Petition for Approval of FPPCA for the year 2021-22

Volume - 1

FPPCA Petition

Submitted to

THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION

by



CESC HOUSE
CHOWRINGHEE SQUARE
KOLKATA 700 001

Index

	Page Nos.
Submission Text	1 – 65
Affidavit	66 – 67
Annex 1 (Applicable forms till 1.28)	68 – 110
Form E(A) - Summarized Revenue Requirement - Part-A	111
Detailed computations, relevant parameters relating to fuel and Form D	112 – 157
Auditor's Certificates	158 - 190
Coal procurement process and logistics	191 - 199
Gist	200



BEFORE THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION, KOLKATA

FILE NO.

CASE NO.

IN THE MATTER OF:

Petition for approval of FPPC for the year 2021-22 and for approval of other amounts payable to the consumers in accordance with the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011

AND

IN THE MATTER OF:

CESC Limited,
CESC House,
Chowringhee Square,
Kolkata-700001

... Petitioner



PETITION FOR APPROVAL OF FPPC FOR THE YEAR 2021-22 AND FOR APPROVAL OF OTHER AMOUNTS PAYABLE TO THE CONSUMERS IN ACCORDANCE WITH THE REGULATIONS OF THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION

The humble petition of the Petitioner abovenamed –

MOST RESPECTFULLY SHEWETH:-

Introduction

- 1. The Petitioner herein, CESC Limited (hereinafter referred to as "CESC" or "the Company"), is a Company registered under the erstwhile Companies Act, 1956 having its Registered Office at CESC House, Chowringhee Square, Kolkata 700001 and is a distribution licensee in terms of the first proviso to Section 14 of the Electricity Act, 2003. CESC is also a generating company within the meaning of Section 2 (28) of the Electricity Act, 2003.
- 2. The Hon'ble West Bengal Electricity Regulatory Commission

(hereinafter referred to as the "Hon'ble Commission"),

2

determines the tariff of the Petitioner in accordance with Section 62 of the Electricity Act, 2003 and the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 (hereinafter referred to as the "Tariff Regulations").

Background

3. The Tariff Regulations are, *inter alia*, applicable for determination of fuel and power purchase cost adjustment for the year 2021-22. The multi year tariff (hereinafter referred to as "MYT") order for the seventh control period comprising the years 2020-21 to 2022-23 has been issued on 01.08.2022 vide Case No: TP – 96 / 20-21. The year under consideration in this petition, i.e. 2021-22, is the second year of the concerned control period. Fuel and Power Purchase Cost Adjustment petition for the year 2021-22 is being filed in terms of the aforesaid order issued by the Hon'ble Commission and the applicable Regulations of the Tariff Regulations, within the timleine stipulated in the Tariff Regulations. Treatment of various items by the Hon'ble Commission in the

recent FPPCA and APR Orders for CESC for the years 2015-16,

3

2016-17 and 2017-18 in Case No. FPPCA-79/16-17 AND APR-58/16-17; Case No. FPPCA-79/16-17 AND APR-58/16-17; Case No. FPPCA-79/16-17 AND APR-58/16-17dated 01.08.2022 ("APR-FPPCA Orders dated 01.08.2022") have also been followed, to the extent applicable and consistent with the Tariff Regulations.

Fulcrum of the Statutory Provisions

4. At the outset it is important to underscore that the Electricity Act, 2003 is a special statute, being "An Act to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally for taking measures conducive to development of electricity industry, promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalisation of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal and for matters connected therewith or

incidential thereto."

(emphasis supplied)

5. In terms of Section 61 of the Electricity Act, 2003, specification of the terms and conditions for tariff determination are guided, *inter alia*, by the following:-

- (b) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- (c) the factors which would encourage competition, efficiency, economical use of the resources, good performance and **optimum investments**;
- (d) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;



5

(i) the National Electricity Policy and tariff policy:"

(emphasis supplied)

Extracted from Section 61 of the Electricity Act, 2003.

- 6. The Hon'ble Commission, being a quasi-judicial body under the Electricity Act, 2003, exercises its powers and functions within the ambit of the said Act. Therefore, the framework and principles of fuel and power purchase cost adjustment applicable for the Company for the year 2021-22 is guided by the provisions of the applicable Regulations and by following the letter and spirit of the Electricity Act, 2003 and in furtherance of the objects of the Act.
- 7. The necessity of substantial investment in all aspects of the electricity sector is an oft-repeated theme of the National Electricity Policy and the Tariff Policy issued under Section 3 of the Electricity Act, 2003. Encouragement of investment by the private sector is detailed in Clause 5.8.1 of the National Electricity Policy. The Tariff Policy states that one of the prime objectives of the Policy is to

"ensure financial viability of the sector and attract investments"

6

(Clause 4.0 (b) of the Tariff Policy). Section 61 of the Electricity Act, 2003 requires that the Appropriate Commission shall safeguard consumers' interest and at the same time ensure recovery of cost of electricity in a reasonable manner. Clause 8.2.1 (7) of Tariff Policy also echoes the same principle of recovery of cost through determination of tariff.

