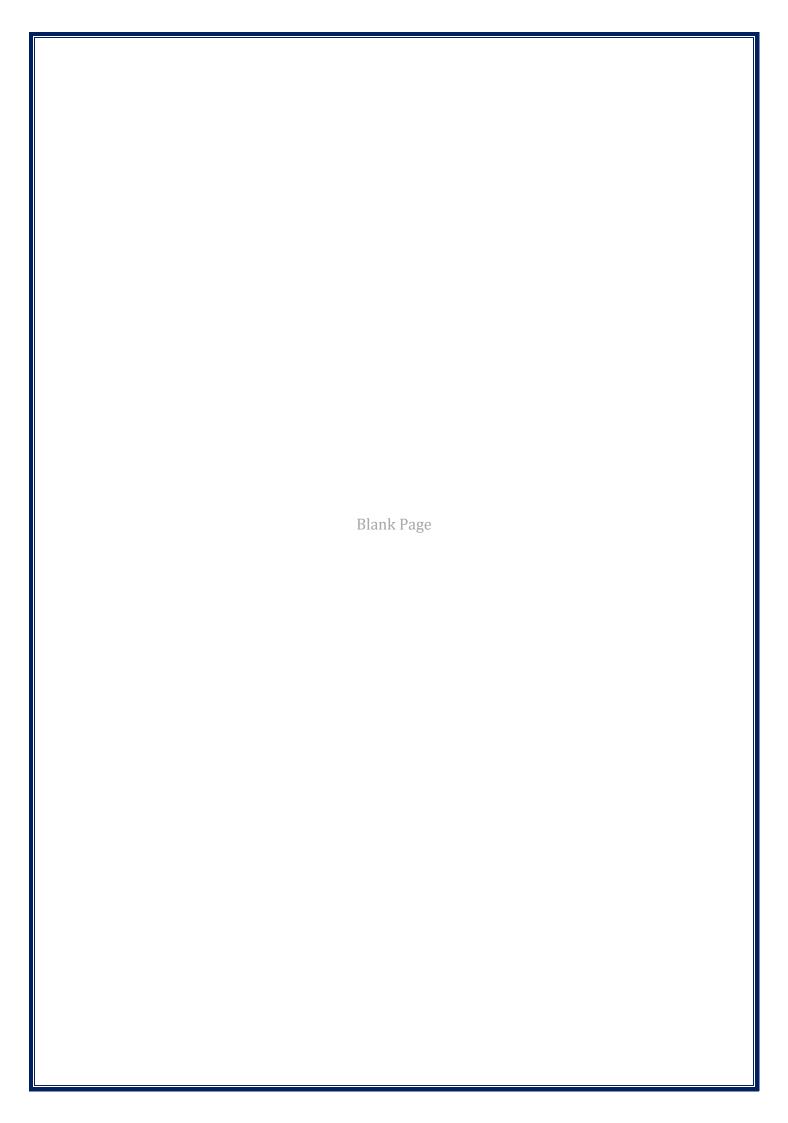
# BEFORE THE HON'BLE CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION, RAIPUR, CHHATTISGARH

## Petition for True up of ARR of Conventional Thermal and Hydro Power Plants for FY 2021-22

December 2022



CHHATTISGARH STATE POWER GENERATION COMPANY LIMITED, RAIPUR



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# BEFORE THE CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION, RAIPUR

IN THE MATTER OF: True up of ARR of CSPGCL's conventional

Thermal & Hydro power plants for FY 2021-22.

BY Chhattisgarh State Power Generation Company

Limited (hereinafter referred as "CSPGCL' or "the

petitioner' or 'Applicant')

The Applicant respectfully submits as under: -

- 1. Present Petition has been prepared in accordance with Sections 62 of the Electricity Act 2003, provisions of the CSERC (Terms and Conditions for determination of tariff according to Multi-Year Tariff Principles and Methodology and Procedure for determination of Expected revenue from Tariff and Charges) Regulations, 2015/2021, and herein referred as "MYT Regulations, 2015" or "MYT Regulations, 2021", as the case may be. It also relies on previous orders / directions / Guidelines of the Hon'ble Commission/ Tribunal/ Courts along with well settled regulatory principles;
- 2. This petition includes the true up of Aggregate Revenue Requirement of conventional thermal and hydro power plants of CSPGCL for FY 2021-22. As the true up of thermal plants include true up of coal cost and during the year coal to ABVTPS and DSPM TPS was supplied from the Gare Palma III mine allotted to CSPGCL hence the petition also includes input price of coal for FY 21-22 from the GP III integrated mine.
- 3. CSPGCL in this petition is submitting the information available and would make available additional data as may be required by the Hon'ble Commission to the extent available with CSPGCL



#### PRAYER TO THE HON'BLE COMMISSION.

#### The Petitioner respectfully prays to the Commission:

- a. To consider the submissions and allow the True-Up of ARR and revenue of its conventional thermal and hydro plants for FY 2021-22.
- b. To consider the submissions and allow True-Up of the capital cost and input price of coal from GP III mine for FY 21-22.
- c. To Allow recovery of petition filing fee and advertisement expenses separately.
- d. To Exercise the 'Power to Relax' and 'Power to Remove Difficulty' and such other powers including the inherent powers vested with the commission as specifically pleaded / prayed in relevant sections.
- e. To allow treatment of revenue gap / Surplus, as per pleadings of CSPGCL.
- f. To condone any inadvertent omissions/errors/shortcomings and permit CSPGCL to add/change/modify/alter this filing and make further submissions as may be required at a future date.
- g. To pass any other such relief as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.

Date:

Petitioner For CSPGCL, Raipur.



#### **Notes and Abbreviations**

Abbreviation	Full Description	
A&G Expenses	Administrative and General Expenses	
ABVTPS	Atal Bihari Vajpai TPS Marwa or Marwa TPP	
AEC	Auxiliary Energy Consumption	
BDI	Backing Down Instruction	
ВОР	Balance of Plant	
Capex	Capital Expenditure	
CHP	Coal Handling Plant	
CIP	Capital Investment Plan	
CERC	Central Electricity Regulatory Commission	
COD	Commercial Operation Date	
CSERC	Chhattisgarh State Electricity Regulatory Commission	
CSPGCL	Chhattisgarh State Power Generation Company Limited	
CWIP	Capital Work In Progress	
DSPM TPS	Dr. Shyama Prasad Mukherjee Thermal Power Station	
EA 2003	Electricity Act 2003	
E&M	Electrical & Mechanical	
FSA	Fuel Supply Agreement	
FY	Financial Year	
GCV	Gross Calorific Value	
GFA	Gross Fixed Asset	
GoCG	Government of Chhattisgarh	
HBHPS Mini Mata Hasdeo Bango Hydro Power Station		
HEP	Hydro Electric Plant	
HFO	Heavy Furnace Oil	
HSD	High Speed Diesel	
HTPS KW	Hasdeo Thermal Power Station Korba West	
KTPS KEB	Korba Thermal Power Station Korba East Bank	
KWTPP	1x500 MW Korba West Thermal Power Plant	
kV	Kilovolt	
LE	Life Extension	
MoEF	Ministry of Environment & Forest	
MYT	Multi Year Tariff	
MW	Megawatt	
MU	Million Units	
0&M	Operations and Maintenance	
PAF Plant Availability Factor		
PLF Plant Load Factor		
PFC Power Finance Corporation		
R&M Expenses	Repair & Maintenance Expenses	
RoE	Return on equity	
RR	Railway Receipt	
SLDC	State Load Dispatch Centre	

All currency figures in this Petition, unless specifically stated otherwise, are in Rs. Crs.

True up for FY 21-22	सी एस पी जी सी C∳PGC



#### 1: BACKGROUND

- 1.1 Subsequent to reorganization of Chhattisgarh State Electricity Board by the Govt. of Chhattisgarh, Chhattisgarh State Power Generation Company Limited (CSPGCL) became functional w.e.f. 1st January 2009.
- 1.2 CSPGCL has diversified generation capacity comprising of conventional and non-conventional power plants. The details of the conventional power plants which were in service during the FY 21-22 are submitted in the table below:

**Table 1: Generation Capacity of CSPGCL Conventional Plants** 

Sr. N.	Name of the plant	Unit no. & Capacity
1	Hasdeo Thermal Power Station (HTPS), Korba.	4x210=840 MW
2	1X500 MW Korba West Thermal Power Plant (KWTPP)	1x 500 MW
3	DSPM, TPS, Korba , District- Korba.	2x250 MW
4	Atal Bihari Vajpai Thermal Power Station , Janjgir Champa	2x500 MW
5	Mini Mata Hasdeo Bango Hydro Power Station, Machadoli, Korba.	3x 40 MW

#### **Procedural History**

- 1.3 Hon'ble CSERC notified the MYT Regulations 2015, for the Control Period FY 2016-17 to FY 2020-21. However, due to COVID-19, new regulations could not be notified and vide public notice no 03/CSERC/Tariff 2020/1227 dated November 26, 2020, Commission extended the prevailing regulations till FY 2021-22. Directions were issued to file the tariff petition accordingly.
- 1.4 Based on the direction, CSPGCL filed the petition for determination of ARR and Tariff for FY 21-22, which was registered by the Commission as petition no 09 of 2021 (T) and order on the same was passed on 2<sup>nd</sup> August 2021.
- 1.5 Further, as the coal production from the Gare Palma Coal block allotted to CSPGCL through government dispensation route started, CSPGCL requested the Hon'ble Commission for guidance regarding energy charge / FCA billing. At that time even the Central Commission regulation was not in force rather it had a provision that till the regulation for computation of input price of coal is notified, the generating company shall continue to adopt the notified price of



Coal India Limited commensurate with the grade of the coal from the integrated mine. In consideration of facts and circumstances, vide letter number 186 dated 27.01.2020 Hon'ble Commission directed CSPGCL to provisionally bill the coal from GPIII mine at the rates applicable for SECL coal of equivalent grade. In the MYT Regulation 2021, a chapter has been introduced for determination of input price of coal from integrated mine. It also provides that for mines which achieved COD prior to notification of these regulations, input price of coal for such prior period shall also be determined as per provisions of these regulations.

1.6 Still further, consequent to notification of CSRERC MYT regulation 2021, CSPGCL filed MYT petition for the control period FY 22-23 to FY 24-25. In the petition, prayer for determination of input price of coal from GP III mine along-with approval of capital cost was also made. Detailed submissions were made. In the order dated 13th April 2022, after a reasoned and cogent deliberation, Hon'ble Commission allowed the capital cost as prayed and input price of coal for the control period has been determined.

#### **Current Petition**

- 1.7 The current petition deals with the true up for FY 2021-22 of all the conventional plants of CSPGCL. It also includes capital cost of the GP III integrated mine and input price of coal from GP III mine for FY 21-22.
- 1.8 For true up FY 21-22, the accounts audited by the statutory auditors and submitted to AG (Audit) have been relied. Copy of the same has already been submitted to the Hon'ble Commission. The Audit certificate is expected to be received in due course of time. CSPGCL craves leave for submission of the audit certificate during the proceedings.
- 1.9 All related formats are covered in the Annexure -I
- 1.10 CSPGCL has made genuine efforts for compiling all relevant information relating to this petition and has also made every effort to ensure that information submitted to the Hon'ble Commission is accurate and free from material errors. However, there may be inadvertent deficiencies. CSPGCL humbly prays to the Hon'ble Commission for allowing further submissions, clarifications and amendments during the course of proceedings.

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#### 2: BASE DATA AND METHODOLOGY ADOPTED FOR THE TRUE UP

#### **Base Data for True up**

- 2.1 For preparation of this petition the Schedule Generation and net injection has been taken from SLDC certified SEA / DSM statements. As per settled mechanism, the gross generation is based on plant certified statements.
- 2.2 Coal data is as per FCA statements, copy of which have been regularly submitted to the Hon'ble Commission. Reconciliation of transportation cost, as applicable in some of the plants, is indicated in respective formats. As per settled practice, the coal transportation cost data and oil data is certified at the plant level. Details for coal from GP III mine have been dealt separately.
- 2.3 Regarding basic financial data, reliance has been placed on the accounts audited by the statutory auditors & submitted to AG (Audit) for FY 21-22.
- 2.4 The opening GFA and capital mix (Debt / Equity) for FY 21-22, has been taken as per the closing values allowed by the Hon'ble Commission in the true up of FY 20-21. Additions have been considered as per accounts after mapping with approved CIPs and in accordance to the well settled methodology in the previous orders.
- 2.5 As per methodology adopted in previous orders, Debt addition, actual loan portfolio and the applicable interest rate has been computed from the quarterly statement issued by the lenders.
- 2.6 Contribution to Gratuity and pension Trust is as per the Hon'ble Commission's order and has been certified by the Trust. The Income tax being claimed is also in accordance to the accounts & actual challans paid.
- 2.7 There are certain deviations in the terminology used in the Company accounts and the terminology used in the regulations/ regulatory accounts. In the instant petition CSPGCL has considered the well settled methodology adopted in the previous petitions/orders for categorisation of various heads. Specific issues as may be required have been dealt in relevant sections/ formats. Leave is craved for explanation of details, as may be required, during technical validation session and/ or the course of proceedings.

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#### 3: Plant Wise Operational parameters

3.1 The performance parameters achieved, for the year under consideration, vis-à-vis the normative parameters have been tabulated in the respective forms. The plant wise salient points are as under:

#### **DSPM TPS**

3.2 The salient parameters are tabulated as under:

FY 21-22 SN <u>Parameter</u> Norms Actual PAF (%) 85.00% 96.29% 1 Auxiliary Consumption (%) 9.00% 7.95% 3 Sp. Oil Consumption (ml/kWh) 0.50 0.09 Station Heat Rate (kCal/kWh) 2500.00 2409.43 5 Transit Loss (%) 0.288% 0.198%

**Table 2: DSPM Operational Parameters** 

- 3.3 From the above, it may be appreciated that during the period, DSPM TPS has outperformed all the performance norms. The gains arising out of such stupendous performance are proposed to be shared with the beneficiaries in 50:50 ratio.
- 3.4 In the above context, it is submitted that during the period under consideration, due to coal crisis on national level and difficulty faced by Coal India in supplying additional coal required for DSPM TPS, in the larger interest of all the stakeholders, part of coal required for DSPM was supplied from GP III mine. In fact, during the review meetings, even the central power and coal ministries, strongly recommended for the same. As DSPM TPS provides cheaper power than almost all alternative sources and the cost of coal through import would have been about seven to eight times, the move resulted in substantial gain to the beneficiaries.
- 3.5 Under such scenario, the only logical way to determine the applicable norm of transit loss for the plant is to consider weighted average of normative transit losses for SECL coal and the GP III coal. For the DSPM TPS, the normative transit loss for SECL coal is 0.20%, (CSPGCL crave leave to refer to settled relevant references) but for coal transported from GP III



mine normative transit loss has been taken as 0.9984%. The computation / reasoning is detailed in section related to ABV TPS. The weighted average normative transit loss for the plant comes out to 0.288%.

#### **HTPS**

3.6 The salient parameters are tabulated as under:

**Table 3: HTPS Operational Parameters** 

SN	Parameter	FY 21-22	
SIN	rarameter	Norms	Actual
1	PAF (%)	78.69%	68.45%
2	Auxiliary Consumption (%)	9.70%	10.04%
3	Sp. Oil Consumption (ml/kWh)	0.90	0.87
4	Station Heat Rate (kCal/kWh)	2650.00	2725.59
5	Transit Loss (%)	0.20%	0.19%

3.7 During the year, there was sharp rise in demand of coal by the thermal power stations across the nation, which led to pan India coal crisis. It may be appreciated that the reduced availability of coal, was totally uncontrollable for CSPGCL. The only option would have been import of coal but in such case the landed cost of coal which is less than Rs 2500/per ton in case of domestic coal, would have sky rocketed to more than Rs 15000/- per ton, implying a steep rise in energy charges. It may also please be appreciated that HTPS and KWTPP share a common coal transport system and common coal yard. Further, the energy charge of the new KWTPP is lower than the old war horse HTPS. Hence, in the wider interest of all stakeholders, KWTPP was allowed higher share of coal utilization. It is humbly submitted that in accordance to the intent and content of the regulations, the underperformance on account of uncontrollable factors, may kindly be allowed in a considerate manner.

#### 500 MW KWTPP

3.8 The salient parameters are tabulated as under:



**Table 4: KWTPP Operational Parameters** 

CN	Davamatav	FY 20-21  Norms Actual  85.00% 84.93%  5.25% 5.37%	
SN	Parameter	Norms	Actual
1	PAF (%)	85.00%	84.93%
2	Auxiliary Consumption (%)	5.25%	5.37%
3	Sp. Oil Cons. (ml/kWh)	0.50	0.28
4	Station Heat Rate (kCal/kWh)	2375.00	2521.62
5	Transit Loss (%)	0.20%	0.19%

3.9 The less coal availability affected this plant too. The gains/ losses are proposed to be shared as per Regulation.

#### **ABV TPS**

3.10 The salient parameters are tabulated as under:

**Table 5: ABVTPS Operational Parameters** 

SN	Parameter	FY 20-	FY 20-21	
SIN	rarameter	Norms	Actual	
1	PAF (%)	76.50%	54.67%	
2	Auxiliary Consumption (%)	5.25%	6.12%	
3	Sp. Oil Cons. (ml/kWh)	0.50	0.50	
4	Station Heat Rate (kCal/kWh)	2378.42	2572.42	
5	Transit Loss (%)	0.9763%	0.9138%	

- 3.11 The gains / losses are proposed to be shared as per Regulation.
- 3.12 Regarding the Transit loss, it is submitted that during the year, the bridge linkage from coal India came to an end and as per the Government policy, no extension was granted. Further, during the year, to meet the coal requirement substantial quantity of coal supply was ensured from GP III mine. As submitted in the section related to DSPM TPS, under such scenario, the only logical way to determine the applicable norm for the plant is to consider weighted average of normative transit losses for SECL coal and the GP III coal.



3.13 As far as coal from GP III mine is concerned, it is submitted that coal from integrated mine has been dealt for the first time in MYT Regulation 2021 and the last proviso of Regulation 43.6 specifically states

"In case of integrated mines, the transit and handling loss shall be decided on case to case basis subject to prudence check".

The reason for such stand is very clear. It is well settled rational that the Transit loss depends upon the mode of transport. In case of dedicated mode (i.e. pit head), the normative transit loss is allowed as 0.2% and in case of public mode transport (i.e. non pit head), the allowable normative loss is 0.80%. In case of an integrated mine, the coal transfer may take place through multiple modes. It may be LDCC, or MGR or Indian railway or Trucks or a combination of such modes. Apparently, it is for such reason, Hon'ble Commission, vary prudently, took a stand for deciding such cases on case to case basis.

- It is submitted that in the instant case, coal transport from GP III mine, involve duel transport in RCR (Rail Cum Road) mode. First, coal is transported from mine to railway siding through trucks (which may be considered as dedicated mode) and then from railway siding transportation occurs through Indian railways (which is public transport). As per settled principle, for the first phase, the applicable normative transit loss is 0.20% and for the next phase (railway siding to plant) the applicable normative loss is 0.80%. Combining the two the resultant net normative transit loss for GP III coal transported through Robertson/ Gharghoda siding, stands at 0.9984%.
- 3.15 For ABV TPS, the normative transit loss for SECL coal is 0.80%. Accordingly, taking into account the share of SECL coal and GP III coal, the weighted average normative transit loss for the plant comes out to 0.9763%.

#### **Hasdeo Bango HPS**

3.16 Actual performance parameters, for the year under consideration, vis-à-vis normative parameters is tabulated as under:



**Table 6: HBHPS Operational Parameters** 

SN	Danamatan	FY 20-	21	
SIN	Parameter	Norms Actual		
1	Gross Generation (MU)	274.00	404.12	
2	Auxiliary Consumption (%)	1.00%	0.19%	

The generating station not only contributes green power but is the cheapest source of power in the state. The generating station has overachieved the operational parameters. During the year the plant generated record power. The gross generation was about 150% higher than the design energy. It may kindly be appreciated that without proper maintenance, such record generation from thirty years old plant would not have been feasible. However, as in the previous orders, the Hon'ble Commission has adopted the approach that gross generation from the plant is dependent on water discharge from the plant, which in turn is uncontrollable for CSPGCL, hence in truthful and honest compliance of the regulatory philosophy, all the gain on account of higher rain fall / water availability is being passed on to the beneficiaries. CSPGCL is not claiming a single paisa gain on account of such excess generation. At the same time, as the Auxiliary Energy Consumption is considered a controllable parameter, hence in accordance to the regulations, the gain on account of reduction in AEC is proposed to be shared with the beneficiaries in 50:50 ratio.

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#### 4: TARIFF COMPONENTS FOR POWER PLANTS

4.1 The Regulation 34 of MYT Regulations, 2015 specifies the components of tariff as Capacity Charge (for recovery of Annual Fixed Cost) and Energy Charge (for recovery of fuel cost). Further, the Regulation 35 of MYT Regulations, 2015 specifies the components of AFC.

#### **Capitalization & Capital Structure**

- The Capital structure has been considered in line with the provisions of 4.2 Regulation 17 & 19 of MYT Regulations 2015 and the settled methodology in the previous orders. The opening GFA and capital structure (Debt / Equity) for FY 21-22, has been taken as per the closing values allowed by the Hon'ble Commission in the true up of FY 20-21. Additions have been considered as per accounts / Fixed Asset Register (FAR) after mapping with approved CIPs. Further, in compliance with the directive of the Hon'ble Commission and in line with consideration adopted by the Commission in the previous true up, the Petitioner has attempted to segregate the capital expenses considered in the books of accounts on best effort basis. The details are submitted in Form -9 for the respective plants. Exceptions, as applicable have been mentioned in the notes to respective forms. As the Regulatory principles and practices slightly differ from financial accounting principles and practices, there are some deviations from accounts. Salient deviations are:
  - a) Hon'ble Commission directed for erection and commissioning of new 220KV interconnecting line between DSPM TPS and the KTPS vide the order dated 15/11/2017. The work related to erection of two number feeder bays at DSPM TPS was allocated to CSPGCL. For proper execution and better coordination in the line and bay work, CSPGCL assigned the work to CSPTCL. An advance of 6.04 Cr. was issued to CSPTCL on 31/08/2019. The status was submitted to Hon'ble Commission from time to time.

