

The Secretary,
Jharkhand State Electricity Regulatory Commission,
1st Floor, Jharkand State Housing Board Old Building
Harmu Housing Colony, Ranchi – 834002

PSD/JSR/1157/2023 Date: 02 Feb 2023

**Subject:** Additional data requirement pertaining to Petition for True-up of FY 2021-22, Annual Performance Review of FY 2022-23 and Aggregate Revenue Requirement (ARR) & Tariff for FY 2023-24, of Tata Steel Limited.

#### Ref: -

- 1. Petition to JSERC vide letter PSD/JSR/1001/2022, Dt. 28.11.2022
- 2. Case Number- Case (Tariff) No. 16 of 2022,
- 3. Letter from JSERC- JSERC/Case (Tariff) No. 16 of 2022/294 Dt. 19.01.2023

# Dear Sir,

With reference to above please find below the response.

# True-Up for FY 2021-22:

1. The Petitioner is required to provide the Searchable pdf of the Annexure. Further, the Petitioner is directed to submit clear copies of Annexure- 1 (page no-20), 10 (page no-2427).

**Response:** - Clear Copies of Annexure- 1 (page no-20), 10 (page no- 2427) is enclosed in **Annexure-1.** The Searchable pdf of the Annexure is submitted in the Pen drive.

- 2. The Petitioner is required to provide the load curve for FY 2021-22 including the base load and peak load.
  - **Response: -** Petitioner would like to Submit the load curve for FY 2021-22 including the base load and peak load of the Licensee in **Annexure-2**.
- 3. As per table 2-1 of the petition, the Petitioner has claimed the sale of energy under MESRTODL, and IEX as 1.08 MUs & 137.40 MUs respectively. But the same was not approved in the MYT Order dated 24-11-2022 for ARR of FY 2021-22. In this regard, the Petitioner is required to justify such deviation.

Response: -TSL Tariff order includes HT institutional category for Railway Traction (RTS) and Military Engineering Services (MES) and other distribution Licensee (Excluding Tata Steel UISL), commonly represented MESRTODL in table 2-1.

During review of consumer data in FY22 one of the Military Installation was found, which was being billed under DSHT category. As this was installation relating the category was changed to MESRTDOL. The sale shown is against this consumer.

Sale in IEX- TSL has contracted power purchase from DVC and Tata Power. Because of variation in load of various consumers during days and weeks; there remains some balance

power which when sold in power exchange at a cost higher than incremental cost of power generation (variable cost), reduces the fixed charge burden on the consumer.

While Hon'ble Commission in its TSL MYT order Dt. 24.11.2022, has not shown the sale in IEX in energy balance (Table-24), the Hon'ble Commission has encouraged the sale of surplus power provided that the same results in reducing the fixed charge burden on the consumers. It further stated that, any losses on account of sale of surplus power shall be approved by the Commission after prudence check, subject to truing up.

Relevant part of the order is reproduced below: -

#### Quote

"The Commission has noted that the Petitioner has proposed to sell the surplus power in the Open Market. The Commission in its Order is not approving any surplus for the Control Period and has reduced the proportional quantum of power purchase from the costliest source at this juncture. However, the Petitioner is encouraged to sell surplus power provided that the same results in reducing the fixed charge burden on the consumers. Further, any losses on account of sell of surplus power shall be approved by the Commission after prudence check, subject to truing up."
Unquote.

We would like to communicate that during FY 2021-22, 137.40 Mus were sold in exchange at average realization of 5.09 Rs/kWh which is much more than the variable cost of power purchased.

This has resulted in reducing the fixed charge burden to the consumers.

In view of the above, we request Hon'ble Commission to approve MESRTODL, and IEX as 1.08 MUs & 137.40 MUs respectively.

4. As per table 2-2 of the petition, the Petitioner has claimed Energy Sale to Steel Work as 46.67 MU against 176.32 MU approved in the MYT order dated 24-11-2022. In this regard, the Petitioner is directed to provide the proper justification.

Response: - Petitioner would like to submit; that like any other consumer, Sale to Steel Works may vary based on their requirement. Projection for FY22 was done based on latest available data of power taken by Steel Works in FY20 and same is approved in the MYT order. However: during FY 2021-22 the actual power taken by Steel Works were lower. While sales to Steel Works is shown separately in energy balance (in Table-24) for the purpose of loss computation; the same should be considered as any other consumer taking power from licensee within the contracted capacity based on their requirement.

5. It is observed that, the Petitioner didn't fulfil the Renewable Purchase Obligation (RPO). But a certain quantum of RPO is fulfilled through G-TAM (Green Term Ahead Market) and Solar rooftops. In this regard, the Petitioner is directed to submit the monthly quantum of power generated through rooftops connected to the Petitioner's distribution system.

**Response: -** Petitioner would like to submit the monthly quantum of power generated through rooftops connected is as below: -

\*Figures are in Million Units

									9			
												Total in FY -22
0.79	0.81	0.69	0.68	0.71	0.75	0.85	0.71	0.66	0.78	0.97	1.20	9.60

6. As per table 2-3 of the petition, the Petitioner has claimed the Power Purchase Rate as Rs 4.82/kWh against Rs 4.64/kWh as approved in MYT Order dated 24.11.2022. In this regard, the Petitioner is required to provide a detailed justification for such an increase in the Power Purchase Rate.

**Response:** - Petitioner would like to submit that while deciding on the projections of power purchase costs during approval of MYT order dt.24.11.2022, Hon'ble Commission has approved Rs 4.64 per unit as against estimates given by the petitioner at Rs 5.02 per unit for FY2021-22. The rational of Rs. 5.02 was already provided in the MYT petition filed in Nov-20.

The variation from Rs. 4.64 per unit to Rs. 4.82 per unit is around 3.8% only and such level of variation is bound to happen in any projections, as projections are based on past data with certain assumptions.

Following may further clarify the reason for variation in power purchase cost than estimates approved in ARR for FY2021-22.

- TPCL units- Hon'ble Commission has approved the same cost as was approved for TPCL Unit- 2 and Unit-3 (i.e., Rs. 3.69/kWh for Unit-2 and Rs. 3.75/kWh for unit-3), Tata power MYT order dt- 04.11.2022.
  - Whereas, the actual power purchase cost as billed came out to be Rs 3.81/kWh, due to variation in fuel prices.

Hon'ble Commission allows the same power purchase cost to Tata Steel, which is approved for Tata Power unit during True up. In this case also, Hon'ble Commission may consider the same rate of power purchase which is approved for Tata power for True up FY22.

- Power Purchase Cost of DVC 132kV was Rs 5.18 per unit, which was higher than the approved estimates of 4.50 per unit. This is primarily because of higher spread of demand charges on energy drawn from this source. The actual drawl was of 252.93 MUs as against plan of 317.52 MUs. The power drawl from this source is depended upon the consumer load and TSL does not have any control over power drawn by various consumer.
- Short term power was purchased to meet the emergency requirement during outage of long-term generators of DVC (MTPS and DSTPS). The actual Power purchase cost was Rs. 6.15 per unit.
- The details of the outage of long-term source is provided in table 2.8 of the petition.
- The details of Market Clearing Prices in IEX in Oct'21 is provided in section 2.4.33; where price of electricity went to Rs 8.013 /Unit during Oct'23
- The details of the short-term power purchase and effective rates is provided in table 2.9 of the petition. During H1 FY22 there was general increase in the coal price throughout the country which led to increase in cost of power in open market (short term).

Petitioner would like to communicate that it takes all efforts to make reasonable estimates while filing the APR and ARR for respective years. These estimates are subject to variations due to various influencing factors beyond the control of the petitioner. The cost of the power generating sources are also reviewed and approved by the respective Regulatory Commission. The bills are raised and paid accordingly.

We request the Hon'ble Commission to kindly consider above facts and submissions and approve the Power purchase cost

7. As per Renewable Purchase Obligation (RPO) compliance (read with para 2.4.17 to 2.4.19, table 2-6) for FY 2021-22, the Petitioner has purchased a quantum of power through Solar as 70.88 MUs against the target of 388.59 MUs and Non-Solar as 340.79 MUs against the target of 343.37 MUs towards RPO compliance. In this regard, the Petitioner is directed to provide proper justification.

