

To,

Date: 12.07.2023

Secretary
Central Electricity Regulatory Commission
3rd & 4th Floor, Chanderlok Building,
36, Janpath, New Delhi- 110001

Subject: Submission of comments on Approach Paper on the Terms and Conditions of
Tariff Regulations for Tariff Period 01.04.2024 To 31.03.2029

Ref: - File No. L-1/268/2022/CERC dated 03-07-2023

Sir,

This is with reference to the above subject Hon'ble Central Electricity Regulatory
Commission invites comments on Approach Paper on the Terms and Conditions of Tariff
Regulations for Tariff Period 01.04.2024 To 31.03.2029.

Thus, Bharat Aluminium Company Limited having a single part tariff (Variable charge)
long term PPA with Chhattisgarh State Power Distribution Company Limited (CSPDCL)
is submitting suggestions for the same as Annexure-A

Submitted for your kind consideration.

Thanking you,

Yours faithfully,

For: Bharat Aluminium Company Limited



Authorized Signatory

**REPRESENTATION/ COMMENTS/ SUGGESTIONS ON BEHALF OF
BHARAT ALUMINIUM COMPANY LIMITED (BALCO)**

**Approach Paper on the Terms and Conditions of Tariff Regulations for
Tariff Period 01.04.2024 To 31.03.2029**

1. The Hon'ble Commission has issued an Approach Paper on the terms and conditions of Tariff Regulations for the period 01.04.2024 to 31.03.2029.
2. Vide a notification dated 26.05.2023, the Hon'ble Commission has invited comments/ suggestions from various stakeholders on the said Approach Paper.
3. Accordingly, in terms of the said notification, BALCO is hereby providing its representation/ comments/ suggestions on the said draft Approach Paper.

SYNOPSIS

4. In the present submissions, BALCO seeks to apprise this Hon'ble Commission of the fact that there are various generating stations located across the country, which have executed Power Purchase Agreements with the State Distribution Licensee, which contemplate a single-part tariff i.e., for Variable (energy) charge only. This is in terms of the Memorandum of Understanding(s) and Implementation Agreement(s) executed with the State Government at the time of setting up of generating stations.
5. When this Hon'ble Commission introduces the Tariff Regulations, the same are notified by keeping in mind the generation stations which have entered into Power Purchase Agreements (PPAs) under Section 62 of the EA, 2003 i.e., based on two part/ cost-plus tariff structure. Similar approach has also been taken by the Hon'ble Commission

while issuing the approach paper for Tariff Regulations to be notified for FYs 2024-25 to 2028-29.

Accordingly, keeping in mind the two-part tariff structure, this Hon'ble Commission in its Tariff Regulations allows actual recovery of cost of fuel, and also allow pass through of other costs as part of 'fixed charge', such as (i) Cost associated with Ash Disposal, (ii) Interest on working capital, (iii) Reimbursement of Water Charges, etc.

6. However, the State Commissions, which usually follow the principles of Tariff Regulations of this Hon'ble Commission, do not allow the above pass through/ actual recovery of cost qua the abovementioned components under the Single-part/ Variable (energy) charge PPAs executed by the generators with the State Discoms. As a result of the same, there is an under-recovery of cost of generation of such generators, thereby severally impacting the said generators, both economically and financially.
7. In terms of the above, it is stated that BALCO executed a Power Purchase Agreement (PPA) dated 19.01.2015 with Chhattisgarh State Power Distribution Co. Ltd. (CSPDCL) [*erstwhile Chhattisgarh State Power Trading Co. Ltd.*] for the purpose of supply of 5% of the total sent out energy from its 1200 MW power plant, at a tariff equivalent to Energy (Variable) Charges, as may be determined by the Appropriate Commission. While determining the said tariff, the Ld. CSERC has been mostly relying upon the Tariff Regulations of this Hon'ble Commission qua various tariff components. This is for the reason that on certain tariff components, the tariff Regulations of the Ld. CSERC are silent and as such, it proceeds to follow the regulations of this

Hon'ble Commission in terms of the guiding principles enshrined under Section 61 of the Electricity Act, 2003 ("**EA, 2003**").

However, since the Regulations of this Hon'ble Commission are silent on certain aspects of tariff components, the Ld. CSERC does not allow pass through of such costs to BALCO, thereby leading to under-recovery of cost of generation.

8. Thus, BALCO, by way of the present representation/ submissions seeks to place on record certain aspects which are necessary to be covered/ included in the Tariff Regulations to be notified for the period 01.04.2024 to 31.03.2029. Some of the components currently covered under Fixed Cost are actually incidental to quantum of power generated, such as Ash management cost , Gross working capital recovery, etc and should ideally be covered under ECR recovery.

This is for the reason that as per Section 61(a) of the EA, 2003, the State Commissions are required to be 'guided' by the principles and methodologies specified by this Hon'ble Commission for determination of the tariff *inter-alia* applicable to generating companies. As such, when this Hon'ble Commission notifies the Tariff Regulations, its duty is not only to consider the Central Generating Stations, but also the generating stations which have single-part/ Variable (Energy) cost PPAs with the State Discoms whose jurisdiction to determine tariff lies with the State Commissions.

In other words, this Hon'ble Commission, while preparing/ notifying the Tariff Regulations has to take a 'holistic view' so that the interest of all the generating companies (*including the generators having variable cost PPAs with State Discoms*) stands protected.

9. Thus, BALCO, by way of the present representation/ submissions seeks to place on record certain aspects which are necessary to be covered/ included in the Tariff Regulations of this Hon'ble Commission for the period 01.04.2024 to 31.03.2029.

SUBMISSIONS ON THE TARIFF COMPONENTS FOR THE TARIFF REGULATIONS FOR THE PERIOD 01.04.2024 to 31.03.2029

- I. **Gross Calorific Value (GCV) of Fuel and landed price of primary fuel**
10. As enumerated above, the tariff regulations of this Hon'ble Commission are also based on the philosophy of recovery of full cost (fixed + variable), and therefore, the parameters of the said regulations cannot be *stricto-sensu*, applied for determining tariff of generators such as BALCO which can only recover variable charges in terms of the PPA executed by it with certain beneficiary (CSPDCL). Thus, what happens is whenever a State Commission determines the tariff for variable cost PPAs, while the said Commission proceeds to follow the Regulations of this Hon'ble Commission, the same results in under-recovery of cost of generation of the generators.
11. In terms of the above, it is submitted that the CERC Tariff Regulations, 2019, provides as follows:

"40. Gross Calorific Value of Primary Fuel: (1) The gross calorific value for computation of energy charges as per Regulation 43 of these regulations shall be done in accordance with 'GCV as received' basis.

(2) The generating company shall provide to the beneficiaries of the generating station the details in respect of GCV and price of fuel i.e. domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel etc. as per the Form 15 prescribed at Annexure-I (Part I) to these regulations:

Provided that the additional details of the weighted average GCV of the fuel on as received basis used for generation during the period, blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall be provided, along with the bills of the respective month.;

Provided further that copies of the bills and details of parameters of GCV and price of fuel such as domestic coal, imported coal, e-auction coal, lignite, natural gas, RLNG, liquid fuel, details of blending ratio of the imported coal with domestic coal, proportion of e-auction coal shall also be displayed on the website of the generating company.

.....