During the year under consideration, on 25<sup>th</sup> October 2021 at 18:33 hrs the feeders were successfully charged and the power flow is taking place since then. As per the well settled Regulatory principle an asset qualifies for capitalization as soon as it is "put to use". Thus the expenditure incurred on erection and commissioning of the bays qualified for capitalization during FY 2021-22. However as this was a



unique work involving the two companies, during the capitalization process on SAP, some procedural issues crept in which led to non-capitalization of the expenditure in the books of accounts for FY 21-22. In the accounts, the capitalization will appear in FY 2022-23. However as per the settled principle in the tariff order dated 30/05/2020 on the petition no. 02 of 2020(T), in such cases, for the regulatory treatment, the capitalization has to be considered in the year in which the qualifying criteria has been satisfied. Accordingly, for the purpose of the instant petition CSPGCL has considered capitalization of Rs. 6.04 Cr. i.e. the advance paid against the work. CSPGCL undertakes that in the FY 2022-23 no additional capitalization against the said work shall be claimed except for the difference between the capitalization which may appear in the audited accounts and the capitalization considered in the instant petition.

- b) Corollary to the aforesaid principle also dictates that if an asset is not 'put to use' the same may not be considered for capitalization for the regulatory purpose, even if it appears in the financial accounts. During the year under consideration, at HTPS it was earlier planned that the COH or unit no. 2 may be undertaken in the month of March 2022. Accordingly, user divisions issued indents for withdrawal of required items from the stores. However due to system constraints and logistical issues, the work could be undertaken in the first quarter of FY 22-23. Thus, from an honest perspective, these expenses would qualify for regulatory claim in the true up for FY 2022-23. True to the spirit of the regulations and the precedence set by the Hon'ble Commission in the tariff order dated 30/05/2020, in the instant petition, CSPGCL is not claiming such expense incurred on condenser tubes, to the tune of approximately Rs. 3.22 Cr. though the same appear in the financial accounts. Leave is humbly craved for claiming these expenses during true up of FY 22-23.
- c) Following the same principle and for the same reason, CSPGCL is also not claiming repair and maintenance expense of Rs 2.80 Cr and 2.76 Cr for economizer coil element (lower and upper bank) in the instant true up. As the work got completed in first quarter of FY 22-23, leave is humbly craved for claiming these expenses during true up of FY 22-23.
- 4.3 Capital structure has been considered in accordance to the well settled



methodology in the previous orders. In cases of higher than normative equity, the normative debt equity (D:E) ratio has been considered. Further, in accordance to the methodology adopted by the Hon'ble Commission in previous orders, for additional capitalisation of the project costs at KWTPP and ABV TPS the opening D:E ratio has been considered. For new schemes normative capital structure has been considered.

4.4 The component wise filing with reference to the Regulations and formats relied in the instant petition are as under:

#### **Return on Equity**

- Return on equity has been computed, as per the Regulation 22 of MYT Regulations, 2015. Regarding the Income tax, CSPGCL has religiously followed the principle adopted by the Commission in the previous orders and accordingly claim is limited to actual Income tax and as per guidance, no claim by way of gross up of ROE is submitted. At the same time, true to the spirit and settled precedence, leave is craved for submission of income tax liability, if any, which may arise after scrutiny by the Income Tax Department in future. In line with the previous orders, Hon'ble Commission is prayed to approve the same.
- 4.6 The detail Return on equity computation is submitted in the Form- 1A.

#### **Interest & Finance Charges:**

- 4.7 CSPGCL submits that the interest & finance charges on loan capital for the year have been computed as per the Regulation-23. There is no change in the principle or methodology from previous orders. As per the procedure adopted by the Hon'ble Commission in the previous orders, the repayment of regulatory loan during the year is deemed to be equal to the depreciation allowed for the year and the interest rate prevailing on 1st April of the year has been taken from quarterly statements issued by PFC. Further, timely payment rebate which does not appear in the quarterly statement issued by PFC, but is allowed separately, has also been passed. Finance charges have been considered as per actual. Savings from refinancing have been computed as per the settled methodology.
- 4.8 The detail interest & finance charges computation is submitted in Form-13 and Form-13 A for respective plants.



#### **Depreciation**

- 4.9 Like previous years, Depreciation for DSPM TPS, has been computed in Form 12 by applying weighted average depreciation rate on the average regulatory GFA. Weighted average depreciation rate has been computed in Form 11 by applying category-wise scheduled rates specified in the Regulation 24.4 on average accounting GFA.
- 4.10 For KWTPP & ABV TPS, as in the Tariff order for FY 21-22, the depreciation rate was determined in accordance to the last proviso of Regulation 24.4, hence as per settled philosophy, in the true up the principle relied in the Tariff order has been adopted and rate has been worked out accordingly. It is submitted that the revised depreciation rates for true up are lower than the rates approved in the Tariff order 21-22.
- 4.11 As per the settled methodology adopted by the Hon'ble Commission in the previous orders, for HTPS, CSPGCL has computed the average depreciation rate on assets added after 01.04.2010.
- 4.12 The depreciation for Hasdeo Bango Hydel plant has been computed in accordance with the first proviso of the Regulation 24.4 and in line with the methodology adopted in the MYT order, by spreading the balance depreciable value over the balance useful life.

#### **Interest on Working Capital**

- 4.13 CSPGCL has calculated the normative interest on working capital as per Regulation 25 of CSERC MYT Regulation, 2015. Normative Cost of coal/oil has been taken as per Regulation 25.1(a) (i)/(ii), 0&M cost as per sub clause (iii), and cost of Maintenance spares has been taken as per sub clause (iv). The Receivables have been computed as per Regulation 25.2 equivalent to one (1) month of actual revenue billed.
- 4.14 As per Regulation 25.4, Interest on working capital has been calculated at the rate equal to the applicable Base rate of State Bank of India as on 1stApril plus 350 basis points for the year.
- 4.15 The detail interest on working capital computation has been submitted in Form- 13 'B'.

#### **Operation & Maintenance Expenses**

4.16 CSPGCL has submitted the O&M Expenses (excluding water and SLDC



- charges) for existing thermal & hydel power plants, as per the Regulation 38.5 of MYT Regulations, 2015.
- 4.17 Further, O&M Expense on support functions such as Head Office, CAU etc. are allocated among the thermal power plants, based on their installed / effective capacities.
- 4.18 As per settled practice, the provisions which have not been actually paid, have not been considered. CSPGCL bows to settled practice and accordingly, water tax provision at HTPS & KWTPP, provision for PET certificates and fly ash utilization provided at HO has not been included in the instant true up claim. Leave is craved for claiming such expenses as and when they are actually paid.
- 4.19 CSPGCL has generally computed the normative O&M cost in the similar manner as approved in the previous orders. In this regard, kind reference is invited to the Tariff order for 2018-19 (page 91) read with Tariff order 2019-20 (page 71), in which successive True ups were undertaken by the Hon'ble Commission under the MYT Regulations 2015 (which is applicable for the instant true up too). The relevant para is reproduced: -

"The above Regulations specifies that at the time of truing up, the O&M Expenses shall be considered after taking into account the actual inflation instead of projected inflation for that period. The Regulation does not mandate to revise the base O&M expenses as approved in the MYT Order."

- 4.20 Accordingly, in the instant true up, the normative O&M has been worked out in the manner and methodology prescribed by the Commission. The component wise normative O&M for FY 21-22 was decided by the Hon'ble Commission by escalating the base year normative value of FY 20-21 approved vide Tariff order dated May 30, 2020 (Refer page 234 of the Tariff Order 21-22). The base year values of order dated 30/05/2020 were escalated by projected CPI-IW of 5.17% and WPI-AC off 1.39%. In the instant petition, for component wise normative values, keeping the base year values constant, the projected inflation rates have been replaced by the actual inflation indexes.
- 4.21 For the purpose of normalization of O&M expenses for the year, the weighted average WPI-CPI inflation has been considered as per below table. For the purpose of this petition, the CPI & WPI series relied are the same as relied by the Commission in the previous true up order.



**Table 7: WPI- CPI Inflation** 

S N	Particular	FY 2021-22
1	WPI Percentage Variation	13.00%
2	CPI Percentage Variation	5.13%
	Average	8.28%

- 4.22 The normative O&M expenses for KWTPP & ABV TPS (Marwa) whose COD is later than 01.04.2010 have been computed as per the Regulation 38.5.1.1 of MYT Regulations, 2015 normalizing the same with actual weighted average rate of inflation.
- However, at KTPS, after retirement of the plant, during the year under 4.23 consideration, along-with the decommissioning activities the O&M of switchyard and hydrogen plant remained in service. It is pertinent to clarify that during the year the switch yard was transferred to CSPTCL on notional cost of Rs 1/- but for smooth transition CSPGCL continued O&M support till 31/03/22. As per settled principle, the employee cost, being pass through, has been clubbed with CAU cost. The R&M and A&G incurred for switchyard and hydrogen plant and also for decommissioning activities are submitted as separate line item. However, in the instant petition no claim has been included against the same. In line with the principle approved by the Hon'ble Commission in the previous order, Leave is respectfully craved to submit the R&M and A&G cost incurred during the year at the time of settlement of salvage value and income from sale of scrap, which is expected during FY 22-23. The issue has been dealt in detail in the section related to NTI.
- 4.24 As per settled methodology adopted by the Commission in its previous orders, for the regulatory purpose, CSPGCL has not considered the productivity incentive, donations and CSR expenses. Further in light of the first amendment to the Regulations and as per the methodology adopted in previous true ups, separate computation of impact of wage revision has not been resorted.
- 4.25 In the accounts, leave encashment expenses are settled against the provisions made in the previous year. In the previous orders, the Hon'ble Commission has taken a view that, for the true-up purpose, instead of



- provisions, only actual expenses/income shall be considered. Accordingly, as per settled principle, only the actual leave encashment expense during the period has been considered as part of employee / O&M cost.
- 4.26 It is further submitted that as per regulation, the MYT order has considered the contribution to the pension trust as a separate line item and not part of O&M expenses. For the purpose of this petition, CSPGCL has followed the same.
- 4.27 Further, as per the well settled methodology adopted in all earlier orders, the cost incurred on coal transport, which as per accounting practice is booked in the plant O&M head has been reduced from the O&M Expenses and added to the fuel cost. However, as the coal transport cost from GP III mine has not been booked to plants and has been maintained separately in the accounts, no such adjustment is applicable for GP III costs.
- 4.28 The plant-wise detail computation has been submitted in Form- 21 & 21 A with this Petition.

#### **Gratuity & Pension Fund Trust Contribution**

4.29 CSPGCL submits that Hon'ble Commission in the tariff order approved Gratuity & Pension Fund Trust contribution by CSPGCL as Rs. 233.23 Cr Crore. CSPGCL confirms that actual contribution to the Trust has been in conformity to the order. Plant wise allocation considered in the order has also been maintained.

#### **Non- Tariff Income**

- 4.30 CSPGCL has computed the Non-Tariff Income as per the Regulation 38.6 of CSERC MYT Regulations, 2015 for true up exercise of its existing thermal & hydel power plants.
- 4.31 It is submitted that for computation purpose, plant specific income has been booked to respective plants and income appearing against HO & CAU has been allocated to thermal plants on installed/effective capacity basis.
- 4.32 As far as FDR interest is concerned, except for the interest on FDR maintained for Coal Blocks, all other interest income appearing in the accounts has been considered. The interest attributable to FDR value of Rs



- 110.20 Cr has been considered as NTI for GPIII mine (along with other income appearing in the Gare Pelma accounts) and the interest attributable to FDR of about 132.048 Cr for Gidhuri pathuria Coal block has been reduced from expenses on the Gidhuri Pathuria mine.
- In-line with the previous order, no income from sale of assets at KTPS has 4.33 been considered, as the same is accounted for recovery of salvage value, stores and the cost of decommissioning. As submitted in pre paras and as considered in the previous order the cost of decommissioning includes R&M and A&G cost after the retirement of the plant. Further, as per the regulatory principle, 10% of GFA is recovered through the salvage value. The balance value of stores and inventories has also to be charged to the cost of scrap. Thus, even after accounting for the revenue of Rs 30 Cr in FY 20-21 and Rs 46.05 Cr in FY 21-22, there is balance residual value of more Rs 61 Cr which still qualifies for recovery through tariff. However, as further receipts are due in FY 22-23, as settled in the previous order, no claim is being made in the instant petition on account of such residual recovery. Leave is craved for submission of detail settlement of revenue from sale of scrap and recovery of salvage value of plant/ balance stores / cost of decommissioning etc. Hon'ble Commission has already allowed such treatment in the previous order, which shall continue till FY 22-23. Thus in the instant petition, no new prayer is being made and the order of the Hon'ble Commission is being followed.
- 4.34 For regulatory purpose, as per well-settled principle, Delayed Payment Surcharge is not considered as NTI.
- 4.35 It is further submitted that as per settled methodology, provisions for income as well as expenses are not considered for the purpose of true-up.
- 4.36 The detailed computation of NTI for all the pre-existing plants is submitted in Form- 17.

#### **Ash Utilization Expense**

4.37 Ministry of Environment and Forests (MoEF) amended the Environment (Protection) Act, 1986 vide notification dated 25th January 2016. Since the notification was issued after the notification of MYT Regulations, 2015, there was no express reference to such expenses but at the same time Regulation 11.1 lists the uncontrollable factors and the entry at 11.1 (b) is



"Change in law". Further Regulation 12 provides that the any gain / loss on account of uncontrollable item shall be pass through in the ARR. The matter was deliberated in detail during the true up for FY 19-20 and FY 20-21 and the Hon'ble Commission vide its order dated 10.8.2021 in Petition No. 09/2021 has taken cognizance of the matter. Further vide order dated 13/04/22 on the petition no 01 of 2022 Hon'ble Commission has allowed such expense as pass through. In the instant petition, the ash utilization expenses have been dealt accordingly. As per settled methodology, such expenses have been reduced from the 0&M expenses and equal amount has been claimed under the separate head. Thus the total expenses remain same.

#### **Variable Cost Computation**

- 4.38 Regulation 41.6 of MYT Regulations, 2015 specifies that the energy charge shall cover the fuel cost (primary fuel as well as secondary fuel).
- 4.39 Fuel cost has been considered as per settled methodology adopted in all previous orders. CSPGCL has submitted the plant wise landed rate of coal and oil for thermal power plants in the Format 15 & 15'A' and coal cost, oil cost and energy charge rate computation in Form 15 'B'.
- 4.40 The coal supply by SECL for the 1x500 MW KWTPP was from the same source and same mode which is available for HTPS old plant (4X210 MW). As per well settled methodology, with common coal stock, the base data of coal receipt has been taken same as considered for HTPS old plant. The consumption has been booked as per actual.
- 4.41 Similarly landed price of the Fuel oil has been computed considering common procurement for HTPS & KWTPP. However, fuel consumption as per actual has been considered separately for these plants.
- 4.42 For ABVTPS, as brought out in the pre- paras, during the year under consideration, Coal was received from SECL as well as the integrated mine at GP –III. For Coal received from GP III mine, as no regulation was available at that time, hence as per direction of the Hon'ble Commission, the ECR & FCA was computed in accordance to the notified price of equivalent grade of coal from SECL. Later on, a new Regulation for the current control period was notified which contain, a chapter for determination of cost of coal from captive coal mines. It also provides that



for coal mines which achieved COD before 01/04/22, the cost of coal for such prior period shall be computed in accordance to it and the excess / under recovery shall be dealt at the time of true up. Accordingly, in the instant petition, cost of coal, from the integrated mine at GP III, has been computed. The matter has been dealt in detail in a separate chapter.

4.43 For Hydro plant, the Regulation 42 and the MYT order both, provide for single part tariff, hence no ECR computation is applicable.

#### Sharing of Gains / (Losses)

- 4.44 Regulation 13 of the CSERC MYT Regulation 2015 specifies the sharing of gain & losses. The well settled principles, as adopted by the Hon'ble Commission in catena of previous orders have been adopted.
- 4.45 CSPGCL is submitting the detailed computation of gain/ (loss) in Form-22.

#### **Statutory Charges**

#### Water Charges & SLDC charges.

4.46 As per MYT Regulations, 2015, CSPGCL has claimed the statutory and other charges such as water charges, SLDC charges, Startup power charges etc on reimbursement basis. CSPGCL has recovered the same accordingly. In view of the above, on these counts, no deficit/surplus is claimed in true up.

#### **Petition Filing Fee & Publication Expenses.**

4.47 As per Regulation 82, of MYT Regulations, 2015, the petition filing fee and publication expenses are directly chargeable and as such the expenses incurred towards petition filing fee and publication expenses have been reduced from 0&M expenses and are being claimed separately.

#### **Aggregate Revenue Requirement**

4.48 Before summing up, it's important to submit that regarding, Gidhmuri Paturia coal block a very significant development has taken place due to Change in Law. The Coal block was applied by CSPGCL after clearance by GoCG and was allotted by the GoI through government dispensation route. As the allotment involved the State Government as well the Central Government, it need not to be submitted that no infeasibility on the legal



ground could have been envisaged at that stage. However, at later stage, in compliance of an order by NGT in a matter related with PKEB coal block, a study by ICFRE was conducted. The specialist agency put the Coal Block in not recommended category, which resulted in stalling the forest clearances required for development of mine. Further, the report was considered by the forest department while finalizing the boundaries of Lemru Forest Reserve. Finally, on 07th October 2021 a notification was issued by GoCG as Lemru Elephant Reserve. The mine area is also covered by the reserve area. The law prohibits any mining activity in such reserve area. Vide letter dated 26 August 2022, Ministry of Coal, GoI cancelled the allotment letter/ agreement and recently GoCG vide letter no 2926/F-22/01/2020/13/2/Gidhmuri dated 21.10.2022 also approved surrender of the mine. Thus due to Change in Law, CSPGCL is forced to abandon the mining activity and write off the capital expenses incurred so far in the project. As per settled accounting principles, in the audited account the capital expenses have been decapitalized and commensurate entry in the revenue expense under A&G head appears. As, the cost incurred due to "Change in Indian law" is undisputedly a pass through. Accordingly, Hon'ble Commission is humbly prayed to allow the same. In the interest of fairness and equity, in the claim, the interest accrued in FY 21-22 on the FDR maintained against the BG have been deducted from the cost appearing in the audited accounts and against the write off value of Rs 44.82 Cr in the accounts claim of only Rs 40.83 Cr has been preferred in the instant petition. Further, as the interest on FDR in the previous years was not considered as NTI, hence true to the spirit, no IDC loading has been considered in the petition. Leave is craved for further submissions, as may be required during the proceedings.

4.49 Based on the details submitted in pre paras, the Aggregate Revenue Requirement for CSPGCL plants covered, has been computed and submitted in Form 1. CSPGCL humbly prays to Hon'ble Commission to consider the same for true up.

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#### 5: REVENUE GAP FOR FY 2021-22

- 5.1 The Revenue from sale of power is considered as per actual bills. As adopted by the Hon'ble Commission in the previous orders and better parity with accounts, along with the recognition of the revenue billed in the billing sheets of April to March of the corresponding financial year, corresponding FCA is also included.
- 5.2 The revenue gap has been computed as per well settled methodology adopted in the previous orders. The net gap along with the carrying cost up to half of FY 23-24 has been computed in the petition.
- 5.3 The carrying cost has been considered at the same rate at which interest on working capital is applicable. Accordingly, for FY 21-22, interest rate of 10.90% and for FY 22-23 & 23-25 interest rate of 9.0%, (as appearing in the Tariff order 22-23) has been applied.
- 5.4 CSPGCL proposes to recover the gap / surplus in 12 equated monthly installments in the ensuing financial year i.e. FY 23-24.

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#### 6: INPUT COAL PRICE AT GARE PALMA -III MINE END

#### **Background**

- 6.1 The details related to allotment of the Gare Pelma Coal Block III (GP III) and its capital cost were submitted in the previous petition no 01/2022 (T). Reasoned and Cogent order covering all the issues was passed by the Hon'ble Commission on 13/04/2022. However, as the COD of the mine was on 1st April 2021, final capital cost on COD officially became due in the year FY 21-22 and therefore for want of audited accounts of FY 21-22, the numbers relied in the Tariff order FY 2022-23 were considered provisional. In the instant petition, the revised numbers are submitted with explanation for the limited deviations and update on contagious issues. However, for just and proper presentation, the salient points submitted earlier are reiterated hereunder.
- Initially the Parsa coal block was allotted to the erstwhile CSEB (and subsequently to CSPGCL). The Gare Pelma III (GP –III) coal block was allotted to M/s Goa Industrial Development Corporation (referred as GIDC) vide letter no. 38039/14/2008 CA-I dated 12th November 2008 by Ministry of Coal, GOI. GIDC in terms of the provisions of Rule 22(4) of the Mines and Mineral Concession Rules 1960 as amended from time to time prepared the Mining plan for the aforesaid mine. The mining plan for GP III mine was approved by Ministry of Coal, GOI vide letter no. 13016/57/2009 CA-I dated 17.05.2010. Further, the approval for Mining lease was accorded by GOI in terms of the provisions of the Section 5(1) and Section 6(1) of MMDR Act 1957 vide letter No.13016/57/2009- CA-I dated 30.5.2011.
- 6.3 Supreme Court vide its judgement dated 24th September 2014 cancelled the allocation of 218 coal blocks. In light of the aforesaid order The Parsa Coal Block was deallocated from CSPGCL and the Gare Palma III coal block was deallocated from GIDC.
- 6.4 Subsequently after enactment of the Coal Mine (Special Provisions) Act, 2015, the GP III Coal block was classified under Schedule I of the said Act. In terms of the provisions of Section 5 of the said Act, the GP-III Coal block was allocated to Chhattisgarh State Power Generation Company Limited for utilization of coal in End Use Plant Atal Bihari Vajpayee (2 X 500 MW)



- Thermal Power Plant, Marwa. It is further submitted that as per the provisions, the coal can also be used for other plants of the same entity.
- 6.5 In terms of the Section 8 of the Coal Mine (Special Provisions) Act and clause (c) of sub rule (2) of Rule 7 and sub-rule (1) of Rule 13 of the Coal Mine (Special Provisions) Rule 2014, the Nominated authority issued the allotment order (Order No. 103/23/2015/NA) for allotment of the GP-III Coal block to Chhattisgarh State Power Generation Company Limited.
- 6.6 In terms of the Section 8 of the Coal Mine (Special Provisions) Act, 2015 all the statutory permits and approvals accorded to prior allotee were transferred to CSPGCL.
- 6.7 The Brief description of the GP-III Coal block are tabulated below:

**Table 8 Details of Gare Palma III Coal Block** 

Name of Coal Mine	Gare Palma Sector III
Latitude	22º10'24.36" N to 22º11'15.84" N
Longitude	83º27'26.62" E to 83º31'56.85" E
Coalfield	Mand Raigarh
Villages	Bajarmuda, Dholnara
District	Raigarh
State	Chhattisgarh
Lease hold land for mining (Private) (Hectares)	444.58
Lease hold land for compensatory afforestation (Government) (Hectares)	400

- 6.8 Through open competitive transparent bidding, CSPGCL appointed Gare Palma III Collieries Limited as the MDO. Crushing and the mine end transportation (Surface Transportation Charges or STC in the Coal India parlance) is also in the MDO scope.
- 6.9 The production from the GP-III mine commenced in December 2019; and since then mining progress is better than the Mine Plan benchmarks.
- 6.10 As per section 61 of the Act the Central Commission regulations are one of the guiding principles for framing the regulations by SERCs. For



determination of Input Price from an integrated mine, certain provisions in the draft CERC Tariff Regulations, 2019 were included. However, considering various suggestions, the same could not find place in the final Regulations. Provisionally, the generating plants were allowed to bill the coal from integrated mines at the notified rates of Coal India Ltd. The regulation was finally notified vide second amendment to CERC Tariff Regulations, 2019. In the state of Chhattisgarh, the provisions for determinations of input cost of coal were first notified in the MYT Regulations 2021. For the intervening period, in response to CSPGCL request for guidance related to billing of ECR / FCA for power generated by coal received from GP III mine, in line with the principle adopted by the CERC, Hon'ble CSERC vide letter dated January 27, 2020, directed CSPGCL to provisionally bill the coal from integrated mines of GP-III at the notified rates of Coal India Ltd. During the FY 21-22, billing continued in accordance to the Hon'ble Commission's direction.

