

Rajasthan Electricity Regulatory Commission

Petition No: RERC/1985/22

In the matter of determination of Aggregate Revenue Requirement (ARR) & Tariff for FY 2022-23 for Chhabra Super Critical Thermal Power Project (CSCTPP) (Units 5&6)

Coram:

Dr. B. N. Sharma, Chairman
Sh. S.C. Dinkar, Member

Petitioner : Rajasthan Rajya Vidyut Utpadan Nigam Ltd.

Respondent :
1. Jaipur Vidyut Vitran Nigam Ltd.
2. Ajmer Vidyut Vitran Nigam Ltd.
3. Jodhpur Vidyut Vitran Nigam Ltd.
4. Rajasthan Urja Vikas Nigam Ltd.

Date of hearing : 28.04.2022, 12.05.2022 & 01.06.2022

Present :
1. Sh. Ankit Sharma, Authorised rep. for Petitioner
2. Sh. Sandeep Pathak, Advocate for Respondents
3. Sh. G.L. Sharma, Stakeholder

Date of Order:

23.06.2022

ORDER

- 1.1 Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (in short "RVUN"), a Generating Company under the provisions of the Electricity Act 2003, has filed a petition for determination of Aggregate Revenue Requirement (ARR) and determination of Tariff for CSCTPP Units 5&6 (2 X 660 MW) for FY 2022-23.
- 1.2 In exercise of the powers conferred under Sections 62, 64 and other provisions of Electricity Act 2003, read with RERC (Terms and Conditions for Determination of Tariff) Regulations, 2019 and other enabling Regulations,

the Commission, after carefully considering each of the submissions of the Petitioner and suggestions/objections submitted by the Stakeholder, has passed the following Order.

1.3 This Order has been structured in following sections as given under:

- (1) Section 1: General
- (2) Section 2: Summary of Tariff determination process
- (3) Section 3: Summary of objections/comments/suggestions received from Stakeholders/Respondents and RVUN's response thereon.
- (4) Section 4: Determination of ARR and Tariff for CSCTPP Units 5&6 for FY 2022-23

SECTION 2

Summary of Tariff determination process.

- 2.1 CSCTPP Units 5&6 were declared COD on 09.08.2018 and 02.04.2019 respectively.
- 2.2 RVUN filed Petitions for approval of final capital cost and tariff for CSCTPP Units 5&6 from COD of Unit 5 till FY 2021-22 on 29.01.2021. The Commission vide its Order dated 28.12.2021 approved the same. Subsequently, RVUN filed a Review Petition seeking review on the Commission's ruling on certain issues of the tariff Order dated 28.12.2021. The Commission disposed of the Petition vide Order dated 23.05.2022.
- 2.3 RVUN filed the instant Petition on 11.01.2022 for determination of ARR and tariff for CSCTPP Units 5&6 for FY 2022-23 in accordance with the provisions of the RERC Tariff Regulations, 2019.
- 2.4 As required under Section 64(2) of the Electricity Act, 2003, public notices with salient features of the petition inviting objections/comments/suggestions were published in the following newspapers on the dates mentioned against each:

Table 1: Details of Newspapers

SR. No.	Name of News Paper	Date of publishing
(i)	Dainik Bhaskar	03.02.2022
(ii)	Dainik Navjyoti	03.02.2022
(iii)	Times of India	03.02.2022

- 2.5 The petition was also placed on the websites of the Commission and the Petitioner. The objections/comments/suggestions were received from Sh. G. L. Sharma and Discoms.
- 2.6 The Commission forwarded the objections/comments/suggestions of the Stakeholders to RVUN for filing its reply. The Petitioner replied to the objections/comments/suggestions made by objectors vide its letters dated 29.03.2022 and 26.04.2022. The Petitioner also submitted its additional reply vide letter dated 11.05.2022.
- 2.7 The Commission vide letter dated 01.02.2022 and 19.05.2022 communicated some data gaps and deficiencies in the Petition. The Petitioner furnished information vide its letter dated 28.02.2022 and

31.05.2022.

2.8 The public hearing in the matter was held on 28.04.2022, 12.05.2022 & 01.06.2022.

SECTION 3

Summary of objections/comments/suggestions received from Stakeholders/ Respondent's and RVUN's response thereon.

General

Stakeholders/Respondents Comments/Suggestions

- 3.1 The Petitioner vide instant Petition prayed before the Commission to incorporate all such issues in the ARR and Tariff determination for FY 2022-23 that are raised vide Review Petition filed against the Commission's Order dated 28.12.2021. The Stakeholder submitted that the Petitioner has to furnish all such issues in public domain for further comments and suggestions. Accordingly, the Petitioner to submit the Review Petition for Stakeholder's comments.
- 3.2 The Petitioner vide instant Petition submitted that the cost of land approved by the Commission till 31.03.2021 is Rs. 56.44 Crore, whereas the Commission vide Order dated 28.12.2021 has approved the cost of land as Rs. 56.07 Crore.

RVUN's Response

- 3.3 RVUN has filed a Review Petition on 28.01.2022 against the Commission's Order dated 28.12.2021. The Review Petition has been uploaded on the RERC website, which is well accessible.
- 3.4 The Petitioner submitted that the amount related to land approved by the Commission as on COD is Rs. 56.07 Crore and as on 31.03.2021 is Rs. 56.44 Crore. The Commission has approved Rs. 0.37 Crore as additional capitalization during FY 2020-21 vide Order dated 28.12.2021.

Separate Tariff for each Generating Unit

Stakeholders/Respondents Comments/Suggestions

- 3.5 The Respondent submitted that the Petitioner should file separate ARR and determine the tariff for each unit. For many Generating Stations in the country, unit wise ARR and Tariff is computed. Power Purchase cost accounts for approximately 80.00 % of the total cost of Discom's expenses. Any increase in cost will lead to higher tariff for consumers. Any savings in Power Purchase Cost will result in lower tariff for the consumers and eventually help the State to prosper.

RVUN's Response

3.6 The Petitioner submitted that CSCTPP Units 5&6 has been constructed by a single EPC contractor and capital cost has been approved by the Commission for Project as a whole for both the units. Further, many auxiliaries, bus bar and the maintenance cost for both the units are common, which is technically difficult to separate and hence, determination of the single tariffs for the Station is more feasible and economical. Therefore, RVUN requested the Commission to determine ARR and Tariff for FY 2022-23 as a Station.

Unit Wise Audited Books of Account

Stakeholders/Respondents Comments/Suggestions

3.7 Many Generating Stations in the country maintain unit wise audited accounts after apportioning common cost. Clubbing the cost of all Units hides the inefficiency of certain Units. The Discoms also have to pay the Fixed Costs of all units even if certain units are shut down. Therefore, the Respondent submitted that the Commission may take a strict view in this regard and direct the Petitioner to maintain unit wise books of account.

RVUN's Response

3.8 RVUN is preparing its Accounting Station wise, which is as per Regulation 2(3) (i-ii) of RERC Tariff Regulations, 2019. Further, RVUN is engaged in only one business, i.e., generation of electricity. RVUN is submitting its Station Wise accounting details for each true up. The allocation statement has already been submitted with the instant Petition. Therefore, RVUN requested the Commission to determine ARR and tariff for FY 2022-23 as claimed.

Annual Financial Statements

Stakeholders/Respondents Comments/Suggestions

3.9 The Stakeholder submitted that as per Regulation 11(5) of the RERC Tariff Regulations, 2019, the Petitioner to submit the annual statements of accounts, annual reports including Director's report, along with the statistics of business transactions and associated activities during the current, previous and the ensuing year. The report of activities shall also indicate targets and achievements of the company.

3.10 As per Regulation 2(a)(1)(vi) of the RERC Tariff Regulations, 2019 "Accounting Statements" means cost records as well. Further, the

Accounting Statements including reconciliation statements have to be maintained separately for each Generating Station. Regulation 2(3) of the RERC Tariff Regulations, 2019 states that the "Allocation Statement" means for each financial year, with respect to each Generating station, showing the amount of any revenue, cost, asset, liability, reserve or provision etc.