43. Computation and Payment of Energy Charge for Thermal Generating Stations

(1) The energy charge shall cover the primary and secondary fuel cost and limestone consumption cost (where applicable), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel and limestone price adjustment). Total Energy charge payable to the generating company for a month shall be:

Energy Charges = (Energy charge rate in Rs./kWh) x {Scheduled energy (exbus) for the month in kWh}

(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a) **For coal based and lignite fired stations:**

$$ECR = \{(SHR - SFC \times CVSF) \times LPPF / (CVPF + SFC \times LPSFi + LC \times LPL)\} \times 100 / (100 - AUX)$$

(b) **For gas and liquid fuel based stations:**

$$ECR = SHR \times LPPF \times 100 / \{(CVPF) \times (100 - AUX)\}$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;

(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;

(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:

CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out; SHR = Gross station heat rate, in kCal per kWh;

LC = Normative limestone consumption in kg per kWh; LPL = Weighted average landed cost of limestone in Rupees per kg;

LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);

SFC = Normative Specific fuel oil consumption, in ml per kWh;

LPSFi = Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ml during the month:

provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month.

(3) In case of part or full use of alternative source of fuel supply by coal based thermal generating stations other than as agreed by the generating company and beneficiaries in their power purchase agreement for supply of contracted power on account of shortage of fuel or optimization of economical operation through blending, the use of alternative source of fuel supply shall be permitted to generating station:

Provided that in such case, prior permission from beneficiaries shall not be a precondition, unless otherwise agreed specifically in the power purchase agreement:

Provided further that the weighted average price of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (5) of this Regulation:

Provided also that where the energy charge rate based on weighted average price of fuel upon use of alternative source of fuel supply exceeds 30% of base energy charge rate as approved by the Commission for that year or exceeds 20% of energy charge rate for the previous month, whichever is lower shall be considered and in that event, prior consultation with beneficiary shall be made at least three days in advance.

.....”

(Emphasis and Underline Supplied)

12. As seen from the above, this Hon'ble Commission in its Tariff Regulations provides that the weighted average of GCV of coal is derived on as received basis, by considering all the sources of coal. There is no specific reference to a type of fuel/ coal which only needs to be considered while computing the weighted average.

However, the Ld. CSERC while determining the weighted average of GCV of coal is only considering specific types of coal, thereby going against the principles enunciated in the CERC Tariff Regulations, 2019. For ready reference, BALCO is providing the recent order dated 20.12.2021 passed by the Ld. CSERC in Petition No. 60 of 2020 (T), and the review order dated 14.09.2022 passed by the said Commission in Petition No. 39 of 2022. Both the petitions pertain to the tariff determination of BALCO qua the 5% variable cost PPA executed with CSPDCL.

A copy of the order dated 20.12.2021 passed by the Ld. CSERC in Petition No. 60 of 2020 (T), is enclosed herewith and marked as **Annexure-I**

A copy of the review order dated 14.09.2022 passed by the Ld. CSERC in Petition No. 39 of 2022 (T), is enclosed herewith and marked as **Annexure-II**.

13. In fact, the PPA executed between BALCO and CSPDCL also specifically provides the definition of 'coal' to mean the "*coal procured from subsidiaries of Coal India Limited either through Coal Supply Agreement or e-auction or open market and/ or imported coal procured from any other agencies or coal blocks allocated*". However, still, the Ld. CSERC is not considering all the types of coal while computing the weighted average of GCV of coal.
14. Therefore, it is necessary that this Hon'ble Commission provides a different mechanism for tariff determination (*both in the existing Tariff Regulations, 2019 as well as in the future Tariff Regulations for FYs 2024-25 to 2028-29*), so that there is complete recovery of cost of generation of the power plants which are supplying power only at Energy (Variable) charges, by allowing complete pass through of GCV and Landed Price of Primary Fuel by considering all the sources of coal, subject to prudence check. The components of variable charges ought to be considered in terms of the manner of its incidence instead of taking a microscopic view while determining the tariff for supply of 5% power only on variable charges.
15. It is necessary this Hon'ble Commission while framing the Tariff Regulations for FYs 2024-25 to 2028-29 considers all expenses/ components as part of variable charges which are directly incidental to the supply of power keeping in view the fact that such expenses vary with the quantum of supply and are incurred only when the power is supplied on variable cost basis only. This would enable this Hon'ble Commission as well as the State Commissions to fulfil the mandate of

complete recovery of cost of generation as encapsulated under Section 61(d) of the EA, 2003.

Further, while doing so, this Hon'ble Commission may consider having separate chapter of computation of variable costs for generators having PPAs with Discoms only on variable cost basis under section 62 of the EA 2003. This will enable such generators to recover those costs which are incidental to such limited power supply on variable costs, which costs are presently either falling under fixed cost category, or not finding a mention at all, when actually they are part of variable charges.

II. Auxiliary Energy Consumption

16. It is submitted that this Hon'ble Commission, over the years in its Tariff Regulations has been providing a particular threshold/ limit which can be considered as Auxiliary Energy Consumption.
17. In this regard, it is submitted that this Hon'ble Commission in the CERC Tariff Regulations, 2019 has provided for Aux Energy Consumption in the following manner:

“(E) Auxiliary Energy Consumption:

(a) For Coal-based generating stations except at (b) below:

S No.	Generating Station	With Natural Draft cooling tower or without cooling tower
<i>(i)</i>	<i>200 MW series</i>	<i>8.50%</i>
<i>(ii)</i>	<i>300 MW and above</i>	
	<i>Steam driven boiler feed pumps</i>	<i>5.75%</i>
	<i>Electrically driven boiler feed pumps</i>	<i>8.00%</i>

Provided that for thermal generating stations with induced draft cooling towers and where tube type coal mill is used, the norms

shall be further increased by 0.5% and 0.8% respectively:.....”

18. As seen from the above, this Hon'ble Commission has provided for a particular threshold qua Auxiliary Energy consumption for the coal based generating stations. It is stated that Auxiliary Energy Consumption means quantum of energy consumed by auxiliary equipment of the generating station, such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station and the transformer losses within the generating station, out of the total power produced by such power plant.
19. Every generating station works on different sets of equipment and the output generated by each generating stations keeps on varying. This situation becomes difficult more so on account of the fact that the generators with PPAs for supply based on energy/ variable charges, cannot recover the fixed cost of generation. As such, the threshold provided by this Hon'ble Commission qua Auxiliary Energy Consumption is unachievable for certain intra-state generating stations, such as BALCO herein.
20. It is a settled principle of law that operational parameters have to be achievable, and in this context, reference be made to the judgment dated 10.04.2018 passed by the Hon'ble Appellate Tribunal for Electricity (APTEL) in Appeal Nos. 86 & 87 of 2007, titled as ***Maharashtra State Power Generation Co. Ltd. vs. Maharashtra Electricity Regulatory Commission & Ors***, wherein it was held as follows:

*“80. However, we find that there is a substantial difference between the norms prescribed by the Commission through the Tariff Regulations and those achieved by the Appellant. We find that the Tariff Regulations give powers to the Commission to amend any provisions of the Tariff Regulations (Regulation 84) and to remove difficulties in implementation of the Tariff Regulations (Regulation 85), which **we feel can be used by the Commission to take corrective measures so that the norms set are achievable under the operating environment.** Hence, we direct the Commission to take into consideration the independent study which we have directed to be undertaken, and reset the above operating parameters. This will also help the Commission to align its Regulations with the Tariff Policy issued by the Government of India advising for prescribing achievable norms and not merely ideal norms. At the same time, the Commission has to be cautious to ensure that deliberate inefficiency on the part of the utility is not passed on to the consumers.*

21. Thus, based on the principle as decided in the aforesaid judgment, BALCO most respectfully requests this Hon'ble Commission to include necessary provisions under the existing Tariff Regulations, 2019 as well as in the Tariff Regulations for FYs 2024-25 to 2028-29 which allows actual operational parameters (Aux) of the generating station to be considered while deciding tariff for the generating stations which have executed PPAs for supply of power only at variable/ energy charges.

III. **Ash Handling Expenses**

22. Another important facet which needs consideration by this Hon'ble Commission is that the State Commissions have proceeded to consider the Ash Handling Expenses as a part of Fixed Cost of the generator. As a result of the same, such expenses are not allowed as pass through while deciding tariff of the generators who have PPAs containing variable cost only.