**Response: -** Petitioner had been meeting its renewable purchase obligation mostly through REC.

During the year FY2022, while hearing the petition DFR NO. 247 of 2020 filed by Green Energy Association w.r.t revision of REC floor and forbearance prices by CERC, APTEL reserved the order and REC trading was suspended from July-20 to Oct-21.

In view of the REC trading suspension for 7 months during the year; Petitioner attempted to buy green power from exchange during FY22 and waited for resumption of trading for REC.

REC trading was resumed in Nov-21 and thereafter petitioner purchased the Solar and Non-Solar RECs.

While almost all Non-Solar RECs bids (323.81 MUs) were cleared in the exchange; Only a part of Solar RECs (i.e. 30.19 MUs against a bid of 537.05 MUs) were cleared in the exchange.

Further, Whenever Green power in exchange was available at reasonable prices, TSL attempted to purchase the same and has purchased 31.08 MUs Solar and 16.97 MUs Non-solar power from Green Term Ahead Market (G-TAM).

Thus total Solar RECs purchased are 70.88 Mus (30.20 Mus of Solar RECs + 31.08 Mus of Solar GTAM + 9.60 MUs of RE generation under net metering).

And total Non Solar RECs purchased are 340.79 Mus (323.82 Mus of Solar RECs + 16.97 Mus of Solar GTAM).

Petitioner made all efforts to comply to the RPO with all options available and complied most part of the same and therefore requests the Hon'ble Commission to kindly consider the same and carry forward the balance RPO to be purchased in subsequent years.

8. As per table 2-18 of the petition, the Petitioner has claimed Normative A&G as Rs 32.22 Cr against Rs 31.43 Cr approved in MYT Order dated 24-11-2022. In this regard, the Petitioner is required to provide proper justification.

**Response: -** The Computation of A&G expense is already explained in the 2.5.20 to 2.5.24 of the petition.

We understand that variation from Rs. 31.43 Cr to 32.22 Cr may be due to load growth factor of 1.71% considered for escalating the A&G expense in FY22 in addition to inflation factor. The inflation factor of FY21 and FY22 are 4.14% and 8.67% respectively.

The computation of inflation factor of FY22 is explained in Table 2-10 of the petition whereas the computation of inflation of FY21 is taken from True Up petition filed for FY21 (Table 2-8). The rational of considering the inflation is already provided in the petition. We request the Hon'ble Commission to kindly consider the same.

9. As per table 2-22 of the petition, the Petitioner has claimed O&M expenses as Rs 96.02 Cr against the Rs 95.21 Cr approved in the MYT Order dated 24-11-2022. In this regard, the Petitioner is required to provide the proper justification.

**Response:** - Petitioner would like to submit that the O&M cost primarily comprise of three element a) A&G b) R&M c) Employee salary and wages. The element wise computation of O&M expense is already explained in section 2.5.1 to 2.5.31 of the petition.

Further, reasons for variation from MYT order are given below: -

- a) A&G- Variation is already explained in the response to question No-8.
- b) R&M- Variation in R&M is due to variation in opening GFA considered as on 01.04.2021.
- c) Employee Expense- The detail computation of Employee expense for FY22 is given below:

Computation	n of Normative	e Employee Cost for FY 20	21-22			
Particulars	Units	Estimated Approved in Business Plan order FY2021-22 (Rs. Cr.)	Base Value FY 2019-20 approved in Business Plan	Normative Value for FY2020-21	Normative Computation for FY2021-22 (Rs. Cr.)	
Employee Cost (n-1 year)	Rs.Cr.	24.87		24.07	25.07	
Inflation Factor	% 8.67% 24.07 4.14%		8.67%			
Growth Factor (Gn)	%	12.40%		0.00%	12.40%	
Employee Cost as per normative basis for FY 2021-22	Rs.Cr.	30.38	24.07	25.07	30.62	

10. As per Audit note 14(f) of the Balance Sheet, the Petitioner has booked Rs 0.71 Cr under Other Miscellaneous Expenses. In this regard, the Petitioner is directed to provide the break-up of Other Miscellaneous Expenses.

Response: - The Breakup of other miscellaneous expenses is as given below: -

Particulars	Amt (Rs.)
Advertisement	0.24
Bank charges	0.19
IT expense	0.28
Total	0.71

11. As per table 2-35 of the petition, the Petitioner has claimed Delay Payment Surcharge (DPS) as Rs 1.65 Cr and Interest of funding of Principal amount on DPS as Rs 0.96 Cr. In this regard, the Petitioner is directed to submit the basis of such claim. Also, the Petitioner is directed to submit the details of the Principal amount of DPS.

**Response: -** The Petitioner would like to submit that; the Hon'ble Commission considers 'Delayed Payment Surcharge' as part of power income (under NTI or part of revenue from sale of power) to compute net ARR.

Therefore, the cost of funding the delayed payments is borne by the petitioner which need to be allowed separately as ARR element.

This matter was already dealt by APTEL in order dated 12.07.2011 in case no 142 &147 of 2009 wherein working capital requirement for funding of Delayed Payment Surcharge at SBI PLR was explained and allowed in ARR.

The details of the same is already provided in section 2.8 of the petition. The relevant extract of the order in the matter of Judgment In the matter of BSES Rajdhani Power Limited vs Delhi Electricity Regulatory Commission & Government of NCT of Delhi are reproduced below:

"The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers. The late payment surcharge is only if the delay is more than the normative credit period. For the period of delay beyond normative period, the distribution company has to be compensated with the cost of such additional financing. It is not the case of the Appellant that the late payment surcharge should not be treated as a non- tariff income. The Appellant is only praying that the financing cost is involved due to late payment and as such the Appellant is entitled to the compensation to incur such additional financing cost. Therefore, the financing cost of outstanding dues, i.e the entire principal amount, should be

allowed and it should not be limited to late payment surcharge amount alone. Further, the interest rate which is fixed as 9% is not the prevalent market Lending Rate due to increase in Prime Lending Rate since 2004-05. Therefore, the State Commission is directed to rectify its computation of the financing cost relating to the late payment surcharge for the FY 2007-08 at the prevalent market lending rate during that period keeping in view the prevailing Prime Lending Rate".

Emphasis added....."

Based on the above principles, Hon'ble Commission has already allowed the Funding Cost of DPS in True-up order for FY2018-19 dated 29<sup>th</sup> Sep'2020. Relevant extracts of the same is reproduced below-

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# Commission's Analysis

- 5.77 The Commission observes that the Petitioner has calculated the receivables for two months based on actual revenue received in that particular financial year, as against the ARR. However, the Commission has calculated the receivables based on Annual Revenue Requirement instead of actual revenue as the Commission has approved a large amount of surplus to be recovered at the existing Tariff. The Commission has adopted the same approach in its previous Tariff Orders.
- 5.78 The Petitioner further submitted that since the Commission has considered DPS as part of Non-Tariff Income (NTI) to compute the net Annual Revenue Requirement (ARR), in light of Judgment of Hon'ble Appellate Tribunal for Electricity (APTEL) dated July 12, 2011, in Appeal No. 142 and 147 of 2009, the funding cost of DPS should be additionally allowed in normative working capital.
- 5.79 The Commission observed that the Petitioner has received an amount of Rs. 3.20 Crore as Delayed Payment Surcharge in FY 2018-19. The Commission has considered the revenue received from DPS under Non-Tariff Income and hence, approves the expenses required to finance the same at the rate approved for IoWC. The Commission has considered the rate for DPS as 18.00% per annum for calculation of corresponding receivables against DPS.
- 5.80 The Commission has scrutinized the details submitted by the Petitioner and approves the IoWC on normative basis including funding cost of DPS as shown below:

Table 45: Interest on Working Capital for FY 2018-19 as approved by the Commission (Rs. Crore)

	F	2018-19	6.5				
Particulars	MYT Order	Petition	Approved				
Receivables (2 months)	259.96	291.54	286.39				
O&M Expenses (1 month)	5.98	7.33	6.34				
Maintenance Spares (1% of Opening GFA)	5.39	5.44	5.43				
Less: Consumers' Security Deposit	18.43	22.77	24.82				
Less: Power Purchase Cost (1 month)	117.40	130.42	130.39				
Total Working Capital	144.76	151.12	142.96				
Interest Rate	12.80%	12.20%	12.20%				
Interest on Working Capital	17.34	18.44	17.44				
Funding Cost of DPS	-	2.17	2.17				
IoWC including Funding Cost of DPS	17.34	20.61	19.61				

..... Unquote.

