of FBSM which was effective from April 2021 to Sep 2021 during FY 2021-22.

It is submitted that MSLDC has started DSM billing by replacing RE schedule by actual injection with effect from 6 Dec 2021. As such DSM charges after replacement of RE schedule by actual injection is available from 6 Dec-2021. But, DSM charges considering the RE schedule from 6 Dec 2021 are not available with MSEDCL. Hence, impact on DSM charges due to RE schedule replacement by actual injection cannot be provided. However, change in terms of MUs due to RE schedule replacement by actual injection is as mentioned below:

		RE Wind Solar			Cogen			Small Hydro			Total RE		
Year	Month	RE SCH MUS	RE actual MUS	Diff Mus	Cogen SCH MUS	Cogen actual MUS	Diff Mus	Small Hydro SCH MUS	Small Hydro actual MUS	Diff MUs	Total RE SCH MUS	RE actual MUS	Diff MUs
FY 2021-22													
2021	10	511	335	176	99	104	-4	102	37	65	712	476	237
2021	11	734	522	212	606	632	-26	137	30	107	1477	1184	292
2021	12	675	412	263	661	775	-114	103	25	78	1439	1212	227
2022	1	768	517	251	702	779	-76	58	60	-2	1528	1355	174
2022	2	714	475	240	653	718	-65	63	75	-11	1431	1267	164
2022	3	806	628	178	704	734	-30	94	91	3	1604	1453	150
	Total	**4209**	**2889**	**1320**	**3426**	**3742**	**-316**	**557**	**317**	**240**	**8191**	**6948**	**1244**
FY 2022-23													
2022	4	654	545	109	464	471	-7	82	71	11	1201	1087	113
2022	5	1229	1134	95	281	329	-48	73	64	9	1582	1527	55
2022	6	1084	955	129	118	157	-39	54	42	13	1256	1154	102
2022	7	1346	1226	120	42	45	-2	46	58	-12	1434	1328	105
2022	8	1285	1150	135	18	13	6	58	87	-29	1361	1250	112
2022	9	885	770	115	6	6	1	70	84	-14	961	859	102
2022	10	707	591	116	49	87	-38	66	67	-1	822	745	77
2022	11	757	635	122	586	627	-41	47	46	1	1389	1308	81
	Total	**7946**	**7005**	**941**	**1565**	**1734**	**-169**	**495**	**519**	**-23**	**10006**	**9258**	**749**

It is submitted that Hon'ble Commission vide order dtd 02.08.2022 has ruled that ADSM charges due to replacement of RE schedule by actual injection to be calculated by MSLDC and such ADSM charges to be recovered from RE DSM pool. The same is reproduced below:

> *16.26 Under such circumstances, the Commission is not inclined to accept the recommendations of the Working Group and MSPC that in case, the buyers are required to pay any incremental ADSM Charges on account of such treatment, such incremental ADSM Charges may be allowed as a pass through in the Tariff. The Commission opines and directs that such incremental ADSM charges should be waived off by MSLDC and DSM Pool should be funded for this shortfall from REDSM pool. Thus, MSLDC shall compute these incremental charges and show the corresponding amount in the bills to be raised on the buyers, however, the buyers will not be required to pay these incremental charges to MSLDC from the date commercial implementation of DSM Regulations i.e. 11 October 2021 till a further Order issued in this regard by the Commission.*

However, MSLDC has not yet separated the ADSM charges due to replacement of RE schedule by actual injection. The ADSM charges as mentioned above, includes the effect of replacement of RE schedule by actual injection on post facto basis. **Major part of ADSM charges is due to replacement of RE schedule by actual injection on post facto basis. Hence, it is requested that different treatment to ADSM charges may not be given at this stage and shall be treated same as DSM charges.**

Query 16. OPEX Schemes from FY 2019-20 to FY 2024-25

MSEDCL shall submit the details of schemes proposed under OPEX along with the monetary benefits. Also, MSEDCL shall evaluate whether the schemes proposed under OPEX are eligible.

Further, MSEDCL shall also provide expenses incurred on same scheme in FY 2017-18 to FY 2019-20 and booked in O&M expenses

<u>MSEDCL Reply:</u>

Sr. No.	**Project Name**	**Cost Benefit analysis of Opex Schemes**
1	Centralised Customer Care Center services and establishment of Consumer Facilitation Centers (CFC)	**Benefits:** • Better & professional Customer Care service to MSEDCL Consumers calling its Toll free numbers (1912, 19120, 1800-233-3435, 1800-212-3435). High Availability of CCC operations. BPO companies maintain robust CCC Infrastructures, trained manpower backups & redundant telecom lines to avoid disruptions and SLA penalty. • Faster call handling and quicker resolution of Consumers' Calls. • Outbound campaign like payment follow-ups can be easily

<table>
<tr><th>Sr. No.</th><th>Project Name</th><th>Cost Benefit analysis of Opex Schemes</th></tr>
<tr><td></td><td></td><td>arranged for better outcome.

CFC are established to enhance customer experience equipped with state of the art facilities with following objectives:
Division level Facilitation Centers (for in-person resolutions).
Single Window Service for all types of consumer complaints / issues.
Quick In-Person resolutions of all Complaints/Enquiries/Service Request, etc.
Improved quality of services.
Ease of Access to all consumer related information.
Cost benefits:
In addition to address the consumer complaints for which Customer Care Centre has been established, MSEDCL has utilized call centre services for outbound calls for follow up of payments from defaulter consumers and its monetary achievements are as under:

<table><tr><td>Year</td><td>No. of outbound calls</td><td>Payment Received from consumers after call (Rs in Crores)</td><td>Monthly Average Payment after outbound call (Rs in Crores)</td></tr><tr><td>FY 2019-20</td><td>2,59,733</td><td>220.08</td><td>18.34</td></tr><tr><td>FY 2021-22</td><td>7,35,547</td><td>1739.82</td><td>144.99</td></tr></table>
For the period Apr-2020 to Mar-2021, no outbound calls for Arrears feedback were made due to COVID 19 Lockdown guidelines. Outbound Campaign for payment follow-ups with defaulting consumers helped MSEDCL in realization of revenue.