23. In fact, such expenses relating to ash handling are made a part of Additional Capital Expenditure under the Tariff Regulations of this Hon'ble Commission, thereby making it a part of Fixed Charges. In this regard, reference is made to Regulation 26 under Chapter 7 of the CERC (terms and conditions of Tariff) Regulations, 2019 (hereinafter as "CERC Tariff Regulations, 2019") which are setout hereinafter below:

"CHAPTER – 7

COMPUTATION OF ADDITIONAL CAPITAL EXPENDITURE

.....

26. Additional Capitalisation beyond the original scope

(1) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

.....

(e) Deferred works relating to ash pond or ash handling system in additional to the original scope of work, on case to case basis:....."

24. As already demonstrated above, tariff regulations of this Hon'ble Commission is based on the philosophy of recovery of full cost (fixed + variable), and therefore, the parameters of the said regulations cannot be *stricto-sensu*, applied for determining tariff of generators such as BALCO which can only recover variable charges in terms of the PPA executed by it with certain beneficiary (CSPDCL). Thus, what happens is whenever a State Commission determines the tariff for variable cost PPAs, while the said Commission proceed to follow the Regulations of

this Hon'ble Commission, the same results in under-recovery of cost of generation of the generators.

25. It is submitted that the cost associated with Ash Handling is always incurred by the generators in proportion to the quantum of power supplied under the Variable Cost PPAs, and as such the same deserves to be allowed by creating a separate heading of computation of variable charge parameters for generators having the said Variable/ Energy Cost PPAs.
26. Therefore, since the State Commissions follow the guiding principles of this Hon'ble Commission under Section 61 of the EA, 2003, it is imperative the Tariff Regulations for FYs 2024-25 to 2028-29 provides for a provision whereby the generators are allowed pass through of ash handling expenses, atleast to the extent of contacted capacity under variable/ energy cost PPAs.

IV. Interest on working capital as a variable charge component

27. In furtherance to the above, the State Commissions have proceeded to consider Interest on Working Capital as a part of Fixed Cost of the generator. As a result of the same, such expenses are not allowed working capital interest qua the power supplied by the generators to the beneficiaries on variable/ energy cost basis only.
28. In fact, interest on working capital is also made part of Fixed Cost only under the Tariff Regulations of this Hon'ble Commission. This is clear from a reading of Regulation 15 of the CERC Tariff Regulations, 2019, which is setout hereinbelow:

"15. Capacity Charges:

The capacity charges shall be derived on the basis of annual fixed cost. The Annual Fixed Cost (AFC) of a generating station or a transmission system including communication system shall consist of the following components:

(a) Return on equity;

(b) Interest on loan capital;

(c) Depreciation;

(d) Interest on working capital; and

(e) Operation and maintenance expenses:

Provided that Special Allowance in lieu of R&M, where opted in accordance with Regulation 28 of these regulations, shall be recovered separately and shall not be considered for computation of working capital."

29. It is reiterated herein that the tariff regulations of this Hon'ble Commission is based on the philosophy of recovery of full cost (fixed + variable), and therefore, the parameters of the said regulations cannot be *stricto-sensu*, applied for determining tariff of generators such as BALCO which can only recover variable charges in terms of the PPA executed by it with certain beneficiary (CSPDCL). Thus, what happens is whenever a State Commission determines the tariff for variable cost PPAs, while the said Commission proceed to follow the Regulations of this Hon'ble Commission, the same results in under-recovery of cost of generation of the generators.
30. It is pertinent to mention herein that that interest on working capital which is sought for by generators qua their respective variable charges PPAs is only to the extent of cost of coal, secondary fuel oil cost, fuel cost, and the cost towards handling of coal which are variable components of tariff. As such, the interest on working capital upon such components ought to be made pass through under the head of variable

cost, otherwise the same would lead to under-recovery of costs, thereby not fulfilling the mandate of the extant provisions of the EA, 2003.

31. It is stated that it is not necessary that interest on working capital is can only be made part of the fixed costs, rather, what is necessary is that the intent qua which the said interest is allowed for has to be seen.
32. The purpose of interest is to reconstitute an entity with the 'time value of money' which an entity is to be paid in order provide complete justice. The principle qua interest is long settled by the Hon'ble Supreme Court. Reference in this regard is made to the decision rendered in ***Indian Council for Enviro-Legal Action v. Union of India***, reported in **(2011) 8 SCC 161**, where the following was laid down:

"169. In the point under consideration, which does not arise from a suit for recovery under the Code of Civil Procedure, the inherent powers in the court and the principles of justice and equity are each sufficient to enable an order directing payment of compound interest. The power to order compound interest as part of restitution cannot be disputed, otherwise there can never be restitution...."

....178. To do complete justice, prevent wrongs, remove incentive for wrongdoing or delay, and to implement in practical terms the concepts of time value of money, restitution and unjust enrichment noted above—or to simply levelise—a convenient approach is calculating interest. But here interest has to be calculated on compound basis—and not simple—for the latter leaves much uncalled for benefits in the hands of the wrongdoer.

179. Further, a related concept of inflation is also to be kept in mind and the concept of compound interest takes into account, by reason of prevailing rates, both these factors i.e. use of the money and the inflationary trends, as the market forces and predictions work out.

180. Some of our statute law provide only for simple interest and not compound interest. In those situations, the courts are helpless and it is a matter of law reform which the Law Commission must take note and more so, because the serious effect it has on the administration of justice. **However, the power of the Court to order compound interest by way of restitution is not fettered in any way.** We request the Law Commission to consider and recommend necessary amendments in relevant laws.

181. "Compound interest" is defined in Black's Law Dictionary, 8th Edn. (Bryan A. Garner) at p. 830 as "interest paid on both the principal and the previously accumulated interest". It is a method of arriving at a figure which nears the time value of money submitted under Head 2 earlier. As noted, compound interest is a norm for all commercial transactions."

33. Thus, in terms of the above settled laid down principle, it is imperative that the interest on working capital is allowed qua variable components also, such as coal costs etc.
34. As such, BALCO most humbly requests this Hon'ble Commission to incorporate necessary provisions in the Tariff Regulations for FYs 2024-25 to 2028-29 which enables generators who have entered into variable cost PPAs to get/ recover interest on working capital on the variable tariff components.

V. Reimbursement of Water Charges

35. Another issue faced by BALCO qua its supply to CSPDCL on variable charges basis as that while allowing the re-imburement of water charges, the Ld. CSERC is allowing the same only to the extent of the proportion of the quantum of power purchased by CSPDCL, and not to the extent of the contracted capacity.
36. It is stated that the generators such as BALCO have to arrange water supply with respect to the total power to be generated for the purpose

of supplying its beneficiaries. The generators cannot arrange water on a daily basis depending upon the requirement or actual drawl of power by the beneficiary. The said charges are fixed for the entire contract period, and does not change whether power is generated or is not generated. Hence, the water charges incurred by generators in proportion to the contracted capacity with beneficiaries, ought to be allowed as pass through.

37. It is further important to note that the generators incur expenses towards the cost of water/ water charges payable to the government authorities which are directly linked with the generation of electricity. As such, for the contracted capacity of power, the generators have already incurred the necessary water charges, and the same are required to be allowed as a "pass through". It cannot that the water charges will be payable only in proportion to the quantum of power which is supplied.
38. In the above context, reference is also made to Regulation 35(6) of the existing CERC Tariff Regulations, 2019, which is setout hereinbelow:

"35. Operation and Maintenance Expenses:

.....

(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check. The details regarding the same shall be furnished along with the petition.

As seen from the above, the CERC Tariff Regulations, 2019 allow recovery of water charges based on the consumption of water. In the case of BALCO and similarly placed generators having variable cost

PPAs, irrespective of whether the entire contracted capacity is availed by the Discom or not, the generators avail the necessary water in order to generate the required contracted capacity, and therefore, there is actual consumption on the part of the generator.