Based on the above facts and reasoning, TSL has claimed the funding cost of DPS as below-

Working of Funding of DPS for TSL:

The computation of funding cost for TSL for FY 2021-22 is provided in the table below. From the Delay Payment Surcharge received figures, the equivalent average Principal amount was calculated by grossing up the same by 1.50% p.m. i.e., 18% p.a. on DPS amount. Thereafter funding cost has been calculated at Interest rate applicable for working capital in Regulations i.e., SBI 1 yr MCLR plus 350 b.p.

Computation of Funding Cost of DPS for FY2021-22									
Particulars	UoM	FY 2021-22							
Delay Payment Surcharge (Rs. Cr.)	Α	1.65							
Principal Amount on which DPS was charged (18% p.a.)(Rs. Cr.)	B = A/18%	9.14							
Interest Rate for funding of Principal of DPS (Rs. Cr.)	С	10.50%							
Interest on funding of Principal amount of DPS (Rs. Cr.)	D = B x C	0.96							

Thus, petitioner therefore humbly requests the Hon'ble Commission to kindly allow the above-mentioned funding cost of DPS Rs 0.96 Cr. for TSL.

12. As per Audit note 10A (c) of the Balance sheet, the Petitioner has booked 0.08 Cr under Other Income. In this regard, the Petitioner is directed to provide the break-up of Other Income.

**Response:** - Petitioner would like to submit that, the breakup of other income of Rs. 0.08 cr. is given in table below.

Particulars	Amount (Rs. Cr.)
Miscellaneous recoveries from employees in lieu of temporary supply etc.	0.04
Recovery of cost towards replacement of MCCBs/ MCB fuse etc.	0.01
Recovery of cost in providing Temporary Electrical Installation	0.03
Total	0.08

13. As per table 2-25 of the petition, the Petitioner has claimed capex during FY 2021-22 as Rs 2.92 Cr. In this regard, the Petitioner is required to provide DPR, cost benefit analysis and applicable regulatory provision.

Response: - Capex of Rs. 2.92 Cr was done on following schemes: -

- 1. Rs. 1.9 Cr Capex was done to provide power supply to new consumers. These were funded by the consumers based on the estimates for power supply.
- 2. Rs. 1.02 Cr was done on "Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation". The value of this scheme was 58 Cr and this scheme was continuing since FY18. The project details is enclosed in Annexure-3

# **Annual Performance Review for FY 2022-23:**

 As per table 3-4 of the petition, the Petitioner has submitted Overall Distribution loss during H1 period as 3.04% & H2 period as 3.86% respectively. In this regard, the Petitioner is directed to submit a detailed justification for estimating an increase in Overall Distribution loss during the H2 period.

**Response:** - Petitioner would like to submit that for the purpose of APR, Distribution losses of H2 FY23 were considered in line with what was considered in the Business plan petition document. Projections in the Business plan was based on the energy sales at various voltage levels and expected losses of the various voltage levels. The basis of considering 3.86% loss was submitted to Hon'ble Commission vide our letter Ref- PBD/125/10/59-T/2021 dated-15.02.2021. The relevant part of the letter is enclosed in **Annexure-4**.

T&D loss however changes with loading pattern of the various Industrial loads and petitioners' efforts to control the theft and pilfer. It is bound to change from period to period.

Petitioner puts continuous effort to ensure that losses are maintained to sustain the losses at lowest possible levels subject to technical, administrative, and social constraints.

The projected overall Distribution loss for the year FY23 is around 3.44%. We request the Hon'ble Commission to consider the same for the purpose of APR

2. As per table 3-5 of the petition, the Petitioner has submitted Power Purchase per unit cost during H1 period as Rs 5.59 & H2 period as Rs 5.74. In this regard, the Petitioner is directed to submit a detailed justification for considering an increase in Power Purchase Per Unit Cost during the H2 period.

**Response:** - Petitioner would like to submit that power purchase during H1 (Apr-Sept'22) are based on the actuals and power purchase cost for all the source for H2 FY2022-23 has been considered based on the expected quantum to be purchased and cost from each source. Following working explains the actual of H1 FY23 and projection of H-2 FY23

				stimated Por	wer Purchase	e Expenses fo	or FY 2022-	23			1000000		
		Estimated	Plan	n business	Apr-	Sep 2022 (H	1)	Oct 20	)22-Mar 2023	(H2)	Revised Es	timates for	FY 2022-23
Source		MUs	Per Unit Cost	Cost (Rs.Crs)	MUs	Per Unit Cost	Cost (Rs.Crs)	MUs	Per Unit Cost	Cost (Rs.Crs)	MUs	Per Unit Cost	Cost (Rs.Crs)
Unit-II		804.17	3.72	299.55	410.48	4.24	173.87	379.69	4.36	165.73	790.17	4.30	339.60
Tata Power Company Limited	Unit -III	804.17	3.78	303.81	431.95	4.03	174.22	399.82	4.25	170.01	831.77	4.14	344.23
(TPCL)	Total TPCL	1,608.34	3.75	603.36	842.43	4.13	348.10	779.51	4.31	335.74	1,621.94	4.22	683.84
DVC 132 KV		325.67	4.47	145.48	148.92	5.26	78.28	139.57	5.17	72.10	288.49	5.21	150.38
DVC 400 KV (excluding PGCIL & ERLDC Charges)		908.07	5.61	509.14	557.24	5.92	329.72	510.42	5.92	302.02	1,067.66	5.92	631.74
TSW Captive		27.08	3.73	10.09		-		10.00	4.31	4.31	10.00	-	4.31
REC Purchase for meeting RPO		-		65.27			70.19			74.34			144.53
Others/ Short Term Open Access		-	-		8.45	3.92	3.32	7.92	5.59	4.43	16.36	4.73	7.74
Green Term Ahead Market		-	-		8.14	4.75	3.87	7.63	4.75	3.63	15.78	4.75	7.50
Less: Sale of Surplus Power		-			Included	in Sales & Re	evenue	Included in Sales & Revenue Inc		Included	cluded in Sales & Revenue		
Total Pooled Power Purchase (excluding PGCIL & ERLDC charges)		2,815.00	4.74	1,333.34	1,565.19	5.33	833.48	1,455.04	5.47	796.55	3,020.23	5.40	1,630.03
PGCIL & ERLDC		-	-	-	-		41.50	1-0	-	38.01	3 <b>=</b> 0		79.52
Total Pooled Power Purchase (in & ERLDC charges)	cluding PGCIL	2,815.00	4.74	1,333.34	1,565.19	5.59	874.98	1,455.04	5.74	834.57	3,020.23	5.66	1,709.55

Basis of considering H2 FY23 power purchase cost

 Tata Power Company Limited (TPCL) - Total Cost of TPCL has been arrived based on fixed cost approved by Hon'ble Commission in its Tariff order dt. 04.11.2022 and energy charge arrived based on the actual variable charge paid in H1 FY23. Fixed/capacity charge for H2 FY23 has been estimated after reducing the H1 FY23 actual paid from the total approved for the year FY23.

28	Expected purchase in H2 FY23 (Mus)	Energy Charge ( based on H1 variable rate) (Rs/kWh)*	Fixed Charge considered for H2 FY23 (Rs. Cr) **	Total Cost H2 FY23 (Rs. Cr)
U#2	379.69	3.02	51.06	165.73
U#3	399.82	2.93	52.76	170.01

\*Rs. 3.02/kWh and Rs. 2.93 Rs./kWh is considered based on the average variable rate charged from Apr-22 to Sept-22 for Unit-2 and Unit-3 respectively.