3.11 In view of above, the Stakeholder submitted that the Financial Statements as submitted by the Petitioner for FY 2020-21 vide instant Petition is not in respect of CSCTPP but for all those Generating companies which are under the control of RVUN. In this regard, the Stakeholder submitted the following:

- a) The Independent Auditors Report's submitted vide Petition states that, "*we have audited the accompanying standalone financial statements of RVUN Ltd. ("the Company") ...*". It indicates that the financial statements submitted by the Petitioner are not exclusively for CSCTPP but are of RVUN company as a whole.
- b) In the financial statements submitted with the Petition, nowhere it has been mentioned that these are exclusively in respect of CSCTPP.
- c) Gross asset balance claimed by the Petitioner as on 01.04.2020 is Rs. 29668.78 Crore. Whereas, the Petitioner has stated that the Capital Cost considered as on COD, i.e., 02.04.2019 is Rs. 8258.77 Crore and the additional capitalization of Rs. 203.26 Crore is claimed for the period 02.04.2019 to 31.03.2020. Therefore, the total Capital Cost as on 31.03.2020 is Rs. 8462.03 Crore, which doesn't match with the claims of the Petitioner regarding gross asset balance.
- d) Vide Petition, the Petitioner submitted, "*the company has investment of Rs 37,005.00 Lakhs in its subsidy GLPL....*". This indicates that the financial statements are not exclusively for CSCTPP station.
- e) Director's report and cost records are not filed along with the instant Petition.

3.12 Henceforth, the requirement of Regulation 11(5) of the RERC Tariff Regulations, 2019 is not being met and the Petition is incomplete. Therefore, the Stakeholder sought the required financial statements.

3.13 The Commission vide Order dated 11.09.2020 directed the Petitioner to maintain station wise allocation statement and submit audited accounts. The Petitioner has never complied to the directions by not submitting the same. Hence, the Stakeholder requested the Commission to take necessary actions.

RVUN's Response

- 3.14 The statement of accounts of the previous year, i.e., FY 2020-21 has been enclosed with the petition and Annual Reports including Director's Report is submitted with the data gap's reply. The figures of previous, current, and ensuing year for the computation of ARR and Tariff have been provided in the Petition. Further, the Petitioner submitted the station wise allocation of financial statement.

Additional Capitalization

Stakeholders/Respondents Comments/Suggestions

- 3.15 The Petitioner vide instant Petition requested the Commission to allow additional capitalization of Rs. 428.59 Crore estimated for FY 2021-22. Further, the Petitioner has made a provision of Rs. 2636.58 Crore, that includes the amount of Rs. 1360 Crore against the FGD expenses and the amount of Rs. 1276.58 Crore against RVUN's share towards Parwan Dam for water allocation.
- 3.16 In this regard, the Stakeholder submitted that the Petitioner has not provided the certified audited statement to verify the actual expenses with respect to various works executed after the date of COD. This violates the provisions of Regulation 17(1) of the RERC Tariff Regulations, 2019. Hence, the Stakeholder requested the Commission to not sanction such estimated expenses of the Petitioner.
- 3.17 With respect to the Petitioner's claim towards Parwan Dam, the Commission vide Order 28.12.2021 stated as below:
- "4.43 For the cost to be incurred towards Parwan Dam, the Commission doesn't find it appropriate to consider anything on it at this stage, where RVUN has not incurred any expenditure against it. Further, the Commission directs RVUN to continue with the present source of water allocation for Unit 5&6 and accordingly, optimize the expenditure and proportionate quantum of water allocation from Parwan Dam (1270 Mcft) considering total water requirement of CSCTPP Units 5&6 as 1570 Mcft and present sources of water allocation. RVUN with its claim on additional capital expenditure for Parwan Dam is required to submit its detailed computation with justification for the same in its forthcoming year Tariff Petition."*
- 3.18 In view of above, the Stakeholder sought documents as per the aforesaid ruling of the Commission vide Order dated 28.12.2021.

RVUN's Response

- 3.19 The Petitioner submitted that the actual expenses duly audited by Statutory Auditor will be submitted after finalization of audited accounts. Therefore, the observation raised by stakeholder is not correct and hence, denied.
- 3.20 Further, the Petitioner submitted that the availability of water from Parwan Dam is required considering uncertainty and insufficient water inflow in case of less rain during monsoon season. During summer season acute shortage of water crisis is faced causing units to be kept under force shutdown. The Petitioner submitted that the justification for not continuing the present sources of water allocation is that the operation of thermal power plant gets adversely affected due to poor quality of water. The river water contains industrial waste, higher turbidity, hardness chloride and toxic chemicals which are harmful for plant machinery, which deteriorates the equipment's and consequently increases O&M cost. The water quality parameters received from Lhasi dam and Anicuts of Parvati River is analyzed at plant chemical wing. The Petitioner submitted the comparative chart of the water chemistry.
- 3.21 The infrastructure developed for water transportation system shall be utilized in future also for transportation of water from Parwan Dam (68 Km. away from the plant) and water from Lhasi Dam (45 Km. away from the plant). The proportionate shared cost of Parwan Dam has been worked out by WRD as per the recommendation of TAC guideline. The details of proportionate shared cost and demand raised by WRD is submitted.

Ash Utilization Fund

Stakeholders/Respondents Comments/Suggestions

- 3.22 With respect to the compliance of various provisions of Pollution control Act and impact thereof including utilization and disposal of ash, the chartered accountants report submitted vide Petition states that,

“According to information and explanation given to us that the company followed the compliance laid under pollution control act and deposited fees regularly. Further the company is not following the guidelines of MOEF in respect of utilization of fly ash utilization fund. As company has utilized amount of fly ash utilization fund for its own affairs which is violation of notification dated 3rd November 2009 issues by MOEF- Gol.

- 3.23 In this regard, the Stakeholder submitted that the Petitioner to state the amount of ash utilization Fund as on 31.03.2021 and also intimate that

where this amount has been utilized. The Stakeholder requested the Commission to take a view of such non-compliance of the statutory notification and issue necessary directions to the Petitioner for future scenarios.

RVUN's Response

3.24 The Petitioner submitted that an amount of ash utilization fund as on 31.03.2021 is Rs. 463.95 Crore and these funds are utilized only for development of infrastructure or activities, promotion, and facilitation activities for use of fly ash until 100% fly ash utilization level is achieved.

Depreciation

Stakeholders/Respondents Comments/Suggestions

3.25 The Stakeholder submitted that the Petitioner while computing depreciation for FY 2022-23 has considered additional capitalization of Rs. 428.59 Crore, which is an estimated amount.

3.26 The Commission vide Order dated 28.12.2021 has mentioned that for expected additional capitalization beyond 31.03.2021, the Petitioner may submit the actual audited figures certified by the Statutory Auditor. However, the Petitioner has not submitted the audited accounts as per above norms and hence, the respective claim for additional capitalization is illegal in absence of prior approval of the Commission. In view of above, the admissible claim with respect to depreciation is Rs. 416.35 Crore, which was approved by the Commission in the tariff Order dated 28.12.2021 for FY 2021-22.

RVUN's Response

3.27 The computation of depreciation for FY 2022-23 is considering the additional capitalization estimated for FY 2021-22. The Statutory Auditor certificate for additional capitalization will be submitted after finalization of accounts. Therefore, RVUN requested the Commission to allow depreciation for FY 2022-23 considering estimated capitalization for FY 2021-22 as claimed.

Interest on Term Loan (IoTL)

Stakeholders/Respondents Comments/Suggestions

3.28 The Stakeholder submitted that Interest on term loan may be allowed on the amount approved in the Final Capital Cost and in respect of any

additional capitalization approved for FY 2021-22.