39. Additionally, this Hon'ble Commission through various orders has allowed pass through of water charges to the extent of the contract capacity. Reference in this regard is made to one of orders, being order dated 28.02.2020 passed in Petition Nos. 118/MP/2015 and 153/MP/2015, titled as **Sasan Power Limited v. MP Power Management Company Ltd & Ors.** wherein the following was held:

"11. Accordingly, in terms of the above finding of the APTEL, the Petitioner is entitled to be compensated by the Procurers on account of the levy of one time water allocation fees, equivalent to the amount of one month's water tax and cess on the annual allocated quantity of water, in proportion to their contracted capacity. The Petitioner is entitled to claim reimbursement of one time water allocation fees along with proof of payment and the computation duly certified by the auditor from the procurers and to be billed in accordance with the PPA."

(Underline Supplied)

40. Thus, based on the above findings of this Hon'ble Commission, BALCO most respectfully requests this Hon'ble Commission to include appropriate provisions under the Tariff Regulations for FYs 2024-25 to 2028-29 whereby the generators are allowed complete reimbursement of water charges, atleast to the extent of contacted capacity under variable/ energy cost PPAs.

In view of the submissions made hereinabove, it is submitted that above submissions/ factors are necessary to be considered thereby incorporating adequate provisions in the Tariff Regulations for the period FYs 2024-25 to

2028-29. It is re-iterated herein that as per Section 61(a) of the EA, 2003, the State Commissions are required to be 'guided' by the principles and methodologies specified by this Hon'ble Commission for determination of the tariff *inter-alia* applicable to generating companies. As such, when this Hon'ble Commission notifies the Tariff Regulations, its duty is not only to consider the Central Generating Stations, but also the generating stations which have limited supply PPAs with the State Discoms whose jurisdiction to determine tariff lies with the State Commissions.

In other words, this Hon'ble Commission, while preparing/ notifying the Tariff Regulations has to take a 'holistic view' so that the interest of all the generating companies (*including the generators having variable cost PPAs with State Discoms*) stands protected.

Thus, BALCO most respectfully prays/ requests this Hon'ble Commission to take the present representation into account and accordingly make necessary incorporations in the Tariff Regulations for FYs 2024-25 to 2028-29, so that justice is done to the generators which have entered into PPAs with beneficiaries having only energy/ variable charges recovery mechanism qua the power supplied by them.


CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION

Irrigation Colony, Shanti Nagar, Raipur - 492 001 (C.G.)

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Petition No. 60 of 2020(T)
In the Matter of:

Determination of variable cost (Energy Charge Rate) for the FY 2018-19 to FY 2020-21 of coal based thermal power station of 1200 MW (4x300 MW) capacity situated at Korba, Chhattisgarh under section 86(1)(a) and 62 of the Electricity Act, 2003.

M/s Bharat Aluminum Company Limited

... Petitioner

Vs

M/s Chhattisgarh State Power Trading Company Limited

... Respondent - 1

M/s Chhattisgarh State Power Distribution Company Ltd

... Respondent - 2

PRESENT

: **Hemant Verma, Chairman**
 : **Vinod Deshmukh, Member (Judicial)**
 : **Pramod Kumar Gupta, Member**

Appearance

: Shri Buddy Ranganathan, Shri Hemant Singh, Shri Rishabh Garg, Shri Lakshya Bagdwal and Shri Lakshyajit Singh Counsels for petitioner
 Shri Abhinav Kardekar, Ms. Gurpreet Kaur Chawla, Counsels for Respondent No.1
 Shri V. K. Jain, Ms. Vandana Ahuja and Ms. Ritu Chauhan Counsels for Respondent No.2

ORDER
(Passed on 20/12/2021)

This order is passed in petition filed by M/s Bharat Aluminum Company Limited (BALCO) for determination of tariff (energy charge rate) of the power generated from its 1200 MW (4 X 300 MW), which is a coal based thermal generating unit under the provisions of section 86 (1) (a) read with Section 62 of the Electricity Act, 2003. The petitioner is supplying 5% of net power generated from aforesaid generating station to Chhattisgarh State power trading company Limited (CSPTrdCL) at rate of Energy Charge Rate (ECR). CSPTrdCL is further supplying this power to Chhattisgarh State Power Distribution Company Limited (CSPDCL) under back to back power sale arrangement.

- Respondent no. 1, CSPTrdCL is engaged in trading in electricity in the State of Chhattisgarh as provided under the provisions of the Electricity Act, 2003.

3. Respondent no. 2, CSPDCL, is a distribution licensee in the State of Chhattisgarh. CSPDCL is procuring the power generated from the petitioner's power plant through CSPTrdCL.
4. The petitioner has entered into PPA with CSPTrdCL for supply of 5% of Net generated power from above thermal power plant. CSPTrdCL further entered into back to back agreement with CSPDCL for sale of this power. As per clause 33 of the MYT Regulations, 2015, provides for filing of tariff petition by generating companies who are supplying power to distribution licensees of the State directly or through CSPTrdCL. In compliance to aforesaid provision, petitioner has filed this petition for determination of variable cost of above mentioned generating station.
5. The instant petition was filed on 26.06.2020 and was registered as petition no 60/2020 on 08.07.2020. In compliance to the clause 6.4 of MYT Regulations, 2015, the petitioner had published a notice comprising salient features of the tariff petitions on 04.09.2020 in newspapers for inviting objections/suggestions from the stakeholders.
6. Public hearing was conducted on 23.12.2020 and 28.09.2021.
7. In the petition, petitioner has made following prayers:
 - (i) To allow an amount of 280.59 paisa per kWh being energy charges for FY 2018-19, for supply of power by the Petitioner to the Respondent in terms of PPA dated 19.01.2015;
 - (ii) To allow an amount of 263.39 paisa per kWh being energy charges for FY 2019-20, for supply of power by the Petitioner to the Respondent in terms of PPA dated 19.01.2015;
 - (iii) To allow an amount of 196.41 paisa per kWh being provisional charges for FY 2020-21, for supply of power by the Petitioner to the Respondent in terms of PPA dated 19.01.2015;
 - (iv) To allow Transportation cost of coal as incurred by the Petitioner for the FY 2018-19 to FY 2020-21, of the present petition;
 - (v) To allow other Fuel Related Charges / Variable Charges as may be applicable from time to time, of the present petition;
 - (vi) To allow statutory charges, duties and taxes as a pass through based on actual incurred basis, in terms elaborated in the present petition;
 - (vii) To allow expenses incurred towards ash handling and disposal system as a pass through on actual incurred basis;
 - (viii) To allow interest on working capital at 10 Paise/kWh for FY 2018-19, interest on working capital at 9 Paise/kwh for FY 2019-20, and interest on working capital at 7

Paise/Kwh at provisional basis for FY 2020-21 from the beneficiary in terms elaborated in the present petition;

- (ix) To allow actual recovery towards filing and publication fees and other charges as is currently estimated;
- (x) To allow the Petitioner to amend the petition and/ or file such other additional documents/ explanations etc. as may be necessary to support the petition; and
- (xi) To pass such further and other Orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

8. Determination of variable cost (energy charge rate)

- i. The petitioner has filed this petition for determination of tariff for period FY 2018-19, FY 2019-20 and FY 2020-21. The MYT Regulations, 2015 is applicable for control period from FY 2016-17 to FY 2020-21. It is pertinent to reproduce the relevant para of the tariff order dated 30/05/2020 passed in petition no. 12/2020 for FY 2020-21:

“The Commission had estimated the purchase of concessional power at a weighted average rate of Rs. 1.60/kWh for the year 2017-18, pending determination of tariff. For the subsequent years i.e. FY 2018-19, FY 2019-20, the same rate has been continued. However, meanwhile, the Commission, has determined tariff in respect of concessional power of majority of generators. It is, therefore, clarified that for the generators whose tariff has been so determined, energy charges for FY 2020-21 shall be billed at the latest tariff determined by the Commission. For others whose tariff is yet to be determined by the Commission, the energy charges shall be billed at the rate of Rs. 1.60/kWh. ”

The provisional energy charge rate for the petitioner's power plant for FY 2020-21 has been estimated in tariff order dated 30/05/2020 of CSPDCL for FY 2020-21. As the financial year 2020-21 now is over, this tariff order is limited to determination of energy charge rate for FY 2018-19 and FY 2019-20 according to MYT, Regulations, 2015.