- 8. Securing optimum investment and recovery of costs in the sector and ensuring financial viability is relevant in the context of the developments that took place in the legal regime pertaining to coal in the last few years, which is of great significance for the generation sector of the country (70% of generation in India is coal based). Around 78% of coal produced in India is consumed in power generation.
- 9. As has already been submitted, the Electricity Act, 2003 is a special statute, which consolidates all electricity laws of the land. The Hon'ble Commission, through its Tariff Regulations under the said Act, is mandated to ensure, *inter alia*, that generation, distribution and supply of electricity is conducted on commercial

principles [Section 61 (b)], optimum investment in the sector is

7

encouraged [Section 61 (c)], consumers' interest is safeguarded together with allowing recovery of the cost of electricity in a reasonable manner [Section 61 (d)], and the principles of tariff determination be guided by the National Electricity Policy and the Tariff Policy [Section 61 (i)]. This petition is being submitted in the backdrop of and pursuant to the above basic tenets of the Electricity Act, 2003 which are reflected through the Tariff Regulations read with orders of the Hon'ble Commission.

- 10. "The principles rewarding efficiency in performance" has been recognised in the Electricity Act, 2003 as one of the major guiding factors for determination of tariff. The relevant Regulations of the Hon'ble Commission also echo the same. The Hon'ble Commission has adopted the principle enshrined in the National Electricity Policy vis-à-vis sharing of the gains on operating norms.
 - "5.8.5 All efforts will have to be made to improve the efficiency of operations in all the segments of the industry. Suitable performance norms of operations together with incentives and disincentives will need to be evolved along with appropriate arrangement for sharing the gains of efficient

8

operations with the consumers. This will ensure protection of consumers' interests on the one hand and provide motivation for improving the efficiency of operations on the other."

Extracted from the National Electricity Policy issued under Section 3 of the Electricity Act, 2003.

11. That the Tariff Policy issued under the aegis of the Electricity Act,2003, also echoes the same principles.

"5.0 GENERAL APPROACH TO TARIFF

5.11 (f) Operating Norms

.

Suitable performance norms of operations together with incentives and disincentives would need be evolved along with appropriate arrangement for sharing the gains of efficient

operations with the consumers. Except for the cases referred to

in para 5.11 (h)(2), the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized."

In cases where operations have been much below the norms for many previous years, the SERCs may fix relaxed norms suitably......

(emphasis supplied)



10

"5.11 (h) 2)

In cases where operations have been much below the norms for many previous years, the initial starting point in determining the revenue requirement and the improvement trajectories should be recognized at "relaxed" levels and not the "desired" levels. Suitable benchmarking studies may be conducted to establish the "desired" performance standards. Separate studies may be required for each utility to assess the capital expenditure necessary to meet the minimum service standards."

(emphasis supplied)

Extracted from the Tariff Policy issued under Section 3 of the Electricity Act, 2003.

KAMAI KOKATA
REGN NO 277000

11

Components of Variable Costs

A. General

12. The licensed distribution business of the Company has been procuring power generated by the generating stations of its generation business in terms of the orders issued by the Hon'ble Commission from time to time and the Minutes of Meeting dated 22 March 2007 signed between the generation and distribution divisions of the Company. The period under consideration posed significant challenges and adversities for the Company due to Covid-19 induced pandemic. Consumer demand was significantly suppressed during major parts of the year. Therefore, considering the best interest of the end consumers, Southern Generating Station was operated following appropriate economic dispatch in terms of the merit order principle and associated technical issues. It is respectfully submitted that operation of conventional generating stations requires steady load and hence, frequent startup and shut-down activities affect health and life of conventional plants. Keeping this in mind, operation of Southern Generating

Station was undertaken to ensure continuous operation of the units

12

for a minimum time period. Southern was generally not operated when prices in power exchanges were more favourable in the best interest of end consumers. Kindly refer to documents placed in Appendix (pages 429 to 431 of Volume 4 of the Petition).