Due to redressal of billing complaints and power supply related complaints through call center, the consumer satisfaction is improved thereby improving collection efficiency and billing quality, which is intangible benefit.</td></tr>
<tr><td>2</td><td>RF-DCU (Expression of Interest & Tender)</td><td>Benefits:
No need to visit the consumer premise/ carry Hand Held Terminals (HHT) to take meter readings.
Readings downloaded by DCUs can be seen online through web based data collection software of agencies.
Accuracy of reading is 100%.
Cost benefits:
RF-DCU project is implemented in towns with high losses like Jalgaon, Nanded and Latur on pilot basis. The detailed analysis has shown rise of 1.63% in sale for FY21-22 after RF DCU implementation in above zones. Also there is rise of 1.87% in sale for FY21-22 in all RF-DCU project area across Maharashtra.

The work order is issued for 36.72 Crs (LOA1: Rs. 24.75 Crs + LOA2: Rs. 11.97 Crs) for RF-DCU meter reading project for 5 years on opex basis (per reading rate).</td></tr>
</table>

Sr. No.	Project Name	Cost Benefit analysis of Opex Schemes
		In case of execution of RF-DCU project on capex basis following estimated expenditure would have incurred: DCU Cost for 9501 nos. of DCUs : Rs.16.82 Cr. DCU implementation Cost for 9501 nos. of DCUs : Rs. 3.86 Cr. Maintenance Cost for 9501 nos. of DCUs for 5 years : Rs.20.18 Cr. **--** Total **Rs. 40.36 Cr.** From above comparison it is observed that the opex cost is less than the capex cost that would have been required for the RF-DCU project. Further, due to OPEX model, the cost of project is equally divided over the contract period and it is not required to bear entire project expenses during initial period of the contract. Apart from above monetary benefits, due to automatic meter readings in project area, the billing accuracy is improved, which in turn resulted into consumer satisfaction. Also, meter tamper cases are detected regularly which in turn improved sales and helped to reduce loss levels.
3	Substation Monitoring System (SMS)	**Benefits to MSEDCL:** • Improved monitoring and situational awareness of remote substations • Feeder Interruption analysis and computation of reliability indices such as SAIDI, SAIFI, etc. • Monitoring failures and breakdowns, Feeder load profiling, Load growth planning, and management • Data for Strategic, Managerial, and Operational decisions **Benefits to Customers:** • Quick actions from MSEDCL to reduce downtime and improve customer satisfaction. • SMS alerts facility can be extended to consumers so that consumers will know that the feeder is under breakdown. **Cost Benefits:** **After implementation of substation monitoring system at all substations across Maharashtra, the real time data for loading pattern on all feeders will be available. Also, due to availability of health parameters of substation equipment, there will be savings in breakdown maintenance cost. With this, it is submitted that the cost benefits of the project are intangible.** As per the MYT order (Case No. 322 of 2019 dated 30.03.2022) the Hon'ble Commission has approved the Substation monitoring system project across MSEDCL with the following cost benefit. **Implementing a Substation Monitoring System will help MSEDCL in controlling outages by bringing an effective Outage Management System of feeders and health monitoring of equipment. At present, the revenue loss due to forced outage is**

Sr. No.	Project Name	Cost Benefit analysis of Opex Schemes
		approx. Rs. 339.77 Crore/year, with the help of Substation Monitoring System saving of nearly 20% of revenue loss is envisaged. Present Status of the Project is as under: The tender no. MSEDCL/HO/CGM-IT/Substation Monitoring System/19-20 was floated on OPEX basis with an estimated cost of Rs. 330.64 Crores for 5 years on date 03.07.2019. Due to poor response the same was cancelled and now Tender No: MSEDCL/HO/CGM-IT/Substation Monitoring System/22-23/1 is floated on CAPEX + OPEX basis on date 25.08.2022 with the last date of bid submission as 30.12.2022. The same is extended up to 15.02.2023. The estimated cost of the tender is Rs 450.41 Crore. The implementation period is of 1.5 year and the FMS period is of 8 years.
4	MSEDCL Cloud Project	**Project Benefits:** • Less operational issues: The cloud service provider company has to maintain the cloud uptime as per the Service level Agreement with the Customer which is normally 99.99%. Therefore, cloud computing actually has fewer issues than On-Premises infrastructures. • Security: Cloud Service Provider is usually backed by top class security professionals managing the security infrastructure of Cloud 24x7. The cloud service providers also perform more regular security audits. Cloud providers even back up data to additional remote servers so data loss just won't happen. **Cost Benefits:** **The LOA issued for Rs. 88.77 Cr is less than cost of On-premise infra required at Data Centre and Disaster Recovery Centre for hosting applications.** **Estimated on premises IT Infra cost for 5 years would have been Rs. 205.79 crs (all capex) (i.e 205.79/5= Rs. 41.15 crs per year)** **In case of cloud, LOA issued for 5 years is Rs. 88.77 Crs. (Capex 5.26 Crs. and Opex Rs. 83.51 Crs. ie. Rs 88.77/5 = Rs 17.75 Crs. Hence there is cost savings in case of Cloud, compared to On-Premise Dc & DR Center.** **The amount Rs. 17.75 Cr. contains opex as well as capex amounts whereas above table contains only Opex amounts.**