RVUN's Response

3.29 The Petitioner submitted that the computation of interest on term loan for FY 2022-23 is considering the additional capitalization estimated for FY 2021-22. The auditor's certificate for additional capitalization will be submitted after finalisation of accounts. Therefore, the Petitioner requested the Commission to allow interest on term loan for FY 2022-23 considering estimated capitalization as claimed.

O&M Expenses

Stakeholders/Respondents Comments/Suggestions

3.30 The Petitioner has claimed an O&M expense of Rs. 266.14 Crore, whereas the actual working as per the RERC Tariff Regulations, 2019 is Rs. 266.11 Crore. The Stakeholder sought justification for such variance.

RVUN's Response

3.31 The computation for the O&M expenses has been made as per the RERC Tariff Regulations, 2019 and accordingly O&M expenses is Rs. 266.14 Crore. Therefore, RVUN requested the Commission to allow O&M expenses for FY 2022-23 as claimed.

Insurance Charges

Stakeholders/Respondents Comments/Suggestions

3.32 Vide instant Petition, insurance charges claimed for FY 2022-23 is Rs. 14.79 Crore, whereas per Form 6.7 (Insurance Expenses) of the Petition, insurance expenses claimed for FY 2022-23 are Rs. 8.18 Crore. Also, the actual expenses incurred for FY 2021-22 is Rs. 7.79 Crore. In this regard, the Stakeholder sought justification for claiming insurance charges of Rs. 14.79 Crore for FY 2022-23 and also requested the Commission to consider Rs. 8.00 Crore with respect to the insurance charges.

RVUN's Response

3.33 The Petitioner submitted that the insurance charges for FY 2022-23 on fixed asset have been computed as 0.2% of average Net Fixed Assets as per Regulation 25 of the RERC Tariff Regulations, 2019. Therefore, the Petitioner requested the Commission to allow insurance charges for FY 2022-23 as claimed.

Return on Equity (RoE)

Stakeholders/Respondents Comments/Suggestions

- 3.34 The Stakeholder submitted that as per the Order dated 28.12.2021, the State Government has withdrawn the RoE of FY 2019-20, 2020-21 and 2021-22 as well. The Petitioner has not submitted any letter of approval from the Government to allow equity for FY 2022-23. Therefore, the Commission is requested not to consider RoE claims of the Petitioner. However, if the Petitioner submits the supporting documents before the Commission to verify RoE claims, then the same may be allowed in the True-up of FY 2022-23.
- 3.35 The Commission vide Order dated 28.12.2021 has considered the withdrawal of RoE for FY 2019-20 and FY 2020-21, but in the earlier Order it has been allowed and included in the Tariff determined for those years. As a result of this, the Petitioner has recovered the RoE from the respective Discoms through its approved tariff. Hence, the Stakeholder requested the Commission to make suitable reduction of such recovery in its present tariff determination.

RVUN's Response

- 3.36 The Petitioner submitted that RoE has been claimed as per the direction of the State Government issued vide letters dated 17.09.2021 and 16.11.2021. The Government of Rajasthan has withdrawn RoE for FY 2019-20 and FY 2020-21 and allowed RoE from FY 2021-22 onwards vide letter dated 17.09.2021. Further, Government of Rajasthan has withdrawn RoE for FY 2021-22 vide letter dated 16.11.2021.

Terminal Benefits

Stakeholders/Respondents Comments/Suggestions

- 3.37 The Stakeholder submitted that as per RERC Tariff Regulations, 2019, terminal benefits are to be allowed on the basis of actuarial valuation report. It is observed from the instant petition that the actuarial valuation report is of the employees of the RVUN as a whole and not in respect of employees of the CSCTPP Units 5&6. Since, the tariff is to be determined for CSCTPP Units 5&6, hence the incidence of terminal benefits has to be limited in respect of employees who are specifically involved in O&M of Units 5&6 of CSCTPP.
- 3.38 The Stakeholder submitted that these charges may not be allowed on proportionate basis. Therefore, the Stakeholder sought the actuarial

valuation report about the employees of CSCTPP Units 5&6 for claiming these charges. In absence of such documents, the Stakeholder requested the Commission to not allow the terminal benefit charges as claimed by the Petitioner.

- 3.39 Further, the Stakeholder submitted that the terminal benefit charges may be limited to the amount deposited in the designated fund in FY 2020-21 & FY 2021-22. Hence, the Stakeholder sought the details of the actual amount deposited in the designated funds for FY 2020-21 and FY 2021-22.

RVUN's Response

- 3.40 The Petitioner submitted that the terminal benefit charges have been claimed as per the RERC Tariff Regulations, 2019, i.e., based on the actuarial valuation report of FY 2020-21 and it has been computed based on the employee expenses of respective plants. Further, these charges are estimated for determination of ARR, whereas the details of deposit will be submitted along with the true up Petition.

Gross Generation, PLF and Ex-bus Energy Stakeholders/Respondents Comments/Suggestions

- 3.41 As per Regulation 45(1)(a) and 45(1)(b) of the RERC Tariff Regulations, 2019, the target availability and the target PLF is 85% for all Thermal Generating Stations commissioned after 01.04.2019, whereas the Petitioner has submitted the PLF of 84% for approval of its thermal generating plant.
- 3.42 Subsequently, as per norms, the Gross and Net generation shall be calculated as 9828.72 MU and 9312.71 MU, whereas the Petitioner has submitted Gross generation of 9713.09 MU and 9203.15 MU. The Stakeholder sought justification from the Petitioner regarding submissions of such lower PLF and availability figures in comparison to prescribed norms.

RVUN's Response

- 3.43 The Petitioner submitted that CSCTPP Unit 5 achieved COD on 09.08.2018 under the regime of RERC Tariff Regulations, 2014. Regulation 45(1)(a) of RERC Tariff Regulations, 2014, states target availability and PLF of 83.00%. CSCTPP Unit 6 achieved COD on 02.04.2019 under the regime of RERC Tariff Regulations, 2019. Regulation 45(1)(a) of the RERC Tariff Regulations, 2019 states target availability and PLF of 85%. Accordingly, the weighted average is taken for the target availability and PLF as 84%. Therefore, RVUN requested the Commission to allow ARR and tariff for FY 2022-23 considering

target availability and PLF as 84%.

GCV and Price of Coal

Stakeholders/Respondents Comments/Suggestions

- 3.44 With respect to the GCV of coal, the Stakeholder sought the data of GCV of coal received and the GCV of such coal that was fired in previous months, i.e., November, 2021 to January, 2022.
- 3.45 The Commission vide Order dated 28.12.2021, directed the Petitioner to take appropriate steps in ensuring that the coal price of CSCTPP Units 5&6 remains lesser than coal price procured from Coal India Ltd. for CSCTPP Units 1&2. The Petitioner was supposed to submit the detailed report on this in 2 months from the date of the Order dated 28.12.2021. In view of above, the Stakeholder sought the information regarding price of coal procured from Coal India Ltd. for CSCTPP in December, 2021, January, 2022 and February, 2022, so that proper comparison can be done along with the copy of the report submitted to the Commission.
- 3.46 The Respondent submitted that the Petitioner has not submitted the summary of Lab Reports along with the methodology for arriving at accurate value of GCV. In order to arrive at the fuel charges, GCV has to be accurate. Therefore, the Respondent requested the Commission to direct the Petitioner to submit a copy from a Government recognized Lab providing GCV values along with the detailed methodology for arriving at the figure of GCV mentioned in the Petition.
- 3.47 The Stakeholder further submitted that there is no such document made available by the Petitioner in which the State government has approved the price of coal. Therefore, the Petitioner to get the rate of coal approved from the State Government. The reference of Government approval as being made by the Petitioner is nothing but the approval for forming Joint Venture Company only.
- 3.48 Further, in the mining approved plan, it has been mentioned that a coal washery with a raw coal capacity of 10.00 MTPA is proposed to set up at the pit head to wash coal of Parsa East and Kenta Basan block in Surguja district of Chhattisgarh to meet the requirement of two thermal Power Projects, i.e., Chhabra Phase - II and Kalisindh. The Stakeholder submitted that for what reasons it has not been installed at pit head and why at a distinct place, which has unnecessary caused loading/unloading and transportation cost. The Stakeholder also sought from RVUN that whether

they have intimated the Coal Ministry for this charge and obtained their approval.