- ii. Clause 41.6 of MYT Regulations, 2015 specifies methodology and principle for determination of energy charges of thermal power generating stations. The same has been followed for determining energy charge rate for the power plant in question. The relevant portion of clause common to both regulations reads as under:
“The energy charge shall cover the fuel cost (primary fuel as well as secondary fuel), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month. Total Energy charge payable to the generating company for a month shall be:

(Energy charge rate in Rs./kWh) x {Scheduled energy (ex-bus) for the month in kWh.}

Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined up to three decimal places in accordance with the following formulae for coal based stations:

$$ECR = \left[\frac{(GHR - SFC \times CVSF) \times LPPF}{CVPF} + SFC \times LPSFi \right] \times 100 / (100 - AUX)$$

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = Gross calorific value of primary fuel as fired, in kCal per kg, per litre or per standard cubic meter, as applicable.

CVSF = Calorific value of secondary fuel, in kCal per ml.

ECR = Energy charge rate, in Rupees per kWh sent out.

GHR = Gross station heat rate, in kCal per kWh.

LPPF = Weighted average landed price of primary fuel, in Rupees per kg, per litre or per standard cubic meter, as applicable, during the month.

SFC = Specific fuel oil consumption, in ml per kWh.

LPSFi = Weighted Average Landed Price of Secondary Fuel in Rs./ml considered initially.”

Parameters for determination of energy charge

9. Auxiliary Energy Consumption

Petitioner's Submission

- i. Petitioner has submitted that the design auxiliary consumption of the instant generating station is 7.5%. Section 61(d) of the Act provides that the Petitioner is entitled to the complete recovery of actual energy charges, therefore, the Petitioner has considered the norms of auxiliary energy consumption which result in such recovery.
- ii. Petitioner further submitted that the Commission vide order dated 25.04.2020 passed in Petition No. 62 of 2017, has determined tariff considering Normative Auxiliary Energy Consumption at 5.75%.
- iii. While fixing the Normative Auxiliary Energy Consumption at 5.75%, Commission has relied on the CERC Tariff Regulations, 2014. The Petitioner has submitted that said Regulations contain lower parameters as compared to the actual parameters of the Petitioner's plant. However, since in tariff matters, the principle of res judicata does not normally apply, as held by the Hon'ble Supreme Court in its judgments, the Petitioner is claiming the actual Auxiliary Energy Consumption at the rate of 7.10% and 7.09% for the FY 2018-19 and 2019-20 respectively instead of 5.75% & 6.25%. Further, for the purpose of determining the variable charges for FY 2020-21, the actual Auxiliary Energy

Consumption is 7.09%.

- iv. It is a settled principle of law that operational parameters have to be achievable, and in this context reference be made to the judgment dated 10.04.2018 passed by the Hon'ble Appellate Tribunal for Electricity (APTEL) in Appeal Nos. 86 & 87 of 2007, titled as Maharashtra State Power Generation Co. Ltd. vs. Maharashtra Electricity Regulatory Commission & Ors, wherein it was held as follows:

“31. We are of the opinion that if the SHR allowed by the Commission is not achievable, then the same would not be in anybody's interest; entity would suffer by not recovering its reasonable cost of supply of the electricity and the consumers would not get the right signal about the pricing of the product they would be using. It is as much essential for the consumers to know the right price of the product they are using, as much as it is for the entity to recover its cost of operations. Unless the consumer knows the true price of the product, he will not be able to take an informed decision about the quantum of his consumption, particularly the industrial and commercial consumers who recover such costs from their consumers. Determining right price is also essential to send signals to the prospective developers/investors in the sector enabling them to take decision about the investment potential in the sector.”

- v. Therefore, when the operational norms are not achievable, then the Commission is required to re-work the said norms so that the same results in recovery of cost, which is mandated under Section 61 (d) of the Act. Hence, the Petitioner ought to be allowed the Auxiliary Energy Consumption of 7.10% and 7.09%, for the FYs 2018-19 & 2019-20. Further, for the purpose of determining the variable charges for FY 2020-21, the actual Auxiliary Energy Consumption is 7.09%.

Respondent's submission

- i. Respondent has submitted that the normative Auxiliary Energy Consumption for 300 MW is not specified in CSERC Multi Year Tariff Regulations, 2015 and as such in accordance to CERC (Terms and condition of tariff) Regulation, 2014 (hereinafter referred to as “CERC Regulations”), wherein, in clause 36(E)(a)(ii) the auxiliary consumption for coal based generating stations having steam driven boiler feed pumps of generating units with capacity of 300 MW and above is 5.25%.
- ii. Respondent has further submitted that the Petitioner has claimed for determination of Auxiliary Energy Consumption of 7.10% and 7.09% for the Financial Year of 2018-19 to Financial Year 2020-21 respectively. In view of this, Respondent prayed that since CSERC Regulation is silent for Auxiliary Energy Consumption for 300 MW but rather clear about 500 MW set, therefore, it should be clustered in the same group of 500MW set as per CERC Regulations. That in absence of any

specific regulation for 300 MW set Auxiliary Consumption of 500 MW set be considered as max limiting factor.

Commission’s View

- i. We have considered the above submissions. It is pertinent to mention here the Commission has already deliberated the issue of Normative Auxiliary Energy Consumption for the aforesaid plant in order dated 25.04.2020 passed in Petition No. 62 of 2017. In the said order, the Commission has relied on Central Commission's Tariff Regulations, 2014, as CSERC MYT Regulations, 2015, is silent on norms for auxiliary energy consumption for thermal generating stations of 300 MW capacities. In this petition, variable cost is required to be determined for FY 2018-19 and FY 2019-20. Therefore, CERC (Terms and Conditions of tariff) Regulations, 2014 and CERC (Terms and Conditions of tariff) Regulations, 2019 shall be applicable for determination of tariff for the FY 2018-19 and FY 2019-20 respectively. In these regulations, norms for auxiliary energy consumption for thermal generating units of 300 MW sets have been specified.
- ii. In light of the above, the Commission has relied on relevant Central Commission Regulations as far as norms for auxiliary energy consumption is concerned. The petitioner's power plant is having steam driven boiler feed pump with induced draft cooling towers therefore, normative auxiliary energy consumption is considered as 5.75% (5.25% + 0.50%) and 6.25% (5.75%+0.50%) for FY 2018-19 and FY 2019-20 respectively.
- iii. The actual auxiliary energy consumption for FY 2018-19 and FY 2019-20, as submitted by the petitioner is 7.10% and 7.09 % respectively and is considered for sharing of gains and losses.