- 6.11 As submitted in the opening para, upon notification of CSERC MYT Regulation 2021, for the control period 01/04/2022 to 31/03/2025, CSPGCL filed petition for determination of ARR for its conventional power plants, which got registered as petition no 01 of 2022 (T). The petition included prayer with detailed submissions for approval of input cost of coal from the integrated mine Gare Palma III (GP III). It in turn was also inclusive of detail submission on capital cost of the GP III mine. Hon'ble Commission, allowed the capital cost of the mine and input cost of coal for the current control period vide MYT Order 2022 -23.
- 6.12 Regarding COD of the integrated mines, the Regulation 3.19 (iii) of the CSERC MYT Regulations, 2021 specifies as under:
  - "3.19. "Date of Commercial Operation" or "COD" means .... (iii) The date of commercial operation in case of integrated mine(s), shall mean the earliest of —
  - a) the first date of the year succeeding the year in which 25% of the Peak Rated Capacity as per the Mining Plan is achieved; or
  - b) the first date of the year succeeding the year in which the value of production estimated in accordance with these regulations, exceeds total expenditure up to that year; or
  - c) the date of two years from the date of commencement of production:"



6.13 During FY 2020-21, the production from the mine crossed 1.6 MTPA. As the peak rated capacity of the mine as per the approved mining plan is 5 MTPA, hence the first conditionality of provisions of Regulation 3.19 (iii) of the CSERC MYT Regulations, 2021 was met in FY 2020-21. Accordingly, as per the CSERC MYT Regulations, 2021, the Date of Commercial Operation (COD) of the mine comes out to April 1, 2021. Hon'ble Commission has approved the same in the order on the petition 01 of 2022. Thus FY 21-22 was first full year of operation of the mine after the achievement of COD.

#### **Current Petition**

- 6.14 In the above backdrop, the current petition deals with the true up of the approved capital cost as well as determination of the input cost of coal for the FY 21-22.
- 6.15 Regarding the enabling provision for true up the Regulation 49.3 of the CSERC MYT Regulations 2021states :
  - "Provided, if Commercial operation date of any integrated mine occurred before the notification of these regulations, input price of the coal supplied from such mine shall also be determined by the Commission as per provisions of these regulations."
- 6.16 Accordingly, for preparation of this petition the provisions of the Chapter 5 of the CSERC (Terms and Conditions for determination of tariff according to Multi-Year Tariff principles and Methodology and Procedure for determination of Expected Revenue from Tariff and Charges) Regulations 2021 have been followed.
- 6.17 Further the Regulations provide that the excess or short recovery due to difference between the input price of coal determined under these regulations and the input price of coal adopted prior to such determination, shall be a pass through with interest rate considered for working Capital Loan. As such, in the instant petition, the input cost derived on the basis of referred regulations has been used for computation of actual fuel cost and ARR of those plants (namely ABVTPS & DSPM TPS) which used the GP III coal and the carrying cost on the net gap / surplus (including but not limited to difference between excess amount recovered



through the ECR and FCA based on the cost of SECL rate for coal of equivalent grade and the actual input price of coal) has been applied the interest rate equivalent to the rate of Interest on Working Capital Loan for the year. Thus the regulations have been fully complied in pith and substance.

6.18 The Formats related to determination of Input Price of Coal for FY 21-22 are same which were relied in the previous petition/ order.

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#### **Base Data & Methodology followed in Petition**

- 6.19 The approved capital cost in the TO 22-23 along with the expenses appearing in the audited accounts have been relied.
- 6.20 A certificate issued by an independent CA is also being submitted in support of the hard cost actually incurred as on the date of COD. The additional capitalisation during the year, subject to adjustment as detailed in the relevant format, is as per audited accounts.
- 6.21 For computation, following, references have been relied:
  - a) Excavation quantity As per the statutory requirement, a Fix Reserve Price (FRP) of Rs. 100/- Per ton with GST @ 18% needs to paid on monthly basis. The same is paid by 20<sup>th</sup> of the next month. For the purpose of the instant petition, the statement of the excavation, payments submitted to the concerned authority have been relied for the excavation quantity. As per the Regulations, though the FRP is part of Input Price of Coal but it is not part of Annual Extraction Cost (AEC).
  - b) <u>Dispatch from Mine</u> As per the government policy / procedure, whenever coal is dispatched from the mine a transit pass is issued from the online portal maintained by Mineral Resource Department GoCG. The transit pass contains the vehicle number, tare and gross weight of vehicle and the grade of coal. For the purpose of instant petition, the dispatch quantity has been compiled from the daily transit passes issue through the portal. The month wise, grade wise summary of coal dispatch is submitted with the petition.
  - c) Statutory Charges- As per the government policy / procedure, a revolving advance is maintained with Khanij Vikas Nigam. At present there is no express notification regarding the rate of coal from the captive mine allocated through government dispensation route. Hence, as per the prevailing practice and the only mechanism available on the online portal, base rate of equivalent grade of coal as notified by SECL is considered for royalty. As per rule royalty is payable @ 14% of base price. Payments towards District Mineral Fund (DMF) and National Mineral Exploration Trust (NMET) are chargeable @ 2% and 10% of Royalty respectively. On all of the above three statutory charges, GST @ 18% is applicable. The three other charges Environment Cess (@ Rs 11.25/- per ton),



Infrastructure development cess (@ Rs 11.25/- per ton) and Forest Tax (26.23% of Rs 15/ per ton i.e Rs 3.93 per ton) are paid separately. As theses taxes are fixed liability of CSPGCL and neither any claim on account of advance payment nor any penalty / surcharge on account of delay is pass through in the regulations, hence the liability on account of statutory charges have been directly worked out based on the quantity, grade and base rate of equivalent grade of coal from SECL.

- d) Road transportation charges The actual payment has been considered from the accounts. The net quantity after accounting for the transit losses has been considered for deriving the per ton road transportation charges. As there is difference between the actual quantity dispatched from the mine and the quantity which is dispatched from the railway siding to the plant, the road transportation charges have been claimed only for the corresponding quantity required for loading on the railway racks
- e) <u>Coal dispatch from railway siding</u>— The details of railway receipts (RR) are submitted along with each FCA bill raised by CSPGCL on CSPDCL. Copy of the same is also submitted to the Hon'ble Commission. For the purpose of instant petition the RR quantity indicated in individual FCA bills for the period pertaining to the year under consideration have been relied.
- 6.22 <u>Rail transportation Charges</u> As mentioned above the RR details are submitted with the FCA bills. As per the well settled principle, at the time of true up, the quantity and charges indicated in the FCA bills are relied. Exceptions, as applicable, are dealt and detailed in the respective formats.
- 6.23 <u>Coal Sampling charges</u> As per the regulations and for other statutory payments too, third party sampling of coal is required. CSPGCL has placed reliance on CIMFR which is the most renowned agency in the field and is also a Central Government undertaking. The rate allowed to CIMFR for carrying out the quality test is same which is being paid to CIMFR in case of coal supply by Coal India, however unlike, CIL coal, in this case, the charges are borne fully by the beneficiary. As per settled principle the charges are pass through.
- 6.24 <u>Annual target quantity (ATQ)</u>: As per the regulations, it is the quantity in accordance with the Mining Plan. The same was relied by the Hon'ble Commission at the time of determination of input price in the tariff order. However, it may not be prudent to consider the same at the time of true



up. As the regulation do not provide any express clause / methodology for the true up, hence CSPGCL has placed reliance on the settled regulatory philosophy and has adopted the principle of purposive interpretation. For the purpose of true up, the ATQ has been considered as the actual quantity to derive the AEC per ton, the AEC has been divided by the actual quantity of coal. However, it leads to another issue. At the time of true up, what 'actual quantity' should be considered in place of the ATQ.

6.25 In the above context, such 'actual quantity' may be inferred as the excavated quantity or the dispatch quantity from mine or the RR quantity or the net quantity received at the plant. CSPGCL, in all its earnest, has tried to consider each of the above on the anvil of purposive interpretation. It is submitted that any law, rule or regulation is framed for a specific purpose and the true and proper interpretation can be made only by giving priority to the purpose of the said rule / regulation.

First of all, the case of excavated quantity is considered. While the excavated quantity may be a true parameter for an independent commercial mine the same may not be just and proper for an integrated mine. The whole issue of determination of input price of coal has travelled to the Regulatory domain to the Electricity Regulatory Commission (ERC's) because of its direct co-relation with the ability of a power plant to generate power. If at the time of true up actual excavated quantity is considered in place of ATQ than it is quite possible that no coal reaches to the plant and still it may be claimed that the integrated mine has over achieved the bench mark. It may not be proper to consider the excavated quantity from another perspective. The input price as per the regulations reflects the price at the mine end including the statutory charges as may be applicable. As the statutory charges i.e. royalty, DMF, NMET etc. are paid only at the time of dispatch of the coal, the AEC/ton derived on the excavated quantity may not reflect such cost components

Another case may be the dispatch quantity. Though the dispatch quantity to a large extent meet the criteria for consideration as actual quantity matching to the ATQ however in the cases where multiple modes of transportation are involved there may be difference between the quantity dispatched from the mine and the quantity which is finally dispatched to the plant from any intermediate siding. Therefore, while for the purpose of integrated mines with direct connectivity to the end use plant, the dispatch



quantity is a true reflector of actual quantity to be consider in place of the ATQ, the same may need some correction in case of multiple transfers with intermediate yard/ sidings.

There may be another case of RR quantity or the net quantity at the plant end. However, it is well settled that the transit losses in case of transportation of coal are inevitable. The input price is determined at the mine end, the FRP is paid at the time of excavation of coal and all the other statutory charges are paid at the time the coal is dispatched from the mine end. Consideration of RR quantity / plant quantity will clearly lead to under recovery of just and proper cost. Such may be the case only when the procurement is done on the delivery basis. In such cases the supplier quotes the rates after embedding all the costs including but not limited to the impact of transit losses. The instant case is entirely different.

Based on the above discussion, it is submitted that it may be most proper and prudent to consider the quantity of coal dispatched from the mine end commensurate to the net quantity received at the plant end. In other words, it applies the grossed up quantity from the mine end. By such methodology true cost at the plant end can be reflected. It is important to submit that since the beginning of the regulatory regime of determination of plant wise tariff, Hon'ble Commission has adopted the same principle in respect of coal from SECL. As, such coal do not involve multiple transfers, the transit losses for only one mode were considered. In the case of coal supply from GP-III mine as at present Rail Cum Road system is applicable hence net impact of both the transit losses has to be considered. The computation and impact of grossed up transit losses is submitted in the Form 15 for the plant wise true up. In harmony with the same for the purpose of deriving the input price of coal at the mine end the same grossed up quantity has been relied in the Form 1 of Annex – II.

6.26 It is clarified that bare reading of the first proviso of Regulation 54.1 indicates that transportation charge in the section implies transportation up to the loading point associated with the integrated mine. Hence in this section, in order to avoid duplicity, no separate loading of transportation charge is included. The cost of transportation of coal from mine to the power plant (as is applicable in case of other plants too) is covered in the MYT section and in case any different interpretation is made then the transportation cost as submitted in the MYT section may please be



- considered. On aggregate basis, such transposition would not make any material difference.
- 6.27 As over ground mining is more cost effective and major coal stock is over ground, as per standard industry practice, at present only over ground mining has been undertaken, hence the instant petition is for coal excavated from over ground mines only.

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## Capital cost

6.28 After detailed deliberation, Hon'ble Commission in the previous order dated 13/04/2022 on CSPGCL petition no 01/2022 (T), approved the capital cost for the GP III mine as under (table 8-4, page 228):

"Since CSPGCL has submitted that the provisional data for the Capital Cost for GP-III mine and the expenditure incurred, including IDC and IEDC, are yet to be duly certified by the Chartered Accountant, the Commission has approved the Capital Cost for GP-III mine on provisional basis as shown in the Table below. CSPGCL shall file the Petition for true up of Input Price at the time of truing up of FY 2021-22 based on the final accounts certified by the statutory auditors."

-(page 227, Emphasis Supplied)

Table 9: Breakup of Approved Capital Cost as per Tariff Order 2022-23

SN	Particulars	Approved Cost	Year
A	Statutory Expenses		
1	Upfront amount paid to Ministry of Coal	39.94	COD
2	Fixed cost (Consents Cost+ Cost of Geological Report)	30.99	COD
3	Incremental cost of Geological Report	1.96	COD
4	Mining Lease agreement	21.48	COD
5	Compensation for obtaining surface right of Private land	190.14	COD
6	Addl. Compensation for private and forest land due to land	3.44	COD
U	diversion and having Van Adhikar Patta	3.44	
7	Afforestation Charges for diversion of forest land.	2.05	COD
8	Reimbursement of GIDC claim for tree felling	1.20	COD
9	Dead rent	0.09	COD
В	Other expenses		
	Payment towards Consultancy fee, BG charges to Bank,		COD
10	Hiring of vehicles, Office rent, deployment of manpower,	9.03	
10	Annual watch ward of office & rest house, and other A $\&$ G	9.03	
	expenses		
11	Salaries Coal project	4.79	COD
12	FDR Expenses	110.20	COD
	Total Expenses Incurred	415.31	
13	Adjustment	-30.92	COD
	Net Expenses Incurred	384.39	
С	Expenses to be incurred		
14	Payment of compensation of land for obtaining surface	415.03	FY 21-22
14	right of remaining one village Bajarmuda	413.03	



15	Payment of compensation of land adjacent to main road of	5.99	FY 22-23
	village Dholnara & Milupara.	5.77	
16	Land acquisition of village Bhalumar for R &R of project		FY 22-23
10	affected families of village Bajarmuda.	12.64	
17	Rerouting of Spur line (Railway Line) passing through GP-	53.45	FY 21-22
17	III coal mine	33.43	
	Drilling of boreholes and preparation of GR for proving coal		
18	reserve in mining lease area and unexplored 59.431 Ha on	25.60	
	western part of GPIII coal mine.		
19	Construction of Rest house, office building and other works	4.39	FY 23-24
	Construction of Approach Road from Gharghoda - Chhal		FY 23-24
20	Main Road to Ghargoda Railway Siding for transportation of	2.65	
	Coal of GP-III Coal Block.		
	Expenses to be incurred	519.75	
	Grand Total	904.10	
21	Contingency @5% of IA Cost	0.00	Reserve
22	Notional IDC	111.91	
	Total Capital Cost	1016.05	
23	De-capitalization on achieving peak rated capacity	-110.20	FY 24-25
	Net Capital Cost	905.85	

- 6.29 In the above, Rs 25.60 Cr appearing at SN 18 towards drilling of boreholes and preparation of GR for proving coal reserve in mining lease area and unexplored 59.431 Ha on western part of GPIII coal mine was not considered part of the Capital cost for the control period, as these expense relate to unexplored area. Hence the approved capital cost for the project stands at 880.25 CR plus contingency reserve of 5% (about 44Cr). Regarding other cost components, in the interest of brevity, CSPGCL is not reproducing the detail order passed by the Hon'ble Commission and leave is craved to refer back to previous submissions/ order, if required.
- 6.30 Against the above capital cost considered in the TO 22-23, the actual as per audited accounts certified by the statutory auditors the expenses capitalized on COD are as under:-

Table 10: Approved Breakup of Capital Cost v/s Actual Capital Cost

SN	Particulars	Approved	Actual
1	Upfront amount paid to Ministry of Coal	39.94	39.94
2	Fixed cost (Consents Cost+ Cost of Geological Report)	30.99	31.00
3	Incremental cost of Geological Report	1.96	1.96



4	Mining Lease agreement	21.48	21.48
5	Compensation for obtaining surface right of Private land	190.14	190.14
6	Addl. Compensation for private and forest land due to	3.44	3.02
0	land diversion and having Van Adhikar Patta	3.44	3.02
7	Afforestation Charges for diversion of forest land.	2.05	2.05
8	Reimbursement of GIDC claim for tree felling	1.20	1.20
9	Dead rent	0.09	0.09
	IEDC including consultancy fee, BG charges to Bank,		
10	hiring of vehicles, office rent, deployment of manpower,	9.03	20.30
	watch &ward and other such expenses.		
11	Salaries Coal project (1.27 Cr in FY 16-17 & 3.52 Cr in	4.79	4.79
11	FY 17-18)	4.7 )	
12	FDR Expenses	110.20	110.20
13	Adjustment	-30.92	-38.97
14	IDC	111.91	111.21
	Net GFA on COD	496.30	498.43
	Expenses Incurred in FY 21-22		
15	Payment of compensation of land for obtaining surface		
13		415 03 1	387 28
	right of remaining one village Bajarmuda	415.03	387.28
16	right of remaining one village Bajarmuda Balance for Van Adhikar Patta (SN 6 above)	415.03	387.28
		0	0.41
16 17	Balance for Van Adhikar Patta (SN 6 above)		
	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through	0	0.41
	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through GP-III coal mine	0	0.41
17	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through GP-III coal mine One Time Settlement payment to PAPs in lieu of	53.45	0.41
17 18 19	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through GP-III coal mine One Time Settlement payment to PAPs in lieu of employment Prior Period Salary Capitalisation Construction of Approach Road from Gharghoda -	0 53.45 0 0	0.41 0 5.78 5.56
17 18 19 20	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through GP-III coal mine One Time Settlement payment to PAPs in lieu of employment Prior Period Salary Capitalisation Construction of Approach Road from Gharghoda - Chhal Main Road to Ghargoda Railway Siding	0 53.45	0.41 0 5.78
17 18 19	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through GP-III coal mine One Time Settlement payment to PAPs in lieu of employment Prior Period Salary Capitalisation Construction of Approach Road from Gharghoda - Chhal Main Road to Ghargoda Railway Siding Other Miscellaneous / Contingent expenses	0 53.45 0 0	0.41 0 5.78 5.56
17 18 19 20	Balance for Van Adhikar Patta (SN 6 above) Rerouting of Spur line (Railway Line) passing through GP-III coal mine One Time Settlement payment to PAPs in lieu of employment Prior Period Salary Capitalisation Construction of Approach Road from Gharghoda - Chhal Main Road to Ghargoda Railway Siding	0 53.45 0 0	0.41 0 5.78 5.56 1.33

#### Notes -

- 1. The IEDC expenses include Salary expense capitalized on COD in Gare Pelma account for FY 19-20 (Rs 2.39 Cr) & FY 20-21 (Rs 5.06 Cr) and capitalization of R&M and A&G expenses of Rs 2.25 Cr capitalized on COD.
- 2. Though the accounts reflect the total payment of one Time Settlement payment to PAPs as Rs 11.75 Cr, Only 50 % of in lieu of employment has been considered here. Details are submitted in subsequent para.
- 3. The Construction of kuchha Approach Road from Gharghoda Chhal Main Road to Ghargoda Railway Siding is a work undertaken due to urgency, may be considered as Contingent work.
- 4. As on COD, the total CWIP was about 0.73 Cr.



- 6.31 From the above it may be appreciated that as on COD there is a very marginal (less than 0.5%) increase in the estimated cost and at the same time closing GFA is lower than the estimate. Further, the total contingency expenses are also far lower than the approved capping of 5%. Breakup of capital cost considered for input price is submitted in the form 5-B.
- 6.32 It may also please be appreciated that subsequent to minor adjustment to actual quarter wise expenses there is slight reduction in the IDC submitted earlier. The computation is submitted in form 5-B(II). In this context it is also submitted that during the year under consideration, actual loan tie-up has occurred and actual loan was drawn too, however the actual drawl remained lower than 70% and thus the equity continued to be more than the normative capping of 30%. Hence, in compliance of the norms, debt equity ratio for FY 21-22 has been considered as normative 70:30 only.
- 6.33 CSPGCL would like to further submit that a large part of project expenses pertain to compensation for land. It is submitted that land acquisition has been made and compensation paid in accordance to the prevailing law and orders of the revenue authorities. In this regard, it may not be out of place to refer the Government of Chhattisgarh Energy Department letter no. 2647/ R-124/2019/13/2 dated 18.11.2019. The letter initially directed CSPGCL to obtain approval of Hon'ble Commission for the compensation to be paid for land before making such payment. Accordingly, CSPGCL approached Hon'ble Commission vide letter no. 03-09/Reg-2/49 dated 20/10/2020 to grant in principle approval for the compensation to be paid towards land. In response, Hon'ble Commission vide letter no. 13-GH30/2020/186 dated 27.01.2020 replied that the matter of approval of rate of compensation to be paid to the land owners does not come under the jurisdiction of the Commission. The relevant extract is reproduced below:
  - ".....The said provisions do not contain any reference to approval of the rate of compensation to be paid for land acquisition by the generating company. Thus, the matter of approval of the rate of compensation to the landowners for operating/ commissioning the coal mines sanctioned in Gare Palma- 3 does not come under the purview of Section 86 of the Electricity Act, 2003"

<sup>&</sup>quot;..... In the light of the aforesaid, the Commission is of the view that the matter does not require approval of the Commission."