\*\* Fixed Charge is derived as the total Fixed Cost approved by Hon'ble Commission for FY23 minus actual Fixed Cost recovered in H1 FY23 (i.e. for U#2 Rs 104.32 Cr is approved FC for FY23 out of which Rs 53.26 Cr is recovered by TPCL from Apr-22 to Sept-22. Balance fixed charge of Rs. 51.06 Cr. (Rs 104.32 Cr. - Rs. 53.26 Cr.) is considered for H2 FY23.

Similarly for U#3 Rs. 102.24 Cr is approved FC for FY23 out of which Rs 49.28 Cr is recovered by TPCL from Apr-22 to Sept-22. Balance fixed charge of Rs. 52.76 Cr. (Rs 102.24 Cr. - Rs. 48.48 Cr.) is considered for H2 FY23.

- DVC 132 kV- Total cost of DVC 132 kV source has been derived based on the actual cost of H1 FY23 and expected rates for H2 FY23, based on DVC petition filed before Hon'ble JSERC.
- 3. DVC 400 kV- Estimation of the overall cost of DVC 400 kV is based on the actual of H1 FY23.
- 4. STOA- Total cost of STOA has been considered at based on power purchase rate of all source combine together and STOA Mus quantity.
- 5. Transfer from TSL Works- Average rate of TPCL U#2 and U#3 has been considered.
- 6. REC- REC cost has been derived from actual amount paid to trader for buying REC and the balanced REC that need to be purchase in H2 FY23 at the rate of Rs 1450/ REC (excluding tax and margin).
- 3. As per para 3.4.10 of the petition, the Petitioner has incurred Transmission & scheduling Charges for the H2(estimated) period as Rs 41.41 Cr each. In this regard, the Petitioner is directed to provide the proper computation and methodology used for considering the cost of Rs 41.41 Cr for the H2 period.

**Response:** - There seems to be some typographical error in given value of Rs. 41.41 Cr in the query. The estimated Transmission & scheduling Charges is Rs 41.50 Cr for H1 FY23 and 38.01 Cr. for H2 FY23 (refer table 3-6 of the petition).

The computation of Transmission & scheduling Charges FY23 is based on the actual cost in H1 and expected for H2 as per the ratio of sales considered in H2 FY23. We understand that, computation of transmission and scheduling charge is very complex subject and being dealt by CTU and therefore such simplified assumption is considered for estimation.

Petitioner requests the Hon'ble Commission to kindly consider Rs 79.52 Cr for FY2022-23 for the purpose of APR subject to final true up based on actual.

4. As per para 3.4.13 of the petition, the Petitioner has estimated the purchase of 7.92 MU's of power from exchanges at the rate of Rs. 5.59 per kWh. In this regard, the Petitioner is directed to submit a detailed analysis of the requirement of power purchase from Short-term. As per MoP guidelines, any short-term power purchase must be approved by the Appropriate Commission. In this regard, the Petitioner is directed to provide a detailed justification of whether the TSL has taken prior approval from the JSERC towards short-term power procurement or not.

Response: - Petitioner would like to submit that, Petitioner has tied up long term power sources for meeting the demand of consumers in the area. However, during outage of its long-term

sources of power, petitioner tries to arrange power through exchange to avoid load shedding in the licensed area.

During H1 FY23 8.45 Mus power purchased through STOA during outage of long-term sources.

This is around 0.54% of total (1565.19 Mus) H1 FY23 purchases.

Similar trend was expected in H2 FY23; and therefore, power purchased through STOA is estimated as 7.92 Mus which is 0.54% of total (1455.04Mus) in H2 FY23.

This short-term power of 7.92 Mus is expected to be purchased to meet the emergency requirement through bidding process in exchange and to avoid the outage of power to customers.

5. As per table 3-9 of the petition, the Petitioner has projected Employee cost, A&G Expenses, and R&M Expenses as Rs 15.00 Cr, Rs 14.00 Cr and Rs 17.00 Cr respectively. In this regard, the Petitioner is directed to provide the detailed computation of Employee cost, A&G Expenses, and R&M Expenses for the H2 period.

Response: - The estimates of the same has based on the following assumption: -

- a) Employee cost- H2 FY23 estimates are more, primarily because of planned addition of new employees (approx. 20 employee) as well as wage revision of a group of unionized categories of employee. Impact of wage revision arrears is around Rs. 4.50 Cr + / 10%. A part of this payment may be disbursed in H2 FY 2022-23.
- b) **A&G and R&M Expense-** H2 FY23 estimates are more to accommodate network strengthening work under repair and maintenance work; major parts of which happens generally during H2.
  - We request the Hon'ble Commission to kindly approve Employee cost, A&G Expenses, and R&M Expenses as Rs 15.00 Cr, Rs 14.00 Cr and Rs 17.00 Cr respectively subject to final True up.
- 6. As per table 3-10 of the petition, the Petitioner has computed Normative R&M Expenses by considering the inflation factor as 6.41%. In this regard, the Petitioner is directed to submit the detailed methodology and computation to obtain the inflation factor as 6.41%.

**Response:** The Inflation Factor has been considered as average of Inflation factor for FY 2020-21 and FY 2021-22 which works out to be 6.41% (i.e., AVERAGE (4.14%,8.67%), and the same has been considered for FY 2022-23. The actual inflation factor for FY 2022-23 will be known at the end of the year & the same may be considered at True up stage. We request Hon'ble Commission to consider 6.41% inflation for the purpose of ARR, subject to final True-up.

Computation of Inflation Factor for FY 2020-21

				Con	putation of	Inflation Fa	actor for FY	2020-21					
Computation of WPI Inflation													
Month/Year	Apr	May	June	July	Aug	5ep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2020-21	119.20	117.50	119.30	121.00	122.00	122.90	123.60	125.10	125.40	126.50	128.10	129.90	123.38
FY 2019-20	121.10	121.60	121.50	121.30	121.50	121.30	122.00	122.30	123.00	123.40	122.20	120.40	121.80

	Computation of CPI Inflation													
Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average	
FY 2020-21	329.00	330.00	332.00	336.00	338.00	340.13	344.16	345.31	342.14	340.42	342.72	344.45	338.69	
FY 2019-20	312.00	314.00	316.00	319.00	320.00	322.00	325.00	328.00	330.00	330.00	328.00	326.00	322.50	

Period	WPI	CPI	Total
Weightage	0.45	0.55	1.00
Avg Indexation for FY 20-21	123.38	338.69	
Avg Indexation n-1 (Index * Wt.)	55.52	186.28	241.80
Avg Indexation for FY19-20	121.80	322.50	
Avg Indexation n (Index * Wt.)	54.81	177.38	232.19
Combined Inflation (Indxn/Indxn-1)		4.14%	

Computation of Inflation Factor for FY 2021-22

				Com	putation of	Inflation Fa	ctor for FY	2021-22					
					Compu	tation of W	PI Inflation						
Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2021-22	132.00	132.90	133.70	135.00	136.20	137.40	140.70	143.70	143.30	143.80	145.30	148.90	139.408
FY 2020-21	119.20	117.50	119.30	121.00	122.00	122.90	123.60	125.10	125.40	126.50	128.10	129.90	123.38

					Compu	utation of C	PI Inflation						
Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2021-22	345.89	347.33	350.50	353.66	354.24	355.10	359.71	362.02	361.15	360.29	360.00	362.88	356.06
FY 2020-21	329.00	330.00	332.00	336.00	338.00	340.13	344.16	345.31	342.14	340.42	342.72	344.45	338.69

Computation of Inflation	
Annual Increase over FY 2021-22 in WPI	13.00%
Weightage of 45%	5.85%
Annual Increase over FY2021-22 in CPI	5.13%
Weightage of 55%	2.82%
Total Inflation WPI+CPI	8.67%

7. As per table 3-11 of the petition, the Petitioner has estimated CGRF expenses & petition filing fees as Rs 0.44 Cr & Rs 0.20 Cr respectively. In this regard, the Petitioner is required to provide proper justification.