- 3.49 As per CMDA dated 03.10.2013 and 24.05.2016, for washing the coal, certain charges are being claimed as "Benefication Charges". The definition of it as per the aforesaid agreement is as below:

"Benefication Charges means Rs. 120 per MT which is the rate indicated in the tender as the rate prevailing on the date of opening of tender, i.e., 28.10.2010 including transportation from mines to washery, unloading and loading at washery, Transportation to railway siding, unloading and loading in rail wagons and any other incidental charges considering rebate for the rejects generated and all taxes, levies except service tax to render the coal to 4900 GCV, Ash content of 30% and total moisture of 10% assuming yield of 77.5%".

In view of above, the Stakeholder submitted that as to for what reasons in the instant petition the petitioner has claimed GCV as 4151.41 kCal/kg, i.e., on such lower side and therefore, Benefication Charges paid are of no use, which should be disallowed from the Cost of Coal.

- 3.50 Also, there is a clause on ceiling price in the aforesaid mining and delivery agreement as below:

"Notwithstanding anything to the contrary herein in respect of any quantities supplied, the contract price excluding railway freight charges and other charges related to rail transportation shall never be allowed to exceed the ceiling price.

The ceiling price shall mean that current CIL/SECL notified price of pit head G12 Grade Coal plus Crushing Charges escalated Benefication and all other charges as per calculation in Schedule 1"

The Petitioner has not submitted the comparison of above two prices to satisfy that what they have charged is in accordance to the delivery contract or not.

The aforesaid delivery agreement also states that the ceiling price shall be determined at the beginning of an operating year by the parties. The operating year has been defined as from April, 01 to the following March, 31. Therefore, the ceiling price as on April, 01 has also not been submitted by the Petitioner.

- 3.51 The Stakeholder further submitted that RVUN in order to apprise the BOD regarding determination of ceiling price and contract price of coal

supplied from Parsa East and Kente Basan coal blocks to Chhabra and Kalisindh Thermal Plant in pursuance of CMDA executed between RVUN and PKCL placed an agenda before BOD vide 235th meeting dated 27.03.2014. In the above agenda there were two calculations, one on ceiling price considering GCV of 4900 kCal/kg Coal and second one on ceiling price worked out on pro rata based on GCV of 4500 Kcal/kg coal. The Petitioner has not submitted any reasons for deviation from 4900 kCal/kg GCV to 4500 kCal/kg GCV, which has been against the delivery agreement

- 3.52 Also, vide data gap reply dated 11.03.2022 (Petition No. 1980/22), the Petitioner submitted calculations of contract price of washed coal with GCV of 4500 kCal/kg and ceiling price though has been calculated at GCV of 4900 kCal/kg but at the same ceiling price on prorata basis of GCV 4500 kCal/kg has also been calculated. The Petitioner has not submitted any reasons for such deviation from delivery agreement, which is to be clarified.
- 3.53 In the instant Petition, the GCV has been shown as 4151.46 kCal/kg, which is much lower than that prescribed in the mining and delivery agreement. The beneficiation charges paid or included in the present cost is of no use, which are based to render the coal for GCV as 4900 kCal/kg and not for any lower category.
- 3.54 As per the delivery agreement, if the ash content in the coal as determined on a rake to rake basis at the thermal power stations after sampling and analysis exceeds 30.00 %, the weight of the coal shall be reduced by the same percentage by which ash content increases from 30.00 % and such reduced weight of coal shall only be considered for payments. No price adjustment shall be carried out for coal with ash content less than 25.00 %. Coal with ash content above 34.00 % shall not be supplied, also, shall not be accepted by RVUN. The Petitioner to submit the reasons for accepting coal of such higher ash content the Commission may disallow the cost of such coal.

RVUN's Response

- 3.55 The details of price and GCV for the month of October, November & December, 2021 has been provided in the data gap reply and copy of the same is provided to the Stakeholder.
- 3.56 The Petitioner submitted that GCV testing is done by Government of India

authorized laboratory and is carried out from third party, i.e., CIMFR. Therefore, RVUN requested the Commission to determine ARR and Tariff as claimed.

- 3.57 The Petitioner further submitted that the EOI was invited from the prospective JV partners having technical and financial capabilities to join RVUN in the formation of Company to enter the business of captive coal mining in the Indian Coal fields for meeting the increased coal requirement of its Power Stations.
- 3.58 This EOI case was submitted to the GOR for seeking approval. The GOR vide letter dated 28/30.03.2005 directed that RVUN may apply for captive coal blocks through a process of identification of the most suitable coal blocks that are presently available. RVUN may also select the most suitable Joint Venture partner through a competitive bidding route from amongst the shortlisted participating firms.
- 3.59 The tender for formation of JV was invited through open competitive bidding in two parts and the tender specification was got vetted by expert Sh. M G. Ramachandran, New Delhi.
- 3.60 The three firms submitted the bids on scheduled date, i.e., 15.05.2006
- M /s Adani Exports Ltd., Ahmedabad
 - M /s Essel Mining & Industries Ltd., Mumbai
 - M /s Sainik Mining and Allied Services Ltd., New Delhi
- 3.61 The Sub-Committee vide meeting doted 20.06.2006 considered the proposal in detail and approved the two firms as qualified and technically accepted for captive mining of coal through formation of JV Company for opening of price bids as below:
- M /s Adani Exports Ltd., Ahmedabad
 - M /s Sainik Mining and Allied Services Ltd., New Delhi
- 3.62 The price bid for above firms was opened on 22.06.2006 and the Sub-Committee vide meeting dated 24.08.2006 considered price of M/s Adani Exports Limited, Ahmedabad as lowest and submitted the case before the BOD, RVUN for decision.
- 3.63 The BOD vide 112th meeting dated 12/13.10.2006 considered the proposal in detail and after deliberation negotiated with L1 Bidder, i.e., M/s Adani

Export Limited for better prices and other terms & conditions. The BOD considered the confirmation of M/s Adani Export Limited all the terms as specified in the minutes of 112th BOD meeting as the JV partner for formation with RVUN for Captive mining for meeting the coal requirement of the Power Stations of RVUN of the State. It was also decided to refer the case to GOR for seeking its NOC before issuance of a LOI to the selected JV partner. The GOR issued NOC vide letter dated 23.10.2006 for the JV.