B. Fuel Sourcing

Linkage Coal

Supply Agreements (FSAs) with subsidiaries of CIL, namely Eastern Coalfields Limited ("ECL") and Bharat Coking Coal Limited ("BCCL"). The aggregate available quantity is generally less than what is required by the Company. The Company, through diligent efforts, was able to manage coal procurement at reasonable levels. The relevant FSAs are already in the records of the Hon'ble Commission. Domestic coal procured through linkage has been recognised as one of the sources of procurement in terms of Regulation 5.8.4 (2) of the Tariff Regulations. It is humbly submitted that the responsibility of loading of coal at railway siding lies with the Coal Company and therefore the procurer does not

charges. The FSAs also provide for coal delivery through road /

13

Road-cum-Rail ("RCR") mode of arrangement at the Supplier's discretion. It is respectfully submitted that the Supplier, i.e. subsidiaries of CIL are also empowered to offer coal from any other subsidiary and decision in this regard of the CIL subsidiaries are binding on the Company. The Company craves leave to refer to the FSAs, whenever necessary. It is pertinent to mention that coal from CCL was sourced under import substitution mechanism recommended by the Ministry of Coal in a sub-group meeting held on 17.03.2021. CIL issued notice for procurers to submit their requirement of procuring domestic coal in lieu of imported coal.

Captive Mine

14. CESC has consumed about 39% of its annual requirement from coal produced from its captive mine located at Sarisatolli. Details regarding cost and quantum of captive coal has been furnished in terms of relevant forms as mentioned in Regulation 5.8.4 (2) of Tariff Regulations. Detailed chronology of events leading to allocation of the captive coal mine at Sarisatolli, emergence of this mine as the primary and least-cost source for CESC's generating

units, subsequent de-allocation as well as securing back of the

14

mine through e-auction, issues and factors affecting mining operations presently are already in the records of the Hon'ble Commission and the details are not repeated herein to avoid prolixity. The Company craves leave to rely upon the same, whenever necessary. The risk / cost of coal procurement has indisputably enhanced to a great extent, which is affecting financial viability and investment in the sector.

15. It is worthwhile to mention in this context that the Tariff Regulations provides for case-to-case basis of determination of cost of coal sourced from captive mine in terms of Regulation 5.8.6 (3). Post de-allocation of Sarisatolli mine and allotment through subsequent auction, the consumers are not bearing the mining cost, therefore reject sale proceeds are not liable to be shared with consumers. The same principle is also echoed in Tariff Regulations framed by the Hon'ble Central Electricity Regulatory Commission (hereinafter referred to as the "CERC"), which states that benefit sharing for reject sale is not required for auctioned mines. Relevant extract (Regulation 36P (2)) has been placed in the Appendix in page 442-444 of Volume 2 of the petition. The Hon'ble Commission in Order

dated 08.10.2021 in Case No. TP-95/20-21 for West Bengal Power

15

Development Corporation Limited has held that determination of input price of coal for captive coal mines will be determined as per Tariff Regulations framed by the Hon'ble CERC. It is respectfully submitted that in accordance with the Tariff Regulations of Hon'ble CERC, benefit sharing for reject sale is not required for auctioned mines. In this regard it is important to highlight that as per Para 4.4.3 of the Washery Reject Policy issued by the Ministry of Coal on 27.05.2021, benefit sharing for reject sale is not required for auctioned mines. Relevant extracts of the Washery Reject Policy dated 27.05.2021 is placed in the Appendix in pages 440-441 of Volume 2 of the Petition.

16. Captive coal was mined to the extent possible. Some uncontrollable factors hindered production, which include rapid spread out of fire in and around areas of coal seam close to working areas, restrictions imposed by Directorate General of Mines Safety (DGMS) on blasting in some parts, difficult geographical terrain inside the mines resulting into deeper sections with narrower angles, necessitating use of smaller equipment, existing district board road through the mine which is being used as a thoroughfare etc. All such factors have made

16

extraction extremely difficult at times and the issues have been regularly placed before the Appropriate Authority through monthly status reports / communications. In this regard, as has already been intimated to the Hon'ble Commission that matters relating to performance standards and production issues under the Coal Mine Development and Production Agreement (CMDPA) is presently sub-judice before the Hon'ble Tribunal, Rajmahal Project Area, Lalmatia Godda, Jharkhand, constituted under the Coal Bearing Areas (Acquisition and Development) Act, 1957, which is also the appropriate authority for adjudication under the Coal Mines (Special Provisions) Act, 2015. Subsequently, in the matter of issues relating to lower production from the mine, various difficulties faced in the mine was represented before the Scrutiny Committee constituted by Ministry of Coal. The Committee recommended the Nominated Authority to take opinions / comments of Central Mine Planning and Design Institute Limited (CMPDIL). In response CMPDIL in July 2021 communicated to the Coal Ministry that "the fire is affecting the production capacity of the mine, however, for assessing the impact of fire on the annual production capacity of the mine a detail study would be required

involving considerable resources in terms of time and money". A

17

copy of the Minutes of Meeting of the Scrutiny Committee and also the report of CMPDIL have been placed in Pages 391 to 396 of Volume 2 of this Petition. On similar representations, the Scrutiny Committee has so far refrained from recommending imposition of any performance shortfall penalties due to the conditions beyond the control of the Management.