Sr. No.	Project Name	Cost Benefit analysis of Opex Schemes
5	Vehicle Tracking System	**Project Benefits:** • Provide effective monitoring, better decision making, planning and management of MSEDCL vehicles. • Track the vehicles on real-time basis, so that the current location of the vehicle can be identified for effective monitoring. • Identify the vehicles doing violations based on the time of travel, distance travelled, destinations, etc. • Generate analytical / graphical reports based on the various parameters, as desired by MSEDCL from time-to-time (development/customization to be done if required). • Better Customer Services when Customer is having an outage, we need to respond quickly. Sending the closest vehicle during the outage will enhance customer service. • Faster Access to help in Emergencies **Cost Benefits:**The benefits of this project are intangible . The work order is issued for Rs. 2.55 Crs for implementation of VTS system for 5 years on opex basis (monthly payment for installed VTS devices). **In case of execution of VTS project on capex basis following expenditure is estimated:** VTS device Cost for 1222 nos. of devices: Rs. 1.873 Crs VTS device implement. Cost for 1222 nos. of devices: Rs.0.043 Crs VTS/transfer relocation during contract charges: Rs. 0.070 Crs SIM Charges for 1222 nos.: Rs. 0.164 Crs Server Cost: Rs. 0.582 Crs Change Request for 200 man days: Rs. 0.106 Crs -- Total: Rs. 2.84 Crs From above comparison it is observed that the Opex cost is less than the capex cost that would have been required for the VTS project. Further, due to OPEX model, the cost of project is equally divided over the contract period and it is not required to bear entire project expenses during initial period of the contract.
6	Business Analytics and Demand Forecasting Solution	**Project Benefits:** The proposed solution will enable measurable improvements including: • Demand Forecasting • Scenario Analysis • Demand Supply Position Map (Load Generation Balance) • Power Portfolio Management • Scheduling Optimization • Trade Optimization • Enterprise Visualization The project is implemented on CAPEX+OPEX model. The OPEX cost is for operational and support activities during the contract period, after go live of the project.

<table>
<tr><th>Sr. No.</th><th>Project Name</th><th>Cost Benefit analysis of Opex Schemes</th></tr>
<tr><td></td><td></td><td>Cost Benefits:
The load forecasting solution using AI/ML technology will help to reduce the power purchase cost. The benefits of this project are intangible .</td></tr>
<tr><td>7</td><td>Enterprise GIS & Network Analysis Solution</td><td>Project Benefits:
The proposed solution will enable measurable improvements including:
GIS Implementation at Enterprise Level
Reliability and Performance Indices
Network System behaviour and response to disturbances
Optimization of asset utilization and operating efficiency of the electric power system.
The project is implemented on CAPEX+OPEX model. The OPEX cost is for operational and support activities during the contract period, after go live of the project.

Cost Benefits:
The network analysis and GIS will help to analyze loading conditions on network assets, which in turn will reduce losses and savings in breakdown cost for network assets. The benefits of this project are intangible.</td></tr>
<tr><td>8</td><td>ERP SAP S4 HANA</td><td>Benefits of SAP S4 HANA:
The SAP HANA in-memory database helps organizations to execute transactions and analyse business data in real-time.
User experience is powered by Fiori – browser based and convenient to use.
Embedded real-time analytics, and HANA powered in-memory processing to handle large data volumes of operational and transactional business data.
Benefits of SAP Treasury and Risk Module (TRM):
With the SAP TRM application, one can integrate cash flows, transactions, loan, grant and optimize straight-through processing with full-view and real-time analysis, audit trails, and compliance reporting.
The project is implemented on CAPEX+OPEX model. The OPEX cost is for operational and support activities during the contract period, after go live of the project.

Cost Benefits:
S/4 HANA facilitates improved user experience with higher efficiency. This will help to improve employee productivity. The new module SAP TRM will be helpful for better management of cash flows. The benefits of this project are intangible.</td></tr>
<tr><td>9</td><td>Procurement of SD-WAN Solution</td><td>The benefits of this project are intangible eg.
Faster Access, Better availability, Resilience for MSEDCL applications. A resilient SD-WAN reduces network downtime. The technology shall feature real time detection and automatic switch over to working links.</td></tr>
</table>

Sr. No.	Project Name	Cost Benefit analysis of Opex Schemes
		• Field offices connected to each other • Quality of service: SD-WAN technology supports quality of service by having application level awareness, giving bandwidth priority to the most critical applications. This may include dynamic path selection, sending an application on a faster link, or even splitting an application between two paths to improve performance by delivering it faster. • Security: SD-WAN communication is secured using IPsec, SSL, Application Control, Malicious URL filtering, IPS/IDS, Firewall etc. • Application optimization: SD-WANs can improve application delivery using caching, storing recently accessed information in memory to speed future access. • Multipoint Communication: SD-WAN forms multipoint communication across branch offices using MPLS over SD-WAN. • Centralized Control: SD-WAN provide Centralized Management Control to manage traffic, assign policies, configured devices (switches, routers, firewalls) etc. • Cost Effective: SD-WAN improves cost effectiveness and flexibility by leveraging commercially available Bandwidth hardware and network devices. **Cost Benefits:** **MSEDCL's MPLS Network costing upto subdivision level (Capex+Opex) is approximately Rs. 80.44Cr for 5 Years, whereas for cost of SD-WAN Project for availing same type of services with highest level of cyber security is approx. Rs. 72.66 Crs including 2 broadband links (SD-WAN cost Rs. 53.47 Crs+ Broad Band cost Rs. 19.19 Crs) for 5 Years (thus saving Rs. 7.78 Crs for 5 years).**
10	Smart Metering Under RDSS	Advantages of Smart Metering: • Regular availability of meter readings / data without manual interventions. • Due to the accurate readings, average billing will be reduced & there will be no need to revise the bill. Hence, consumer billing complaints will also be reduced. • Losses will be reduced due to accurate energy accounting. • Disconnection & Reconnection of consumers in arrears can be done remotely.

Expenses incurred on same scheme in FY 2017-18 to FY 2019-20 and booked in O&M expenses:

Sr. No.	Opex Scheme	Expenses (Rs.Crs)			Remarks
		FY 17-18	FY 18-19	FY 19-20	
1	Centralized Customer Care Center services and establishment of Consumer Facilitation Centers **(**CFC**)**	0	1.72	8.81	ED/IT&CS/ 148 DT. 25.01.2018.