- 3.64 After formation of JV, the detailed CMDA was prepared and approved in the 141th meeting of BOD, RVUN dated 04/05.07.2008. The proposed CMDA draft approved by the BOD, RVUN was submitted to GOR vide letter dated 14.07.2008. In continuation to the above letter, GOR vide letter dated 25.07.2008 directed to submit signed copy of CMDA. Therefore, the Petitioner submitted that the whole process of formation of JV and CMDA was approved by GOR and therefore, the price of Coal is also approved by the GOR.
- 3.65 As per the provisions of CMDA, PKCL shall supply coal of GCV 4500 kCal/kg, Ash of 30.00 % and Total Moisture at 10.00 % for which (if necessary) PKCL shall establish coal washery and supply coal of the required specifications.
- 3.66 Further, Ministry of Coal, GOI vide letter dated 16.07.2009 approved Mining plan of 10 MTPA including washery of 10 MTPA as per the guideline of Ministry of Coal, GOI for mining of 10 MTPA coal from' Parsa East and Kente Basan,, coal blocks.
- 3.67 Ministry of Coal, GOI vide letter dated 16.07.2009, while conveying approval of Mining plan of PEKB coal blocks, suggested considering large mineable coal reserves, the mining can be planned for higher production of 15 MTPA as against 10 MTPA and directed RVUN to meet coal requirement of new projects (2 x 660 MW Suratgarh and 2 x 660 MW Chhabra Super Critical Project)
- 3.68 Accordingly, M/s PKCL established initially 10 MTPA washery at pithead (in the mining lease area) in 2011. Ministry of Coal, GOI vide letter dated 19.11.2013 and 12.08.2016 approved Mining plan & Mine Closure Plan for 15 MTPA or Parsa East & Kente Basan Open cast Coal Mine. Thereafter, M/s PKCL enhanced the washery from 10 MTPA to 15 MTPA.
- 3.69 MOEF&CC, GOI vide letter dated 10.08.2018 and 21.12.2011 accorded approval for expansion of PEKB Open Cast mine project from 10 MTPA to 15

MTPA and Pithead coal washery from 10 MTPA to 15 MTPA in a total area of 2682.856 ha located in Hasdeo-Arnad coalfields in Sarguja District, Chhattisgarh. Further, Chhattisgarh Environment Conservation Board (CECB) vide letter dated 17.09.2018 and 25.11.2021 accorded" consent to establish for expansion of mine project from 10 MTPA to 15 MTPA and pit head coal washery from 10 MTPA to 15 MTPA. Subsequently, CECB, Chhattisgarh vide letter dated 10.12.2018 granted "Consent to Operate" for expansion of mine project from 10 MTPA to 15 MTPA and Pithead coal washery from 10 MTPA to 15 MTPA under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981.

- 3.70 Further, evacuated coal is transported by truck/dumpers to CHP and transported coal from CHP to Washery by belt conveyor and wagon loading is done at PSRS Railway siding, which is situated at pit head through SILO with inbuilt Rapid Loading System. It is evident from the above facts that the expansion of mine project from 10 MTPA to 15 MTPA coal washery is installed at pit head, i.e., in the mining lease area only and hence, there is no extra cost incurred towards loading/unloading and transportation.
- 3.71 The references of CMDA dated 03.10.2013 and 24.05.2016 pertains to Kente Extension & Parsa Coal blocks respectively and the supply of coal from both these coal blocks have not yet commenced. Also, the beneficiation charges mentioned pertains to these coal blocks. In the Petition filed before the Commission as per the Tariff Regulations, GCV is taken on ARB basis while as per CMDA dated 16.07.2008 in respect to Parsa East & Kente Basan coal block, GCV is considered on ADB basis, i.e., 4500 kCal/Kg.
- 3.72 As per the provisions of CMDA, Ceiling price is regularly determined at the beginning of every year. The ceiling price is not determined on monthly basis. However, it is re-determined in case of changes in any component of the Ceiling price during the year. As per CMDA, contract price (excluding railway freight) is component with ceiling price calculated as per Schedule - 1 provided in CMDA of the beginning of every year. Accordingly, Ceiling Price and Applicable Contract price for FY 2021-22 is calculated for CTPP.
- 3.73 The Beneficiation contract appended with CMDA dated 25.07.2006 between RVUN and M/s Aryan Coal Beneficiation Pvt. Ltd., in which, the GCV (ADB) is taken under the range of 4800 - 5000 kCal/kg and therefore, the average, i.e., 4900 kCal/kg is taken in calculating ceiling price. As per CMDA between RVUN and PKCL, Price (mining fees) is payable to PKCL on

the basis of GCV (ADB) at 4500 kCal/kg and as per Schedule - I (calculation of ceiling price) appended with CMDA, the ceiling price is calculated considering GCV at 4900 kCal/Kg and thereafter worked out on pro-rata based on GCV (ADB) of 4500 kCal/kg Coal to compare with the contract price of GCV of 4500 kCal/kg and lower of the two is taken for payment.

- 3.74 The ash contents in the coal are considered for payment as per the CMDA. If the ash content in the received coal exceeds 30.00 %, then such reduced weight of coal shall only be considered for payment of the applicable contract price.

SECTION 4

Determination of ARR and Tariff for CSCTPP Units 5&6 for FY 2022-23

Gross Fixed Asset (GFA) during FY 2018-19, FY 2019-20 and FY 2020-21

RVUN's Submission

- 4.1 RVUN filed the instant petition for approval of tariff for CSCTPP Units 5&6 for FY 2022-23, considering the capital cost of Rs. 8568.06 Crore and the same as the opening GFA for FY 2021-22. Further, in FY 2021-22, RVUN has estimated an additional capitalization of Rs. 428.59 Crore.
- 4.2 Vide the replies of data gaps, RVUN submitted the details of additional capitalization for FY 2021-22 as under:

Table 2: Additional Capitalization claimed by RVUN for FY 2021-22 (Rs. Crore)

Particulars	Additional Capitalization Proposed for FY 2021-22 for Unit 5	Additional Capitalization Proposed for FY 2021-22 for Unit 6	Total Additional Capitalization proposed for CSCTPP Unit 5&6 for FY 2021-22
EPC Contract	0.00	80.21	80.21
River Water System(Supply)	0.00	11.42	11.42
Intake Well	0.00	0.00	0.00
Lhasi Dam	0.00	0.65	0.65
Raising of height of Anicut	0.00	7.62	7.62
Land	0.00	0.92	0.92
Town Ship	0.00	92.64	92.64
Other Civil Work(railway siding)	0.00	165.51	165.51
Others	0.00	56.10	56.10
Pre-operative	0.00	7.26	7.26
IDC	0.00	1.97	1.97
Finance Charges (Loan Process Charge)	0.00	4.29	4.29
Total	0.00	428.59	428.59

4.3 Accordingly, the asset class wise GFA details submitted by the Petitioner for FY 2021-22 is as shown in the table below:

Table 3: Asset class wise details submitted by RVUN (Rs. Crore)

Particulars	FY 2021-22			
	Opening GFA	Addition	Deduction	Closing GFA
Land & land rights	56.07	0.92	0.00	56.99
Hydraulic works	766.01	25.35	0.00	791.36
Building & Civil works of Power plant	1706.13	287.62	0.00	1993.75
Plant & machinery including sub-station equipment's	5946.87	113.11	0.00	6059.98
Communication equipment (lines and cable network)	91.57	1.59	0.00	93.16
Vehicles	0.00	0.00	0.00	0.00
Furniture & fixtures	1.28	0.00	0.00	1.28
Office Equipment's	0.12	0.00	0.00	0.12
Capital spares	0.00	0.00	0.00	0.00
IT Equipment's	0.00	0.00	0.00	0.00
IT/ SCADA Software	0.00	0.00	0.00	0.00
Any other items	0.00	0.00	0.00	0.00
Total	8568.06	428.59	0.00	8996.65

4.4 Further, for FY 2022-23, RVUN has not claimed any additional capitalization. The details of GFA claimed by RVUN for FY 2022-23 is as shown in the table below:

Table 4: GFA claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Amount
Opening GFA as on 1 st April, 2022	8996.65
Add: Additions During FY 2022-23	0.00
Less: Deductions during FY 2022-23	0.00
Closing GFA for FY 2022-23	8996.65

Commission's Analysis

4.5 The Commission observed that the Petitioner filed the instant petition for determination of tariff for FY 2022-23 on 11.01.2022, considering the opening GFA as approved by the Commission for FY 2021-22 vide Order dated 28.12.2021 in Petition No. 1879/21. Further, vide instant Petition, RVUN has estimated an additional capitalization of Rs. 428.59 Crore during FY 2021-22.