10. Gross calorific value (CVPF) of primary fuel

Petitioner’s Submission

GCV of the coal for FY 2018-19 and FY 2019-20 as submitted by the petitioner are as given in table below:

Weighted Average GCV on 'as received basis' as submitted by petitioner (kCal/kg)

Type of Coal	FY 2018-19	FY 2019-20
Linkage Coal	3,671	3,551
E-Auction Coal	3,182	3,478
Spl Fwd-Auction Coal	3,420	3,539
Import	5,091	5,478
Trader	3,494	3,345

Commission’s View

As per clause 41.6 of MYT Regulations, 2015, petitioner has to submit the ‘Gross calorific value of primary fuel’ (CVPF) 'as fired basis', in kCal per kg for each type of

coal used for generation of energy supplied to CSPTrdCL. But 'as fired' GCV data submitted by the petitioner were GCV of blended coal i.e. blending of linkage coal, e-auction coal, Special e-auction coal, imported and trader coal whereas for calculation of energy charge rate requires GCV of individual coal separately. But petitioner failed to submit 'as fired GCV' for coals from different sources. However, petitioner has submitted segregated GCV on 'as received basis'.

In absence of the aforesaid data, Commission has referred Section 61 of the Act which provides that while specifying terms and conditions of tariff, the State Commission shall be guided by Central Commission's Regulations in case of generating companies and transmission licensee. Central Commission has notified CERC (Terms and Conditions of tariff) Regulations, 2014 and 2019, for determination of tariff. In these regulations, CVPF is as weighted average gross calorific value of coal 'as received basis', in kCal per kg and same has been utilized for computation of energy charge rate.

In light of the above, Commission has referred Central Commission's Tariff Regulations, 2014 and 2019, as far as GCV for computation of energy charge rate is concerned. After prudence check, GCV has been taken on 'as received basis' for FY 2018-19 and FY 2019-20 and the same has been considered for computation of ECR which is as given in table below:

Weighted Average of GCV (kCal/kg) on as received basis considered by the Commission for calculation of ECR

Type of Coal	FY 2018-19	FY 2019-20
Linkage Coal	3,671	3,551
E-Auction Coal	3,182	3,478
Spl Fwd-Auction Coal	3,420	3,539
Import	5,091	5,478
Trader	3,494	3,345

11. Calorific value of secondary fuel

Calorific value of secondary fuel as submitted by the petitioner are 10,558 kcal/litre and 10,655 kcal/litre for FY 2018-19 and FY 2019-20 respectively. The Commission, after prudence check, has considered the same for computation of energy charge rate.

12. Gross Station Heat Rate (GSHR)

Petitioner's Submission

Petitioner has submitted the actual SHR of the plant as 2403 kCal/ kWh and 2408 kCal/ kWh for FY 2018-19 and FY 2019-20 respectively.

Respondent's Submission

Respondent submitted that Petitioner has submitted that SHR was 2403 kCal/kWh and 2408 kCal/kWh for FY of 2018-19 to FY 2019-20 respectively and claiming Station Heat Rate for 2407 kCal/kWh for the Financial Year 2020-21. It is most respectfully submitted that the normative station heat rate for 300 MW capacity is not specified in CSERC MYT Regulations, 2015 and as such in accordance to applicable CERC Tariff Regulation, 2014 (hereinafter referred to as "CERC Regulations"),

"The thermal generating station having COD on or after 01.04.2014

(i)Coal-based and lignite fired Thermal Generating Stations

$$= 1.045 * \text{Design Heat Rate (kCal/kWh)}$$

Where design heat rate of a generating unit means the unit heat rate guaranteed by supplier at condition of 100% MCR, zero percent make up, design coal and design cooling water temperature/back pressure.

Provided that the design heat rate shall not exceed the following maximum design unit heat rates depending upon the pressure and temperature ratings of the units:..

Provided further that in case pressure and temperature parameters of a unit are different from above ratings, the maximum design unit heat rate of the nearest class shall be taken:

Provided also that where unit heat rate has not been guaranteed but turbine cycle heat rate and boiler efficiency are guaranteed separately by the same supplier or different suppliers, the unit design heat rate shall be arrived at by using guaranteed turbine cycle heat rate and boiler efficiency....."

The respondent further submitted that the above given calculation to be kindly taken into account. In pursuant to the above mentioned calculation the GSHR should be limited to maximum design unit heat rates depending upon the pressure and temperature ratings of the units as specified in clause 36(C)(b)(i) of CERC Regulation, 2014. Further, deducting 40kcal/kwh is to be deducted for boiler operated electrically feed pump. As auxiliary energy consumption and furthermore, as per the clause 36(E)(a)(ii) of CERC Regulation, 2014, 300 MW should be clustered in the same group of 500MW set. That in absence of any specific regulation for 300 MW set GSHR of 500 MW set to be considered as max limiting factor.

Commission's View

- i. It is to note that for the purpose of determination of tariff for FY 2018-19 and FY 2019-20, plant shall be treated as 'existing generating station' as per applicable Tariff Regulations.
- ii. The Commission has deliberated the issue of SHR of this plant in order dated 25/04/2020 passed in petition 62 of 2017. In the aforesaid order, the Commission has considered Normative SHR of the plant of the petitioner for FY 2018-19 as

2375 kCal/kWh based on CERC Regulations, 2014 and for FY 2019-20 as 2390 kCal/kWh based on CERC Regulations, 2019 and the same was relied by Respondent.

- iii. Hence, there is no need to deviate from the view taken in aforesaid order. Therefore, Commission has considered 2375 kCal/kWh for FY 2018-19 and 2390 kCal/kWh for FY 2019-20 as Normative SHR.

Normative SHR as considered by the Commission Kcal/Kwh

FY 2018-19	2375
FY 2019-20	2390

- iv. The petitioner has submitted actual SHR for FY 2018-19 and FY 2019-20 as 2406.45 kCal/kWh and 2414.11 kCal/kWh respectively. After prudence check, the Commission has considered quantity of coal consumed and GCV of coal as given in table below:

Detail of actual Coal consumed with its average GCV for computation of SHR as considered by the Commission

Type of Coal	FY 2018-19		FY 2019-20	
	Qty in MT	GCV	Qty in MT	GCV
CPP Linkage	19,55,113	3,560	20,08,509	3,518
Chotia Block	3,28,014	4,560	7,17,954	4,647
Ex Auction	57,278	3,677	--	--
IPP Linkage	12,10,783	3,669	10,21,995	3,550
E-Auction/HCV	1,26,047	3,139	1,24,562	3,305
Spl-Forward Auction	2,61,744	3,417	66,853	3,506
Trader/Import	8,42,255	4,560	11,05,921	4,464
Total	47,81,234		50,45,794	

13. Weighted average landed price of primary fuel

Petitioner's submission

Actual weighted average landed price of primary fuel as submitted by the petitioner for FY 2018-19 and FY 2019-20 are as given in table below:

Weighted Average landed price as submitted by petitioner
(₹/MT)

Particular	FY 2018-19	FY 2019-20
Linkage Coal	2,163	2,168
E-Auction Coal	4,451	3,725
Spl Fwd-Auction Coal	4,391	3,059
Import	7,134	6,951
Trader	4,898	4,160

Further, petitioner has submitted that Regulation 41.10 of the MYT Regulations, 2015, provides that the landed price of fuel shall also, inter alia, include the transportation cost by conveyer / rail / road or any other means, for the purpose of computation of energy

charge. Accordingly, the transportation cost as submitted by Petitioner is given in table below:

Weighted Average transportation cost as submitted

Particular	(₹/MT)	
	FY 2018-19	FY 2019-20
Linkage Coal	264	275
E-Auction Coal	335	394
Spl Fwd-Auction Coal	367	1137
Import	1593	1672
Trader	---	---

Respondent's submission

- i. Respondent has submitted that the Petitioner is obligated to supply 5% of net power generated at variable cost only in lieu of utilizing state resources in accordance to MOU, with State of Chhattisgarh. It is most humbly submitted that variable cost for 5% of net power be arrived at considering weighted avg. cost of coal from all sources for generating total net power i.e summation of power supplied to all procurer/licensee by the Petitioner.
- ii. Respondent has further submitted that, under Article 8.1.2 and 8.1.4 of the PPA dated 19.01.2015 for 5% of net power generated from power station states that:

“8.1.2 ... provided further that where there is more than one agreement under which electricity being sold and /or supplied by the company to any person, then the lowest price at which power is being supplied under any such agreement by the company to any person shall be deemed to be the price at which electricity shall be purchased by the CSPTradeco under this power purchase agreement

Provided further that as and when agreements are entered into by the Company in which price of supply is lower than the operative price then the operative price shall stand revised on and from date of such agreement.