Sr. No.	Opex Scheme	Expenses (Rs.Crs)			Remarks
		FY 17-18	FY 18-19	FY 19-20	
2	RF-DCU **(**Expression of Interest & Tender**)**	0	0	0	LOA no HO/IT/ RF DCU/13 DT. 01.01.19
3	Substation Monitoring System **(**SMS**)**	0	0	0.63	LOA NO HO/IT/544 DT.04.05.2018 LOA NO HO/IT/543 DT.04.05.2018 LOA NO HO/IT/ 541 DT.04.05.2018.
4	MSEDCL Cloud Project	cloud start in 2019	0	0	LOA no ED/B&R/329 dt 02.03.2019.
5	Vehicle Tracking System	LOA issued in 2020	0	0	CGM/IT/F-0000841/85 dt. 15/01/2020
6	Business Analytics and Demand Forecasting Solution	0	0	0	Project is in process
7	Enterprise GIS & Network Analysis Solution	0	0	0	Project in process
8	ERP SAP S4 HANA	0	0	0	Project in process
9	Procurement of SD-WAN Solution	0	0	0	Project in process

Query 17. Other expenses for FY 2021-22

MSEDCL has claimed INR 132 Crores in other expenses against write off of WDV of scrapped assets in FY 2021-22. MSEDCL shall submit the year wise list of assets scrapped and whether it resulted in reduction in GFA. Also provide year wise details of non-tariff income considered against such asset.

MSEDCL Reply:

MSEDCL submits that due to write off of WDV of scrapped assets has resulted in reduction in GFA, the details are attached as per **Annexure Query 17a**. Year-wise list of asset scrap cannot be provided as it was not linked to Asset register in the system. The year-wise details of non-tariff income considered against such asset are given in **Annexure Query 17b**.

Query 18. Other expenses for FY 2021-22

MSEDCL shall submit the details of other expenses claimed against provisions for non-moving items (INR 90.79 Crores) and provisions against court deposit (INR 205 Crores) in FY 2021-22.

MSEDCL Reply:

MSEDCL submits that total provision as on 31.03.2022 is Rs. 140.04 Crs out of that Rs. 49.26 Crs balance as on 31.03.2021. So, net provision in FY 2021022 is Rs. 90.79 Crs. The item-wise non-moving /slow moving details are provided in **Annexure Query 18a** and SSI Industries claim delayed payment charges and which is disputed by MSEDCL. However, some amount in deposited in court and provision made for entire disputed amount. Details of Provision against court deposit is attached in **Annexure Query 18b**.

Query 19. FBSM Charges

MSEDCL to verify the amount claim under FBSM in FY 2022-23. Further, MSEDCL should separate head of DSM charges instead of FBSM Charges after commencement of the DSM Regulations.

MSEDCL Reply:

It is submitted that there is a typo error in Table 144 of the Petition. The amount of Rs. -1.90 Cr. reflecting under the head FBSM is on account of DSM charges. It is submitted that no FBSM charges have been claimed in FY 2022-23.

Query 20. General (FY 2019-20, FY 2020-21, FY 2021-22)

MSEDCL to provide compensation amount paid to MSPGCL and other generators on account of backing down to 55%.

MSEDCL Reply:

It is submitted that no amount of compensation was paid to MSPGCL on account of backing down during FY 2019-20 and FY 2020-21.

The following Table shows the month wise compensation amount paid to MSPGCL on account of backing down during FY 2021-22.

Compensation Bill Summary for FY 2021-22					
Bill Type	**Month**	**Invoice Date**	**Amt.**	**Payment date**	**Remarks**
Compensation bill for April 21	Apr-21	4/13/2022	10,020,073.94		Considered under ELPS Rules, 2022 issued by MoP, for payment through EMI
Compensation bill for May 21	May-21	5/2/2022	8,857,345.00		
Compensation bill for June 21	Jun-21	5/2/2022	6,325,751.00		
Compensation bill for July 21	Jul-21	5/2/2022	19,211,828.71		
Compensation bill for August 21	Aug-21	5/2/2022	39,157,769.99		
Compensation bill for Sept 21	Sep-21	5/2/2022	1,903,346.85		
Compensation Bill For Oct 21	Oct-21	5/2/2022	0.00		
Compensation Bill for Nov 21	Nov-21	5/20/2022	54,945,689.74	10/4/2022	
Compensation Bill For Dec 21	Dec-21	5/20/2022	128,382,264.81	11/5/2022	
Compensation Bill for Jan 22	Jan-22	6/10/2022	41,822,311.41	11/5/2022	
Compensation Bill for Feb 22	Feb-22	6/10/2022	16,437,673.32	11/5/2022	
Compensation Bill for Mar 22	Mar-22	6/10/2022	2,383,183.07	11/5/2022	
TOTAL			**329,447,237.84**		

With regards to NTPC stations, the compensation amount paid during FY 2019-20 to FY 2021-22 is as submitted below:

Year	**Year wise Compensation charges**	**Compensation charges paid through Energy Bills**
FY 2019-20	604574032	604574032
FY 2020-21	234535863	234535863
FY 2021-22	540302852	540302852

Query 21. Power Purchase for FY 2023-24 and FY 2024-25

MSEDCL MSEDCL need to confirm if it has estimated the power purchase expenses of CGPL and APML including cost under dispute?

MSEDCL also need to assess the power purchase cost from these generators with disputed amount. This would impact the MoD of these generators and they may not be able provide the estimated power for balance control period. MSEDCL need to assess the impact on fixed cost and variable cost composition for these generators

MSEDCL Reply:

CGPL

MSEDCL has signed Power Purchase Agreement (PPA) with Coastal Gujarat Pvt. Ltd (CGPL), UMPP Mundra on 22.04.2007. Out of 4000 MW (5 X 800MW) MSEDCL's contracted capacity is 760 MW at levelised tariff of Rs. 2.26 / Kwh.

Further, Govt. of Maharashtra (GoM) vide its G.R. dated 13th August 2020 has principally approved signing of Supplemental PPA in accepting recommendations of High Power Committee formed for CGPL based on certain conditions, SPPA is yet to be signed.