- (Emphasis supplied)
- 6.34 Accordingly, the land compensation is being paid as per the Government directive and Hon'ble Commission is prayed to accept the same as uncontrollable and legally binding expense for CSPGCL.
- 6.35 Hon'ble Commission vide letter no. 13-GH30/2020/186 dated 27.01.2020 has provisionally permitted CSPGCL to continue to adopt the notified price of Coal India Limited commensurate with the grade of coal from integrated mines. Accordingly, CSPGCL continued ongoing methodology of adopting the SECL rates till the COD of the mine. However, while ascertaining the capital cost it is necessary to set off the additional revenue earned over and above the expenses towards coal production in a similar manner as to that of infirm power. Accordingly, CSPGCL considered the quantity already submitted to Hon'ble Commission through FCA (which is RR (Railway receipt quantity). During the previous submission, for provisional working of the adjustment value, a normative transit loss segregated in 50:50 ratio between the rail and road transport was relied. The statutory charges payable prior to COD were also computed on the basis of RR quantity grossed up by transit loss of 0.4% in road transport. At the same time, in that petition it was also submitted these charges are subject to change once the final reconciliation of quantity supplied from mine to Marwa is complete and accordingly CSPGCL prayed the Hon'ble Commission to provisionally approve the adjustments made to the capital cost. Leave was craved to submit the revised and final adjustment at the time of truing up for FY 2022-23. However, now as the transit pass data have been compiled and as after FY 20-21 the plant end transit loss data has attained finality, in the instant petition for True up of FY 21-22, the final adjustment computation is being submitted, so that, save for some uncontrollable reason (including but not limited to some legal/ statutory development), the capital cost on COD need no further revisit. The other costs incurred during the period are also known, hence in the instant petition instead of normative / estimated values, the actual values have been relied. The statutory charges have also been computed on the basis of actual grade wise quantity dispatched (as recorded in the transit passes). The adjustment value which was earlier estimated to Rs 30.92 Cr, now on the basis of actual data, comes out to Rs 38.97 Cr. For the purpose of Regulatory treatment this has been reduced from the Capital cost incurred on COD and input cost has been worked out considering such reduced



capital cost only. At this point it may be pertinent to submit that the set off considered in the Regulatory purpose and accounting purpose are two entirely different concepts. The accounts follow the concept of moving averages (which involves loading of stock cost) and regulatory approach rely on replacement cost philosophy. It is for this reason, that since the start of plant-wise two-part tariff regime, there is always a difference between the cost of coal in the financial accounts and the regulatory accounts. In the instant case too, the adjustment in accounts include stock valuation, however for regulatory purpose, as cost of coal is recovered only when electricity is supplied, historically, stock valuation finds no place in the CERC or in the CSERC. Accordingly, CSPGCL has relied on the principle approved in the previous orders. Detail computation is submitted in Form 5 B (I).

- 6.36 At this juncture it is pertinent to submit that there exist some unsettled contingent contractual / legal issues, which may have commercial implications. Some of such disputes are already before arbitration and some other at discussion stage. Details of such issues were submitted during the proceedings on petition no 01 of 2022 and Hon'ble Commission has taken cognizance of such issues in the order. Though such issues may not have an impact on true up of FY 21-22, yet, in the interest of clarity and transparency, CSPGCL crave leave to submit brief update on such issues.
  - a) Claim before the Tribunal by the previous allottee M/s GIDC: As submitted earlier, M/s Goa Industrial Development Corporation has lodged a claim of Rs. 232.06 Cr in Hon'ble Tribunal at Bilaspur (CG) constituted under the Coal Bearing Act. No further development has taken place. Leave is humbly craved for submission of the cost as and when it matures.
  - b) Payment against demand received from Chhattisgarh Environment Control Board (CECB), citing conditions of environment clearance- The matter is before arbitration to adjudge the issue regarding the liability of CSPGCL vis a vis the MDO.
  - c) Payment against 600 metre Coal Transport Road constructed by M/s. Gare Palma Collieries Limited and proposal of another 950 metre road The matter is before Joint Committee for amicable settlement.
  - d) Railway Siding expenses at Mine end: Erstwhile base cost estimate of Rs 60 Cr was referred on the basis of the feasibility Survey Report (FSR)



prepared by M.s RITES in December 2017. However, now M/s IRCON (A Government of India undertaking) has been appointed for the said wok. MOU has been entered for the same. The revised cost estimate will be known after receipt of DPR. However as per MOU, till such time the estimate is being considered as Rs 75 Cr (excluding value of land, taxes & duties)

- e) Arbitration cases with the MDO:- Such arbitrations relate to unloading charges at plant end, liability for one-time settlement of Project Affected Persons (about 1090 persons), settlement of environment clearance issues, etc. The cases are yet to be decided and the principal amount involved is now estimated to be over Rs. 100 Crore.
- 6.37 As directed by the Hon'ble Commission in the previous order, no claim against the above cited issues have been included in the instant petition and in compliance of the order, claim, shall be filed when these expenses are actually incurred.
- 6.38 In the above context, it is very pertinent to submit that earlier it was planned that employment will be provided by MDO to the Project Affected Persons (PAPs). Further rehabilitation for the Project Affected Families (PAFs) was planned at the Village Bhalumar. Accordingly estimate of about Rs 12.64 was considered in the original cost estimate approved in the order dt. 13/04/2022 (SN 16 of the Table related to approved cost break up). However, now number of PAPs are opting for one-time settlement of compensation of Rs 5 lakhs. Similarly, PAFs are opting for one-time settlement. Vide letter no 5350/LA/2022 dt. 16.06.2022 Collector Raigarh has communicated that villagers of Bajarmuda & Dholnara are not willing to get displaced to R&R village Bhalumar and for amicable settlement Collector Raigarh has suggested onetime payment of Rs 9,55,000/- per PAFs. At present, in the interest of keeping the mine operational, CSPGCL and MDO have agreed to pay costs in the 50:50 ratio. Accordingly, first trench payment of Rs 11.55 Cr has already been deposited to revenue authorities. The district authorities have been requested to certify the number of PAFs and PAPs. It is respectfully submitted that in view of the above developments, government policy, decisions of the revenue authorities, and outcome of arbitration decision, the project cost may escalate substantially. However, except the 50% share of Rs 11.55 Cr already paid, no claim has been included in the instant petition.



6.39 CSPGCL humbly crave leave to submit further developments, if any, during the course of proceedings.

## Progress against the Mining Plan

- 6.40 As submitted earlier, the Mining Plan for the Gare Pelma III coal block was prepared by prior allottee M/s Goa Industrial Development Corporation and approval was accorded on the same by Ministry of Coal Government of India vide its letter bearing reference number 13016/57/2009-CA-I dated 17th May 2010. The coal mine has been allocated to CSPGCL for end use of coal at ABV thermal Power Station, Marwa.
- 6.41 CSPGCL takes pride to submit that since beginning it is overachieving almost all the performance benchmarks. The production from mine has been higher than the targets defined in the mine plan. Even during the Corona period, when the GoI itself relaxed the targets for all the mines, CSPGCL exceeded the original targets. During FY 21-22 too, the actual production from mine, dispatch from mine to railway siding and loading on railway racks for dispatch to plants, all exceeded the target of 3.5 Million tons set in the mining plan.
- 6.42 It is submitted as per the Regulations, the general principles set in the Chapter 2, are applicable for the integrated mines too. As such sharing of gains/ losses in accordance to the Regulation 12 & 13 is applicable in the instant case too. In the instant petition, CSPGCL has included the same. Details are submitted in the subsequent section related to computation of input price.

## **Computation of Input Price of Coal**

6.43 As per the provisions of Chapter 5, Clause 52.1 of the CSERC MYT Regulations 2021:

Input price of coal or lignite from the integrated mine(s) shall be determined based on the following components:

- I) Run of Mine Cost (ROM); and
- II) Additional charges:
  - a. crushing charges.



- b. transportation charge within the mine up to the washery end or coal handling plant associated with the integrated mine, as the case may be;
- c. handling charges at mine end; d. washing charges; and e. transportation charges beyond the washery end or coal handling plant, as the case may be, and up to the loading point:
- 6.44 Further as per clause 53.2 of the CSERC MYT Regulations, 2021:

Run of Mine Cost of coal in case of integrated mine allocated through allotment route under Coal Mines (Special Provisions) Act, 2015 shall be worked out as under:

ROM Cost = [(Annual Extraction Cost /ATQ)+Mining Charges]+(Fixed Reserve Price);

#### Where,

- i. Annual Extraction Cost is the cost of extraction of coal as computed in accordance with Regulation 36F of these regulations.
- ii. Mining Charge is the charge per tonne of coal paid by the generating company to the Mine Developer and Operator engaged by the generating company for mining, wherever applicable; and
- iii. Fixed Reserve Price is the fixed reserve price per tonne along with subsequent escalation, if any, as provided in the Coal Mine Development and Production Agreement.
- 6.45 Clause 57 of the CSERC MYT Regulations, 2021 further defines the components of Annual Extraction Cost as follows:
  - I. Depreciation;
  - II. Interest on Loan;
  - *III.* Return on Equity;
  - *IV. O&M Expenses, excluding mining charge;* 
    - a. HR expenses
    - b. M&G Expenses
  - V. Interest on Working Capital;
  - *VI. Mine closure expenses, if not included in mining charge; and*
  - VII. Statutory charges, if applicable.



## **Computation of Annual Extraction Cost**

## **Depreciation**

6.46 Depreciation has been calculated as per the Regulation 24 of the CSERC MYT Regulations 2021. The depreciation rate has been computed in accordance to Appendix 1 A of the Regulations. Further, as the expense incurred on statutory compliance is in the form of FDR which is not a depreciable asset, no depreciation is being claimed on the same. The computation is submitted as Form 11 & Form 12 of the Annexure II.

## **Interest & Finance Charges**

6.47 The interest on loan has been calculated on normative basis by considering 70% of the capital cost as debt. During the year, CSPGCL has got loan sanctioned from the consortium of PFC and REC with both the lenders having 50% share of the amount of loan. However, as on 1st April 2021, there was no actual loan. As per Regulation 58.4 read with the second proviso to Regulation 24.5, in such case weighted average rate of interest for the generating company as a whole is applicable. Accordingly, interest rate of 10.15% has been considered in the petition. As per the provisions of the CSERC MYT Regulations, 2021 the depreciation has been considered as normative repayment for each year of the control period. The computation is submitted in Form 13 A of the Annexure II.

## **Return on Equity**

6.48 Return on equity has been calculated in terms of the provision of clause 23.1 read with clause 17 of the CSERC MYT Regulations 2021. The normative equity has been considered as 30% of the capital cost and the return on equity has been calculated on average of opening and closing equity. The base rate of return on equity has been considered as 14% which is in line with the clause 23.1 of CSERC MYT Regulations. As per the principle adopted by the Hon'ble Commission generally in all the previous orders and specifically in the Tariff order FY 22-23, no grossing up with Income tax rates has been adopted. Leave is craved for pass through of income tax liabilities, if any, as and when that may arise.



## **Operation and Maintenance Expenses**

6.49 CSPGCL carve leave to refer to its submissions in the previous petition. The In the interest of brevity and clarity, Hon'ble Commission view in the Tariff order FY 22-23 is reproduced herewith

"The Commission notes that CSPGCL has appointed M/s. Gare Palma Collieries Limited as the MDO through a transparent process of competitive bidding for undertaking the major operation and maintenance activities. The Commission takes cognizance of the requirement of a manager and certain statutory manpower to be deployed by mine owner to perform and discharge the duties laid down in the Mines Act, 1952 and Coal Mines Regulation, 2017.

Since there is no CERC Order or any other reference document to project O&M expenses for integrated mines, CSPGCL has projected O&M expenses at 15% of MDO charges. The Commission accepts the methodology adopted by CSPGCL for projecting O&M expenses for the Control Period, which shall be trued up based on actuals and prudence check. However, there shall be no sharing of gains /losses, in case the actual O&M expenses are lower than the approved provisional O&M expenses, since the O&M expenses are being approved on adhoc basis."

6.50 The O&M expenses have been derived from the accounts as per well settled methodology. It is submitted that the same is lower than the 15% of MDO charges. Bowing to the pith and substance of the direction for the control period, FY 22-23 to FY 24-25, CSPGCL is not claiming any gain on account of lower actual O&M expenses.

## **Interest on Working Capital**

6.51 Interest on working capital has been calculated in line with the provisions of the clause 61 of CSERC MYT Regulations, 2021. Accordingly working capital has been computed considering the Input cost of coal stock for 7 days production corresponding to the ATQ, stores and spares including explosives, lubricants and fuel @ 15% of 0&M expenses and 0&M expenses for 15 days. As the normative 0&M expenses are yet to be settled, actual 0&M expenses have been considered. The interest rate applicable for IOWC in FY 21-22 has been retained.



## **OB** adjustment

6.52 It is submitted that as the responsibility of over burden removal is in the scope of the MDO and at present there is no liability on CSPGCL no OB adjustment in accordance to the Regulation 65 has been considered in the instant true up. Leave is craved for submission, in this regard as and when such a situation arises.

## GCV adjustment-

First of all, CSPGCL humbly submits that as per settled principles and also 6.53 as per the express provisions under the regulations, the impact of uncontrollable factors is a pass through. As the quality of coal from a coal seam is totally uncontrollable for the generation company, no adjustment is applicable on this count too. It is also submitted that the Directorate of Geology & Mining, Government of Chhattisgarh vide order no 5236 dated 07th October 2022 has declared GCV for different seams of the mine and there is no declared GCV for GP-III mine. As such adjustment in accordance to Regulation 66 is not applicable. It is further submitted that the statutory charges are being paid in accordance to the seam wise grade declared vide above order and as the impact of GCV of coal is embedded in the true up of the end use plants in comprehensive manner (unlike the case with the plants covered in the CERC Regulations), hence no separate treatment of such adjustment is applicable. At the same time CSPGCL respectfully submits that above does not in any way imply that there has been any slippage of grade and any exemption is being sought against the same. Per contra, it is submitted that during the year there were four seams available for excavation. The best coal grade declared is G-13, while the weighted average of coal as fired is also in the same range. Thus there is no slippage at all. Rather, if the weighted average of seams is considered then the actual GCV is better than the declared grade. Being gain on account of uncontrollable factor, CSPGCL is not claiming any gain on account of the same.

## **NTI Adjustment**

6.54 The adjustment of nontariff income (subject to alignment of actual extracted quantity as above) has been passed in accordance to the Regulation 67.



## **Mine Closure Charges**

6.55 CSPGCL would like to submit that the liability of mine closure expenses rests with the MDO as per the provisions of CMSA and hence no expenses towards mine closure has been considered for the purpose of calculation of Input Price of coal in this Petition.

## **Statutory Charges**

6.56 Statutory charges have been considered as per various notifications/ guidelines of Ministry of Coal. As submitted earlier, in absence of rate of coal from integrated mine allotted through government dispensation route, for the period under consideration, the base rate of coal for royalty computation, was considered same as applicable for the equivalent grade of coal from SECL mine. It was in accordance to the directions of the Hon'ble Commission too and the online portal of Mineral Resource Department, GoCG, also allows this methodology only. As such CSPGCL has not applied any discretion at its own end and has followed the directives / procedures laid down by the authorities. Leave is craved for additional submissions / claim, if the authorities decide to review the rates of taxes from retrospective effect. The computation of statutory taxes, is submitted in Form 2 of The Annexure II. The Statutory charges considered for the purpose of calculation of input price are tabulated below:

**Table 11 Details of Statutory Charges** 

Statutory Charges	Rate	On
GST	18%	Mining Charges
Royalty	14%	On Base Price
DMF	10%	Royalty
NMET Fund	2%	Royalty
Environment Cess	11.25	per Tonne
Infrastructure Development CESS	11.25	per Tonne
Forest Tax	26.23%	Rs.15/Tonne
GST on Royalty, DMF and NMET	18.00%	



## **MDO Charges**

6.57 As submitted earlier, CSPGCL has appointed Gare-Pelma III Collieries Ltd as MDO through open transparent competitive bidding process. The same has been adopted by the Hon'ble Commission in the MYT order. For the purpose of pre COD period computation as well as True up for FY 21-22, the actual charges as appearing in the accounts have been considered. The actual per ton charges are lower than the coupon rates. Thus deductions, as applied, have been fully passed on to the beneficiaries.

## Sharing of gain / loss

As submitted in the previous section, the principles of sharing of gain / loss laid down in Regulation 12/13 are applicable in case of the integrated coal mine also. In this regard it is submitted that for the operation of the integrated coal mine the only materialistic performance criteria is achievement of the coal production targets as set in the approved mining plan. While the fix reserve price and the statutory charges are directly related to the quantity of coal produced hence in case of over / under achievement of target do not make any impact on the effective per ton rate of coal. However, the financial costs - such as return on equity, interest in finance charge and depreciation are directly dependent on the average capital cost and capital structure during the year and there is no direct relation with the quantity of coal actually produced. Thus, in case of over / under achievement of the production target, the per ton cost attributable to these components tend to vary. IOWC has also been considered as the cost component which affects the beneficiary in case of over / under achievement of the target. To a large extent the 0&M cost also follows the same path. However, as in the previous order, the Hon'ble Commission has taken a view that gain/ loss on account of O&M cost shall not be considered for integrated mine, hence same has not been considered in the instant case. As per the well settled philosophy of sharing of gain / loss, the per ton cost attributable to the above cost components (ROE, interest and finance charges, depreciation and IOWC) considering the normative ATQ (Annual Target Quantity) equal to the target set in the mining plan has been worked out. The same has been recomputed for the 'actual quantity' achieved during the year. When the actual production exceeds the target production, the per ton cost of coal is reduced benefitting the end



consumer and when the actual production is lower than the mining plan target, there is an adverse impact on the beneficiaries. In the instant petition, tabulation has been made accordingly in the Form 22 of the Annexure II. As during the year under consideration CSPGCL exceeded the target set in the mining plan, savings have been achieved and gain is shared on 50-50 basis.

## **Fixed Reserve Price**

6.59 Government of India, Ministry of Coal vide notification no. 13016/9/2014 - CA III dated 26<sup>th</sup> December 2014 has fixed the Floor/ Reserve price for auction and allotment of coal mine/ blocks as Rs. 100/ ton for coal blocks allocated to government companies for specified end use. GST is applicable on the same @18%. Accordingly, the fixed reserve price has been indicated as Rs. 118/ ton for the calculation of Input price of coal.

## **Input price of Coal**

6.60 Based on the above, input price of Coal at the mine end has been computed. Hon'ble Commission is prayed to approve the same and consider it for determination of landed price of Coal for ABVTPS and DSPM TPS, as submitted in the plant True up section of the instant petition.

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## 7: ANNEXURE I – TRUE-UP OF FY 2021-22 – FORMATS

## Dr. Shyama Prasad Mukherjee TPS (DSPM TPS)

## FORM - 1 - ANNUAL REVENUE REQUIREMENT

Name of Power Station: **Dr. Shyama Prasad Mukherjee TPS (DSPM)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

Dantigulano	FY 202		
Particulars	Tariff Order	Actual	
Depreciation	130.52	130.16	
Interest & Finance Charges	8.86	8.07	
Return on Equity	110.06	109.86	
O&M Expense	179.95	171.06	
Interest on Working Capital	19.16	21.35	
Less: Non-Tariff Income	3.71	6.10	
<b>Total Annual Capacity Charge</b>	444.90	434.39	
Cost of Coal	517.34	583.42	
Cost of Oil	9.52	3.01	
Total Energy Charges	526.86	586.43	
Contribution to Gratuity/Pension Fund	38.77	38.77	
Ash Utilization Expenses	0.00	1.42	
Aggregate Revenue Requirement	1,010.59	1,061.01	



## FORM - 1A - RETURN ON EQUITY

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## In Rs. Crores

Particulars	FY 2021-22		
Particulars	Tariff Order	Actual	
Equity in Opening GFA		707.01	
GFA Addition during the Year		11.66	
Equity %		30%	
Equity portion of addition during the year	-	3.50	
Equity in Closing GFA		710.51	
Average Permissible Equity during the year		708.76	
Rate of Return on Equity		15.50%	
Return on Equity	110.06	109.86	



## FORM - 3 - PARAMETERS CONSIDERED FOR TARIFF COMPUTATIONS

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## FY 2021-22

Sr. No.	Particulars	Unit	Approved	Actual
1	Effective Rated Capacity	MW	500	500
2	Base Rate of Return on Equity	%	15.50%	15.50%
3	Applicable Tax Rate	%	0.00%	0.00%
4	Rate of Return on Equity	%	15.50%	15.50%
5	PAF	%	85.00%	96.29%
6	Gross Generation	MU	3723.00	3908.42
7	Auxiliary consumption	%	9.00%	7.95%
8	Auxiliary consumption	MU	335.07	310.82
9	Net Generation	MU	3387.93	3597.60
10	Schedule energy	MU		3531.65
11	Gross Station Heat Rate	kCal/kWh	2500.00	2409.43
12	Specific Fuel Oil Consumption	ml/kWh	0.50	0.09
13	Transit and stacking losses	in %	0.29%	0.20%
14	Cost of Coal/Lignite for working capital	in Months	1.00	1.00
15	Cost of Main Secondary Fuel Oil for WC	in Months	2.00	2.00
16	O & M expenses for WC	in Months	1	1
17	Maint. Spares for WC of R&M Cost	% of O&M	40.00%	40.00%
18	Receivable for WC	in Months	1.00	1.00
19	Base Rate of SBI as on 01.04.2021	%	7.40%	7.40%
20	Interest rate for Working Capital	%	10.90%	10.90%