**Response:** - The CGRF expense and petition filing fees is estimated based on actuals of FY22 which was Rs. 0.35 Cr and 0.16 Cr respectively plus some provision kept for inflationary adjustment and additional petition. We request Hon'ble Commission to kindly approve estimated CGRF expenses & petition filing fees as Rs 0.44 Cr & Rs 0.20 Cr respectively; subject to final True- up.

# Aggregate Revenue Requirement (ARR) for FY 2023-24:

1. It is observed that the Petitioner has projected energy sales to MESRTODL & IEX- Power Market as 1.11 (MUs) & 84.96 (MUs) respectively. In this regard, the Petitioner is directed to provide the detailed computation for considering the energy sale to MESRTODL & IEX-Power Market.

**Response:** - The actual sale to MESRTODL was 1.08 Mus in FY22. We would like to intimate that there is only one military establishment in our licensed area.

The power sale in IEX of 84.96 Mus for FY24 is considered same as the expected sale in IEX in FY23.

This however is dependent upon several factors like available generation at different point of time, loading pattern of ,consumers at different point of time, Market Clearing price of exchange.

We would like to request Hon'ble Commission to kindly approve the energy sales to MESRTODL & IEX- Power Market as 1.11 (MUs) & 84.96 (MUs) respectively subject to final true up.

2. It is observed that the Petitioner has projected energy available from 400 kV of Damodar Valley Corporation as 1107.04 MUs respectively. In this regard, the Petitioner is directed to submit the methodology used for the computation of energy availability.

**Response:** - The term available energy represents the plan for drawl from these units and are based on experience of loading of these units due to past loading pattern of the network and capacity limitations imposed by interconnections.

The same is balanced to match the overall demand.

there is not much visibility.

The Power Drawl from all the sources are reviewed and revised based on latest available information and accordingly 1107.04 Mu of DVC 400 kV is Projected.

3. As per table 4-3 of the petition, the Petitioner has projected the PGCIL and ERLDC charges as Rs 78.11 Cr. In this regard, the Petitioner is required to provide the basis for considering the PGCIL and ERLDC charges.

**Response:** - Petitioner has projected the cost of PGCIL and ERLDC fees based on the past year cost of ERLDC and PGCIL and energy sales increase from 400kV Source.

4. As per table 4-5 of the petition, the Petitioner has expected Renewable Energy generation under net metering as 12 MUs for FY 2023-24. In this regard, the Petitioner is directed to provide the methodology used for projecting Renewable Energy generation under net metering.

**Response:** - Petitioner would like to submit that, Solar rooftop Generation in FY22 was 9.60 MUs and in FY23 H1 was around 7.35MUs.

Projections for FY22-23 was done based on expected addition during the period.

We would like to communicate that in FY2022-23 from Apr'22 to Oct'22 the Solar RTS Generation is around 8.85 MUs, which is expected to go up to 12 MUs by end of FY2022-23. For FY2023-24 similar level is considered due to limited additions of Solar RTS. We do acknowledge that the same may go up, in case more RTS is installed, on which currently

5. As per table 4-8 of the petition, the Petitioner has computed Normative R&M Expenses by considering the 'K' factor as 5.08% for FY 2023-24. In this regard, the Petitioner is directed to submit the detailed methodology and computation to obtain the 'K' factor as 5.08%.

**Response:** - Petitioner would like to communicate that, K- Factor has been considered based on Business Plan and MYT order for FY2021-22 to FY2025-26 approved by Hon'ble Commission on order Dt 24.11.2022.

Following considerations were taken in MYT petition submitted by Petitioner in Nov-20

Base Year for Control Period FY22-26: FY 2020-21.

Preceding Year of the Base Year: FY2019-20.

R&M Cost of 2019-20: Rs 28.03 Cr. (Refer True-up petition of FY2019-20)

Opening GFA of 2019-2

0: Rs 550.49 Cr. (Refer Note1 (a) total and Note 1(b) total of audited

account of FY2019-20)

K Factor= Base Year R&M Cost/ Base Year GFA

= 28.03/550.49=5.09%.

However Hon'ble Commission has approved 5.08% in the MYT order and the same has been considered, we therefore request the Hon'ble Commission to kindly consider above submissions and approve the O&M expense based in K Factor of 5.08%.

6. The Petitioner has Projected additional capital expenditure amounting to Rs 48.33 Cr in its Aggregate Revenue Requirement (ARR) against Rs 26.62 Cr approved in Business Plan Order dated 24-11-2022. In this regard, the Petitioner is required to provide the schemewise break-up of additional capitalization, cost-benefit analysis, DPR and applicable Regulatory provision.

**Response:** - Petitioner would like to submit that expected expenditure of Rs. 48.33 Cr is against the approved schemes only. Because of the delay in execution of scheme in FY22 and FY23 phasing of expenditure against some of the schemes are shifted to FY24.

The summary of the yearly capex approved by JSERC is given below: -

		Total	Revised Project Cost submitted		Capex Plan		Approved 0	Capex Plan,	JSERC orde 2022	r dt. 24th N	lovember
S No	Scheme Name	Project Cost	Vide Letter dt. PSD/JSR/793/202 2 dt. 11.08.2022	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26
1	Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58.00	58.00	10.00	30.00	18.00					
1 2 1	Upgradation of Network Monitoring & Control Centre	7.50	12.60					4.00	3.50		
3	New 6.6kV AIS indoor substation for network extension in Ramadhin Bagan, Manifit and nearby area (Eastern South)	3.00	3.07				0.50	2.50			
4	New 2x16/20MVA, 33kV / 6.6 kV S/Stn with incoming feeder cable from Bara S/stn at Baridih Area for Eastern North Area (Unserved Area)	25.00	32.10					3.00	19.00	3.00	
5 1	6.6 kV Network Extension for power supply in fringe areas*	8.00	10.57				1.00	1.00	2.00	2.00	2
6	Strengthening of Testing facilites*	2.00	2.93				2.00				
	Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation*	20.00	24.00					20.00			
8	Upgradation of Tinplate Area Substation including - Replacement of 6.6 kV switch board at Tinplate area substation*	17.40	21.50				2.00	15.40	53		
9 !	Supply and Installation of Power Quality Meter	1.52	2.40				1.52				
10	Other assets to provide consumer connection from consumers (self financing scheme)	10.00	10.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
11	Other assets										
	Total	174.49	199.24	12.00	32.00	20.00	9.02	47.90	26.50	7.00	2.00

<sup>\*</sup>These Capex were approved in last control period but the same were not completed, so it is carried forward to next control period. The approved value of these schemes are not shown in the table.

# The summary of the yearly actual capex done by petitioner is given below: -

		Total	Revised Project Cost submitted Vide Letter			Audite	ed Capex	(		Expecte	d Capex
S No	Scheme Name	Project Cost	dt. PSD/JSR/793/2022 dt. 11.08.2022	FY-17	FY-18	FY-19	FY-20	FY-21	FY22	FY23	FY24
1	Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58.00	58.00		0.59		30.65	1.06	1.02	0.99	1.00
2	Upgradation of Network Monitoring & Control Centre	7.50	12.60								1.00
3	New 6.6kV AIS indoor substation for network extension in Ramadhin Bagan, Manifit and nearby area (Eastern South)	3.00	3.07					251			0.50
4	New 2x16/20MVA, 33kV / 6.6 kV S/Stn with incoming feeder cable from Bara S/stn at Baridih Area for Eastern North Area (Unserved Area)	25.00	32.10								0.00
5	6.6 kV Network Extension for power supply in fringe areas	8.00	10.57							1.50	4.00
6	Strengthening of Testing facilites	2.00	2.93				1			1.00	1.93
7	Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation	20.00	24.00							1.00	18.00
8	Upgradation of Tinplate Area Substation including - Replacement of 6.6 kV switch board at Tinplate area substation	17.40	21.50			1.24	0.11			4.00	17.50
9	Supply and Installation of Power Quality Meter	1.52	2.40								2.40
10	Other assets to provide consumer connection from consumers (self financing scheme)	10.00	10.00	2.52	2.55	2.69	2.43	1.44	1.90	3.52	2.00
11	Other assets				H BET .			0.19			
m	Total	174.49	199.24	8.46	13.13	9.93	34.33	2.69	2.92	12.01	48.33

7. As per table 4-11 of the petition, the Petitioner has projected the Consumer contribution received during the FY 2023-24 as Rs 2.00 Cr. In this regard, the Petitioner is required to provide the basis for considering the Consumer contribution received during the FY 2023-24.