Further, the CGPL has not scheduled power from Oct 21 to Mar 22 due to increase in imported coal price and delay in finalization of SPPA. Considering the power scenario of shortfall and rising power demand, MSEDCL has procured power from CGPL on short term basis based on the rate of supplementary PPA being finalized with Gujarat/GUVNL for the period from 12.04.2022 to 05.05.2022 and at a rate decided by Committee formed by MoP under Section 11 from 06.05.2022 to 31.12.2022. All the power purchase costs are paid to CGPL as per MOP notifications. Only the capacity charges for non-procurement of power are disputed by MSEDCL and are partially paid as per Supreme Court order dated 14.11.2022 in CA No. 8175 of 2022.

The directives of MoP under Section 11 were prevailing for the period up to 31.12.2022 only. Therefore, from 01.01.2023, CGPL has to supply power as per exiting PPA dated 22.04.2007, since SPPA is yet to be signed between MSEDCL and CGPL. Hence, MSEDCL has estimated power purchase expenses of CGPL considering the rates as per PPA dated 22.04.2007 and approved change in law as the CGPL PPA is valid and effective as on date.

APML

It is submitted that the disputes between APML and MSEDCL on computation of Change in Law component are highlighted in Reply to Query no. 23. Further it is submitted that the impact of the disputed cost of generators as per MSEDCL calculation is considered while projecting the rates for FY 2023-24 and FY 2024-25.

Query 22. Power Purchase for FY 2023-24 and FY 2024-25

MSEDCL shall provide detailed justification for considering higher availability of MSPGCL comparing to energy procured in past period.

In actual, it is observed that there is shortfall in energy supplied by MSPGCL for true up years than the quantum approved by Commission in MYT Order.

MSEDCL Reply:

It is submitted that the station wise actual Plant availability factor and Plant load factor of MSPGCL Thermal Stations as submitted by MSPGCL in its MTR Petition for the period FY 2019-20 to FY 2021-22 is shown in the Table below:

Name of Plant	FY 2019-20		FY 2020-21		FY 2021-22	
	PAF	PLF	PAF	PLF	PAF	PLF
Bhusawal Unit - 3	96.54%	2.85%	97.11%	12.44%	64.69%	29.22%
Chandrapur 3 to 7	61.76%	55.41%	65.64%	49.02%	53.51%	51.47%
Khaperkheda 1 to 4	73.38%	53.78%	75.79%	60.08%	61.00%	44.50%
Koradi 6 to 7	67.32%	27.92%	76.73%	21.66%	72.52%	48.90%
Nashik 3 to 5	81.14%	42.76%	95.02%	11.63%	84.43%	32.39%
Uran	44.92%	44.14%	34.39%	33.14%	35.33%	35.18%
Paras 3 to 4	81.87%	63.34%	82.96%	68.82%	75.00%	58.58%
Parli 6 to 7	78.59%	35.75%	97.17%	28.47%	77.58%	40.19%
Khaperkheda 5	81.87%	75.43%	74.08%	64.86%	82.85%	78.93%
Bhusawal 4 to 5	83.72%	60.10%	92.51%	50.20%	77.81%	63.87%
Koradi 8 to 10	53.76%	51.61%	65.78%	42.20%	63.00%	61.52%
Chandrapur 8 to 9	82.09%	76.59%	84.26%	75.82%	74.80%	72.71%
Parli 8	67.48%	39.63%	97.06%	40.84%	80.32%	50.10%

As seen from the above Table, most of the thermal generating stations of MSPGCL have operated at much lower PLF as compared to their respective availability (highlighted in red) during the period from FY 2019-20 to FY 2021-22. This is mainly due to functioning of MoD which have back down the costlier generation of MSPGCL stations as compared to the other sources of power purchase of MSEDCL during that period.

Further, it is submitted that the actual generation (in MUs) achieved by MSPGCL stations during FY 2019-20 to FY 2021-22 is the effective generation due to MoD operation. The net generation during this period would have been much higher if these stations would have operated/generated at available Declared capacity. The following Table shows the difference in net generation with actual PLF with respect to the actual PAF.

Name of Plant	FY 2019-20		FY 2020-21		FY 2021-22	
	Net MU with PAF	Net MU with PLF	Net MU with PAF	Net MU with PLF	Net MU with PAF	Net MU with PLF
Bhusawal Unit - 3	1,581.31	29.44	1,590.64	188.84	1,059.61	458.42
Chandrapur 3 to 7	9,486.94	8,457.73	10,178.99	8,245.00	8,297.96	7,763.90
Khaperkheda 1 to 4	4,875.83	3,534.49	5,035.97	4,421.17	4,053.23	3,274.64

Koradi 6 to 7	1,115.69	433.23	1,284.49	398.43	1,214.01	784.41
Nashik 3 to 5	3,985.38	2,085.71	4,680.24	641.98	4,158.62	1,787.54
Uran	2,564.99	2,525.01	1,961.69	1,950.77	2,015.31	2,014.06
Paras 3 to 4	3,281.10	2,482.82	3,295.72	3,014.13	2,979.50	2,327.24
Parli 6 to 7	3,149.65	1,393.83	3,860.23	1,246.90	3,081.99	1,596.78
Khaperkheda 5	3,370.75	3,110.11	3,050.02	2,840.89	3,411.10	3,249.87
Bhusawal 4 to 5	6,893.84	4,933.98	7,617.64	4,397.22	6,407.19	5,259.22
Koradi 8 to 10	8,765.09	8,226.25	10,724.84	7,319.78	10,271.59	10,030.99
Chandrapur 8 to 9	6,759.62	6,283.58	6,938.31	6,641.43	6,159.33	5,986.89
Parli 8	1,352.20	777.33	1,944.94	894.37	1,609.49	1,003.88
TOTAL	**57,182.39**	**44,273.51**	**62,163.72**	**42,200.91**	**54,718.93**	**45,537.84**
Difference	**12,908.89**		**19,962.81**		**9,181.08**	

Note: Net Generation excluding Hydro generation

As seen from the above ~12,909 MUs in FY 2019-20, ~19,963 MUs in FY 2020-21 and ~9181 MUs in FY 2021-22 would have been additionally generated by MSPGCL Thermal stations (excluding Hydro stations) if the variable rates of these stations would have qualified under merit order dispatch.