## FORM - 9 - DETAILS OF ADDITIONAL CAPITALIZATION DURING THE YEAR

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## FY 2021-22

In Rs. Crores

Sr. No.	Description of Work	Asset (Rs. In CR.)	CIP / Business plan order approval
I.	Total Capitalization at plant	12.50	
II.	Scheme wise capitalization against CIP		
1	Commissioning of Sewerage treatment plant	1.06	Order Dt.02.05.20 S No. 3 Pg 4 of 12
2	Renovation of Sewage Network for DSPM TPS colony	0.31	CIP order dt. 31.07.21 (P. no. 10 of 2021), Page No6
3	3rd stage Raising of Ash Dyke Lagoon 1	2.63	CIP order dt. 31.07.21 (P. no. 63/2020) , para 13 Page No5 of 5
4	3rd stage Raising of Ash Dyke Lagoon 2	1.42	CIP order dt. 31.07.21 (P. no. 10 of 2021), Page No5
5	Construction of Temporary Earthen embank	0.18	CIP order dt. 02.05.2020, Page No4 of 12, in schemes under category -3
6	Construction of 220 kV bay	6.04	CIP order dt. 31.07.21 (P. no. 10 of 2021), Page No5
	Sub Total Qualified Asset of the Plant	11.66	
III.	Total capitalization in CAU & HO	0.66	
1	Share of DSPM in CAU (non qualified)	0.12	
2	Share of DSPM in CAU (qualified)	0.00	
IV	Total capitalisation considered	12.61	
V	Total qualified asset	11.66	
VI	Total non qualified asset	0.95	

Note: Capitalization of 220 KV bay has been considered under capitalization since the asset has been put to use in current year, however the same has not been capitalized in books of accounts and shall reflect in accounts in FY 2022-23



## FORM - 11 - CALCULATION OF DEPRECIATION RATE

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

C	Name of the Assets	Depreci	Gross	Gross	Deprecia
S. No.		ation	Block as on	Block as on	tion
		Rate	31.03.22	31.03.21	FY 21-22
1	Land - Freehold	0.00%	1.29	1.29	0.00
2	Land – Leasehold	3.34%	0.04	0.04	0.00
3	BldgThermo Electric Generating Plant	3.34%	42.16	42.16	1.41
4	Bldg. Hydro Electric Generating Plant	3.34%	0.00	0.00	0.00
5	Building-Diesel Electric Generating Plant	3.34%	0.00	0.00	0.00
6	Bldg Transmission installation	3.34%	0.00	0.00	0.00
7	BldgDistribution installations	3.34%	0.00	0.00	0.00
8	Office Building	3.34%	0.12	0.12	0.00
9	Building – Others	3.34%	3.01	2.78	0.10
10	Building - Residential, Hospitals & Guest House.	3.34%	16.68	16.68	0.56
11	Plant & Machinery - Gas Power Plant	5.28%	0.00	0.00	0.00
12	Roads on Municipal Land	3.34%	0.00	0.00	0.00
13	Kuchcha & Pucca Roads	3.34%	0.76	0.76	0.03
14	Well, Boundary wall And Canal	3.34%	0.44	0.00	0.01
15	Railway Sidings	5.28%	42.72	42.72	2.26
16	Furniture & Fittings	6.33%	0.00	0.00	0.00
17	Hydel Works	5.28%	13.74	12.36	0.69
18	Instrumentation and Controls	5.28%	93.84	93.84	4.95
19	Boiler Plant & Equipment	5.28%	1802.97	1798.73	95.08
20	Locomotives and Wagons	9.50%	131.98	131.98	12.54
21	Transmission Plant-Xmers 100 KVa & above	5.28%	84.88	78.83	4.32
22	SS Transformer & Kiosks 100 Kv & Above	5.28%	10.37	10.37	0.55
23	Material Handling Equipment	5.28%	0.12	0.12	0.01
24	Switchgears Including Cable Connections	5.28%	24.97	24.97	1.32
25	Comm. Equip-Radio & High Freq. Carrier	6.33%	0.00	0.00	0.00
26	Air-Conditioning Plant	5.28%	17.43	17.43	0.92
27	Static Machine Tools & Equipments	5.28%	0.00	0.00	0.00
28	Meter Testing Laboratory Tools & Equip	5.28%	21.80	21.80	1.15
29	Overhead Lines On Steel Support At Volt> 66 Kv	3.34%	0.00	0.00	0.00
30	Underground Cables Inclu. Jt. Boxes & Disconnect. Box	5.28%	44.13	44.13	2.33
31	Internal Wiring Including Fittings & Fixtures	6.33%	5.85	5.85	0.37
32	Furniture and Fixtures	6.33%	0.74	0.70	0.05
33	Office Equipments	6.33%	0.39	0.30	0.02
34	Computers Hardware and Software	15%	0.91	0.87	0.13
35	Vehicles	9.50%	0.32	0.32	0.03
	Total		2361.69	2349.19	128.82
	Average Rate				5.47%



## **FORM - 12 - DEPRECIATION**

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

Donticulous	FY 2021-22		
Particulars	Tariff Order	Actual	
Opening GFA		2,374.10	
Additional Capitalisation		11.66	
Closing GFA	-	2,385.76	
Average GFA		2,379.93	
Average Rate of Depreciation		5.47%	
Net Depreciation for claim	130.52	130.16	



# FORM – 13 –CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON ACTUAL LOANS

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

C	DSPM Loan Details	FY 2021-22		
Sr. No.	Particulars	Order	Rate (%)	Outstanding Balance
1	REC			-
2	Weighted Average rate of Interest	10.25%		10.25%

## FORM - 13A -INTEREST ON LOAN CAPITAL

In Rs. Crores

	FY 2	021-22
Particulars	Tariff Order	Actual
Total Opening Net Normative Loan		137.84
Repayment during the period		130.16
Additional Capitalisation		11.66
Debt %		0.70
Increase/Decrease due to ACE during the Year		8.16
Total Closing Net Normative Loan		15.84
Average Loan during the year	_	76.84
Weighted Average Interest Rate		10.25%
Interest Expense for the Period		7.88
Savings on interest rate due to refinancing		0.60%
Share of savings due to interest rate		0.15
Finance and Other Charges		0.04
Total Interest Expenses	8.86	8.07

#### FORM - 13B -INTEREST ON WORKING CAPITAL

In Rs. Crores

	FY 20	021-22
Particulars	Tariff Order	Actual
Cost of Coal (1 month for pit head, 1.5 month for non-pit head)		48.02
Cost of Oil (2 months)		1.64
O&M Expenses (1 months)		15.89
Maintenance spares (40% of R&M)	-	36.58
Receivables (1 month)		93.72
Total Working Capital Requirement		195.85
Rate of interest for working capital (As on 1st April)		10.90%
Interest on Working Capital	19.16	21.35



# FORM – 15 –DETAILS/INFORMATION OF PRIMARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## **Primary Fuel (Coal)**

S. N.	Particulars	Units	ROBERTSON	KTPS	SECL	TOTAL
1	Coal supplied for Rail Loading	MT	298568.55	5770.65	2452085.11	2756424.31
2	Transit Loss from Mine to Rly Siding	%	0.10%	0.00%	0.00%	0.01%
3	RR Quantity (Rakes recd. at Plant)	MT	298265.61	5770.65	2452085.11	2756121.37
4	Transit Loss RR to Plant	%	0.19%	0.19%	0.19%	0.19%
5	Net Coal Received	MT	297706.51	5759.83	2447488.66	2750955.00
6	Rate Charged by Coal Company	Rs. /MT	1269.79	1787.67	1816.13	1756.89
7	Amount Charged by Coal Company	Rs. Cr.	37.91	1.03	445.33	484.27
8	Stock transfer from plant	MT	0.00	0.00	0.00	0.00
9	Amount charged against stock transfer	Rs. Cr.	0.00	0.00	0.00	0.00
10	Total amount Charged	Rs Cr	37.91	1.03	445.33	484.27
11	Road transportation Charge	Rs Cr	24.75	0.00	0.00	24.75
12	Rail Transportation charges	Rs Cr	7.49	0.00	49.74	57.23
13	Total Transportation Charges	Rs Cr	32.24	0.00	49.74	81.98
14	Transportation Charge	Rs. /MT	1082.93	0.00	203.23	298.01
15	Coal Sampling Charges	Rs Cr	0.00	0.00	1.27	1.27
16	Other Charges	Rs Cr	0.50	0.01	4.10	4.61
17	Total amount Charged for coal	Rs. Cr.	70.65	1.04	500.44	572.13
18	Rate of Coal per MT at actual Transit Loss	Rs. /MT	2373.14	1804.41	2044.72	2079.76
19	Total Actual Transit Loss	MT	0.29%	0.19%	0.19%	0.20%
20	Total Normative Transit loss	%	1.00%	0.20%	0.20%	0.29%
21	Rate of Coal at Normative Transit Loss	Rs. /MT	2390.15	1804.64	2044.98	2081.60



# FORM – 15A –DETAILS/INFORMATION OF SECONDARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: **Dr. Shyama Prasad Mukherjee TPS (DSPM)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

## **Secondary Fuel (HFO + HSD)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	579
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	5,15,70,491
3	Rate of Secondary Fuel per KL	Rs. /KL	89,068.21

## **Secondary Fuel (HFO)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	45
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	23,79,691
3	Rate of Secondary Fuel per KL	Rs. /KL	52,882

## **Secondary Fuel (HSD)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	534
2	Amount charged by the Secondary Fuel Company	(Rs.)	4,91,90,800
3	Rate of Secondary Fuel per KL	Rs. /KL	92,118



## FORM - 15B -CALCULATION OF FUEL COST & ENERGY CHARGES

Name of Power Station: Dr. Shyama Prasad Mukherjee TPS (DSPM)

Name of the Company: Chhattisgarh State Power Generation Company Limited

		FY 2021-22		
Particulars	Units	Normative Operational Parameters	Actual Operational Parameters	
Capacity	MW	500	500	
Plant Load Factor	%	85.00%	96.29%	
Gross Generation	MU	3,723.00	3908.42	
Auxiliary Consumption	%	9.00%	7.95%	
Auxiliary Consumption	MU	335.07	310.82	
Net Generation	MU	3387.93	3597.60	
Station Heat Rate	kcal/kWh	2500.00	2409.43	
Sp. Oil Consumption	ml/kWh	0.50	0.09	
GCV of Coal	kcal/kg	3355.74	3355.74	
Calorific Value of Oil	kcal/l	10000.00	10000.00	
Overall Heat	G Cal	9307500.00	9417052.05	
Heat from Oil	G Cal	18615.00	3376.14	
Heat from Coal	G Cal	9288885.00	9413675.91	
Oil Consumption	kL	1861.50	337.61	
Coal Consumption	MT	2768055.74	2805243.00	
Specific Coal Consumption	kg/kWh	0.74	0.72	
Price of Coal	Rs./MT	2081.60	2079.76	
Price of Oil (Average)	Rs. /kL	89068.21	89068.21	
Price of Oil (for WC)	Rs./kL	52882.02	0.00	
Coal Cost	Rs. Crore	576.20	583.42	
Oil Cost	Rs. Crore	16.58	3.01	
Total Fuel Cost	Rs. Crore	592.78	586.43	
Oil Cost (for WC)	Rs. Crore	9.84	0.00	
Coal Cost/Net Generation	Rs./kWh	1.70	1.62	
Oil Cost/Net Generation	Rs./kWh	0.05	0.01	



## **Hasdeo Thermal Power Station (HTPS)**

## FORM - 1 - ANNUAL REVENUE REQUIREMENT

Name of Power Station: Hasdeo Thermal Power station (HTPS)

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

Particulars	FY 20	21-22
Particulars	Tariff Order	Actual
Depreciation	37.73	35.31
Interest & Finance Charges	24.29	21.28
Return on Equity	72.71	70.65
O&M Expense	361.03	308.12
Interest on Working Capital	27.71	28.47
Less: Non-Tariff Income	7.15	10.48
Total Annual Capacity Charge	516.45	453.36
Cost of Coal	759.20	740.08
Cost of Oil	25.99	27.57
Total Energy Charges	784.93	767.65
Contribution to Gratuity/Pension Fund	104.49	104.49
Ash Utilization Expenses	0.00	6.56
Aggregate Revenue Requirement	1,405.86	1,332.06



## FORM - 1A - RETURN ON EQUITY

Name of Power Station: Hasdeo Thermal Power station (HTPS)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## In Rs. Crores

	FY 20	21-22	
Particulars	Tariff Order	Actual	
Equity in Opening GFA		442.34	
GFA Addition during the Year		89.97	
Equity %	-	30%	
Equity portion of addition during the year		26.99	
Equity in Closing GFA		469.33	
Average Permissible Equity during the year		455.84	
Rate of Return on Equity		15.50%	
Return on Equity	72.71	70.65	



## FORM - 3 - PARAMETERS CONSIDERED FOR TARIFF COMPUTATIONS

Name of Power Station: Hasdeo Thermal Power station (HTPS)

Name of the Company: Chhattisgarh State Power Generation Company Limited

Sr. No.	Particulars	Unit	Approved	Actual
1	Effective Rated Capacity	MW	840	840
2	Base Rate of Return on Equity	%	15.50%	15.50%
3	Applicable Tax Rate	%	0.00%	0.00%
4	Rate of Return on Equity	%	15.50%	15.50%
5	PAF	%	78.69%	68.45%
6	Gross Generation	MU	5790.32	5044.96
7	Auxiliary consumption	%	9.70%	10.04%
8	Auxiliary consumption	MU	561.66	506.60
9	Net Generation	MU	5228.66	4538.36
10	Schedule energy	MU	0	4463.19
11	Gross Station Heat Rate	kCal/kWh	2650.00	2725.59
12	Specific Fuel Oil Consumption	ml/kWh	0.90	0.87
13	Transit and stacking losses	in %	0.20%	0.19%
14	Cost of Coal/Lignite for working capital	in Months	1.00	1.00
15	Cost of Main Secondary Fuel Oil for WC	in Months	2.00	2.00
16	O & M expenses for WC	in Months	1	1
17	Maint. Spares for WC of R&M Cost	% of 0&M	40.00%	40.00%
18	Receivable for WC	in Months	1.00	1.00
19	Base Rate of SBI as on 01.04.2019	%	7.40%	7.40%
20	Interest rate for Working Capital	%	10.90%	10.90%



#### FORM - 9 - DETAILS OF ADDITIONAL CAPITALIZATION DURING THE YEAR

Name of Power Station: **Hasdeo Thermal Power station (HTPS)**For FY 2021-22

In Rs. Crores

Sr. No.	Description of Work	Asset (Rs. In Cr.)	CIP / Business plan order approval
I.	Total Capitalization at plant	90.17	
II.	Scheme wise capitalization against CIP		
1	Sewage line renovation	2.89	Order Dt.02.05.20 (P. no. 77 of 2018) S No. 22.3 of Pg 9 of 12
2	Distributed Control System (DCS)	26.52	Order Dt.31.07.21 (P. no. 10 of 2021) S No.2 of Pg 12
3	Augmentation of ESP	51.66	Order Dt.31.07.21 (P. no. 10 of 2021) S No1 .of Pg 12
4	Booster Pump for 210 MW sets	0.93	Order Dt. 16.03.16 (P. no. 05 of 2016) Pg 36 read with order dt 02.05.20 (P No 77 of 2018)
5	Commissioning of 6.6 KV VCB	4.55	Order Dt.31.07.21 (P. no. 10 of 2021) S No6 .of Pg 13
6	Commissioning of Sewerage treatment plant	3.42	Order Dt.02.05.20 (P. no. 77 of 2018) S No. 4 para 19 of Pg 7 of 12
	Sub Total Qualified Asset of the Plant	89.97	
III.	Total capitalization in CAU & HO	0.66	
1	Share of HTPS in CAU (non qualified)	0.20	
2	Share of HTPS in CAU (qualified)	0.00	
IV	Total capitalisation	90.37	
V	Total qualified asset considered	89.97	
VI	Total non qualified asset	0.39	

Note: Capitalization of Condenser tubes of Rs.3.2 Cr. appearing in audited accounts has not been considered as additional capitalization for Regulatory Purpose as the asset has not been put to use in FY 2021-22. The same shall be considered as additional capitalization in FY 2022-23



## FORM - 11 - CALCULATION OF DEPRECIATION RATE

Name of Power Station: Hasdeo Thermal Power station (HTPS)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## For FY 2021-22

Sr.		Asset Add	ition		Depreciation
No.	Description of Work	From 2010-11 to 2020-21	21-22	Rate %	2021-22
1	LAND	2.10	0.00	3.34%	0.07
2	Building Hydro Electric Generating Plant	1.87	0.00	3.40%	0.06
3	Office Building	3.55	0.00	3.40%	0.12
4	Other Buildings	0.01	0.00	3.40%	0.00
5	Kuccha & Pukka Roads	1.66	0.00	3.40%	0.06
6	Hydel Works	4.57	2.89	5.28%	0.32
7	Instrumentation And Control	19.01	27.45	5.28%	1.73
8	Boiler Plant & Equipment	537.93	51.66	5.28%	29.77
9	Locomotives & Wagons	6.92	0.00	9.50%	0.66
10	Transmission Plant-Xmers 100 kVA & above	17.64	0.00	5.28%	0.93
11	SS Transformer & Kiosks 100 kV & Above	0.62	4.55	5.28%	0.15
12	Material Handling Equipment	0.54	0.00	9.50%	0.05
13	Switchgears Including Cable Connections	0.09	0.00	5.28%	0.00
14	Static Machine Tools & Equipment	0.06	0.00	5.28%	0.00
15	Meter Testing Laboratory Tools & Equipment	20.38	3.42	5.28%	1.17
16	Internal Wiring Including Fittings & Fixtures	2.94	0.00	6.33%	0.19
17	Furniture & Fixtures	0.02	0.00	6.33%	0.00
18	Office Equipment	0.02	0.00	6.33%	0.00
19	Computers	0.22	0.00	15.00%	0.03
	Total	620.14	89.97		35.31
				Wt. Avg. rate	5.31%



## **FORM - 12 - DEPRECIATION**

Name of Power Station: Hasdeo Thermal Power station (HTPS)

Name of the Company: Chhattisgarh State Power Generation Company Limited

For FY 2021-22

Particulars	FY 2021-22			
Particulars	Tariff Order	Actual		
Depreciation for assets up to FY 2009-10 already recovered		759.58		
Depreciation for assets added after FY 2009-10				
Opening Gross block on additional capitalization from FY 2010-11 onward		620.18		
Additional Capitalization during the year		89.97		
Closing Gross block		710.15		
Average Gross block		665.17		
Depreciation rate		5.31%		
Depreciation for the year	37.73	35.31		
Accumulated depreciation for assets added after FY 2009-10		233.39		



## FORM – 13 –CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON ACTUAL LOANS

Name of Power Station: **Hasdeo Thermal Power station (HTPS)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

#### In Rs. Crores

S. No.	HTPS Loan Details	FY 2021-22		
	Particulars	Tariff Order	Rate (%)	Outstanding Balance
1	PFC-22104001		11.65%	0.75
2	PFC- 22104004		11.40%	1.33
3	PFC- 22104005		11.40%	0.60
4	PFC-22104007		11.40%	4.55
	Total Loan			7.22
	Weighted Avg. Interest	11.22%		11.43%

#### FORM - 13A -INTEREST ON LOAN CAPITAL

#### In Rs. Crores

Particulars	FY 2021-22		
Particulars	Tariff Order	Actual	
Total Opening Net Normative Loan		171.89	
Repayment during the period		35.31	
Additional Capitalisation		89.97	
Debt %		70%	
Increase/Decrease due to ACE during the Year		62.98	
Total Closing Net Normative Loan	-	199.56	
Average Loan during the year		185.72	
Weighted Average Interest Rate		11.43%	
Interest Expense for the Period		21.22	
Finance and Other Charges		0.06	
Total Interest Expenses	24.29	21.28	

## FORM - 13B -INTEREST ON WORKING CAPITAL

#### In Rs. Crores

Particulars	FY	FY 2021-22		
rai ticulai s	Tariff Order	Actual		
Cost of Coal (1 month)		68.81		
Cost of Oil (2 months)		4.61		
O&M Expenses (1 months)		31.23		
Maintenance spares (40% of R&M)		46.13		
Receivables (1 month)		110.42		
Total Working Capital Requirement		261.21		
Rate of interest for working capital (as on 1st April)		10.90%		
Interest on Working Capital	27.71	28.47		



## FORM – 15 –DETAILS/INFORMATION OF PRIMARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: Hasdeo Thermal Power station (HTPS)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## **Primary Fuel (Coal)**

## The below mentioned details are for HTPS+KWTPP

S. N.	Particulars	Units	ROBERTSON	KTPS	SECL	TOTAL
1	Coal supplied for Rail Loading	MT	-	-	6715444.72	6715444.72
2	Transit Loss From Mine to Rly Siding	%	0.10%	0.20%	0.00%	0.00%
3	RR Quantity (Rakes received at Plant)	MT	-	-	6715444.72	6715444.72
4	Transit Loss RR to Plant	%	0.19%	0.19%	0.19%	0.19%
5	Net Coal Received	MT	-	-	6702682.25	6702682.25
6	Rate Charged by Coal Company	Rs./MT	1269.79	1269.79	1761.69	1761.69
7	Amount Charged by Coal Company	Rs. Cr.	-	-	1183.05	1183.05
8	Stock transfer from plant	MT	-	-	0.00	0.00
9	Amount charged against stock transfer	Rs. Cr.	-	-	0.00	0.00
10	Total amount Charged	Rs Cr	-	-	1183.05	1183.05
11	Road transportation Charge	Rs Cr	-	-	0.00	0.00
12	Transportation charges (LDCC)	Rs Cr	-	-	60.59	60.59
13	Total Transportation Charges	Rs Cr	•	ı	60.59	60.59
14	Transportation Charge	Rs./MT	-	-	90.39	90.39
15	Coal Sampling Charges	Rs Cr	-	-	3.49	3.49
16	Other Charges	Rs Cr	-	-	0.00	0.00
17	Total amount Charged for coal	Rs. Cr.	-	-	1247.13	1247.13
18	Rate of Coal per MT at actual Transit Loss	Rs./MT	-	-	1860.64	1860.64
19	Total Actual Transit Loss	MT	0.29%	0.39%	0.19%	0.19%
20	Total Normative Transit loss	%	1.00%	1.00%	0.20%	0.20%
21	Rate of Coal at Normative Transit Loss	Rs./MT	-	-	1860.83	1860.83



## FORM – 15A –DETAILS/INFORMATION OF SECONDARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: **Hasdeo Thermal Power station (HTPS)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

#### The below mentioned details are for HTPS+KWTPP

## **Secondary Fuel (HFO + HSD)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	5634.099
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	35,52,27,841
3	Rate of Secondary Fuel per KL	Rs./KL	63,049.63

#### **Secondary Fuel (HFO)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	4196.174
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	22,29,28,950
3	Rate of Secondary Fuel per kL	Rs./KL	53,127

## Secondary Fuel (HSD)

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	1437.925
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	13,22,98,891
3	Rate of Secondary Fuel per kL	Rs./KL	92,007