17. It is pertinent to mention in this context that significant developments have taken place regarding treatment of change in law events and pass through of associated cost in the national scenario. The Central Government, in exercise of the powers conferred under Section 107 of the Electricity Act, 2003, has issued direction to CERC on 27.08.2018 to allow pass through of cost for any change in duties, levies, cess and taxes imposed by any Government Instrumentality as the same is construed as "Change in Law". The Hon'ble Appellate Tribunal for Electricity as well as various Electricity Regulatory Commissions have reiterated the above principle and allowed pass through of associated cost along with corresponding carrying costs favourably in their judgments / orders.



18

Significant quantum of coal sourced from the captive mine has been washed taking into account quality of coal and blending needs, environmental constraints relating to ash utilization, directives of West Bengal Pollution Control Board etc. Detailed communications in this regard are already in the records of the Hon'ble Commission. The Hon'ble Commission, in Order dated 02.03.2020 in Case No. TP-72/16-17-COMPLIANCE observed that washing is done to adhere to environmental needs and the associated cost impact is insignificant. The Regulations of the Hon'ble Commission also recognise the need to comply with environmental standards. CESC, as directed by the Hon'ble Commission had approached the West Bengal Pollution Control Board to explore the possibility of exemption from the requirement of coal beneficiation. However, the West Bengal Pollution Control Board has reiterated the requirement of utilisation of coal with ash content not beyond 33% at the Budge Budge Generating Station. Relevant details have been placed in the Appendix in pages 429 to 434 of Volume 2 of the Petition. The Company is, therefore, required to resort to a judicious mix of supply from CIL sources and other sources including beneficiated coal from appropriate

blending.

18.

19

E-auction

19. In this context, it is worthwhile to mention that after exhausting the FSA route and mining captive coal to the extent feasible, CESC had to procure coal, in terms of the Regulation 5.8.2 first proviso (recognising the e-auction mode of procurement), through the eauction mechanism rolled out by the Government of India from some of the specified mines of CIL and its subsidiaries, considering the quality, delivery schedule and blending requirements. This is an enabling provision to address the scarcity of coal and at the same time keeping less reliance on imported coal. The Company was able to keep the procurement through eauction mode at a lower level considering reduced generation level due to suppressed consumer demand driven by the Covid-19 induced pandemic. The Company, however, needed to be vigilant and undertake the planning of coal procurement through e-auction as the e-auction schedules are usually non-uniform and without any specific delivery commitment / schedule. Moreover, coal available through e-auction mode are subject to high volatility of price owing to variation in premium depending on the nature of demand and other associated factors. Procuring coal through e-

20

auction route calls for bidding over a predetermined reserve price, that includes a high premium over basic prices of similar grades of coal supplied through linkage. Any upward revision in notified price of coal is also being considered by CIL subsidiaries for automatic scaling up of coal e-auction discovered price, often with retrospective applicability. This mechanism affects the Company as coal booked under e-auction is delivered in tranches over a period of time. It is also pertinent to note that the Government of India has merged all types of coal auctions since March 2022. Discontinuation of power sector specific coal auction has thrown power sector companies like CESC in deep trouble, as the Company need to participate along with unregulated sectoral players from aluminium, steel, coal traders etc. in coal block auctions, which are seeing manifold increase in discovered price since introduction of common auction process. Notification dated 01.03.2022 of CIL is placed in the Appendix in pages 448 of Volume 2 of the Petition for kind reference of the Hon'ble Commission. It is pertinent to mention that the responsibility of loading of coal at railway siding lies with the Coal Company and therefore the procurer does not have any control / role whatsoever,

on overloading / underloading charges.

21

- 20. In terms of the recommendations of the Group of Ministers (GoM) (as has been approved by the Ministry of Power) for resolution of stressed thermal power projects, Ministry of Coal may earmark at least 50% coal sourced under e-auction mode for use in the power sector. Hence, utilisation of e-auction coal for power sector is an accepted and widely acknowledged position by the Government of India. Details relating to sale intimation notices / sale orders containing price discovered in the bid, have been placed in the Appendix for kind consideration of the Hon'ble Commission.
- 21. The Company, as prudent practice, booked coal through e-auction processes conducted during earlier years. This was done by the Company in consumer interest. However, Covid-19 induced pandemic caused enormous problems and forecasts of the Company went haywire. During 2021-22, the Company had to absorb coal booked under e-auction processes held in earlier years. About 45% of e-auction coal consumed during 2021-22 was booked through e-auction processes held in earlier years.

22. Premium of coal booked under e-auction during 2021-22 has

shown an increasing trend and in most cases, the reserve price

22

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

itself was higher than CIL notified price (about 25%), establishing escalation of coal price. Apart from these coal, some e-auction coal, booked during previous years had been consumed during 2021-22. As the coal mines notified for e-auction are often located in far-away places, the procurement is also riddled with issues of logistics and use of roadways is frequently needed to be taken up.