It is therefore submitted that the shortfall in energy supplied by MSPGCL stations as compared to approved is mainly due to most of its generating stations not qualifying under MoD and not due to its inability to generate the required quantum of energy.

It is also submitted that the Hon'ble Commission while approving the Tariff Order has also considered lower units from MSPGCL stations considering the applicability of MoD principle and therefore full declared capacity units are not reflected in the MUs approved by the Hon'ble Commission for MSGPCL stations during FY 2019-20, FY 2020-21 and FY 2021-22.

It is submitted that the following Table shows the PAF considered by MSPGCL Thermal stations for FY 2023-24 and FY 2024-25 in its MTR Petition via-a-vis the PAF considered by MSEDCL for projecting power generation from MSPGCL Thermal station during FY 2023-24 and FY 2024-25 in its MTR Petition.

Name of Power Station	PAF projected by MSPGCL for FY 2023-24 and FY 2024-25 in its MTR Petition	PAF projected by MSEDCL for FY 2023-24 and FY 2024-25 in its MTR Petition
Bhusawal Unit - 3	80.85%	69.34%
Chandrapur 3 to 7	84.90%	60.40%
Khaperkheda 1 to 4	85.41%	72.21%
Koradi 6	85.41%	65.37%
Nashik 3 to 5	80.19%	67.36%
Uran	35.33%	35.29%
Paras 3 to 4	84.71%	81.65%
Parli 6 to 7	84.96%	80.02%
Khaperkheda 5	85.23%	72.21%
Bhusawal 4 to 5	84.96%	78.22%
Koradi 8 to 10	84.97%	65.24%
Chandrapur 8 to 9	85.36%	84.82%
Parli 8	85.27%	72.49%

As seen from the above Table, MSPGCL in its MTR Petition has considered availability for thermal stations almost close to normative availability. However, MSEDCL while projecting generation from MSPGCL thermal stations have adopted a conservative approach and considered a significantly lower availability in most of the thermal power stations taking into account the historical trend in availability achieved by these stations. It is also submitted that in none of the power stations stated above, MSEDCL has considered a higher availability that that submitted by MSPGCL in its MTR Petition for FY 2023-24 and FY 2024-25.

It is submitted that the overall gross availability (in MW) from existing MSPGCL Thermal stations as stated above works out to ~8313 MW as per MSPGCL MTR Petition, while MSEDCL has considered ~6983 MW to be available from these stations during FY 2023-24 and FY 2024-25.

Hence it is submitted that MSEDCL while working out the availability of MSPGCL Thermal stations have considered a conservative approach and projected the availability for FY 2023-24 and FY 2024-25 based on the historical trend observed in these stations. Hence it would not be appropriate to say that MSEDCL has considered a higher availability for MSPGCL stations as compared to the past period.

However, it is submitted that there is a slight variation observed in the PAF considered by MSEDCL in its MTR Petition and the three-year average PAF worked out based on the billing data for each of the power station. MSEDCL has rectified the difference observed in some of the power stations and accordingly considered the revised availability as shown in the Table below for purpose of energy projection for FY 2023-24 and FY 2024-25.

Name of Power Station	Average Availability considered by MSEDCL in MTR Petition	Average Availability of last three years as per billing (revised)
Bhusawal Unit - 3	69.34%	76.73%
Chandrapur 3 to 7	60.40%	58.11%
Khaperkheda 1 to 4	72.21%	69.94%
Koradi 6	65.37%	63.88%
Nashik 3 to 5	67.36%	71.56%
Uran	35.29%	36.51%
Paras 3 to 4	81.65%	79.35%
Parli 6 to 7	80.02%	84.83%
Khaperkheda 5	72.21%	82.16%
Bhusawal 4 to 5	78.22%	82.93%
Koradi 8 to 10	65.24%	62.82%
Chandrapur 8 to 9	84.82%	82.89%
Parli 8	72.49%	80.58%

Query 23. Power Purchase for FY 2023-24 and FY 2024-25

It is observed that, Power purchase cost of APML has been increased substantially due to CIL and past period impact. MSEDCL need to assess the impact of such claims on MOD position of APML for future period.

MSEDCL need to clarify on Change in law claims have been considered by it while preparing MoD Stack position.

MSEDCL Reply:

MSEDCL is considering Change in law claims while preparing MOD stack position, as per prevailing orders of MERC & APTEL. However, there are differences in the matter of Change in Law component as submitted by APML in its form 5S (as per Grid Code Regulations) & calculated by MSEDCL. The same are as follows

Sr. No.	Issue	APML 5S	MSEDCL
1	**Scheduled Generation – (kwh)**	Not as per data available on SLDC website.	As per data available on SLDC website.
2	**Alternate units from unit 1,4,5 in 1320MW PPA**	M/s. APML has claimed change in law on units supplied from unit 1,4,5 against 1320 MW PPA.	Power supplied from unit 1,4,5 against 1320MW PPA is power supplied from Alternate source (i.e. from non-identified units). As per article 19 of 1320 MW PPA Change in law compensation is not applicable to these units. Hence MSEDCL has not considered this in MOD.
3	**Auxiliary consumption for 1320 MW (PPA unit 2 & 3)**	M/s. APML has claimed change in law on Auxiliary consumption in the matter of 1320MW PPA.	As per MERC order dated 05.03.2018 in case no.122 of 2015 read with MERC order dated 07.03.2018 in case no.123 of 2017 & order dated 15.01.2019 in case no 289 of 2018 Change in law cannot be claimed on auxiliary consumption in the matter of 1320 MW PPA.
4	**Net SHR**	**Net SHR-** a) For Entire plant- - APML calculates net SHR as below- i)Gross SHR as per MYT/ Aux as per MYT) ii) Gross SHR actual/ (1- Aux as per Actual) Lower of above i) & ii).	**Net SHR-** Gross SHR (lower of actual or MYT) / (1-Aux. Con. (lower of actual or MYT) As upheld by orders dated 10.12.2020 in MA 53 and MA 54 of 2020 and further clarified in order dated 16.11.2021 in case no 240 of 2020 (RIPL's case).
5	**Credit towards busy season surcharge (BSS) & Development surcharge. (DS)**	APML is not considering the credit impact towards subsuming of BSS & DS in base freight rate and not passing credit on the same.	The change in DS/BSS is already held as CIL event vide MERC order in Case no.02 of 2014 & 163 of 2014.Hence as per PPA, the negative CIL (i.e. BSS +2% to zero & DS +5% to zero) has to be passed on to MSEDCL from the effective date along with interest as per Ministry of Railways notification dated 09.01.2018, the BSS and DS were merged in basic railway fare. BSS DS were part of quoted tariff which APML is recovering from MSEDCL and subsuming the same in base price is covered through CERC index.