## FORM - 15B -CALCULATION OF FUEL COST & ENERGY CHARGES

Name of Power Station: Hasdeo Thermal Power station (HTPS)

		FY 2	021-22
Particulars	Units	Normative Operational Parameters	Actual Operational Parameters
Capacity	MW	840	840
Plant Load Factor	%	78.69%	68.45%
Gross Generation	MU	5,790.32	5044.96
Auxiliary Consumption	%	9.70%	10.04%
Auxiliary Consumption	MU	561.66	506.60
Net Generation	MU	5228.66	4538.36
Station Heat Rate	kcal/kWh	2650.00	2725.59
Sp. Oil Consumption	ml/kWh	0.90	0.87
GCV of Coal	kcal/kg	3446.03	3446.03
Calorific Value of Oil	kcal/l	10000.00	10000.00
Overall Heat	G Cal	15344361.14	13750493.31
Heat from Oil	G Cal	52112.92	43734.10
Heat from Coal	G Cal	15292248.22	13706759.21
Oil Consumption	kL	5211.29	4373.41
Coal Consumption	MT	4437643.61	3977552.00
Specific Coal Consumption	kg/kWh	0.77	0.79
Price of Coal	Rs./MT	1860.83	1860.64
Price of Oil (Average)	Rs./kL	63049.63	63049.63
Price of Oil (for WC)	Rs./kL	53126.72	0.00
Coal Cost	Rs. Crore	825.77	740.08
Oil Cost	Rs. Crore	32.86	27.57
Total Fuel Cost	Rs. Crore	858.63	767.65
Oil Cost (for WC)	Rs. Crore	27.69	0.00
Coal Cost/Net Generation	Rs./kWh	1.58	1.63
Oil Cost/Net Generation	Rs./kWh	0.063	0.061



## 1x500 MW Korba West TPP (KWTPP)

## FORM - 1 - ANNUAL REVENUE REQUIREMENT

Name of Power Station: 1x500 MW Korba West TPP (KWTPP)

Name of the Company: Chhattisgarh State Power Generation Company Limited

Double of the second		21-22
Particulars	Tariff Order	Actual
Depreciation	233.99	222.49
Interest & Finance Charges	170.52	161.28
Return on Equity	97.92	97.16
O&M Expense	108.74	115.21
Interest on Working Capital	16.94	18.11
Less: Non-Tariff Income	3.03	5.82
<b>Total Annual Capacity Charge</b>	625.12	608.43
Cost of Coal	438.47	511.17
Cost of Oil	9.29	6.58
Total Energy Charges	447.92	517.75
Contribution to Gratuity/Pension Fund	23.21	23.21
Ash Utilization Expenses	0.00	4.51
Aggregate Revenue Requirement	1,096.25	1,153.90



## **FORM - 1A - RETURN ON EQUITY**

Name of Power Station: **1x500 MW Korba West TPP (KWTPP)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

	FY 2	021-22
Particulars	Tariff Order	Actual
Equity in Opening GFA		619.33
GFA Addition in Project Cost during the Year		79.25
Other Addition, approved in CIP		4.94
Equity % on additional capitalization in Project Cost	-	17.14%
Equity % on additional capitalization on other additions		30.00%
Equity portion of addition during the year		15.07
Equity in Closing GFA		634.40
Average Permissible Equity during the year		626.86
Rate of Return on Equity		15.50%
Return on Equity	97.92	97.16

#### Note -

For KWTPP, as per previous orders, the permissible equity in additional capitalization in project cost was limited to 17.14%, During the year actual equity was higher, however, in the instant petition, for regulatory purpose, the D:E ratio has been considered in compliance of the principle followed in previous order.



#### FORM - 3 - PARAMETERS CONSIDERED FOR TARIFF COMPUTATIONS

Name of Power Station: **1x500 MW Korba West TPP (KWTPP)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

## FY 2021-22

			KWTPP	
Sr. No.	Particulars	Unit	Approved	Actual
1	Effective Rated Capacity	MW	500	500
2	Base Rate of Return on Equity	%	15.50%	15.50%
3	Applicable Tax Rate	%	0.00%	0.00%
4	Rate of Return on Equity	%	15.50%	15.50%
5	PAF	%	85.00%	84.93%
6	Gross Generation	MU	3723.00	3734.10
7	Auxiliary consumption	%	5.25%	5.37%
8	Auxiliary consumption	MU	195.46	200.63
9	Net Generation	MU	3527.54	3533.47
10	Schedule energy	MU	-	3498.01
11	Gross Station Heat Rate	kCal/kWh	2375.00	2521.62
12	Specific Fuel Oil Consumption	ml/kWh	0.50	0.28
13	Transit and stacking losses	in %	0.20%	0.19%
14	Cost of Coal/Lignite for working capital	in Months	1.00	1.00
15	Cost of Main Secondary Fuel Oil for WC	in Months	2.00	2.00
16	O & M expenses for WC	in Months	1	1
17	Maintenance Spares for WC of R&M Cost	% of O&M	40.00%	40.00%
18	Receivable for WC	in Months	1.00	1.00
19	Base Rate of SBI as on 01.04.2021	%	7.40%	7.40%
20	Interest rate for Working Capital	%	10.90%	10.90%



## FORM - 9 - DETAILS OF ADDITIONAL CAPITALIZATION DURING THE YEAR

Name of Power Station: 1x500 MW Korba West TPP (KWTPP)

Name of the Company: Chhattisgarh State Power Generation Company Limited

FY 2021-22

Sr. No.	Description of Work	Asset (Rs. In CR.)	CIP / Business plan order approval
I.	Total Capitalization at plant	84.19	
II.	Scheme wise capitalization against CIP		
1	Raising height of Pond No. 1A RL 310 to 313 of ash dyke	0.70	Order Dt.31.07.21 (petition no. 63/2020) Pg no. 5
2	Raising height of Pond No. 2 RL 310 to 313 of ash dyke	0.88	Order Dt.31.07.21 (petition no. 63/2020) Pg no. 5
3	Raising height of 1B RL310m to 313m	0.37	Order Dt.02.05.20 page no. 11 of 12 (Read with order dt. 16.03.16)
4	Raising the height of starter dyke & ash dyke including constr. Of WBM road	0.20	Order Dt.02.05.20 page no. 7 of 12
5	2nd stage Raising of Dindolbhata RL 313M	1.80	Order Dt.31.07.21 (petition no. 10/2021) Pg no. 8
6	1st stage raising of Lagoon-II from RL 308 to 313 M	1.00	Order Dt.31.07.21 (petition no. 63/2021) Pg no. 5
	Sub total schemes	4.94	
7	Capitalization against project cost	79.25	
	Sub Total Qualified Asset of the Plant	84.19	
III.	Total capitalization in CAU & HO	0.66	
1	Share of KWTPP in CAU (non qualified)	0.12	
2	Qualified capitalization of KWTPP share	0.00	
IV	Total capitalisation	84.31	
٧	Total qualified asset considered	84.19	
VI	Total non qualified asset	0.12	



## FORM - 11 -CALCULATION OF DEPRECIATION RATE

Name of Power Station: 1x500 MW Korba West TPP (KWTPP)

a v	v. 60 4 .	Deprec	Gross Block as	Gross Block as	Depreciation
S. N.	Name of the Assets	iation Rate	on	on	FY 21-22
1	Land & Freehold	0.00%	<b>31.03.22</b> 0.00	31.03.21 0.00	0.00
2	Land – Leasehold	3.34%	0.62	0.62	0.02
3	BldgThermo Electric Gener. Plant	3.34%	80.40	80.38	2.68
4	Bldg. Hydro Electric Gener. Plant	3.34%	0.02	0.01	0.00
5	Bldg Diesel Electric Generat. Plant	3.34%	0.02	0.98	0.03
6	Bldg Transmission installation	3.34%	0.00	0.00	0.00
7	BldgDistribution installations	3.34%	0.00	0.00	0.00
8	Office Building	3.34%	138.32	88.03	3.78
9	Building - Others	3.34%	13.16	13.16	0.44
10	BldgResidential, Hospital& G.House	3.34%	21.37	21.37	0.71
11	Plant & Machinery- Gas Power Plant	3.34%	0.00	0.00	0.00
12	Roads on Municipal Land	3.34%	0.00	0.00	0.00
13	Kuccha & pukka Roads	3.34%	29.38	29.38	0.00
14	Well, Boundary wall And Canal	3.34%	0.98	0.02	0.98
15	Railway Sidings	5.28%	0.98	0.02	0.02
16	Furniture & Fittings	6.33%	0.00	0.00	0.00
17	Hydel Works	5.28%	520.60	520.06	27.47
18	Instrumentation And Controls	5.28%	118.28	117.25	6.22
19	Boiler Plant & Equipment	5.28%	2434.21	2406.27	127.79
20	Locomotives And Wagons				
21	Trans. Plant-Xmers 100kVA & above	9.50%	0.00	0.00	0.00
22	SS Transf.& Kiosks 100 kV & Above	5.28% 5.28%	218.47	217.64	0.00 11.51
23	Material Handling Equipment				
24	Switchgears Including Cable Connections	5.28% 5.28%	0.00 57.24	0.00 55.15	0.00 2.97
25	Comm. Equip-Radio & High Freq. Carrier				
26	Air-Conditioning Plant	6.33%	0.00	0.00 10.41	0.00 0.55
27	Static Machine Tools & Equipment	5.28% 5.28%	10.54 0.00	0.00	0.00
28	Meter Testing Lab. Tools & Equip	5.28%	39.35	39.35	2.08
29	Overhead Lines On Steel Support At Voltage > 66 kV	3.34%	2.77	2.77	0.09
30	Underground Cables Including Jt. Boxes & Disconnect. Box	5.28%	0.65	0.65	0.03
31	Internal Wiring Incl Fittings& fixtures	6.33%	0.25	0.25	0.02
32	Furniture And Fixtures	6.33%	0.51	0.49	0.03
33	Office Equipment	6.33%	0.20	0.19	0.01
34	Computers Hardware and Software	15%	0.39	0.38	0.06
35	Vehicles	9.50%	0.00	0.00	0.00
	Total		3688.71	3604.84	187.51
	Average Rate				5.14%



## **FORM - 12 - DEPRECIATION**

Name of Power Station: **1x500 MW Korba West TPP (KWTPP)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

Particulars	FY 2021-22		
Particulars	Tariff Order	Actual	
Opening GFA	-	3,611.80	
Additional Capitalisation		84.19	
Closing GFA		3,695.99	
Average GFA		3,653.90	
Average Rate of Depreciation		6.09%	
Depreciation	233.99	222.49	

For the Depreciation the last proviso of the Regulations states - "Provided that in those cases where the capital investment plan has been approved by the Commission and the depreciation rates as provided in these Regulations are insufficient for the repayment of loan, the rate of depreciation shall be decided by the Commission at the time of issuance of tariff order, subject to prudence check."

Accordingly Depreciation Rate is computed as under

A. Depreciation Rate as per Schedule	5.14%
Estimated Dep. for FY 21-22 at above rate	187.87
B. On repayment Obligation Basis	
Repayment for the year	222.49
Depreciation rate required for meeting repayment obligation	6.09%

The Depreciation Rate allowed in the Tariff order was 6.35%, however, for meeting out the actual repayment obligation 6.09% rate is sufficient hence in the instant true up petition the lower rate has been considered.



# FORM – 13 –CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON ACTUAL LOANS

Name of Power Station: **1x500 MW Korba West TPP (KWTPP)** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

	KWTPP Loan Details	FY 2021-22		
Sr. No.	Particulars	Order	Rate (%)	Outstanding Balance
1	KWTPP		10.15%	1724.09
2	Weighted Avg. Interest	9.90%		10.15%

## FORM - 13A -INTEREST ON LOAN CAPITAL In Rs. Crores

	FY 2	2021-22
Particulars	Tariff Order	Actual
Total Opening Net Normative Loan		1629.59
Repayment during the period		222.49
Additional Capitalisation in Project Cost		79.25
Other Additional Capitalisation (Approved in CIP)		4.94
Debt % in Project Cost		82.86%
Debt % in Other Capitalisation (Approved in CIP)		70.00%
Increase/Decrease due to ACE during the Year		69.13
Total Closing Net Normative Loan	-	1476.22
Average Loan during the year		1552.91
Weighted Average Interest Rate		10.15%
Interest Expense for the Period		157.62
Savings on interest rate due to refinancing		0.70%
Share of savings due to interest rate		3.62
Finance and Other Charges		0.04
Total Interest Expenses	170.52	161.28

#### FORM - 13B -INTEREST ON WORKING CAPITAL In Rs. Crores

Particulars	FY 2021-22		
Particulars	Tariff Order	Actual	
Cost of Coal (1 month for pit head)		39.97	
Cost of Oil (2 months)		1.65	
0&M Expenses (1 months)		9.47	
Maintenance spares (40% of R&M)	_	18.17	
Receivables (1 month)		96.85	
Total Working Capital Requirement		166.10	
Rate of interest for working capital (as on 1st April)		10.90%	
Interest on Working Capital	16.94	18.11	



# FORM - 15 -DETAILS/INFORMATION OF PRIMARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: 1x500 MW Korba West TPP (KWTPP)

Name of the Company: Chhattisgarh State Power Generation Company Limited

## **Primary Fuel (Coal)**

#### The below mentioned details are for HTPS+KWTPP

S. N.	Particulars	Units	ROBERTSON	KTPS	SECL	TOTAL
1	Coal supplied for Rail Loading	MT	-	1	6715444.72	6715444.72
2	Transit Loss From Mine to Rly Siding	%	0.10%	0.20%	0.00%	0.00%
3	RR Quantity (Rakes received at Plant)	MT	-	-	6715444.72	6715444.72
4	Transit Loss RR to Plant	%	0.19%	0.19%	0.19%	0.19%
5	Net Coal Received	MT	-	-	6702682.25	6702682.25
6	Rate Charged by Coal Company	Rs./MT	1269.79	1269.79	1761.69	1761.69
7	Amount Charged by Coal Company	Rs. Cr.	-	-	1183.05	1183.05
8	Stock transfer from plant	MT	-	-	0.00	0.00
9	Amount charged against stock transfer	Rs. Cr.	-	1	0.00	0.00
10	Total amount Charged	Rs Cr	-	-	1183.05	1183.05
11	Road transportation Charge	Rs Cr	-	-	0.00	0.00
12	Rail Transportation charges	Rs Cr	-	-	60.59	60.59
13	Total Transportation Charges	Rs Cr	-	1	60.59	60.59
14	Transportation Charge	Rs./MT	-	-	90.39	90.39
15	Coal Sampling Charges	Rs Cr	-	ı	3.49	3.49
16	Other Charges	Rs Cr	-	-	0.00	0.00
17	Total amount Charged for coal	Rs. Cr.	-	1	1247.13	1247.13
18	Rate of Coal per MT at actual Transit Loss	Rs./MT	-	-	1860.64	1860.64
19	Total Actual Transit Loss	MT	0.29%	0.39%	0.19%	0.19%
20	Total Normative Transit loss	%	1.00%	1.00%	0.20%	0.20%
21	Rate of Coal at Normative Transit Loss	Rs./MT	-	-	1860.83	1860.83



# FORM – 15A –DETAILS/INFORMATION OF SECONDARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: 1x500 MW Korba West TPP (KWTPP)

Name of the Company: Chhattisgarh State Power Generation Company Limited

#### The below mentioned details are for HTPS+KWTPP

## Secondary Fuel (HFO + HSD)

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	5634.099
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	35,52,27,841
3	Rate of Secondary Fuel per KL	Rs./KL	63,049.63

## Secondary Fuel (HFO)

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	4196.174
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	22,29,28,950
3	Rate of Secondary Fuel per kL	Rs./KL	53,127

#### **Secondary Fuel (HSD)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	1437.925
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	13,22,98,891
3	Rate of Secondary Fuel per kL	Rs./KL	92,007



## FORM - 15B -CALCULATION OF FUEL COST & ENERGY CHARGES

Name of Power Station: 1x500 MW Korba West TPP (KWTPP)

		FY 20	21-22
Particulars	Units	Normative Operational Parameters	Actual Operational Parameters
Capacity	MW	500	500
Plant Load Factor	%	85.00%	84.93%
Gross Generation	MU	3,723.00	3734.103
Auxiliary Consumption	%	5.25%	5.37%
Auxiliary Consumption	MU	195.46	200.63
Net Generation	MU	3527.54	3533.47
Station Heat Rate	kcal/kWh	2375.00	2521.62
Sp. Oil Consumption	ml/kWh	0.50	0.28
GCV of Coal	kcal/kg	3423.61	3423.61
Calorific Value of Oil	kcal/l	10000.00	10000.00
Overall Heat	G Cal	8842125.00	9416002.99
Heat from Oil	G Cal	18615.00	10433.70
Heat from Coal	G Cal	8823510.00	9405569.29
Oil Consumption	kL	1861.50	1043.37
Coal Consumption	MT	2577250.84	2747264.00
Specific Coal Consumption	kg/kWh	0.69	0.74
Price of Coal	Rs./MT	1860.83	1860.64
Price of Oil (Average)	Rs./kL	63049.63	63049.63
Price of Oil (for WC)	Rs./kL	53126.72	0.00
Coal Cost	Rs. Crore	479.58	511.17
Oil Cost	Rs. Crore	11.74	6.58
Total Fuel Cost	Rs. Crore	491.32	517.75
Oil Cost(for WC)	Rs. Crore	9.89	0.00
Coal Cost/Net Generation	Rs./kWh	1.36	1.45
Oil Cost/Net Generation	Rs./kWh	0.033	0.019



## Atal Bihari Vajpai TPS

FORM - 1 - ANNUAL REVENUE REQUIREMENT

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

Particulars	FY 20:		
raruculars	Approved	Actual	
Depreciation	532.78	521.53	
Interest & Finance Charges	571.84	545.28	
Return on Equity	170.07	169.41	
O&M Expense	217.47	252.12	
Interest on Working Capital	40.45	37.76	
Less: Non-Tariff Income	6.38	12.32	
Total Annual Capacity Charge	1,526.18	1,513.78	
Cost of Coal	872.06	811.59	
Cost of Oil	16.60	16.08	
Total Energy Charges	888.67	827.66	
Contribution to Gratuity/Pension Fund	63.46	63.46	
Ash Transportation Expenses	0.00	19.14	
Aggregate Revenue Requirement	2,478.31	2,424.04	



## FORM - 1A - RETURN ON EQUITY

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

	FY 2021-22	
Particulars	Tariff Order	Actual
Equity in Opening GFA		1091.72
GFA Addition in Project Cost		12.02
Other Additions (Approved in CIP)		3.54
Equity % in Project Cost		12.44%
Equity % in Additional Capitalization approved in CIP	-	30.00%
Equity portion of addition during the year		2.56
Equity in Closing GFA		1094.28
Average Permissible Equity during the year		1093.00
Rate of Return on Equity		15.50%
Return on Equity	170.07	169.41

Note: For ABV TPS, as per the order dated  $07^{th}$  July 2018, the maximum permissible equity in additional capitalization in project cost was limited to 12.44%, hence ROE claim in project cost is limited to the same only.



#### FORM - 3 - PARAMETERS CONSIDERED FOR TARIFF COMPUTATIONS

Name of Power Station: ABVTPS

Sr. No.	Particulars	Unit	Approved	Actual
1	Effective Rated Capacity	MW	1000	1000
2	Base Rate of Return on Equity	%	15.50%	15.50%
3	Applicable Tax Rate	%	0.00%	0.00%
4	Rate of Return on Equity	%	15.50%	15.50%
5	PAF	%	76.50%	54.67%
6	Gross Generation	MU	6701.40	4828.05
7	Auxiliary consumption	%	5.25%	6.12%
8	Auxiliary consumption	MU	351.82	295.50
9	Net Generation	MU	6349.58	4532.54
10	Schedule energy	MU	-	4482.13
11	Gross Station Heat Rate	kCal/kWh	2378.42	2572.42
12	Specific Fuel Oil Consumption	ml/kWh	0.50	0.50
13	Transit and stacking losses	in %	0.98%	0.91%
14	Cost of Coal/Lignite for working capital	in Months	1.50	1.50
15	Cost of Main Secondary Fuel Oil for WC	in Months	2.00	2.00
16	O & M expenses for WC	in Months	1	1
17	Maintenance Spares for WC of R&M Cost	% of O&M	40.00%	40.00%
18	Receivable for WC	in Months	1.00	1.00
19	Base Rate of SBI as on 01.04.2019	%	7.40%	7.40%
20	Interest rate for Working Capital	%	10.90%	10.90%



## FORM - 9 - DETAILS OF ADDITIONAL CAPITALIZATION DURING THE YEAR

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

FY 2021-22

Sr. No.	Description of Work	Asset (Rs. In CR.)	CIP / Business plan order approval
I.	Total Capitalization at plant	15.56	
II.	Scheme wise capitalization against CIP		
1	Construction of ash dyke at ABVTPS	3.54	Order Dt.31.07.21 (petition no. 63/2021) Pg. no. 5
	Sub total schemes	3.54	
2	Capitalization against project cost	12.02	
	Sub Total Qualified Asset of the Plant	15.56	
III.	Total capitalization in CAU & HO	0.66	
1	Share of ABVTPS in CAU (non qualified)	0.23	
2	Share of ABVTPS in CAU ( qualified)	0.00	
IV	Total capitalisation	15.79	
V	Total qualified asset considered	15.56	
VI	Total non qualified asset	0.23	
	<b>Total Asset Qualified for Capitalisation</b>	15.56	



## FORM - 11 - CALCULATION OF DEPRECIATION RATE

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

Name of the Assets	Depreciation	Gross	Gross	Depreciation
	Rate	Block as on	Block as on	FY 21-22
		31.03.2022	31.03.2021	
Land & Freehold	0.00%	109.83	107.92	0.00
Land - Leasehold	3.34%	14.74	14.74	0.49
BldgThermo Electric Generating Plant	3.34%	336.16	334.17	11.19
Bldg. Hydro Electric Generating Plant	3.34%	0.00	0.00	0.00
Building - Diesel Electric Generating Plant	3.34%	0.07	0.07	0.00
Bldg Transmission installation	3.34%	0.00	0.00	0.00
BldgDistribution installations	3.34%	0.30	0.30	0.01
Office Building	3.34%	72.36	72.23	2.41
Building - Others	3.34%	1.96	1.88	0.06
Building - Residential, Hospitals & Guest House.	3.34%	130.33	130.08	4.35
Plant & Machinery - Gas Power Plant	3.34%	0.00	0.00	0.00
Roads on Municipal Land	3.34%	0.00	0.00	0.00
Kuchcha & Pucca Roads	3.34%	23.37	23.31	0.78
Well, Boundary wall And Canal	3.34%	17.21	17.21	0.57
Railway Sidings	5.28%	257.87	257.57	13.61
Furniture & Fittings	6.33%	0.00	0.00	0.00
Hydel Works	5.28%	639.49	639.49	33.76
Instrumentation And Controls	5.28%	325.70	325.22	17.18
Boiler Plant & Equipments	5.28%	5834.40	5824.85	307.80
Locomotives And Wagons	9.50%	0.00	0.00	0.00
Transmission Plant-Xmers 100 KVa & above	5.28%	0.49	0.49	0.03
SS Transformer & Kiosks 100 Kv & Above	5.28%	585.29	585.29	30.90
Material Handling Equipment	5.28%	395.80	395.80	20.90
Switchgears Including Cable Connections	5.28%	93.42	93.42	4.93
Comm. Equip-Radio & High Freq.Carrier	6.33%	9.43	9.43	0.60
Air-Conditioning Plant	5.28%	55.42	55.42	2.93
Static Machine Tools & Equipments	5.28%	0.29	0.29	0.02
	5.28%	98.47	98.18	5.19
Meter Testing Laboratory Tools & Equip	3.20%	90.47	90.10	3.19
Overhead Lines on Steel Support At Voltage > 66 Kv	3.34%	2.56	2.56	0.09
Underground Cables Inclu.Jt. Boxes & Disconnect. Box	5.28%	29.64	29.39	1.56
Internal Wiring Including Fittings &	6.33%	0.18	0.18	0.01
Fixtures			2.52	
Furniture And Fixtures	6.33%	2.70	2.53	0.17
Office Equipments	6.33%	1.14	1.12	0.07
Computers Hardware and Software	15%	1.74	1.67	0.26
Vehicles	9.50%	20.13	20.13	1.91
Total		9060.49	9044.93	461.79
Average Rate				5.10%



#### **FORM - 12 - DEPRECIATION**

Name of Power Station: **ABVTPS** 

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

Douticulous	FY 20	21-22
Particulars	Approved	Actual
Opening GFA		8,771.85
Additional Capitalisation		15.56
Closing GFA	-	8,787.41
Average GFA		8,779.63
Weighted Average rate of Depreciation		5.94%
Depreciation	532.78	521.53
Accumulated Depreciation up to 2021-22		2,230.60

For the Depreciation the last proviso of the Regulations states - "Provided that in those cases where the capital investment plan has been approved by the Commission and the depreciation rates as provided in these Regulations are insufficient for the repayment of loan, the rate of depreciation shall be decided by the Commission at the time of issuance of tariff order, subject to prudence check."