4.6 The Commission also observed that the Petitioner vide Petition No. 1879/21 has claimed an estimated additional capitalization from FY 2021-22 to cut-off

date and estimated additional capitalization beyond cut-off date of Rs. 335.92 and Rs. 2729.22 Crore respectively. The Commission against it vide Order dated 28.12.2021 directed as below:

"4.128. For the expected additional capitalization beyond 31.03.2021, the Commission directs RVUN to submit the actual audited figures against it, certified by the Statutory auditor. The details of the same can be submitted by RVUN through the true-up petition of FY 2021-22. The Commission will carry out the prudence check of it at that time and accordingly revise the capital cost for CSCTPP Units 5&6."

- 4.7 Further, the Commission vide additional data gaps asked the petitioner to submit the Statutory Auditor Certificate for additional capitalization claimed for FY2021-22, in response to that Petitioner submitted that the auditor certificate for additional capitalization will be submitted alongwith the true up petition for FY 21-22.
- 4.8 The Commission, therefore, for the purpose of this Order has not considered any estimated additional capitalization of FY 2021-22, i.e., of Rs. 428.59 Crore and accordingly, again directs RVUN to submit the actual audited figures against it, certified by the Statutory auditor during the true-up petition of FY 2021-22. The Commission will carry out the prudence check of it at that time and accordingly revise the capital cost for CSCTPP Units 5&6.
- 4.9 The Petitioner has not proposed any additional capitalization for FY 2022-23, therefore, the same has not been considered.
- 4.10 Accordingly, the GFA base approved by the Commission for FY 2022-23 is as shown in the table below:

Table 5: GFA approved by the Commission (Rs. Crore)

Particulars	FY 2022-23
	Amount
Opening GFA as on 1 st April, 2022	8568.05
Add: Additions During FY 2022-23	0.00
Less: Deductions during FY 2022-23	0.00
Closing GFA for FY 2022-23	8568.05

- 4.11 The tariff determination for FY 2022-23 has been done in accordance with the RERC Tariff Regulations, 2019.
- 4.12 The Annual Fixed Charges comprise of the following elements:
- (i) Operation and Maintenance (O&M) Expenses;

- (ii) Depreciation;
- (iii) Interest on Long-Term Loans and Finance Charges;
- (iv) Return on Equity;
- (v) Interest on Working Capital;
- (vi) Insurance Charges;
- (vii) Terminal Benefit;
- (viii) Less: Non-tariff Income.

4.13 Each of the annual fixed charges elements has been dealt with in the following paragraphs.

Operation and Maintenance (O&M) Expenses

RVUN's Submission

4.14 RVUN submitted that the Operation & Maintenance Expenses have been computed on the basis of norms prescribed under Regulation 47 of the RERC Tariff Regulations, 2019.

4.15 The details of the O&M expense as claimed in the Petition for FY 2022-23 is as shown in the table below:

Table 6: O&M expenses claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
O&M Expenses	266.14

Commission's Analysis

4.16 The Commission has verified RVUN's computations of normative O&M expenses. It is observed that as per Regulation 47 (1)(b) of the RERC Tariff Regulations, 2019 normative O&M expense for unit size of more than 250 MW is Rs. 18.18 Lakh/MW for FY 2019-20 and after that Rs. Lakh/MW cost is to be escalated by 3.51% in subsequent years as per Regulation 24(3) of the RERC Tariff Regulations, 2019. Accordingly, O&M Expenses applicable for CSCTPP Units 5&6 for FY 2022-23 is Rs. 20.16 Lakh/MW as per provisions of the RERC Tariff Regulations, 2019.

4.17 The Commission has accordingly approved O&M Expenses for FY 2022-23 is as shown in the table below:

Table 7: O&M expenses approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
O&M Expenses	266.14	266.14

Depreciation**RVUN's Submission**

4.18 RVUN submitted that for computation of depreciation it has considered the capital cost as Rs. 8568.06 Crore as the opening GFA for FY 2021-22. Further, in FY 2021-22 RVUN has estimated an additional capitalization of Rs. 428.59 Crore. Therefore, while computing the depreciation, these additional capitalizations has also been considered. Accordingly, the depreciation claimed for FY 2022-23 is as shown in the table below:

Table 8: Depreciation claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Depreciation	433.35

Commission's Analysis

4.19 Depreciation has been computed considering the approved asset class wise GFA for FY 2022-23 as discussed in above paras and considering the rates of depreciation as specified in the RERC Tariff Regulations, 2019. The depreciation approved by the Commission for FY 2022-23 is as shown in the table below:

Table 9: Depreciation approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Depreciation	433.35	416.35

Interest on Long-Term Loans and Finance Charges**RVUN's Submission**

4.20 RVUN submitted that loan wise interest expenses & finance charges have been worked out and taken as part of fixed cost. The depreciation for the year has been considered as normative repayment for the year. The interest charges on long term loans as submitted by RVUN for FY 2022-23 is as shown in the table below:

Table 10: Interest on long term loan and Finance Charges claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Interest on Loan & Finance Charges	630.97

Commission's Analysis

4.21 As the Commission has not considered any GFA addition for FY 2021-22, the closing term loan balance approved for FY 2021-22 has been considered as the opening loan balance for FY 2022-23. The allowable depreciation for the year has been considered as the normative repayment. Therefore, the Loan balance considered by the Commission for FY 2022-23 is as shown in the table below:

Table 11: Loan balance approved by the Commission (Rs. Crore)

Particulars	FY 2022-23
	Approved (Units 5&6)
Opening loan	5699.26
Addition	0.00
Repayment	416.35
Closing loan	5282.92

4.22 As per Regulation 21 (5) of the RERC Tariff Regulations, 2019, the rate of interest to be considered is weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year.

4.23 The Commission has considered the interest rate after deducting the penal interest amount of FY 2020-21 on long term loans considering the information submitted by RVUN vide reply to data gaps dated 31.05.2022, i.e., 10.81%.

4.24 RVUN has claimed finance charges of Rs. 0.76 Crore for FY 2022-23 on the basis of actual finance charges incurred during FY 2020-21. The Commission for the purpose of this Order has considered the same, i.e., as per the actuals for FY 2020-21. Any variation shall be adjusted during the truing up exercise for FY 2022-23.

4.25 The interest on long-term loans approved by the Commission for FY 2022-23 is as shown in the table below:

Table 12: Interest on long-term loans and finance charges approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Interest on Loan & Finance Charges	630.97	594.35

Return on Equity (RoE)

RVUN's Submission

4.26 RVUN submitted that Government of Rajasthan has withdrawn RoE for FY 2019-20 and FY 2020-21 and allowed RoE for RVUN from FY 2021-22 onwards vide letter dated 17.09.2021. The extract of it is as below:

"Looking to the severe affect of COVID on the revenue stream of DISCOMS , it has been decided that ROE charged by RVUNL in the year 2019-20 and 2020-21 which is yet to be truing up by RERC be withdrawn. However, from year 2021-22 onwards the ROE continues to be charged by RVUNL."