6	**Coal shortfall compensation for 1180MW capacity**	APML is allocating the total available coal under 1180 MW FSA among the unit 1 (660 MW) & unit 2 (520 MW) on the basis of MW capacity and calculating the coal shortfall impact for unit 1 & unit 2 separately instead of calculating compensation for 1180 MW capacity as a whole.	MSEDCL calculating compensation for 1180 MW capacity as a whole. Hon. MERC in its order dtd. 07/03/2018 in case no 189 of 2013 para 92 (a) & consequential order thereof in MA 53 dtd. 10.12.2020 at para no. 18.3 (A) has clearly given calculation methodology for 1180 MW capacity. The allocation followed by APML among unit 1& 2 is creating pseudo shortfall under unit 1 of 1180 MW FSA and it is contrary provision 4.1.1 of FSA.
7	**Method of conversion of IPT coal Quantity, Cost & GCV**	APML has wrongly adopted method of coal cost conversion on GCV equivalence basis keeping the domestic coal quantum same as that of IPT coal actually used at Tiroda and levied normative transportation cost on entire domestic coal quantum. APML is considering the actual domestic quantity of IPT coal, its coal cost is converted in the proportion to GCV of domestic IPT coal & imported coal utilized at Tiroda (at present it is considering GCV of 5000 kcal/kg as there is no actual imported coal utilized at Tiroda).Normative Transportation cost from Dahej to Tiroda along with taxes and duties on normative transportation is considered without producing any documents of such expenses and payment of such taxes and duties to government department.	MSEDCL calculations are as per directions given in Hon. MERC vide order dtd. 28.11.2020 in case no 132 of 2020 read with order dtd. 11.09.2021 in case no 9 of 2021 as follows: 1. As per para no 19.7, 20.1, 20.2, 20.4, 20.9, 20.10, 20.11 from the order dtd. 28.11.2020, the cost of equivalent imported coal (quantity determined on GCV equivalence basis) used at Mundra in lieu of IPT coal used at Tiroda is to be commercially accounted at Tiroda plant. The transportation cost is payable on the quantum of imported coal derived on GCV equivalence basis. 2. No proof regarding non-availability of vizag port for transportation is submitted by APML hence MSEDCL considers normative transportation from Vizag to Tiroda. 3.Taxes levies duties on normative transportation cannot be considered as there are no expenses & proof regarding the same.

It is submitted that MoD rates of APML stations are considered as per MSEDCL calculation on the above issues and the same are considered for projecting rates for FY 2023-24 and FY 2024-25.

Query 24. Power Purchase for FY 2023-24 and FY 2024-25

MoP has issued direction to all the Gencos for blending of 6% imported coal which would have impact on the VC of generators. MSEDCL needs to clarify if it has considered the impact of incremental VC while projecting the power purchase cost of generators? If not, MSEDCL may appropriately factor it in its power purchase projections.

MSEDCL Reply:

The Ministry of Power (MoP), Govt. of India (GoI), vide its letters dated 20.10.2021, 7.12.2021, 28.04.2022 and 26.05.2022 had asked the coal based generating companies to ensure availability of plant for meeting the demand as per the requirement of the Electricity Grid wherein in case domestic coal supplies fall short of requirements, MoP had advised to blend imported coal initially upto 4% and then upto 10% of the total requirement and ensure continuous power supply in the respective States. Accordingly, NTPC stations have been using around 8% and MSPGCL stations have been using around 10% of the imported coal. The actuals ECR of MSPGCL and NTPC stations in FY 2021-22 and FY 2022-23 (Up to Sept 22) includes the impact of the imported coal blending. As projections for FY 2023-24 & 2024-25 are done on the basis of actuals for FY 2022-23, the impact of present directions of MoP for blending of 6% imported coal is already been accounted for in rates projected for these stations.

RIPL

Sr No	Month	% gross generation from Imported coal	Rate (Rs/unit)	Rate for 1% blend (Rs./unit)	Rate/Unit for 6% blend
1	Sep-22	12.19%	0.7448	0.0611	0.3665

The impact of the same is already been considered in MSEDCL's MTR Petition.

GMR Warora

As per the tentative calculation of impact of blending of coal for the month of Dec 22 is conveyed by GMR is RS. 0.3680 per unit

Sai Wardha

1. SWPGL has blended imported coal for the September-2022, October-2022 and November-2022 with different blending percentage i.e. 5.52%,11.04% and 6.41% respectively.
2. Change in Law rate i.e. Change in Law per unit Net scheduled Generation is obtained by taking ratio of change in law and Net Scheduled generation obtained by taking ratio of change in law and Net Scheduled generation.
3. Accordingly, Change in Law rate for 1% blending is obtained by dividing the CIL rate by blending percentage.
4. CIL rate for 6% blending is obtained by multiplying CIL Rate for 1% blending with 6%.
5. Finally Average of all 3 months is 0.3237 is being considered for SWPGL.

Sr No	Month	% gross generation from Imported coal	Change in law for blending of coal/Scheduled Net Generation	ECR Imported	Change in law for blending of coal/Scheduled Net Generation for 1% blending	Change in law for blending of coal/Scheduled Net Generation for 6% blending
1	**Sep-22**	5.52%	0.3004		5.4385	0.3263
2	**Oct-22**	11.04%	0.5926		5.3658	0.3219
3	**Nov-22**	6.41%	0.3449		5.3840	0.3230
						0.3237

It is submitted that in case of CGPL & JSW, the projections submitted up to Mar 23 as per the current CERC index. For considering projections for FY 2023-24 and FY 2024-25, the variable rates excluding imported coal rates are escalated by CAGR of last 5 years.