**Response:** - The Petitioner submits that the Consumer Contribution projection for FY 2022-23 has been considered as same as the Hon'ble Commission has approved in the Business Plan FY22 to FY26 & MYT order dt 24.11.2022.

Consumer contribution is estimated based on past year trend and specific information received at the time of making projections. We request Hon'ble Commission to kindly consider the same for the purpose of ARR subject to true up.

8. As per para 4.12.1 of the petition, the Petitioner has considered Rs 7.10 Cr towards Non-Tariff income for FY 2023-24. In this regard, the Petitioner is required to provide the break-up of Non-Tariff income as per para 10.54 of the JSERC (Term and condition for Determination of Distribution Tariff) Regulations, 2020.

**Response:** - There seems to be some typographical error in given value of Rs. 7.10 Cr instead of Rs. 7.28 Cr in the query. The Petitioner submits that in the MYT Tariff Order for the Control Period FY 2021-22 to FY 2025-26 dated 24th November 2022, the Hon'ble Commission has considered Rs. 7.28 Cr. as Non-Tariff Income for FY 2023-24 and the same has been considered by the Petitioner for the projection of ARR for FY 2023-24 subject to True up.

We request Hon'ble Commission to kindly consider the above submissions and oblige.

Thanking you, Yours faithfully,

(Sharad Kumar)

Chief of Power Systems and Energy

Tata Steel

# **List of Annexures**

- 1. Annexure-1 Clear Copies of Annexure- 1 (page no-20), 10 (page no-2427).
- 2. Annexure-2 load curve for FY 2021-22 including the base load and peak load of the Licensee.
- 3. Annexure-3 Detail of project.
- 4. Annexure-4 Relevant Part of our letter Ref-PBD/125/10/59-T/2021 dated- 15.02.2021.

Annexure-1 Clear Copies of Annexure- 1 (page no-20), 10 (page no- 2427).

Tata Steel Limited Power Business Division Notes forming part of financial statements

Notes forming part of financial statements
Note 1(a): Property, plant and equipment

			Gross Block	ATTENDED TO THE PERSON AND THE PERSO	NUMBER CHEROSPHER PROPERTY OF THE PERSONS ASSESSED.		Accum	Accumulated Depreciation	TO PERSON AND PROPERTY AND PROP		
Particulars	As at April 01, 2021 (₹)	Additions during the period (R)	Adjustment/ Transfer during the period (₹)	Disposal/ adjustment during the period (?)	As at March 31, 2022 (F)	As at April 01, 2021 (₹)	Accumulated Depreciation/ Amortization on Adjustment/Transfer for the year (?)	Depreciation/ Amortization for the year (F)	Depreciation on assets disposed / adjusted (?)	As at March 31, 2022 (୧)	Net block as at March 31, 2022 (?)
Freehold land and roads	30,08,500 (30,08,500)		ã t	SEC E	30,09,500	7,246 (6,959)		254 (287)		7,500	30,02,000 (30,02,254)
Buildings	48,07,72,440 (40,84,16,625)	(7,23,55,815)	( <b>6</b> ) <b>X</b>	24,638	48,07,47,802 (48,07,72,440)	10,25,53,412 (8,94,23,316)	3#8 #	1,28,21,786	24,638	11,53,50,560	36,53,97,242
Plant and machinery	5,42,71,76,375 (5,17,52,65,278)	1,71,54,503	(3,80,47,484)	1,18,58,212	5,39,44,25,182 (5,42,71,76,375)	3,47,53,60,730	(2,84,04,972)	17,67,55,873 (29,63,49,650)	1,08,66,725	3,61,28,44,906	1,78,15,80,276
Furniture and fixtures	28,32,837 (27,42,229)	(809'06)		34,162	27,98,675 (28,32,837)	14,43,045 (8,72,128)		2,06,685	34,162	16,15,568	11,83,107
Vehicles	5,50,000	r a	1 1	5,50,000	(2,50,000)	5,50,000 (5,50,000)		11	5,50,000	(5,50,000)	
Office equipments	27,17,311 (18,22,638)	(8,94,673)	9,62,915	a.,	36,80,226 (27,17,311)	11,84,281 (7,74,060)	1,52,736	2,20,999 (4,10,221)	1 1	15,58,016 (11,84,281)	21,22,210
T equipments		6,98,582	3,70,84,569	k 1	3,77,83,151	. ,	2,82,52,236	44,95,848		3,27,48,084	50,35,067
Total 5.91.70.58.46: (5,59,18,06.27 Previous Year figures in italics and in brackets	6,91,70,58,463 (5,59,18,06,270) lics and in brackets	1,78,53,085		1,24,67,012	5,92,24,44,536 (5,91,70,58,463)	3,58,10,98,714	2 2	19,45,01,445	1,14,75,525	3,76,41,24,634	2,15,83,19,902

Note 1(b): Other intangible assets

	-		Gross Block	TOTAL STREET,			Accumus	Accumulated Depreciation	The second secon	The state of the s	
Particulars	As at April 01, 2021 (₹)	As at April 01, Additions during 2021 (*) the period (*)	Adjustment/ Transfer during the period (F)	Disposal/ adjustment during the period (E)	As at March 31, As 2022 (₹)	As at April 01, 2021 (₹)	Accumulated Depreciation/ Amortization on Adjustment/Transfer	Depreciation/ Amortization for the year (₹)	Depreciation on assets disposed / adjusted (₹)	As at March 31, 2022 (*)	Net block as at March 31, 2022 (₹)
Software	19,07,465	•	r	,	19,07,465	2,85,532		2,86,120		5,71,652	Trinschiptor Company
Total	204, 10,613				(19,07,465)	(1,36,559)	-	(1,48,973)	٠	(2,85,532)	
	100000000000000000000000000000000000000	•		-	19,07,465	2,85,532	1	2,86,120		5,71,652	13,35,813
Previous Year figures in italics and in brackets	cs and in brackets		•	•	(19,07,465)	(1,36,559)	•	(1,48,973)		(2,85,532)	







REPORT - I

# DAILY OBLIGATION SUMMARY REPORT

Trading Date

: 19-Mar-22

Delivery Date

: 20-Mar-22

Entity ID Portfolio Code : W2MH0TPT0000 : E1DV0TPT0504 Entity Name

: TATA Power Trading Company Ltd.