4.27 Further, GOR withdrawn RoE for FY 2021-22 vide letter dated 16.11.2021. The extract of it is as below:

"....ROE for the year 2021-22 will not be charged by RVUNL"

4.28 RVUN further submitted that RoE was allowed from FY 2021-22 onwards and withdrawn only for FY 2021-22. Therefore, RVUN is claiming RoE for FY 2022-23 as per GOR direction and Regulation 20 of RERC Tariff Regulation 2019, i.e., at the rate of 15.00% for FY 2022-23

4.29 The RoE claimed by RVUN for FY 2022-23 is as shown in the table below:

Table 13: Return on Equity Claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Return on Equity	236.77

Commission's Analysis

4.30 As the Commission has not considered any GFA addition for FY 2021-22, the closing equity balance approved for FY 2021-22 has been considered as the opening equity balance for FY 2022-23. Therefore, the equity base considered by the Commission for FY 2022-23 is as shown in the table below:

Table 14: Equity base approved by the Commission (Rs. Crore)

Particulars	FY 2022-23
	Approved (Units 5&6)
Opening Equity	1492.77
Addition	0.00
Closing Equity	1492.77

4.31 The Commission during the proceedings of hearing dated 12.05.2022 directed

RVUN to submit a letter from Government of Rajasthan stating that RoE from FY 2022-23 be allowed for RVUN stations. Against this RVUN vide its reply dated 31.05.2022 submitted the following:

"It is also submitted that GoR has issued fresh directions to RVUN vide letter dated 26.04.2022 for additional capital cost and equity support for implementation of revised emission norms to RVUN power stations allowing equity support, the extracts of which reproduced as below:

"FD concurs additional Project cost Rs. 1602.74 Crore against proposed 2627.77 Crore for implementation of revised emission norms as under subject to that Rs 320.55 Crore state equity support (20% of Rs. 1602.74 Crore) will be used from Return on equity (RoE) which will be allowed @ 15% for the FY 2022-23 to RVUNL,

It is clear from the above letter of Government, where government is directing the RVUN to utilize the RoE approved for FY 2022-23 towards equity fund of FGD project. Thus. it is clear that RoE for FY 2022-23 is not withdrawn and approved for FY 2022-23. Therefore, no clarity is required on this issue.

Similarly, vide letter dated 05.05.22 GoR issued direction in the matter of equity approval of CSCTPP for Units 5&6.

However, on the direction of Commission, RVUN has also made pursuance to GoR on 06.05.2022 with a request for clarification of Govt. of Rajasthan for claiming of RoE by RVUNL from FY 2022-23 and onwards. The copy of GoR letters dated 11.09.2021, 16.11.2021, 26.04.2022 and 05.05.2022 and RVUN letter dated 06.05.2022 are being submitted by RVUN."

4.32 The Commission has considered the submissions of RVUN for allowing RoE from FY 2022-23 onwards, however, the Petitioner has not submitted any specific document from the GOR stating that the RoE for RVUN from FY 2022-23 may be allowed. Therefore, the Commission for the purpose of this Order has not considered the same. However, the Commission grants liberty to the Petitioner to come up with the aforesaid document from GOR for its claim on ROE during the true-up Petition for FY 2022-23. The RoE allowed by the Commission for FY 2022-23 is as shown in the table below:

Table 15: Return on Equity approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Return on Equity	236.77	0.00

Interest on Working Capital (IoWC)

RVUN's Submission

4.33 The interest on working capital loan for FY 2022-23 has been computed as per the norms specified in Regulation 27 of the RERC Tariff Regulations, 2019. The rate of interest has been considered as equal to 300 basis points higher than the average Base Rate of State Bank of India prevalent during first six months of the previous year. Accordingly, IoWC claimed by RVUN for FY 2022-23 is as shown in the table below:

Table 16: IoWC claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Interest on Working Capital	83.18

Commission's Analysis

4.34 In accordance with the Regulation 27(2) of the RERC Tariff Regulations, 2019 the rate of interest on working capital is to be computed on normative basis and shall be 300 basis points higher from SBI Base Rate prevalent during first six months of the year previous to the relevant year. Accordingly, for working out interest on working capital for FY 2022-23, weighted rate of interest has been considered as per admissible rates during the previous year. The same works out to 10.00% p.a., which has been used for calculating interest on working capital for FY 2022-23. The computation of the bank rate is as shown in the table below:

Table 17: Computations of IoWC as considered by the Commission

Applicable for the Year	From Date	To Date	No. of Days	SBI Base Rate	300 Basis Point	Approved Interest Rate
FY 2022-23	01-04-2021	09-04-2021	9.00	7.00%	3.00%	10.00%
	10-04-2021	14-04-2021	5.00	7.00%		
	15-04-2021	14-05-2021	30.00	7.00%		
	15-05-2021	14-06-2021	31.00	7.00%		
	15-06-2021	14-07-2021	30.00	7.00%		
	15-07-2021	14-08-2021	31.00	7.00%		
	15-08-2021	14-09-2021	31.00	7.00%		
	15-09-2021	30-09-2021	16.00	7.00%		

<https://sbi.co.in/web/interest-rates/interest-rates/mcrlr-historical-data>

4.35 Further, the Commission has worked out the working capital requirement in accordance with the Regulation 27 of the RERC Tariff Regulations, 2019.

4.36 The Interest on Working Capital as approved by the Commission for FY 2022-23 is as shown in the table below:

Table 18: IoWC approved for FY 2022-23 (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Interest on Working Capital	83.18	80.08

Insurance Charges

RVUN's Submission

- 4.37 RVUN in its petition has claimed insurance charges for FY 2022-23 as per Regulation 25 of the RERC Tariff Regulations, 2019, i.e., 0.2% of average fixed assets for the year.
- 4.38 The insurance charges as claimed by the Petitioner is as shown in the table below:

Table 19: Insurance Charges claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Insurance Charges	14.79

Commission's Analysis

- 4.39 The Commission for the purpose of this Order has considered the actual insurance expenses for FY 2020-21 against CSCTPP Units 5&6, as per the station wise reconciliation statement submitted against insurance charges, i.e., Rs. 7.42 Crore and escalated subsequently till FY 2022-23 by 5.00% per annum.
- 4.40 The Petitioner also vide its data gaps reply dated 31.05.2022 has requested to allow insurance charges for FY 2022-23 considering 5.00% year on year escalation. Similar approach has been adopted by the Commission in approving the same in its previous year ARR and Tariff Petition against insurance charges.
- 4.41 The Commission hereby grants liberty to the Petitioner to come up with an actual figure of Insurance Charge of CSCTPP Units 5&6 in its true-up petition for FY 2022-23. The Commission based on the prudence check will take a view on it accordingly at the time of true-up. The insurance charges approved by the Commission for FY 2022-23 is as shown in the table below:

Table 20: Insurance Charges approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Insurance Charges	14.79	8.18

Terminal benefit

RVUN's Submission

4.42 RVUN submitted that terminal benefits have been separately allowed over and above the normative O&M expenses in accordance with Regulation 47(7) of the RERC Tariff Regulations, 2019 as specified below:

"Provided that terminal liabilities based on actuarial valuation, over and above the normative O&M Expenses, subject to prudence check shall be allowed through tariff separately."

4.43 RVUN in its petition has claimed terminal benefits for FY 2022-23 based on the actuarial valuation for FY 2020-21. The details are as shown in the table below:

Table 21: Terminal Benefits claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Terminal Benefit	24.23

Commission's Analysis

4.44 The Commission has provisionally approved the terminal benefits in this Order as claimed by RVUN. Any variation in actual terminal benefits shall be adjusted during the truing up exercise for FY 2022-23. The terminal benefits as approved by the Commission are as shown in the table below:

Table 22: Terminal Benefits approved for FY 2022-23 (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Terminal Benefit	24.23	24.23

Amortization

RVUN's Submission

4.45 RVUN submitted that the amount against amortization has been claimed on the government land provided on lease. The amortization as proposed by RVUN for FY 2022-23 is as shown in the table below:

Table 23: Amortization claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Amortization	0.77

Commission's Analysis

4.46 The Commission has considered the amortization as claimed by RVUN for the

purpose of this Order. The Commission shall carry out the prudence check of the actual amount against amortization at the time of truing up exercise for FY 2022-23. The amortization approved by the Commission for FY 2022-23 is as shown in the table below:

Table 24: Amortization approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Amortization	0.77	0.77

Non-Tariff Income

RVUN's Submission

4.47 RVUN submitted that the main heads of Non-Tariff income are Sale of Scrap, interest on FD/Staff loans, miscellaneous receipts (rebates), etc. Further, RVUN submitted that it has been claimed based on the actual non-tariff income for FY 2020-21 and considering 5.00% increase year on year. The Non-tariff income as proposed by RVUN for FY 2022-23 is as shown in the table below:

Table 25: Non-tariff income claimed by RVUN (Rs. Crore)