.....”

“8.1.4 The operative price as determined in accordance to Article – 8.1.2 above or on the basis of an agreement for supply to any party other than CSPTradeco shall be deemed to be the operative price and all billing shall be on the basis of such operative price. The operative price shall be variable price for supply of contracted power to CSPTradeco from the generating station of the Company”

- iii. That in the light of above fact, Respondent has prayed that the Petitioner is required to disclose the variable charge at which power supplied to all the other procurers

and licensee. That tariff applicable to the Respondent will be lowest of the tariff i.e. variable charges as determined by Commission or variable charge at which Petitioner is supplying power to other procurers.

Commission's View

Petitioner has been asked to submit the month wise quantity of each type of Coal consumed along with rate of the coals which are used for generation of 5% of net power generated during the year of consideration. The petitioner has also been asked to provide month wise transportation cost and other charges paid during the respective year. Petitioner could not provide details of actual transportation and handling loss. Therefore, the Commission has considered 'transmission and handling loss' as 'nil' while computing landed price of the primary fuel. The Commission has not considered the demurrage charges as claimed by the petitioner as Regulations do not provide for the same. The details of computation of landed price of the primary fuel are as given in table below:

Weighted Average Landed Cost of the primary fuel as considered by the Commission
(₹/MT)

Type of Coal	FY 2018-19			
	Basic Rate	Transportation Cost	Other Charges	Total
Linkage Coal	1,801	264	74	2,139
E-Auction Coal	4,116	335	--	4,451
Spl Fwd-Auction Coal	4,024	367	--	4,391
Import	5,485	1,593	32	7,110
Trader	4,898	--	--	4,898

(₹/MT)

Type of Coal	FY 2019-20			
	Basic Rate	Transportation Cost	Other Charges	Total
Linkage Coal	1,801	275	73	2,149
E-Auction Coal	3,330	394	--	3,725
Spl Fwd-Auction Coal	1,921	1,137	--	3,059
Import	5,227	1,672	34	6,933
Trader	4,160	--	--	4,160

As regards respondent's submission on applicability of clause 8.1.2 and 8.1.4 of the PPA, it may be noted that this instant petition is limited to determination of tariff of the petitioner's power plant in accordance with the provisions of the Act and the applicable Regulations. The execution of the PPA is between the parties. Therefore, there is no need for the Commission to pass any order on this point.

14. Specific fuel oil consumption

The MYT Regulations, 2015, specifies normative secondary fuel oil consumption as 0.50 ml/kwh and the same has been considered for determining normative energy charge for

period in consideration. The actual specific fuel oil consumption for the FY 2018-19 and FY 2019-20 as submitted by the petitioner is 0.24 ml/kwh and 0.19 ml/kwh respectively. The Commission has considered the actual values as submitted by petitioner for sharing of gains and loss.

15. Weighted Average Landed Price of Secondary Fuel

The petitioner has submitted weighted average landed price of secondary fuel as 51,682.93 ₹/kL and 48,256.64 ₹/kL for the year 2018-19 and 2019-20 respectively. The Commission, after prudence check, has considered the same.

16. The computation of energy charge rate for FY 2018-19 and FY 2019-20 are as given in table below:

Ex-bus Energy Charge Rate as approved by the Commission

S. No.	Particular	Unit	FY 2018-19		FY 2019-20	
			Normative	Actual	Normative	Actual
1	AEC	%	5.75	7.10	6.25	7.09
2	CVPF	kCal /kg	3513.56	3503.20	3516.79	3515.99
3	CVSF	kCal /ml	10.56	10.56	10.65	10.65
4	GSHR	kCal /kWh	2375.00	2406.45	2390.00	2414.11
5	LPPF	₹/kg	3.55	3.58	3.05	3.07
6	SFC	ml/kWh	0.50	0.24	0.50	0.19
7	LPSFI	₹/ml	0.05	0.05	0.05	0.05
8	ECR	₹/kWh	2.567	2.655	2.234	2.274

17. Interest on working capital, expenses towards ash handling and disposal system

Petitioner’s Submission

The petitioner has claimed interest on working capital in accordance with CERC Regulations, 2014. For this purpose, petitioner has considered the cost of coal, oil and receivables equivalent to two months of energy charges which are elements of variable charges. Accordingly, petitioner has computed interest on working capital @ 10.00 paise/kWh, @9.00 paise/kWh for FY 2018-19 and FY 2019-20 respectively.

Respondent submission

Respondent submitted that the Petitioner under the Present Petition has claimed interest on Working Capital, it is most humbly submitted that interest on working capital is used for computation of annual fixed cost and is not part of calculation for variable charges, since 5% of net power is to be supplied only at variable charge as per Schedule 6 of PPA dated 19.01.2015. That, as per the PPA, tariff covers only variable energy charge and that it is not the part for ECR calculation and therefore, such fixed cost is not payable for 5% of the contracted output.

In view of the above, respondent prayed not to allow interest on working capital.

Commission's View

The Commission has already deliberated on the above issues in order dated 25/04/2020 passed in petition no. 62 of 2017 and the same are not allowed in this order also.

18. Sharing of gains and loss

Clause 11 of MYT Regulations, 2015 specifies controllable and uncontrollable factors which re as under:

"11.1 For the purpose of these Regulations, the term "uncontrollable factors" shall comprise of the following factors, but not limited to, which were beyond the control of the applicant, and could not be mitigated by the applicant:

- (a) Force Majeure events;*
- (b) Change in law,*
- (c) Judicial pronouncements,*
- (d) Fuel prices i.e. price of coal, oil and all primary-secondary fuel;*
- (e) Sales mix and quantum of sales;*
- (f) Cost of power purchase;*
- (g) Costs on account of inflation;*
- (h) Taxes and Statutory levies.*

11.2. For the purpose of these Regulations, the term "Controllable factors" shall comprise of the following:

- (a) Capitalization on account of cost overruns in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or circumstances beyond control of the generating company or the licensee, as the case may be.*
- (b) Generation performance parameters like PLF, SHR, Auxiliary consumption, PAF etc;*
- (c) Energy losses computed in accordance to Regulation 71;*
- (d) Operation & Maintenance expenses;*
- (e) Failure to meet the standards specified in the Standards of Performance Regulations, except where exempted;*
- (f) Variation in Wires Availability and Supply Availability."*

Clause 13 of MYT Regulations, 2015 specifies mechanism for sharing of gains and losses on account of controllable factors. Accordingly, aggregate net gain on account of over achievement or aggregate net loss on account of under achievement in reference to the norms set in tariff order for efficiency linked controllable items shall be passed on to the beneficiary/consumer(s) and retained by the generating company in the ratio of 50:50. or as may be specified in the Order of the Commission passed under these Regulations.

19. The summary of true up for the FY 2018-19 and FY 2019-20:

Based on the principle and data mentioned in earlier paras, the Commission has computed energy charge rate as Rs. 2.611/kWh as against the petitioner's claim of Rs.

2.806/kWh for FY 2018-19 and Rs. 2.254/kWh as against the petitioner's claim of Rs. 2.634/kWh FY 2019-20. The details of the same are given in table below:

S. No.	Particular	Unit	FY 2018-19		FY 2019-20	
			Normative	Actual	Normative	Actual
1	ECR	₹/kWh	2.567	2.655	2.234	2.274
2	ECR for Billing after considering gain & loss	₹/kWh	2.611		2.254	

20. Reimbursement of water charges, statutory charges, duties and taxes on actual basis

Petitioner's Submission

The petitioner requested the Commission that water charges, statutory charges, duties and taxes such as electricity duty on sale of power and on auxiliary consumption, environment development cess may allowed as separate pass through based on actual basis as they are variable in nature and directly linked with the generation from the power station. These are statutory in nature and restricting such expenses is beyond the control of the petitioner.