Portfolio Name : Tata\_Steel\_Ltd

•	Funds Payin(-) / Payout(+)	962,645.03
•	Charges	
	> NLDC Application Fees	-7.33
	> CTU Transmission Charges	0.00
	> NLDC Scheduling & Operating Charges - Buy	0.00
	> NLDC Scheduling & Operating Charges - Sell	-200.00*
	> STU Transmission Charges	0.00
	> Distribution Charges	0.00
	> Any other Charges	0.00
	> SLDC Scheduling and Operating Charges	-1,000.00
	> ALDC Scheduling and Operating Charges	0.00
	Fees	-4,850.00
	> IGST	0.00
	> SGST	-436.50
	> CGST	-436.50
	> UTGST	0.00
	Total	955,714.70

#### Remarks:

- NLDC Application Fee = ₹ 5000.00 / (No of Successful Portfolios 682 ).
- Injection CTU Transmission.Charges = ₹ 420.40/ MWh.
- Drawal CTU Transmission Charges = ₹ 420.40/ MWh.
- NLDC Scheduling & Operating Charges Buy = ₹ 1.00 x (Total Traded Buy Qty in MWh)

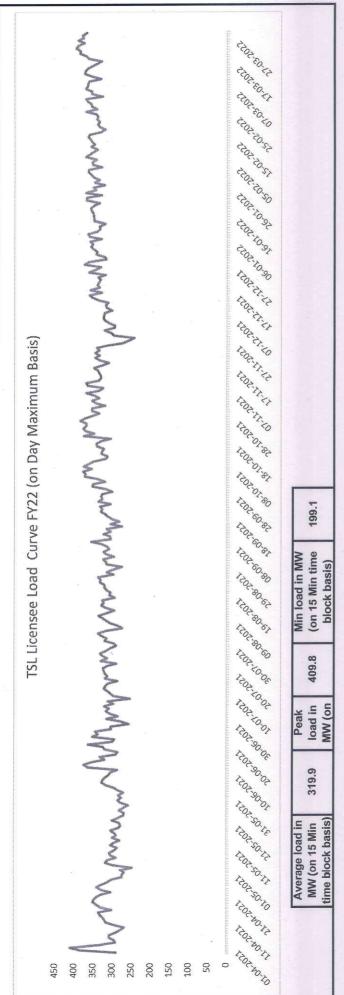
NLDC Scheduling & Operating Charges - Sell = ₹ 1.00 x (Total Traded Sell Qty in MWh)

- \* Max Charges applied
- State Transmission/Distribution Charges and Scheduling and Operating Charges are as per the Rate specified in Standing Clearance.
- Trade details displayed on the next page Annexure A.

Page 1 of 2

<sup>\*\*</sup> This is a computer generated report.

Annexure-2 load curve for FY 2021-22 including the base load and peak load of the Licensee.



Graph represent daily 15 Min peak demand of TSL Licensee based on SCADA level data. Average Load is based on average of all 15 min demand data over the year

Annexure-3 Detail of project.

# Scheme Name: - Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of TELCO Area Substation

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Purpose/ Objective:- Presently eastern part of town & industrial load is fed from existing 2X10MVA, 33/6.6kV Teleo Area substation. The existing 2 x 10MVA transformers are old, outlived their useful life and their capacity is not sufficient to cope up with present & upcoming load growth. Also existing 6.6 kV switchboard of 1956 South Wales make consists of bulk Oil Circuit Breakers which are now of obsolete technology. These breakers are not maintainable as of today & also unsafe to operating personnel due to vertical isolation type. Considering the above it is necessary to replace the above equipment. Also there is additional 30 MVA power demand for load growth of township and upcoming industrial load.

These additional loads will not be possible to be catered from 132kV system alone as it does not have firm power (i.e availability of power during outage of one generator) and hence it is proposed to receive power from 400kV BPRS substation.

It is therefore proposed to make arrangement to load the tertiary winding of the 315MVA transformers at BPRS and new 2 X 25 MVA, 33/6 5 kV substation will be set-up at Ramdin Bagan area near existing substation since there is space constraint in existing substation for augmentations.

The above scheme is also recommended by TCE in their Master Plan Study for Town Distribution Network.

# Single Line Diagram 33 KV INCOMER HOUS 348 MVA TRO-2 TENTIARY WINDS 33 KV INCOME STATE OF THE THAT WINDS 33 KV INCOMER STATE OF THE THAT WINDS NEW 33 KV S/S 54 KV BUS 55 KV BUS 55

a. Tentative BOQ of the scheme:

2	33kV Indoor GIS Breakers at BPRS S/s	- 12 Nos.
Æ	33kV Indoor GIS Breakers at new 33kV S/s	- 11 Nos.
×	6.6 kV Indoor AIS Breakers at new 33kV S/s	- 15 Nos.
ū	HT, LT & Control Cables	-1 Let
H	Battery charger, ACDB, DCDB	-1 Lot
W	Civil work for control building, Transformer foundation etc.	- 11 ot

b. How does this scheme impact area of:

Load <b>Growth</b>	Reduction in Distribution In Loss	Customer service improvement in quality and reliability of supply	System Improvement	Network Expansion	Any Other
It will cater app. 30 MVA upcoming demand of town & industrial load	No Impact	Will be able to provide power supply to more applicants who have applied or will apply for power in coming 3 to 5 years time frame.	will be replace	Yes, the capacity will be increase from 2X10 to 2X25 MVA to cater additional load	Nil

# c. Cost Benefit Analysis:

Cost Rs. 58,00 Crs.

Benefit:

Safety, Reliability, Load growth, Network Augmentation.

Expected increase in revenue commensurate to sales over period of time.

d. Whether this scheme has been approved by the Chairman/Managing Director/Board and to submit copy of the approval.

Submitted for approval

e. Capital Structure for scheme: 100% Equity

f. Capitalization schedule: Rs. Crs

Base year (2016-17)	2017-18	2018-19	2019-20	2020-21
Year of approval by Hon'ble		5	20	. 33
Commission and Board.				

- g. Implementation schedule: Refer the Annexure
- h. Proposed Financing plan: Internal Accrual
- i. Improvement in operational efficiency envisaged in the control period after implementation of the scheme:

Implementation Schedule: "Infrantructure develonment at BPRS for 33 KV Power Supply & Enhancement of TELCO Arca S/s."

(Firm Schedule of Completion will be submitted post approval of the scheme)

Activity	8	0,2	8	2	8	970	6	<b>8</b> 8	හි	010	2	<b>G</b> 12
Engineering & Design						Î		de la constitución de la constit		in the second		
RFQ & Finalization of Vendor							The second secon	7		e) periodical and inches		ada i ing spandjanega Pilipipa
Civil Work												
Colorery of chearfical Equipment						TALL!						
Erection, Testing & Corumissioning Work												
Charging of New Substation							a mail arthropical record					the supplies and the supplies of the supplies and the supplies are supplies and the supplies and the supplies and the supplies are supplies and the supplies and the supplies are supplies are supplies and the supplies are supplies are supplies are supplies are supplies and the supplies are supplies

# Cost Summary: "Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of TELCO Agen S/s"

SI. No.	Description	Cost (Rs. Cr.)
1.1	Supply Cost	32,20
1.2	Erection Cost	9.38
1.3	Civil Cost	12.42
A	TOTAL	54.00
В.	Consultancy Services	2,00
c	Contingency	2.00
D	TOTAL PROJECT COST (A+B+C)	58.00

# Phasing of Expenditure:

Rs. Cr.

			ns. U.	New York Comments	
Year	2017-18	2018-19	2019-20	2020-21	
Expenditure		10	30	18	

0

Annexure-4 Relevant Part of our letter Ref-PBD/125/10/59-T/2021 dated- 15.02.2021.



The Secretary,
Jharkhand State Electricity Regulatory Commission,
New Police Line, Opposite CM House.
Kanke Road, Ranchi-834008.

PBD/ 125 /10 / 59-T / 2021 Date: - 15/02/ 2021

Subject: Additional data requirement pertaining to Petition for Business plan & MYT for control period for FY 2021-22 to FY 2025-26, of Tata Steel Limited.

Ref. – Letter No. JSERC/Case (Tariff) No. 13 of 2020/416, dated 01-02-2021 Our letter no. PBD/2095/59-T/10/2021 dated 29-11-2020

Dear Sir,

With reference to above mentioned letter, point wise comments are given below

### **Business Plan**

1. It is observed that the Petitioner has provided the estimates for manpower requirement for each year of the Control Period. However, the Petitioner has not provided the details of existing manpower including Contractual employees in the Petition. The Petitioner is required to provide the details of existing manpower.

**Reply:** - The petitioner would like to submit the details of existing manpower directly involved in power distribution as on 31st March 2020, including Contractual employees as below.: -

Sr. No.	Category	Tata Steel UISL	TSL own	Total	
A	Men On-roll				
A.1	Officer Grade	38	6	44	
A.2	Supervisor	32	17	49	
A.3	Worker	47	0	47	
Total of	A	117	23	140	
В	Contractual Workfo	orce		110	
Total of A				250	

This however does not include some of the shared resources.