23. Since, CESC had explored such procurement decisions judiciously keeping the interest of consumers in the forefront with continuous monitoring of the coal market and abiding by the principles of coal procurement specified in the Tariff Regulations (Regulation 5.8.2), the Hon'ble Commission may kindly consider the cost of e-auction coal in terms of the extant Tariff Regulations to protect the Company from any adverse price impact.

Road Transportation

24. In 2015, the government brought in a policy level change to shift from imported coal to developing new areas for mining and supplying domestic coal. When the new mines opened up, absence of railway siding and railway tracks for coal evacuation

became a critical issue At this juncture, as a policy decision, coal

23

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

consumers were encouraged to lift coal from mine on their own and carry it to railway siding for onward transport. This mechanism is known as "Road-Cum-Rail" or "RCR" in common parlance. Shift in policy stance from import to domestic RCR route also gets evidenced from the decision of the Railway Authority keeping in abeyance in 2016 the "Logistic Plan" introduced in 2011 for imported coal.

25. The Ministry of Coal has formed the Infrastructure Constraints Review Committee to look into the coal shortage issues in thermal power plants. Reports of the sub group constituted by Infrastructure Constraints Review Committee, having representation from the Ministry of Coal, the Ministry of Power, the Central Electricity Authority, Railways, Coal Companies, NTPC etc. show that not only the Independent Power Plants ("IPP"), but the Public Sector Undertakings like NTPC Limited, DVC etc. were also encouraged to lift coal through RCR route and had concurrence / approval of the Ministry of Power and other government authorities. Thus, the generating companies started procuring coal through RCR mode in addition to already existing

rail mode. As per the Annual Report of Coal India Limited for the

24

year 2020-21, around 324.80 Million Tonnes (~57%) out of a total dispatch of 573.60 Million Tonnes was through the rail mode. Even under the assumption that all of the coal dispatched by rail mode was to the power sector (~445 Million Tonnes), that would still mean that road dispatches to the power sector as of 2020-21 accounted for at least 27% of total dispatches. It may also be noted that during the fiscal year 2021-22, dispatches from Coal India Limited by road mode increased by 41% while that through rail mode increased only by 11%, showing that there has been an increasing trend in availing the road mode by the procurers. In contrast, only 9.4% of the coal sourced by the Company has been through the RCR mode (all in e-auction mode), reflecting the prudence the Company has exercised to control costs in this regard.

26. It is apparent from the minutes of meetings of the Sub-Group of the Infrastructure Constraints Review Committee that coal transportation from mine to railway siding is a major issue for various coal companies, including ECL, BCCL and CCL, which supply coal to CESC. Transportation of coal to railway siding is

affected due to:

25

- a) contractual disputes / litigation between coal companies and the coal transporter,
- b) inability of contract finalization within a stringent time frame,
- c) local law and order problems, and
- d) inequitable risk-sharing mechanism in contracts.
- 27. In particular, consumers of CCL and BCCL have suffered immensely. To address this issue, coal dispatch in road / RCR mode was encouraged. In particular, inability to conclude road transportation contracts in a reasonable timeframe affected NTPC and other stakeholders. To overcome the issue of transportation of coal by coal companies to railway siding, RCR mode of coal transportation had been advocated on numerous occasions during these meetings by Government authorities to improve coal production and offtake. Relevant documents are already in the records of the Hon'ble Commission. It is also respectfully submitted that "first-mile-connectivity" is a challenging issue for the

Goal India subsidiaries and to evacuate, mined coal from coal

26

mines having connectivity issue are offerred on RCR mode. In past few years, a considerable quantity of coal was moved in RCR mode across the country. It is respectfully submitted that CIL subsidiaries in certain cases offered a part of coal mandatorily though RCR route. Road transportation by trucks is also allowed in the Environment (Protection) Amendment Rules, 2020. It is also submitted that e-auction coal price is normally higher when coal delivery mode is through rail, as compared to road / RCR. Kindly refer to Appendix (pages 445 to 447 of Volume 2 of the Petition).

- 28. As mentioned above, insufficient infrastructural readiness of some of the mines necessitates RCR mode of transports. Therefore, the Company had to resort to RCR mode of transport for coal sourced through e-auction mode sometimes for the period under consideration. In terms of Regulation 5.8.2 read with paragraph 8.1 (iii) under Schedule-1 of the Tariff Regulations, cost of transportation through road mode is a part of fuel cost.
- 29. The existing sidings at the mines were not available for rail transportation. Therefore, available nearby railway sidings were

explored and selection was done considering the parameters such

27

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

as, whether sidings are operational or not, whether length of the siding could accommodate entire rake so as to minimise loading time, and whether such sidings were used exclusively for loading coal into railway rakes or for movement of any other commodity. Accordingly, for ECL RCR mode, Barabani siding was selected for onward transportation of coal received for transportation by the Company.