After considering the impact of blending of coal the rates of IPPs are revised based on the following assumptions. The revised rates are provided as **Annexure Query 24**

Query 25. FY 2023-25 and FY 2024-25

> **Cross Subsidy Surcharge claim shall be justified with regulatory principles and provisions. Further, MSEDCL shall follow Electricity Rules, 2022 capping it to 20% on ACoS.**

MSEDCL Reply:

MSEDCL submits that as mandated by the Hon'ble Commission it submitted the Petition before due date i.e., 30th November, 2022 after due approval from Competent Authority, whereas the Electricity (Amendment) Rules, 2022 are notified on 29th December, 2022 and made available in public domain on 4th January 2023.

MSEDCL respectfully submits that pending the adoption of various rules notified the Central Government by the Hon'ble Commission, MSEDCL submits that it has submitted its proposal in line with its approach proposed at the beginning of current Control Period. In this context, it would be relevant to refer to the Hon'ble Commission observations in its MYT Order, which states as below:

> *"8.30.22**The Commission has taken a note of the concern raised by MSEDCL regarding the application of ceiling cap of +/- 20% across consumer categories as per the Para. 8.3 (2) of the Tariff Policy, 2016**. **Further, the Commission also notes the reference to the Consultation Paper issued by MoP in August, 2017** as regards implementation of both Para. 8.3 (2) and first proviso to para 8.5.1. of the Tariff Policy, 2016 simultaneously.*

MSEDCL submits that in the already submitted in the MTR Petition (para 11.3.3.) it has calculated the Cross Subsidy Surcharge as per regulatory principles i.e., considering the formula prescribed by the National Tariff Policy, 2016 but without putting any ceiling, along with its rationale for making such proposal.

As such instead of introducing any new approach in the middle of Control Period, it would be in interest major stakeholders i.e., utility and consumers at large to introduce the same in new Control Period.

Query 26.

> **It is observed that there is a deviation between wheeling charges and wheeling ARR. MSEDCL shall clarify the reason behind deviation.**

MSEDCL Reply:

MSEDCL submits that the reasons behind deviation have already been discussed and clarified during TVS held on 11.01.2023.

Query 27. General

MSEDCL shall submit input energy data at T<>D periphery from FY 2020-21 onwards with reconciliation.

<u>MSEDCL Reply:</u>

MSEDCL submits that the reply to this data gap will be submitted subsequently.

Query 28. FY 2023-25 and FY 2024-25

MSEDCL has proposed higher capitalisation for FY 2023-24 and FY 2024-25 than its past trend.

MSEDCL shall submit the detailed plan for implementation of proposed capex schemes and how capitalisation will take place in FY 2023-24 & FY 2024-25.

Metering part of RDSS scheme has been considered in CAPEX portfolio. As per MoP guidelines metering component of RDSS needs to be considered in OPEX. MSEDCL shall revise capex and capitalisation forms accordingly.

<u>MSEDCL Reply:</u>

MSEDCL submits that the reply to this data gap will be submitted subsequently.

Query 29. General

MSEDCL shall propose green tariff and methodology for the same in the revised petition.

<u>MSEDCL Reply:</u>

Hon'ble Commission directed to propose Green Power Tariff and methodology for the same in the revised petition. Accordingly, MSEDCL submits that it shall propose green power tariff as per stipulating norms/rules/regulations issued by MERC/MoP in the revised petition.

Query 30. General

MSE MSEDCL shall revise the chapter of Compliance of Directives with detailed justification in tabular format along with timelines and implementation status of the directives given in MYT Order and other Orders passed in present control period.

<u>MSEDCL Reply:</u>

MSEDCL submits that the revised chapter of Compliance of Directives with detailed justification in tabular format along with timelines and implementation status of directives given in MYT Order is attached herewith in **Annexure Query 30**. Further, MSEDCL submits that, the reply to the compliance of the directives in other Orders passed in present control period will be submitted subsequently.

Query 31. General

MSEDCL to provide breakup of power procured in FY 2019-20, FY 2020-21, FY 2021-22 and FY 2022-23 from short term power purchase through Day Ahead and Real time market

<u>MSEDCL Reply:</u>

The breakup of power procured in FY 2019-20, FY 2020-21, FY 2021-22 and FY 2022- 23 from short term power purchase through Day Ahead and Real time market is provided as **Annexure Query 31**.

Query 32. General

MSEDCL need to provide details with regards to automatic compensation paid as per CGRF Regulations, 2020 and compensation arising out of CGRF Orders.

FY	Amount of Compensation (Rs. Crores)
FY 2019-20	
FY 2020-21	
FY 2021-22	
FY 2022-23#	

 # Actuals up to 6 months (or as may be)

<u>MSEDCL Reply:</u>

MSEDCL submits that provision regarding automatic compensation under the MERC CGRF Regulations, 2020 is not observed. Whereas compensation arising out of CGRF Orders is provided as below.

FY	Amount of Compensation (Rs.)
FY 2019-20	2,48,590
FY 2020-21	1,57,800
FY 2021-22	33,508
FY 2022-23#	7,000

Actuals up to 6 months

Query 33. Power Purchase for FY 2019-20, FY 2020-21 and FY 2021-22

MSEDCL has executed EPAs with Bagasse based Cogen Units including conditions of improving collection efficiency of Agriculture category. In case, co-generation plant fails to achieve target of collection efficiency in any year, then co-generation plant would be eligible for only 95% of approved tariff.

MSEDCL need to provide the details of such EPAs, collection efficiency levels and eligible Tariff.

<u>MSEDCL Reply:</u>

MSEDCL submits that the Hon'ble Commission in its Order dated 30 September 2020 has directed that cogeneration plants owners can work with MSEDCL to increase collection efficiency with active support of their members, shareholders or farmers supplying sugarcane to the factories and laid down methodology for the same. In this regard, MSEDCL has annexed all the details of such EPAs as **Annexure Query 33**.