2. As per MYT Regulation, the MYT Application shall include statements containing ARR along with its break up for the Years of the previous Control Period based on Audited Accounts for FY 2015-16 to FY 2019-20. However, it is observed that the Petitioner has not provided actuals for FY 2015-16. Hence, the Petitioner is required to provide the actual figures for FY 2015-16.

# TATA STEEL LIMITED

Jamshedpur 831 001 India

Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001

Tel 91 22 66658282 Fax 91 22 66657724

Corporate Identity Number L27100MH 1907PLC000260 Website www.tatasteel.com

**Reply:** - The petitioner would like to submit the actual details of category wise sales, Power purchase cost and actual ARR of FY 2015-16, which is approved by the Hon'ble Commission, while truing up (vide order dated 18.05.2018) is given in table below:-

 a. Category wise sales of FY2015-16: Given below is the category wise sales as given in the Hon'ble Commission order dated 18.05.2018.

Table 9: Category wise Sales for FY 2015-16 (MU)

Calcury	Submitted by the Petitioner	Approved by the Commission
C AMERICA AND ADDRESS.	190.53	190:53
Oomestic-LT	90.42	90.42
Omnestic-DSHT Commercial	64.11	64.11
	3.05	3.05
emporary Supply Tigh Tension I	30.05	30.05
ligh Tension II	114.69	114.69
iigh Tension III	1,821.98	1,821.98
igh Tension IV	144.77	144,77
Inlities/Street Light	87.78	87.78
ale to other Licensee	339.55	339.55
Folial	2,886.93	2,886.93

The values of No of Consumers and Connected load is given in table below which is taken from petition already submitted to Hon'ble Commission.

Consumer Category	Consumer Nos.	Connected Load (kVA/Kw)	UoM	Energy Sales (MU)
Domestic Services-LT	36673	191912	KW	190.53
Domestic Services - HT	130	47171	KVA	90.42
Commercial Services	8629	42061	KW	64.11
High Tension Industrial Services (HTIS)	109	478765	KVA	2111.49
Utilities/Street Light	393	17001	KW	87.78
Temporary Supply	0	0	KW	3.05
Sale to Other Licensee	1	*	KVA	339.55
Sale in Exchange				
LTIS		The state of the s		-
Total	45935	776910		2886.93

\*though not included in the table, the connected load was 50000KVA

b. Source wise Power purchase cost of FY2015-16: -

Source Source	Energy (MU)	Power Purchase Cost (in Rs. Cr)	Per Unit Cost (Rs/ KWh)	
Tata Power Company Limited	1489.22	587.66	3.95	
Unit – II (incl. credit of PY of Rs – 11.28Cr.)	770.91	304.76	3.95	
Unit - III (incl. credit of PY of Rs -5.64Cr.)	718.31	282.9	3.94	
Damodar Valley Corporation`	1484.92	616.37	4.15	
132 kV	297.86	152.54	5.12	
400 kV	1187.06	463.83	3.91	
Tata Steel Works	17.17	6.66	3.88	
Short Term Sources	0.87	0.35	4.02	
REC		35.08		
Total	2992.18	1246.12	4.16	

Summary of ARR as approved in True up of costs for FY2015-16 is given below.

Table 24 Summary of True up for FY 2015-16 (Rs Cr)

Particulars	Approved in APR		Now
	1,276.97	1.246.23	1,246.12
Power Purchase Cost	105.09	79.43	79.43
Operation & Maintenance Expenses	28.46	28.89	28.89
Depreciation Charges	45.65	45.03	45.03
Interest and Finance Charges	24,49	23.56	23.56
Interest on Loan	1.98	1.17	1.17
Interest on Security Deposits	19.17	20.30	20.30
Interest on Working Capital	1,456.16	1,399.57	1,399.4
Sub Total (1 to 4) Add: Return on Equity	21.46	21.49	21.49
Less; Non-Tariff Income	4.37	5.32	5.32
Add: Income tax on RoE for past periods and FY 2015-16		24.17	24.17
Aggregate Revenue Requirement (5+6-7+8)	1473,26	1439.92	1439.8
Less: Revenue from Sale of Power @ Existing Tariff	1,467.79	1,466.65	1466.6
	1.00	15.40	15.40
Add: Sharing of Gains - O&M Expenses	· ·	8.64	8.64
Add: Sharing of Gains - Distribution Loss		100	
Add: Income Tax on Sharings of Gains	35.00	(1.70)	(2.81)
Revenue Gap / (Surplus) (9-10+11+12+ 13)	5.46	(2.70)	(2.01)

We would further like to submit that True up order of FY2015-16 may be referred for any further data and information related to FY2015-16.

 It is observed that the Petitioner in its Business plan has projected uniform loss of 3.86% on overall sales for each year of the Control Period. The Petitioner is required to provide the basis for such assumption.

Reply: - The petitioner would like to submit the details of considering 3.86% T&D loss on overall sale as follows:-

The expected voltage wise loss in FY2021-22 is given below:-

Voltage level	% of Sales
132 kV	0.70%
33 kV	1.96%
6.6 kV	2.55%
LT	11.90%

As per above calculation the loss up to voltage level is as below (for starting units of 100):-

Particulars	loss at voltage level		loss up to voltage level	
132kv loss		0.70	0.70%	
Energy input to 33 kv system		99.30	71	
33 kv loss	1.96%	1.95	2.65%	
Energy input to 6.6 kv system		97.35		
6.6kv loss	2.55%	2.48	3.18%	
Energy input at LT level		96.82		
LT loss	12%	11.52	14.70%	
Energy to LT consumer		85.30		

Further voltage wise Expected sales, loss, loss up to voltage level and energy requirement as per loss up to voltage level and voltage wise overall loss is as given below:-

Category	Expected sales in FY22	Voltage level	Loss at voltage level	Loss up to voltage level	Energy requirement as per loss up to voltage level	Overall Loss
Domestic	229,71	LT	12.00%	14.80%	269.6	14.80%
Domestic - DSHT	86.44	6.6 kV	2.55%	3.18%	89.3	3.18%
	84.33	IIT	12.00%	14.80%	99.0	14.80%
Commercial HT-IS 6.6 kV	197.69	6.6 kV	2.55%	2.65%	203.1	2.65%
HT-IS 33 kV	1585.4	33 kV	1.96%	2.65%	1628.5	2.65%
HT-IS 132 kV	174.2	132 kV	0.70%	0.70%	175.4	0.70%
	4.18	IT	12.00%	14.80%	4.9	14.80%
Street Light	1.21	LT	12.00%	14.80%	1.4	14.80%
Temporary Supply	400	132 kV	0.70%	0.70%	402.8	0.70%
Sale to Other Licensee	0.1	20210	2.55%	2.65%	0.1	2.65%
Total	2,763.26	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		naming with the second	2,874.11	3.86%

Hence, As per the above calculation Petitioner has considered the estimate loss of 3.86% overall loss through the year i.e. FY22 to FY26. This however does not include any major non-technical T&D losses which licensee may face because of theft and pilfer of electricity by various means. Licensee is always committed to control T&D losses by adopting metering for all consumers, vigilance and field visits by revenue protection team. However the resources are limited and its network spread is large, leading to only sample level checking in the field.

Petitioner would like to communicate that for FY2015-16 T&D target for TSL Licensee was 5.5%. Petitioner worked hard to bring down the losses during the last control period. If Future level of T&D loss targets are set lower; this may result in dis-incentivizing the superior performance. We further request to Hon'ble commission that the Petitioner is already operating at efficient level and therefore the petitioner should not be any penal provision for loss upto 5.5% as was applicable in last control period.

Therefor request Hon'ble commission to kindly consider T&D loss at 3.86% ( ~ 4%) for the purpose of Business plan.

 The Petitioner is required to provide the approval of Competent Authority for the capital expenditure/scheme proposed for each year of the Control Period as required under MYT Regulations.

Reply:- Petitioner would like to submit that Chief (Power System and Energy) is authorized to put up the capital projects plan. The capital project plan given below (as reproduced from the petition) has been prepared after due analysis of its requirement by the technical team. These have been approved by technical team for taking it further in the overall approval process.