C. Fuel Quality

30. The Hon'ble Commission while determining fuel cost of generation in the Tariff Order dated 01.08.2022 in Case No: TP - 96 / 20-21 has considered "as received GCV" at the same level as the minimum notified GCV of the respective grades. The Hon'ble Commission has also directed CESC to arrange for measuring GCV of coal through third party sampling in terms of fourth provisio of regulation 5.8.2 of the Tariff Regulations and to submit a report. In this context, it is respectfully submitted that actual measurement by third party testing agency have already been in place since long. Such testing agency is selected from the list of CIL-empaneled testing agencies. The aforesaid list is placed in the Appendix (page

28

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

1 of Volume 4 of this Petition). Such testing arrangements were in vogue for long period (i.e., before FY 2020-21). Requisite documents, in terms of applicable regulations, have already been placed before the Hon'ble Commission from time to time.

31. Coal in India is in short supply and Indian coal has a monopoly market where CIL is in dominant position operating through its subsidiaries. It is an unfortunate but settled position that there is a serious mismatch between the "as billed" and "as received" heat values. Further, heat losses take place in various stages between "as received" coal and coal as fired into the boilers. After careful consideration, the Hon'ble Commission has introduced the concept of "as received" GCV of coal at the unloading end of the power stations through the notification of the Third Amendment Regulations. It was specified that this newly introduced GCV "as received" shall form the basis of computation of fuel cost and energy charge for the generating stations. Thus, in consideration of such reality and also the relevant Indian Standards, the Hon'ble Commission has introduced "as received" heat value of coal as a basis in the aforesaid regulations. Accordingly, the Hon'ble



29

Commission amended Regulation 5.8.4 (1) and 1.2.1(lxa) of the Tariff Regulations through the third amendments.

- 32. Relevant extracts of the above regulations are appended below.
 - (i) Definition of "GCV as received"

"1.2.1(lxa)

"GCV as received" means the GCV of coal as measured at the unloading point of the thermal generating station through collection, preparation and testing of samples from the loaded wagons, trucks, ropeways, Merry-Go-Round (MGR), belt conveyors and ships in accordance with the IS 436 (Part-I/Section 1)- 1964 and clause 6.2 of IS 1350 (Part-II)-1970:

Provided that the measurement of coal shall be carried out through sampling by a third party to be appointed by the generating companies from the list maintained by the Ministry of Coal, Government of India / Coal India Limited:

Provided further that samples of coal shall be collected either manually or through hydraulic augur or through any other method considered suitable keeping in view the safety of personnel and equipment:

30

Provided also that the generating companies may adopt any advanced technology for collection, preparation and testing of samples for measurement of GCV in a fair and transparent manner."

[emphasis supplied]

(ii) Regulation 5.8.4 (1) Gross Calorific Value (GCV) of primary fuel:

"5.8.4 Gross Calorific Value (GCV) of primary fuel:

- (1) The gross calorific value for computation of energy charges as per paragraph 8.1 (ii) of Schedule-I of these regulations shall be done considering weighted average 'GCV of coal as received', in kCal/kg for coal-based stations less 120 kCal/ Kg on account of variation during storage at generating station.
- (iii) Relevant extract from Schedule 1

"Schedule 1

8. Energy Charges for Thermal Generating Stations:

KOLKATA

KOLKATA

KAMAL KUMARAUL

REGN NO-2700/04

31

- (ii) 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 formula:
 - a) For coal based and lignite fired stations

 ECR = {(GHR SFC x CVSF) x LPPF/CVPF + LC x

 LPL + SFC x LPSF} x 100 / (100 AUX)....

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal-based stations less 120 Kcal/Kg on account of variation during storage at generating station;"

- 33. While dealing with the definition of "GCV as received" in regulation 1.2.1(lxa), the Hon'ble Commission observed the following in paragraph 5.3 of the Statement of Reasons (SoR):
 - "...2. The concern of CESC Ltd. and HEL regarding low quality assurance of coal has already been addressed to by considering "as received GCV" of coal at the unloading point of the thermal generating station through 3rd party sampling....."



32

- 34. Further, there happens more deterioration in heat value of coal when the coal is unloaded and stored in the power station yard, due to ingress of moisture. The Hon'ble Commission also observed the following in paragraph 10.3 of the SoR in connection with Regulation 5.8.4(1) of the Tariff Regulations, dealing with the gross calorific value for computation of energy charges:
 - "2. In regard to submissions made by CESC Ltd.
 and HEL, the Commission observes that, the heat loss
 from loading point to unloading point has already been
 addressed to by way of considering "as received
 GCV" at unloading point. The Commission further
 notes that heat loss of 120 kCal/kg has already been
 allowed on account of loss from unloading point to
 stacking of coal. storing and upto feeding to boiler.
 "
- 35. The above factors led to the following considerations in matters of ascertaining heat content of coal in as received condition at the generating stations.