Accordingly Depreciation Rate is computed as under

A. Depreciation Rate as per Schedule	5.10%
Estimated Dep. for FY 21-22 at above rate	447.86
B. On repayment Obligation Basis	
Repayment for the year	521.53
Depreciation rate required for meeting repayment	5.94%
obligation	

The Depreciation Rate allowed in the Tariff order was 6.04%, however, for meeting out the actual repayment obligation 5.94% rate is sufficient hence in the instant true up petition, the lower rate has been considered.



# FORM – 13 –CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON ACTUAL LOANS

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

	ABVTPS Loan Details		FY 2021-22	2
Sr. No.	Particulars	Tariff Order	Rate (%)	Outstanding Balance
1	PFC		10.15%	5474.81
2	Weighted Avg. Interest	9.90%		10.15%

#### FORM - 13A -INTEREST ON LOAN CAPITAL

In Rs. Crores

III NS. CI UI CS		
	FY 2	021-22
Particulars	Tariff Order	Actual
Total Opening Net Normative Loan		5504.60
Repayment during the period		521.53
Additional Capitalisation in Project Cost		12.02
Other Additional Capitalisation (Approved in CIP)		3.54
Debt % in Project Cost		88%
Debt % in Other Capitalisation (CIP)		70%
Increase/Decrease due to ACE during the Year		13.00
Total Closing Net Normative Loan	_	4996.08
Average Loan during the year		5250.34
Weighted Average Interest Rate		10.15%
Interest Expense for the Period		532.94
Savings on interest rate due to refinancing		0.70%
Share of savings due to interest rate		12.24
Finance and Other Charges		0.09
Total Interest Expenses	571.84	545.28

## FORM - 13B -INTEREST ON WORKING CAPITAL

Particulars	FY 2021-22		
Particulars	Approved	Actual	
Cost of Coal (1.5 month for non-pit head)		130.26	
Cost of Oil (2 months)		2.98	
O&M Expenses (1 months)		18.93	
Maintenance spares (40% of R&M)	-	36.35	
Receivables (1 month)		157.92	
Total Working Capital Requirement		346.43	
Rate of interest for working capital (as on 1st April)		10.90%	
Interest on Working Capital	40.45	37.76	



# FORM - 15 -DETAILS/INFORMATION OF PRIMARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

## Primary Fuel (Coal)

S. N.	Particulars	Units	ROBERTSON	GHARGHODA	SECL	TOTAL
1	Coal supplied for Rail Loading	MT	2126019.25	1086812.03	402657.16	3615488.45
2	Transit Loss from Mine to Rly Siding	%	0.10%	0.20%	0.00%	0.12%
3	RR Quantity (Rakes recd. at Plant)	МТ	2123862.13	1084616.14	402657.16	3611135.43
4	Transit Loss RR to Plant	%	0.79%	0.79%	0.79%	0.79%
5	Net Coal Received	MT	2106991.01	1076000.38	399458.61	3582450.00
6	Rate Charged by Coal Company	Rs./MT	1269.79	1269.79	1230.57	1265.43
7	Amount Charged by Coal Company	Rs. Cr.	269.96	138.00	49.55	457.51
8	Stock transfer from plant	MT	0.00	0.00	0.00	0.00
9	Amount charged against stock transfer	Rs. Cr.	0.00	0.00	0.00	0.00
10	Total amount Charged	Rs Cr	269.96	138.00	49.55	457.51
11	Road transportation Charge	Rs Cr	176.25	59.53	0.00	235.78
12	Rail Transportation charges	Rs Cr	53.25	47.48	14.72	115.45
13	Total Transportation Charges	Rs Cr	229.50	107.01	14.72	351.23
14	Transportation Charge	Rs./MT	1089.23	994.52	368.53	980.42
15	Coal Sampling Charges	Rs Cr	2.21	1.13	0.21	3.54
16	Other Charges	Rs Cr	0.96	0.49	0.18	1.63
17	Total amount Charged for coal	Rs. Cr.	502.63	246.63	64.66	813.92
18	Rate of Coal per MT at actual Transit Loss	Rs./MT	2385.52	2292.10	1618.75	2271.96
19	Total Actual Transit Loss	MT	0.90%	0.99%	0.79%	0.91%
20	Total Normative Transit loss	%	1.00%	1.00%	0.80%	0.98%
21	Rate of Coal at Normative Transit Loss	Rs./MT	2388.01	2292.18	1618.85	2273.40



# FORM – 15A –DETAILS/INFORMATION OF SECONDARY FUEL FOR COMPUTATION OF ENERGY CHARGES

Name of Power Station: ABVTPS

Name of the Company: Chhattisgarh State Power Generation Company Limited

## **Secondary Fuel (HFO + HSD)**

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	3599.17
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	238653781.13
3	Rate of Secondary Fuel per KL	Rs./KL	66308.06

## Secondary Fuel (HFO)

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	2411.40
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	128571293.34
3	Rate of Secondary Fuel per kL	Rs./KL	53318.11

## Secondary Fuel (HSD)

S. N.	Particulars	Unit	FY 2021-22
1	Quantity of Secondary Fuel Received	KL	1187.77
2	Total amount charged by the Secondary Fuel Company including Transportation	(Rs.)	110082487.79
3	Rate of Secondary Fuel per kL	Rs./KL	92680.20



## FORM - 15B -CALCULATION OF FUEL COST & ENERGY CHARGES

Name of Power Station: ABVTPS

		FY 2021-22			
Particulars	Units	Normative Operational Parameters	Actual Operational Parameters		
Capacity	MW	1000	1000		
Plant Load Factor	%	76.50%	54.67%		
Gross Generation	MU	6,701.40	4828.045		
Auxiliary Consumption	%	5.25%	6.12%		
Auxiliary Consumption	MU	351.82	295.50		
Net Generation	MU	6349.58	4532.54		
Station Heat Rate	kcal/kWh	2378.42	2572.42		
Sp. Oil Consumption	ml/kWh	0.50	0.50		
GCV of Coal	kcal/kg	3470.00	3470.00		
Calorific Value of Oil	kcal/l	10000.00	10000.00		
Overall Heat	G Cal	15938743.79	12419739.10		
Heat from Oil	G Cal	33507.00	24243.80		
Heat from Coal	G Cal	15905236.79	12395495.30		
Oil Consumption	kL	3350.70	2424.38		
Coal Consumption	MT	4583635.38	3572183.90		
Specific Coal Consumption	kg/kWh	0.68	0.74		
Price of Coal	Rs./MT	2273.40	2271.96		
Price of Oil (Average)	Rs./kL	66308.06	66308.06		
Price of Oil (for WC)	Rs./kL	53318.11	0.00		
Coal Cost	Rs. Crore	1042.04	811.59		
Oil Cost	Rs. Crore	22.22	16.08		
Total Fuel Cost	Rs. Crore	1064.26	827.66		
Oil Cost(for WC)	Rs. Crore	17.87	-		
Coal Cost/Net Generation	Rs./kWh	1.64	1.79		
Oil Cost/Net Generation	Rs./kWh	0.035	0.035		



## **HASDEO BANGO HPS**

## FORM - 1 - ANNUAL REVENUE REQUIREMENT

Name of Power Station: Hasdeo Bango

Name of the Company: Chhattisgarh State Power Generation Company Limited

	FY 202	21-22
Particulars	Tariff Order	Actual
Depreciation	2.96	2.77
Interest & Finance Charges	0.00	0.00
Return on Equity	5.92	5.91
O&M Expense	15.62	8.07
Impact of Wage Revision	0.00	-
Interest on Working Capital	0.50	1.02
Less: Non-Tariff Income	0.03	0.02
Total Annual Capacity Charge	24.94	17.75
Contribution to Gratuity/Pension Fund	3.31	3.30
Aggregate Revenue Requirement	28.24	21.05



## FORM - 1A - RETURN ON EQUITY

Name of Power Station: Hasdeo Bango

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores

III NS. CI OI CS		
	FY 20	21-22
Particulars	Tariff Order	Actual
Equity in Opening GFA		38.11
GFA Addition during the Year		0.00
Equity %		30%
Equity portion of addition during the year	-	-
Equity in Closing GFA		38.11
Average Permissible Equity during the year		38.11
Rate of Return on Equity		15.50%
Return on Equity	5.92	5.91

#### FORM - 3 - PARAMETERS CONSIDERED FOR TARIFF COMPUTATIONS

Name of Power Station: Hasdeo Bango

Sr. No.	Particulars	Unit	Approved	Actual
1	Effective Rated Capacity	MW	120	120
2	Base Rate of Return on Equity	%	15.50%	15.50%
3	Applicable Tax Rate	%	0.00%	0.00%
4	Rate of Return on Equity	%	15.50%	15.50%
6	Gross Generation	MU	274.00	404.123
7	Auxiliary consumption	%	1.00%	0.19%
8	Auxiliary consumption	MU	2.74	0.78
9	Net Generation	MU	271.26	403.35
16	O & M expenses for WC	in Months	1	1
17	Maintenance Spares for WC of R&M Cost	% of O&M	40.00%	40.00%
18	Receivable for WC	in Months	1.00	1.00
19	Base Rate of SBI as on 01.04.2021	%	7.40%	7.40%
20	Interest rate for Working Capital	%	10.90%	10.90%



#### FORM - 9 - DETAILS OF ADDITIONAL CAPITALIZATION DURING THE YEAR

Name of Power Station: Hasdeo Bango

Name of the Company: Chhattisgarh State Power Generation Company Limited

#### FY 2021-22

S. No.	Description of Work	Asset (Rs. CR.)
1	Total Asset Qualified for Capitalisation	0.00
2	Assets not qualified for addl. capitalization	0.01

#### **FORM - 12 - DEPRECIATION**

Name of Power Station: Hasdeo Bango

Name of the Company: Chhattisgarh State Power Generation Company Limited

	FY 202	21-22
Particulars	Tariff Order	Actual
Opening GFA		111.22
Additional Capitalisation		0
Closing GFA		111.22
Accumulated Depreciation upto last year		72.38
90% of Gross Block Excl. Land		100.10
Amount Left to be Depreciated		27.71
Remaining Life		10.00
Depreciation	2.96	2.77
Accumulated depreciation		77.64



# FORM – 13 –CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON ACTUAL LOANS

Name of Power Station: Hasdeo Bango

Name of the Company: Chhattisgarh State Power Generation Company Limited

In Rs. Crores Calculation of Weighted Average Interest Rate CSPGCL as a whole (Applicable for HBHPS)

S.	CSPGCL Loan Details	FY 2021-22			
No.	Particulars	Tariff Order	Rate (%)	Outstanding Balance	
1	HTPS		11.43%	7.22	
2	DSPM		0.00%	0.00	
3	KWTPP		10.15%	1724.09	
4	ABVTPS		10.15%	5474.81	
	Weighted Average	9.92%		10.15%	

#### FORM - 13A -INTEREST ON LOAN CAPITAL

Particulars	FY 20	21-22
Particulars	Tariff Order	Actual
Total Opening Net Normative Loan		0
Repayment during the period		0.00
Additional Capitalisation		-
Debt %		70%
Increase/Decrease due to ACE during		
the Year	-	-
Total Closing Net Normative Loan		0
Average Loan during the year		0
Weighted Average Interest Rate		10.15%
Interest Expense for the Period		0
Finance and Other Charges		0
Total Interest Expenses	0	0

#### FORM - 13B -INTEREST ON WORKING CAPITAL

Particulars	FY 202	21-22
Particulars	Tariff Order	Actual
Cost of Coal (1 month for pit head, 1.5		
month for non-pit head)		N/A
Cost of Oil (2 months)		
0&M Expenses (1 months)		1.34
Maintenance spares (40% of R&M)	-	1.02
Receivables (1 month)		7.00
Total Working Capital Requirement		9.36
Rate of interest for working capital		10.90%
(as on 1st April)		10.90%
Interest on Working Capital	0.50	1.02



## **Combined Formats**

#### **FORM - 17 - NON-TARIFF INCOME**

Name of the Company: Chhattisgarh State Power Generation Company Limited FY 2021-22

In Rs. Crores

Particulars	HTPS	DSPM	KWTPP	ABV TPS	H Bango	CAU	но
MW->	840	500	500	1,000			
Interest on FDR	0.01	0.00	0.00	0.00	0.00	0.01	2.74
Int On Adv To Contractors/Suppliers	0.00	0.00	0.00	0.00	0.00	2.36	4.19
Interest on Staff Loans & Advances	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Net Income from Sale of Scrap	0.06	0.01	0.00	0.01	0.00	16.16	0.00
Lease Rent Received	0.00	0.01	0.00	0.00	0.00	2.80	0.00
Other Miscellaneous Income	1.27	0.65	0.38	1.44	0.02	1.34	1.27
Total	1.35	0.67	0.39	1.45	0.02	22.67	8.19
Adjustment of CAO, HO & Others	9.13	5.43	5.43	10.87	0.00		
Total with CAO, HO & Others	10.48	6.10	5.82	12.32	0.02		

## FORM - 18 - CONTRIBUTION TO PENSION AND GRATUITY TRUST

Name of the Company: Chhattisgarh State Power Generation Company Limited

Name of Plant	FY 20	21-22
Name of Plant	Approved	Actual
HTPS, Korba West	104.49	104.49
DSPM TPS, Korba	38.77	38.77
1X500 MW KWTPP	23.21	23.21
H. Bango HPS	63.46	63.46
ABVTPS	3.30	3.30
Total CSPGCL	233.23	233.23



## FORM - 21 - 0&M EXPENSE (ACTUAL) <u>FY 2021-22</u>

Employee Cost	HTPS	DSPM	KW TPP	ABVTPS	Hasdeo Bango	CAU	но
Employee Cost	173.02	79.09	33.81	89.26	5.26	122.20	1018.47
Less: Gratuity, Pension	0.00	0.00	0.00	0.00	0.00	0.00	1018.47
Less: RE Cost	0.00	0.00	0.00	0.00	0.00	0.28	0.00
Less: Productivity incentive	0.05	0.01	0.00	0.00	0.00	0.00	0.00
Less: Ext CHP/CT (cost of Coal Transport)	12.91	0.00	6.36	0.00	0.00	0.00	0.00
Net Cost	160.06	79.08	27.45	89.26	5.26	121.91	0.00
Allocation of CAU, and HO	36.06	21.46	21.46	42.93	0.00	0.00	0.00
Net Employee Cost	196.12	100.55	48.91	132.19	5.26	0.00	0.00
A&G Cost							
A&G Cost	14.56	12.09	4.66	13.42	0.52	20.49	18.90
Net Cost	14.56	12.09	4.66	13.42	0.52	20.49	18.90
Allocation of CAU, HO & Other	11.65	6.93	6.93	13.87	0.00	0.00	0.00
A&G Cost	26.21	19.02	11.59	27.29	0.52	0.00	0.00
R&M Cost							
R&M Cost	110.30	72.50	73.39	129.23	45.76	1.62	0.00
Less: Water Charges	21.84	23.15	16.54	28.24	43.47	0.07	0.00
Add: R&M Cost of CHP	31.86	56.88	15.69	24.43	0.00	1.74	6.16
Less: RE Cost	0.00	0.00	0.00	0.00	0.00	1.80	0.00
Net Cost	120.32	106.23	72.54	125.42	2.28	1.49	6.16
Allocation of CAU & HO	2.26	1.35	1.35	2.69	0.00	-	-
R&M Cost	122.58	107.57	73.89	128.11	2.28	-	-
Total A&G and R&M cost	148.79	126.60	85.48	155.40	2.81	-	-
Less: Ext CHP/CT (cost of Coal Transport)	30.02	55.62	14.79	16.56	0.00	-	-
Add: Capital works in accounts which are R&M nature as per Regulatory practice.	0.39	0.95	0.12	0.23	0.01	-	-
Less: Expenditure Against Ash utilization	6.56	1.42	4.51	19.14	0.00	-	-
A&G + R&M cost	112.61	70.52	66.30	119.93	2.82	-	-
Normative O&M Small /Mini Hydro	0.62	0.00	0.00	0.00	0.00	-	-
Net A&G + R&M cost	111.99	70.52	66.30	119.93	2.82	-	-
Net O&M Cost (Employee + A&G+ R&M)-Ext CHP/CT	308.12	171.06	115.21	252.12	8.07	-	-



## FORM - 21A - O&M EXPENSES (NORMATIVE)

Name of the Company: Chhattisgarh State Power Generation Company Limited

#### FY 2021-22

Revised Working for normative O&M expenses considering the actual truing up and revised escalation factor and computation as per methodology of the Commission

Inflation Index	FY 2021-22
Actual WPI	13.00%
Actual CPI	5.13%
Average	8.28%

Particulars	O&M expenses approved in Tariff Order	approved in expenses for FY			
HTPS					
Employee Expenses	240.45	228.63	240.36		
A&G Expenses	120.58	16.87	19.06		
R&M Expenses	120.56	102.06	115.32		
Total	361.03	347.56	374.74		
DSPM TPS					
Employee Expenses	85.59	81.38	85.55		
A&G Expenses	94.36	12.14	13.72		
R&M Expenses	94.30	80.93	91.45		
Total	179.95	174.45	190.72		
HBHPS					
Employee Expenses	11.68	11.11	11.68		
A&G Expenses	3.93	1.62	1.83		
R&M Expenses	3.33	2.26	2.55		
Total	15.62	14.99	16.06		
KWTPP					
0&M	108.74	104.90	113.58		
ABVTPS					
0&M	217.47	209.80	227.16		



## FORM - 22 - SHARING OF GAINS AND LOSSES

Particulars	Units	HTPS	DSPM	KWTPP	ABVTPS	H.Bango
Fixed Charges @ NPAF	'					
Installed capacity	MW	840	500	500	1000	120
NPAF as per MYT Regulations	%	78.69%	85.00%	85.00%	76.50%	-
Actual PAF achieved (billed)	%	68.45%	96.29%	84.93%	54.67%	-
Normative Net Generation	MU	5228.66	3387.93	3527.54	6349.58	400.08
Actual Net generation	MU	4538.36	3597.60	3533.47	4532.54	403.35
Net generation for Fuel Cost recovery	MU	4538.36	3597.60	3533.47	4532.54	403.35
Fixed Cost (norm-wise)						
Depreciation	Rs Cr	35.31	130.16	222.49	521.53	2.77
Interest on Loan and Finance charges	Rs Cr	21.28	8.07	161.28	545.28	0.00
Return on Equity	Rs Cr	70.65	109.86	97.16	169.41	5.91
Interest on Working Capital	Rs Cr	28.47	21.35	18.11	37.76	1.02
0 & M Expenses	Rs Cr	374.74	190.72	113.58	227.16	16.06
Less – Non-Tariff Income	Rs Cr	10.48	6.10	5.82	12.32	0.02
Fixed Cost allowed on Normative Basis	Rs Cr	519.98	454.05	606.80	1488.82	25.74
Fixed cost expenditure excluding O&M	Rs Cr	145.24	263.33	493.22	1261.66	9.68
Normative Fixed Cost (Cr. Rs/% of PAF) excl.	Rs					
0&M	Cr./%PAF	1.85	3.10	5.80	16.49	0.02
Pro-rata Fixed cost allowable from Actual PAF	Rs Cr	126.34	298.31	492.82	901.63	9.76
Fixed cost gain from normative cost	Rs Cr	-18.90	34.98	-0.41	-360.03	0.08
Total gain / loss	Rs Cr			-344.28		
R&M + A&G expenses	'		<u> </u>			
Normative R&M + A&G Cost allowed	Rs Crore	134.39	105.17	64.74	129.48	4.38
Normative R&M + A&G Cost (Cr. Rs/% of PAF)	Rs Cr./%PAF	1.71	1.24	0.76	1.69	0.01
Pro-rata R&M+A&G cost allowable from actual PAF	Rs Crore	116.90	119.13	64.69	92.53	4.42
Actual R&M + A&G expenditure	Rs Crore	111.99	70.52	66.30	119.93	2.82
Difference of recovery and expenditure	Rs Cr	4.90	48.62	-1.61	-27.40	1.60
Total gain / loss				26.115		
Secondary Fuel Cost	1		<u> </u>		· '	
Normative SFC	Rs Cr	32.86	16.58	11.74	22.22	0.00
Normative SF Cost derived from Norm Net Gen	Rs/kwh	0.06	0.05	0.03	0.03	0.00
Secondary fuel cost recovery from actual						
generation	Rs Cr	28.52	17.61	11.76	15.86	0.00
Actual SFC incurred	Rs Cr	27.57	3.01	6.58	16.08	0.00
Savings due to performance improvement	Rs Cr	0.94	14.60	5.18	-0.22	0.00
Total Impact of Savings/Excess Expenditure due to SFC	Rs Cr			20.51		
Coal Cost (primary fuel)						
Normative Coal Cost	Rs Cr	825.77	576.20	479.58	1042.04	0.00
Normative ECR (Coal)	Rs/kwh	1.58	1.70	1.36	1.64	0.00
Normative fuel cost on actual sent out	Rs Cr	716.75	611.86	480.39	743.85	0.00
Actual fuel cost	Rs Cr	740.08	583.42	511.17	811.59	0.00
Coal Cost Surplus/(deficit)	Rs Cr	-23.33	28.43	-30.78	-67.74	0.00
Total Impact of Savings/Excess Expenditure						
due to Coal	Rs Cr			-93.42		
Total plant wise impact of gain/loss	Rs Cr	-36.38	126.63	-27.62	-455.39	1.68
Total Impact of Savings/Excess Expenditure	Rs Cr			-391.08		
Plant-wise Impact of DSM Charges	Rs Cr	27.95	23.46	17.45	23.52	0.00
Total Impact of DSM Charges	Rs Cr			92.38		
Net total Impact Savings/Excess Expenditure	Rs Cr			-298.69		
Net applicable Gain/(-)Loss to CSPGCL on 50:50 basis	Rs Cr			-149.35		
00100 Eusis						