Respondent's submission

Respondent has submitted that water charges are covered under Clause 38.5 of the CSERC Regulation, 2015. That it lays guidelines for recovery of operational and maintenance expense, and in its sub para 38.5.1(f) articulates that water charges should be allowed separately as pass through in tariff on reimbursement basis, in the light of the fact that, water charge is actually the cost of water and instead not any tax or duty as articulated by the Petitioner in his submissions. That the cost of water is covered under the Operational and Maintenance Expenses under Clause 35.1 CSERC Regulation, 2015 which is a component of fixed charge. That, water charges are not payable on 5% of power procured at variable charges. That in light of aforementioned submissions, water charges cannot be allowed.

Commission's View

As per clause 35.1 of the MYT Regulations, 2015, statutory taxes, such as electricity duty, cess, water charges etc. shall be recoverable by the generating company on reimbursement basis. Also, the Commission has deliberated the issue of water charges, statutory charges, duties and taxes of this plant in order dated 25/04/2020 passed in petition 62 of 2017. Accordingly, the petitioner's claim is allowed. The beneficiary is required to pay these charges namely water charges, electricity duty on auxiliary consumption and electricity duty on actual basis. However, these charges shall be limited only to the proportion of quantum of power purchased by CSPTrdCL / CSPDCL.

21. Load Dispatch Centre charges.

Petitioner's Submission

The petitioner has submitted that they are required to pay load dispatch centre charges; therefore, same need to be recovered from the beneficiary on actual basis.

Commission's View

As per MYT Regulations, 2015, the respondents (CSPTrdCL/CSPDCL) are mandated to pay load dispatch centre charges on actual basis for the share of power purchased from petitioner. Hence, the Commission is of the view that Load Dispatch Centre charges paid by the petitioner shall be pass through on reimbursement basis.

22. Issue of recovery of petition filing fees and expenses incurred on publication of notices

Petitioner's Submission

The petitioner has pleaded for recovery of petition filling fee and expenses incurred by the petitioner on publication of notice in the petition for approval of tariff directly from the beneficiary in line with the Clause 82 of the MYT Regulations, 2015.

Commission's View

As regards the above claim of the petitioner, the relevant provision of the MYT regulations, 2015 reads as under;

“The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, be allowed to be recovered by the generating company or the transmission licensee/STU or the distribution licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be:”

In the light of the aforesaid provision, the claim of petitioner is allowed. Accordingly, the petitioner is at liberty to recover the said amount from the beneficiary i.e. CSPDCL.

23. Summary

- i.** Considering the gains and losses with respect to normative parameters, energy charge rate for FY 2018-19 and FY 2019-20 shall be ₹ 2.611 per kWh and ₹ 2.254 per kWh respectively. These rates are ex-bus energy charge rate.
- ii.** As regards to the petitioner's submission for reimbursement of water charges, electricity duty and cess, the Commission is of the view that in the light of specific provisions in the regulations in this regard, water charges, electricity duty and cess paid by the petitioner shall be pass through on reimbursement basis. The same shall apply to Load Dispatch Centre's fees and charges.

- iii. Petitioner is allowed carrying cost/holding cost from the date of filing the petition for FY 2018-19 and FY 2019-20 at the rate as approved by the Commission in the relevant tariff orders passed in petitions filed by State Power Companies and shall be computed in line with the computations done by the Commission while passing the tariff orders for State Power Companies.

24. We order accordingly.

Sd/-
(Pramod Kumar Gupta)
Member

Sd/-
(Vinod Deshmukh)
Member-Judicial

Sd/-
(Hemant Verma)
Chairman


CHHATTISGARH STATE ELECTRICITY REGULATORY COMMISSION

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Petition No. 39 of 2022
In the Matter of:

Review of order dated 20/12/2021 passed in petition no. 60 of 2020 filed for determination of variable cost (Energy Charge Rate) for the FY 2018-19 to FY 2020-21 of coal based thermal power station of 1200 MW (4x300 MW) capacity situated at Korba, Chhattisgarh under section 94(1)(f) of the Electricity Act, 2003.

M/s Bharat Aluminum Company Limited

 . **Petitioner**

Vs

M/s Chhattisgarh State Power Trading Company Limited

 . **Respondent-1**

M/s Chhattisgarh State Power Distribution Company Ltd

 . **Respondent-2**
PRESENT

 : **Hemant Verma, Chairman**

 : **Vinod Deshmukh, Member (Judicial)**

 : **Pramod Kumar Gupta, Member**

Appearance

: Shri Hemant Singh, Counsel for petitioner

Shri Abhinav Kardekar, Counsel for Respondent No.1 and 2 along with Shri Biplab Dutta, EE, CSPDCL.

ORDER
(Passed on 14/09/2022)

This petition is filed by M/s Bharat Aluminum Company Limited (BALCO) for review of Commission's order dated 20.12.2021 passed in petition no. 60 of 2020. The instant petition was filed on 06.06.2022 and was registered

as petition no 39/2022 on 15.06.2022. The Commission heard the petitioner on 05.07.2022 on the issue of maintainability of the petition.

The petitioner has prayed for review/ modify/ rectify the order dated 20.12.2021 passed by the Commission in Petition No. 60 of 2020, in view of the submissions made in the present review petition, to the extent of erroneous computation of Weighted Average of Gross Calorific Value of Primary Fuel (CVPF) and Weighted Average of Landed Price of Primary Fuel (LPPF).

For deciding the matter of maintainability of the petition, the Commission has sought a report from Tariff Section and Finance Wing. Accordingly, report prepared and submitted to the Commission. The Commission has gone through the report and finding and decision are given in upcoming paragraphs.

While analyzing the present petition, the order dated 25/04/2020 passed in petition no. 62 of 2017 which was filed for true-up of energy charge rate for FY 2015-16 to FY 2017-18 was also analyzed being order for the same generating plant.

It is pertinent to mention that the order dated 25/04/2020 was not challenged either by filing review petition or by filling an appeal before Hon'ble APTEL and hence, achieved the finality. Therefore, the Commission has adopted the similar methodology for computation of Weighted Average of Gross Calorific Value of Primary Fuel (CVPF) & Weighted Average of Landed Price of Primary Fuel (LPPF) as adopted while passing the order dated 25/04/2020 in petition no. 62 of 2017 for passing the order dated 20.12.2021 in Petition No. 60 of 2020.

It is pertinent to mention here that petitioner has claimed cost of imported coal in both the petitions i.e. 62 of 2017 and 60 of 2020. The Commission has disallowed cost of imported coal in the order passed in aforesaid petitions. If the landed price of primary fuel and value of GCV of primary fuel are examined, it

can be ascertained that the Commission has not considered the cost and GCV of imported coal in the primary fuel in the both orders.

Therefore, it is clear that the Commission has disallowed cost of imported coal and accordingly, its GCV was not considered in both the orders for computing energy charge rate.

In view of the above, it is evident that there is no apparent error on the face of record in the computation of LPPF, GCV and energy charge rate. Hence, it is clear that this Commission has applied its mind and passed a reasoned order on the subject and, accordingly, the requirement of error or mistake apparent on the face of record cannot be attracted in this case. Therefore, the review petition is not maintainable. Hence, petition is dismissed.

Sd/-
(Pramod Kumar Gupta)
Member

Sd/-
(Vinod Deshmukh)
Member-Judicial

Sd/-
(Hemant Verma)
Chairman