33

- (i) Independent third-party testing of coal at unloading end of generating stations for which list of testing agencies is approved by Coal India Limited.
- (ii) Clause 6.2 of Indian Standard IS 1350, (Part-II) -1970 was specified to factor in moisture correction of the heat value of coal. Also, Indian Standard IS 436 (Part I/Section 1) 1964 was specified for correct method of sample collection, preparation and testing procedure.
- (iii) Relevant excerpts of IS 1350 (part 2), Para 6.2 are as under:

"6.1.1 The following symbols shall be used without any suffix:

M = percentage of moisture in the sample,

Q = calorific value of the sample.

6.2 As-Received Basis

6.2.1 The symbols indicated in 6.1.1 shall be used with suffix 1.

6.2.2 The results of the as-received basis are then obtained as follows:

Moisture = M_1

ADLE ATA

KANAL KUMAH PAUL

PEGN. NO-2700/04

OF

34

$$Q_1 = \frac{Q \ X \ (100 - M1)}{100 - M}$$

- 36. Accordingly, the heat value of coal is considered in terms of the Gross Calorific Value of coal on "as received" basis less 120 kCal/Kg on account of stacking loss as per the Regulation 5.8.4 (1) and 1.2.1(lxa) of Tariff Third Amendment Regulations. Copies of consignment wise quality certification by a CIL approved thirdparty agency for coal procured in 2021-22, have been furnished in pages 4 to 115 of Volume 4 of this petition. An Auditors' Certificate, certifying grade-wise "GCV as received" for the year 2021-22 has been placed in pages 171 to 174, Annex C4, Volume 1 of this petition. Heat value certificate of Light Diesel Oil (LDO) was issued through monthly periodic testing by NABL accredited third party and are placed in pages 116 to 139 of Volume 4 of the petition. An auditor's certificate on monthwise details of heat value for Budge Budge and Southern Generating stations is placed in page 189 of Volume 1 of the petition.
- 37. Coal cost has been arrived at in deference to the extant regulations of the Hon'ble Commission which lays down the principle and methodology for furnishing details of coal in specified formats, both

35

relating to quantity and quality, recognising aspects of significant heat loss at various stages as dealt hereinbefore.

38. In this context it is pertinent to mention the prevalent skewed practice of adjustment of grade slippage where the Company is charged at base rate plus applicable taxes and duties for any improvement of heat value of delivered coal, but is compensated only for the base rate for any grade slippage. The Company tries to alleviate the impact due to the above through pursuance but without any major resolution to this issue till date.

D. Fuel Price

39. In terms of definition as provided in Regulation 1.2.1 (Ivi) read with 5.8.2 of Tariff Regulations, fuel cost comprises cost of basic content as well as associated transportation and handling / other incidental charge as applicable. Over past few years, price of coal has been increased by modifying different price components of coal. Apart from changing the basic rates, the monopoly supplier and transporter caused to increase the cost of coal, the primary

fuel for power generation, through introduction / imposition of new

charges, changing various components of coal price / freight and

36

by enforcing new constraints / conditions etc. This price rise was further accentuated by imposition of taxes and levies. Detailed write-up of the aforesaid issues has been provided below:

- (a) CIL carried out significant upward revision in basic prices on 08.01.2018 in most prevalent grades of coal used in generation of power. This effectively increased the applicable royalty (as applicable), taxes and duties on an ad valorem basis, which are linked to the basic price of coal. Further, vide price notification dated 27.11.2020, the basic prices of all run of mine grades of coal were enhanced. This was made effective from 01.12.2020 accentuating the consequential impact on the overall landed price of coal as mentioned already.
- (b) BCCL revised the prices of washery grades of coal vide Notifications dated 24.04.2020 (effective from 25.04.2020) and 20.10.2020 (effective from 21.10.2020). Similarly, CCL carried out revisions in the washery grade coal prices with effect from 15.09.2018 vide Notification



37

dated 29.12.2018. The above price revisions resulted in a corresponding increase in fuel cost for CESC.

- Railway freight for transportation of coal was increased by (c) the Ministry of Railways on 09.01.2018. Freight was increased and demarcation of busy and non-busy season was removed and the same enhanced rates were made applicable uniformly throughout the year without any seasonal distinction. These new rates effectively increased the freight cost for transportation of coal significantly. Thus, landed cost of coal increased These enhanced rates were further substantially. increased significantly by the Ministry of Railways on 31.10.2018. The freight tables are placed in pages 14 to 16 of Volume 3 of the petition.
- (d) Railways Freight is charged by Indian Railways on full carrying capacity of wagons and not on the actually loaded quantity. Railway wagons are often not capable to carry upto the original carrying capacity due to ageing.