## Revenue Gap/(Surplus)

## FY 2021-22

#### In Rs. Crores

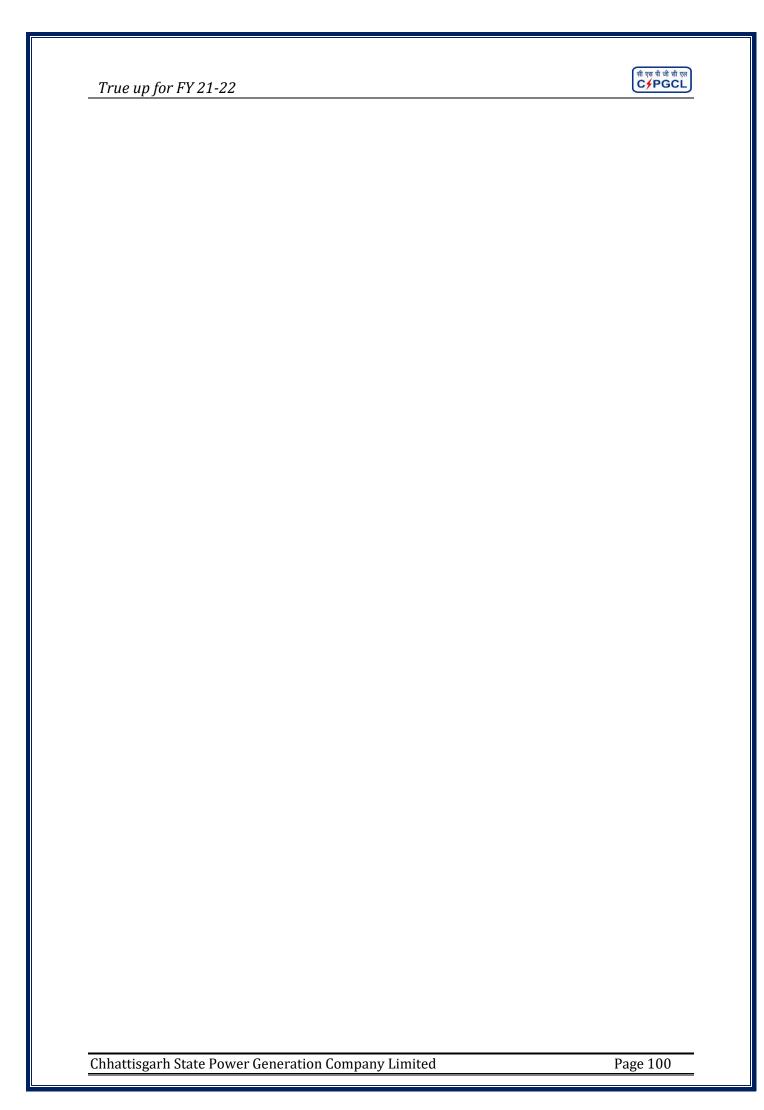
	Actual
Particulars	FY 2021-22
ARR for HTPS	1,332.06
ARR for DSPM TPS	1,061.01
ARR for KWTPP	1,153.90
ARR for ABVTPS	2,424.04
ARR for Hasdeo Bango	21.05
Sub Total	5,992.07
Additional claim on account of sharing gain (loss) of CSPGCL	-149.35
Petition Filing Fee & Advertising expenses	0.47174
Impact of previous year revenue gap	324.03
Water,SLDC charges & start up power for recovery	142.92
Cost on account of Change in law	40.83
Income Tax for Current Year	9.20
Total ARR	6,360.17
Revenue from sale of power for HTPS	1,301.73
Revenue from sale of power for DSPM TPS	1,100.49
Revenue from sale of power for KWTPP	1,144.64
Revenue from sale of power for ABVTPS	1,860.69
Revenue from sale of power for Hasdeo Bango	40.59
Revenue from Sale of Power	5,448.14
Water,SLDC charges & start up power for recovery	142.92
Recovery Impact of previous year revenue gap	324.03
Total Recovery & Revenue	5,915.09
Standalone ARR Gap for the year	445.08

Rs. Crore

#### Gap/ (Surplus) due to True up

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
Opening Gap/(Surplus) for the year	-	469.33	511.57
Gap/(Surplus) for the year	445.08	ı	•
Closing Gap/(Surplus)	445.08	469.33	-
Interest Rate (%)	10.90%	9.00%	9.00%
Holding/Carrying Interest/Cost for the year	24.26	42.24	23.02
Closing Gap/(Surplus)	469.33	511.57	534.59
Total Proposed to be repaid in twelve monthly instalment	-	1	534.59

\*\*\*\*





#### 8: ANNEXURE II – FORMATS -TRUE-UP OF FY 2021-22 – INPUT PRICE OF COAL

**FORM - 1** 

## Input Price of Coal - FY 21-22

Name of Integrated Coal Mine: Gare Pelma-III

Name of the Company: Chhattisgarh State Power Generation Company Limited

Particulars	Unit	Value
Depreciation	Rs Cr	30.20
Interest on loan	Rs Cr	48.12
Return on Equity	Rs Cr	29.35
Interest on Working Capital	Rs Cr	0.96
O&M Charges	Rs Cr	7.99
Statutory Charges	Rs Cr	53.58
Sharing of gain due to Higher Production	Rs Cr	9.04
AEC	Rs Cr	179.24
Actual Quantity of Coal	MMT	3.52
AEC ( Rs./Tonne)	Rs/Ton	509.92
MDO Charges (Rs./Tonne)	Rs/Ton	651.38
Sub Total (Rs./Tonne)	Rs/Ton	1161.30
Less -NTI (Intrest Income)	Rs Cr	3.34
Less - NTI Adjustment	Rs/Ton	9.51
Add- Fix Reserve Price	Rs/Ton	118.00
Total Price/Tonne	Rs/Ton	1269.79



#### FORM - 2- GP III

## **Summary of Statutory Charges**

Name of Integrated Coal Mine: Gare Pelma-III

Particulars	Rate	Remarks	FY 21-22 Amount in Crs
Royalty	14%	On Base Price	33.61
DMF	10%	of Royalty	3.36
NMET Fund	2%	of Royalty	0.67
GST	18%	On Royalty, DMF & NMET	6.78
Infrastructure Development CESS	11.25	Rs per Tonne	3.97
Environment Cess	11.25	Rs per Tonne	3.97
Forest Tax	3.93	26.225% of Rs.15/Tonne	1.39
Total Statutory Charges (e	53.74		
Total Coal Dispatched from Mine (MT)			3525830.86
Statutory Charges Per Ton (Exclud. FRP)			152.43
Statutory Charges on Grosquantity	53.58		



 $\label{eq:form-3} FORM-3$  Normative parameters considered for Input Price computation

Name of Integrated Coal Mine: Gare Pelma-III

Particulars	Unit	FY 21-22
ATQ	Million Tonnes	3
Rate of Return on Equity	%	14%
Input Cost of Coal Stock for WC	in days	7
Consumption of stores & Spares as % of O&M for WC	%	15%
O&M cost number of days for WC	in days	15



## **FORM - 5B**

## **Breakup of Capital Cost**

Name of Integrated Coal Mine: Gare Pelma-III

	GP III Capital Cost During FY 21-22			
SN	Description	Amount (Rs Cr)		
1	Opening Capital Cost as per TB	266.32		
2	Less	0.00		
A	Adjustment passed as per cost accounts	-44.89		
3	Accounting Cost C/f after deductions	311.20		
4	Additions	-		
Α	Salary expenses not claimed in previous petitions being attributed to Coal Mine Project	4.79		
В	Adjustment as per Regulatory Accounts	(38.97)		
С	Statutory BG	110.20		
D	Normative IDC	111.21		
5	Opening Regulatory GFA FY 21-22	498.43		
6	Addl. Cap. during FY 21-22 as per Accounts	406.58		
7	Less 50% of Payment to PAPs by MDO (subject to Arbitration decision)	5.78		
8	Closing Regulatory GFA FY 21-22	899.24		



## **FORM - 5B (I)**

## Adjustment pre COD period

Name of Integrated Coal Mine: Gare Pelma-III

	ADJUSTMENT IN CAPITAL COST DUE TO DIFFRENCE IN COST OF PRODUCTION AND SALE FOR PRE COD PERIOD					
SN						
1	RR Quantity of Coal from Gare Palma in 19-20	Ton	11346.34			
2	Transit Loss booked at Plant in FY 19-20	%	0.69%			
3	Coal Recd at Plant End in FY 19-20	Ton	11268.05			
4	RR Quantity of Coal from Gare Palma in 20-21	Ton	1661727.34			
5	Transit Loss booked at Plant in Fy 20-21	%	0.56%			
6	Coal Recd at Plant End in FY 20-21	Ton	1652421.67			
7	Total RR Quantity in Pre COD Period	Ton	1673073.68			
8	Total Coal Recd at Plant end in pre COD period	Ton	1663689.72			
9	Total Coal Dispatched from Mine to Railway Siding	Ton	1677808.87			
10	Total RR Quantity	Ton	1673073.68			
11	Total Rail Freight Paid in Pre COD Period	Crs	42.716			
12	MDO Charges paid	Crs	107.45			
13	FRV Payment @118/ Ton	Crs	19.74			
14	Forest tax @ 26.23% of Rs 15 / Ton	Crs	0.66			
15	Environment Cess @ 11.25/ Ton	Crs	1.88			
16	Infrastructure Development CESS @ 11.25/ Ton	Crs	1.88			
17	Royalty, DMF and NEMT with GST	Crs	23.27			
	Pro rata Royalty , DMF and NEMT with GST on Grossed up RR	_				
18	quantity	Crs	23.20			
19	Road Transportation Charges on Total road Transport	Crs	117.04			
20	Prorata Road Transportation Charges	Crs	116.71			
21	Total Cost incurred on Pre COD Coal	Crs	314.24			

	NOTIONAL RVENUE THROUGH TRANSFER PRICING			
1	Transfer Pricing Considered for Coal in 19-20	Rs/Ton	2281.80	
2	Coal Recd at Plant End in FY 19-20	Ton	11268.05	
3	Notional Revenue from Coal Transfer in FY 19-20	Crs	2.57	
4	Transfer Pricing Considered for Coal in 20-21	Rs/Ton	2219.61	
5	Coal Recd at Plant End in FY 20-21	Ton	1652421.67	
6	Notional Revenue from Coal Transfer in FY 20-21	Crs	350.64	
7	Total Notional Revenue from pre COD Coal Transfer	Crs	353.21	
	Surplus from Pre COD Transfer of Coal	Crs	38.97	



## FORM - 5B (II) - IDC Computation

Name of Integrated Coal Mine: Gare Pelma-III

	Interest Rate	Opening Cumulative	1	2	3	4	IDC (in Crs )
Opening	0	0	0	131.63	165.93	169.64	0
2015-16	12.81%	0	130.17	31.00	0.00	2.05	0.00
Cumulative	0	0	130.17	162.63	165.93	171.70	0.00
Average	0	0	65.09	147.13	165.93	170.67	0.00
Normative Debt	0	0	45.56	102.99	116.15	119.47	0.00
Interest	0	0	1.46	3.30	3.72	3.83	12.30
Opening	0	0	175.52	178.82	180.56	182.43	0.00
2016-17	10.10%	175.52	0.19	-1.40	-1.31	30.24	0.00
Cumulative	0	175.52	175.71	177.42	179.25	212.67	0.00
Average	0	0.00	175.62	178.12	179.91	197.55	0.00
Normative Debt	0	0	122.93	124.68	125.94	138.29	0.00
Interest	0	0	3.10	3.15	3.18	3.49	12.92
Opening	0	0	216.16	220.19	224.44	230.45	0.00
2017-18	9.93%	216.16	0.27	0.42	2.09	0.47	0.00
Cumulative	0	216.16	216.43	220.61	226.53	230.92	0.00
Average	0	0.00	216.30	220.40	225.48	230.68	0.00
Normative Debt	0	0	151.41	154.28	157.84	161.48	0.00
Interest	0	0	3.76	3.83	3.92	4.01	15.52
Opening	0	0	234.93	238.00	242.33	245.54	0.00
2018-19	9.92%	234.93	-1.00	0.20	-0.99	-0.72	0.00
Cumulative	0	234.93	233.93	238.20	241.34	244.82	0.00
Average	0	0.00	234.43	238.10	241.84	245.18	0.00
Normative Debt	0	0	164.10	166.67	169.29	171.63	0.00
Interest	0	0	4.07	4.13	4.20	4.26	16.66
Opening	0	0	249.08	262.54	268.01	272.24	0.00
2019-20	9.92%	249.08	9.06	0.91	-0.42	185.22	0.00
Cumulative	0	249.08	258.14	263.44	267.59	457.46	0.00
Average	0	0.00	253.61	262.99	267.80	364.85	0.00
Normative Debt	0	0	177.52	184.09	187.46	255.39	0.00
Interest	0	0	4.40	4.57	4.65	6.33	19.95
Opening	0	0	463.79	471.08	478.61	486.98	0.00
2020-21	10.16%	463.79	-0.95	-0.84	-0.13	9.69	0.00
Cumulative	0	463.79	462.84	470.24	478.47	496.68	0.00
Average	0	0.00	463.32	470.66	478.54	491.83	0.00
Normative Debt	0	0	324.32	329.46	334.98	344.28	0.00
Interest	0	0	8.24	8.37	8.51	8.74	33.86
						Total IDC	111.21



#### **FORM - 1A**

## **Return On Equity**

Name of Integrated Coal Mine: Gare Pelma-III

Name of the Company: Chhattisgarh State Power Generation Company Limited

## In Crs

Particulars	2021-22
Opening Equity	149.53
Addition Due to Add Cap	120.24
Closing Equity	269.77
Average Equity	209.65
Rate of Return on Equity	14%
Return On Equity	29.35



#### **FORM - 11**

## **Rate of Depreciation**

Name of Integrated Coal Mine: Gare Pelma-III

Name of the Company: Chhattisgarh State Power Generation Company Limited

S. N.	Asset Class	Dep. Rate	GFA on 31.03.22	GFA on 31.03.21	Dep. during FY 21-22
1	Intangible Assets	5.00%	671.41	266.27	23.44
2	Kuchcha Roads	95.00%	1.33	-	0.63
3	Furniture And Fixtures	6.33%	0.03	0.03	0.00
4	Office Equipment	6.33%	0.02	0.02	0.00
5	Computers Hardware and Software	33.33%	0.11	1	0.02
	Total		672.90	266.32	24.09
	Average Rate				5.13%

#### **FORM - 12**

## **Depreciation**

Name of Integrated Coal Mine: Gare Pelma-III

Depreciation	2021-22
Opening Capital Cost	498.43
Closing Capital Cost	899.24
Average Capital Cost	698.84
Depreciable Value (100%)	588.64
Rate of Depreciation	5.13%
Annual Depreciation	30.20
<b>Cumulative Depreciation</b>	30.20



## **FORM - 13A**

## **Interest On loan Capital**

Name of Integrated Coal Mine: Gare Pelma-III

Interest & Fin Charges	2021-22
Opening Loan	348.90
Addition Due to Add Cap	280.56
Repayment During the Year	30.20
Average Loan	474.08
Interest Rate	10.15%
Interest Charges	48.12
Finance Charges	0.00
Total Interest & Finance Charges	48.12

FORM - 13B
Interest On Working Capital

Particulars	Unit	Norms	FY 21-22 (In Crs)
ATQ	Million Ton	3	
Input Cost for days of Stock	in days	7	7.31
Spares as % of O&M Cost	%	15%	1.20
O&M cost for no of days	in days	15	0.33
Total Working Capital Requirement			8.83
Rate of Interest on WC	%	10.90%	
Interest on WC			0.96



## **FORM - 21**

## **Operation and Maintenance Expenses**

Name of Integrated Coal Mine: Gare Pelma-III

Employee Cost					
Particular	Rs Cr				
Salaries, wages and bonus	6.47				
Contribution to provident and other funds	0.27				
Gratuity & Pension	0.00				
Leave Encashment	0.00				
Other staff costs	0.03				
Staff welfare expenses	0.36				
Less: Employee benefit expense capitalised	0.00				
Net Employee Cost	7.12				
A&G Cost					
Particular	Rs Cr				
Insurance Charges	_				
Rent, Rates and Taxes	0.53				
Legal and Professional Charges	0.02				
Auditor's remuneration	-				
Other administrative expenses	0.26				
Less: A&G Capitalized	-				
Net A&G Cost Chargeable to Plant	0.82				
R&M Cost					
Particular	Rs Cr				
Plant & Machinery	0.03				
Building	0.00				
Others	0.02				
Lubricants, Consumables stores and station	0.00				
Water charges	0.00				
Less: R&M Capitalized					
Net R&M Cost Chargeable to Plant	0.05				
Total O&M Cost	7.99				



## **FORM - 22**

## **Sharing of Gains/Losses**

Name of Integrated Coal Mine: Gare Pelma-III

Name of the Company: Chhattisgarh State Power Generation Company Limited

Particulars	Rs Cr
Dep , Int , ROE & IOWC and NTI	105.29
ATQ MMT	3.00
AFC/ Ton on ATQ basis	350.98
Actual Production (Grossed up quantity of Coal Dispatched)	3.52
AFC/ Ton on Actual basis	299.55
Gain/ (Loss)/ Ton due to Excess / (less) production	18.08
Share of CSPGCL (in Rs Cr)	9.04

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#### **ANNEXURE III - STATEMENT OF PROFIT & LOSS** 9:

Chhattisgarh State Power Generation Company Limited (CIN - U40108CT2003SGC015821)

Statement of Profit and Loss for the period ended 31st March'2022 All amounts are in INR unless otherwise stated

All a	amounts are in link unless otherwise stated			(₹ in Lakhs
	Particulars	Note No.	For the year ended 31st March'2022	For the year ended 31st March'2021
1	Revenue from operations	21	6,50,515.01	6,12,170.98
ii	Other Income	22	5,039.95	3,373.53
	Total Revenue (I + II)		6,55,554.96	6,15,544.51
IV	EXPENSES	1000		0.70.045.55
	(a) Cost of fuel	23	2,55,964.95	2,73,343.5
	(b) Employee benefit expense	24	93,203.94	86,147.7
	(c) Finance costs	25	67,110.67	81,480.7
	(d) Depreciation and amortisation expense	4	85,121.22	82,785.8
	(e) Other expenses	26	63.253.46	60,445.7
	Total Expenses (IV)		5,64,654.23	5,84,203.6
V	Profit before exceptional items and tax (III-IV)		90,900.73	31,340.8
VI	Exceptional items (Income)/Loss	26A	30,000.00	-
	Profit before tax (V-VI)		60,900.73	31,340.8
	I Tax Expense			
	(1) Current tax		919.81	1,354.8
	(2) Deferred tax	8b	3,862.33	11,678.0
	(3) MAT Credit Entitlement	8b	(919.81)	(1,354.8
	(4) Income tax for earlier years		-	/ <del>-</del>
_	Total tax expense (VIII)		3,862.33	11,678.0
IX	Profit/(loss) after tax (VII -VIII)		57,038.40	19,662.8
х	Other comprehensive (income)/Expenses (A+B)		36,232.46	15,431.8
119	A Items that will not be reclassified to profit or loss		-	-
	(i) Remeasurements of the defined benefit liabilities (asset)	/ 26B	55,694.26	23,720.8
	(ii) Income tax relating to items that will not be reclassified to profit or loss	8b	(19,461.80)	-8,289.0
	B Items that may be reclassified to profit or loss		-	-
	(i) Debt instruments through other comprehensive income		-	-
	(ii) Income tax on items that may be reclassified to profit or loss		-	-1

In terms of our report attached.

profit or loss

XI Total comprehensive income for the period (IX-X)

Earnings per share (face value of ₹10 each)

RAIPUR

GENER

RAIPUR

(C.G.)

For, A D B & Company,

Chartered Accountants FRN - 005593C

Basic (in ₹)

Diluted (in ₹)

ose

(Rajesh Kumar Chawda)

Membership No. - 405675

100 - 22 405C75 AUTKSR5913

Place : Raipur

Date: 22 -09-2022

(Nirmal Kumar Bizora) Managing Director DIN - 08678408

27

(Alok Singh)
Chief Financial Officer

(Ujjawala Baghel) Director

20,805.94

2.02

2.02

For and on behalf of the Board of Directors

4,230.98

0.70

0.70

DIN - 08738889