Particulars	FY 2022-23
	Claimed (Units 5&6)
Non-tariff Income	1.12

Commission's Analysis

4.48 The Commission has considered the non-tariff income as claimed by RVUN for the purpose of this Order. The Commission shall carry out the prudence check of the actual non-tariff income at the time of truing up exercise for FY 2022-23. The non-tariff income approved by the Commission for FY 2022-23 is as shown in the table below:

Table 26: Non-tariff income approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed (Units 5&6)	Approved (Units 5&6)
Non-tariff Income	1.12	1.12

Annual Fixed Charges

4.49 Based on the above analysis, the Annual Fixed Charges approved by the Commission for FY 2022-23 is as shown in the table below:

Table 27: AFC approved by the Commission for FY 2022-23 (Rs. Crore)

Particulars	FY 2022-23	
	Claimed	Approved
Operation & Maintenance expenses	266.14	266.14
Interest on loan and finance charges	630.97	594.35
Depreciation	433.35	416.35
Interest on working capital	83.18	80.08
Return on Equity	236.77	0.00
Insurance	14.79	8.18
Terminal benefits	24.23	24.23
Amortization	0.77	0.77
Less: Non-Tariff Income	1.12	1.12
Annual Fixed Charges	1689.09	1388.98

Energy Charges**RVUN's Submission**

- 4.50 SHR has been considered as 2133.60 kcal/kWh for FY 2022-23 as approved by the Commission vide Order dated 28.12.2021.
- 4.51 The PLF has been considered as 84% for Units 5&6 and the auxiliary consumption is considered as 5.25% for FY 2022-23, i.e., in accordance with the RERC Tariff Regulations, 2019.
- 4.52 The GCV and price of fuel for FY 2022-23 has been taken on the basis of actuals for the months of April, 2021 to September, 2021.

Commission's Analysis

- 4.53 The Availability and PLF has been considered as 85% for Units 5&6 for FY 2022-23, i.e., in accordance with the RERC Tariff Regulations, 2019.
- 4.54 The Commission vide additional data gaps asked the petitioner to submit the OEM certificates for SHR guaranteed by the supplier at conditions of 100% MCR, zero make up, design coal and design cooling water temperature/back pressure as per RERC Tariff Regulations. The petitioner has submitted the OEM certificates for the SHR as per RERC Tariff Regulations. The Design Heat Rate as per OEM certificate is 2032(kcal/kWh). Commission has considered the Gross Station Heat Rate as 2133.60 kCal/kWh for FY 2022-23 considering 1.05 multiplying factor in accordance to the RERC Tariff Regulations, 2019.
- 4.55 The normative auxiliary consumption considered by RVUN is in line with the provisions of the Tariff Regulations. The Commission has considered the normative auxiliary consumption as submitted by RVUN for the purpose of this Order.

- 4.56 The Commission has considered the secondary fuel oil consumption of 0.50 ml/kWh in accordance with the RERC Tariff Regulations, 2019.
- 4.57 The Commission has considered the GCV and rate of coal as submitted by the Petitioner vide its reply dated 31.05.2022 for the month of January, 2022 to March, 2022. Accordingly, the claimed figures of RVUN towards energy charges are also changed.
- 4.58 It is observed that the fuel requirement of CSCTPP Units 5&6 is being fulfilled from Parsa, Parsa East and Kente Basan & Kente Extension Coal Block allocated by Ministry of Coal through Govt. Dispensation Route dated 10.03.2015, 26.10.2015. Whereas the Coal utilized for generation of power from CTPP Units 1&2 is from Coal India Limited.
- 4.59 As regards for the coal received from PKCL, Commission observed that cost of coal procured from PKCL in terms of heat value is equal to/ higher than the coal procured from CIL. While analysing it is observed that cumulative impact of washing the coal received from PKCL is around Rs. 1000/MT. RVUN should therefore carry out the cost benefit analysis of coal beneficiation charges.
- 4.60 Further, as per Regulation 11(8) of RERC Tariff Regulations, 2019 the price of fuel procured from captive coal mine for the generating company shall be approved by the Government or Government approved mechanism or by fuel regulator. However, On examination of the data provided by RVUN it could not be ascertained as to whether the price mechanism for determining the fuel price as per Coal Mining and Delivery Agreements (CMDA) dated 16.07.2008, 03.10.2013 and 24.05.2016 executed between RVUN and Parsa Kente Collieries Ltd. (PKCL), Rajasthan collieries Limited (RCL) are approved by Government of Rajasthan.
- 4.61 In view of above, the Petitioner is required to get the specific approval from Government of Rajasthan in respect of the price mechanism for determining the fuel price as per Coal Mining and Delivery Agreements.
- 4.62 The Petitioner is also directed to submit the GCV of coal on as received basis certified by the CIMFR and shall also get certified the calculation of monthly weighted average data of GCV of coal as received basis by CIMFR. The Petitioner should claim the GCV accordingly in next petitions.
- 4.63 Regulation 51(2) of Tariff Regulations, 2019 stipulates the GCV of coal or gas to be considered as the higher value of 'as received less 85 kcal/kg' or 'as fired'. The Petitioner vide data gaps submitted the GCV of coal 'as received' and

'as fired'. For the purpose of tariff determination, the Commission has considered the GCV of coal "as received" as submitted by the Petitioner and subtracted 85 kcal/kg from the same. The Commission directs the Petitioner to submit both 'as received' and 'as fired' GCV of primary fuel for each station separately along with supporting documents for the same in its forthcoming Petitions for tariff determination and/or true-up.

4.64 However, for the instant petition Commission has considered the rates of coal as submitted by RVUN as per JV agreements. Therefore, onus to adhere to laid down procedures and rates are on RVUN. RVUN, therefore, must ensure strict compliance of the same.

4.65 The Energy Charges approved by the Commission for FY 2022-23 is as shown in the table below:

Table 28: Energy Charges approved by the Commission

Particulars	Units	FY 2022-23	
		Claimed	Approved
Gross Generation	MU	9713.09	9828.72
Auxiliary Consumption	%	5.25	5.25
Net Generation	MU	9203.15	9312.71
Landed Price of Coal	Rs./kg	4.47	4.47
Gross Station Heat Rate	kcal/kWh	2133.60	2133.60
Price of Secondary fuel oil	Rs./ml	0.05	0.05
Secondary fuel oil Consumption	ml/kWh	0.50	0.50
Gross Calorific Value of Secondary fuel oil	kcal/ml	9.90	9.90
Heat Contribution from Secondary fuel oil	kcal/kWh	4.95	4.95
Heat Contribution from Coal	kcal/kWh	2128.65	2128.65
Gross Calorific Value of Coal	kcal/kg	4294.09	4294.09
Specific coal consumption	kg/kWh	0.50	0.50
Rate of Energy Charge	Rs./kWh	2.37	2.37
Other Charges	Rs. Crore	0.00	0.00
Total Energy Charges	Rs. Crore	2177.19	2203.11
	Rs./kWh	2.37	2.37

4.66 The Commission accordingly approves the tariff for FY 2022-23 for CSCTPP Units 5&6 as shown in the table below:

Table 29: Final Tariff approved by the Commission (Rs. Crore)

Particulars	FY 2022-23	
	Claimed	Approved
AFC (Rs. Crore)	1689.09	1388.98
AFC per Unit (Rs./kWh)	1.84	1.51
Energy Charges (Rs. Crore)	2177.19	2203.11
Energy Charge Rate (Rs./kWh)	2.37	2.37
Total Tariff (Rs./kWh)	4.20	3.87

- 4.67 The tariff approved by the Commission for FY 2022-23 shall be effective from 01.04.2022 and shall remain in force till the next Order of the Commission.
- 4.68 Copy of this Order may be sent to the Petitioner, Respondents, Objectors, CEA and Government of Rajasthan.

(S. C. Dinkar)
Member

(Dr. B. N. Sharma)
Chairman