Stenciled capacity of wagons is the allowable capacity

38

which can be safely loaded onto a particular wagon considering its age. Overloading charges are computed on the basis of permissible carrying capacity of wagons specified by the Indian Railways. However, CIL refunds for underloading based on the difference of actual weight of coal and the stenciled capacity / permissible carrying capacity, whichever is lower; hence, cost for carriage based on carrying capacity is not neutralised by compensation for underloading. Due to this reason and imposition of GST, actual railway freight on Rs. / Te basis is normally higher than the rates provided in the railway freight table placed in pages 14 to 16 of Volume 3 of the petition. It is humbly submitted that the responsibility of loading of coal at railway siding for coal sourced through linkage mode and e-auction route via rail mode lies with the Coal Company and therefore the procurer does not have any control / role whatsoever, on overloading / underloading charges. Sample copies of the bills / railway receipts and a summary of railway freight based on such receipts are enclosed in pages 285 to 317 of Volume 3 of

this Petition.

39

- (e) Additionally, the Ministry of Railways has imposed 5%GST on "transportation of goods by Rail" from 01.07.2017.
- (f) Sizing Charges were increased by around 10% with effect from 01.09.2017.
- (g) Surface Transport Charges were enhanced by ECL (vide Notifications dated 31.01.2019 and 01.08.2019), BCCL (vide Notifications dated 31.08.2020, 26.05.2021 and 19.01.2022),CCL (vide Notifications dated 05.10.2020,03.12.2020 and 23.06.2021) and MCL (vide Notifications dated 01.02.2021, 31.07.2021 and 31.01.2022) respectively.
- (h) An additional amount of Rs. 50 per tonne as 'Evacuation Facility Charge' has been introduced by CIL from 20.12.2017. The said charge was further enhanced to Rs. 60 per tonne with effect from 01.08.2021 vide Notification dated 31.08.2021.

Terminal Charge at Rs. 20 per tonne has been introduced vide Ministry of Railways Notification dated 27.12.2018.

40

This is levied on traffic handled by the Railways and consequently increased the overall freight charges paid by the Company.

- (j) Mines and Minerals (Development and Regulation) Act, 1957 was amended in March 2015 to give effect of levy of two additional charges towards payment for District Mineral Foundations and National Minerals Explorations Trust. These charges being ad-valorem to royalty, works out to be proportional to the basic notified price of coal.
- (k) Following shift to Goods and Services Tax (GST) regime from 01.07.2017, the Clean Environment Cess of Rs. 400 per tonne has been incorporated under the GST Compensation Cess list and has been renamed as the GST Compensation Cess. GST on coal is 5% and the same is 18% on mining support services. It is respectfully submitted that though no GST is applicable on captive coal, the Company, under applicable statutes, needs to pay 18% GST to agencies engaged for mining, sizing,

transportation, evacuation facility charge, washing,

41

security, road repair etc. CESC also needs to pay GST at applicable rate on Reverse Charge Basis on Fixed Rate, Additional Premium, Royalty etc. The Hon'ble Commission has directed the Company to obtain appropriate ruling for 'Nil' rating of GST on captive coal consumption. A detailed note in this regard has been placed in the Appendix in pages 397 to 428 of Volume 2 of this petition.

- (I) ECL imposed following cess/fees on coal supplied from mines in the state of West Bengal:
 - Rural Employment Cess (RE Cess) 20% of the Notified Price
 - ii. Primary Education Cess (PE Cess) 5% of the Notified Price
 - iii. AMBH Cess Re. 1/ Ton
 - iv. PWD Road Cess Re. 1/Ton
 - (m) CCL, vide Notification dated 06.07.2020, has apprised about imposition of Covid 19 Pandemic Cess at Rs. 10 per Tonne for all coal despatched from coal bearing land.

KOLKATA
KAMAL KUMARPAUL
REGN. NO 270000

42

This charge has been made applicable by the State Government of Jharkhand.

- (n) CCL, vide Notification dated 09.11.2020, has levied forest transit fee at Rs. 57 per Tonne of coal dispatched from coal mines operating completely in forest land. This charge has been made applicable vide the Jharkhand Forest Produce Transit Rules 2020 with effect from 01.10.2020.
- (o) CCL and ECL imposed Management Fees of Rs. 1/ Ton on coal supplied from its mines.
 - (p) CCL, vide Notification dated 03.03.2022, has decided to recover "Composition User Fee" (CUF) at the rate of Rs. 60 per Tonne from its consumers as an additional price component in the coal sale bill. This is on the ground of payment made by CCL on behalf of commercial vehicle owner / transport operator engaged in transportation of coal from colliery to siding / washery and from road weighbridges to consumer destination. Such kind of

43

charge has been imposed by the Road Construction Department of the Government of Jharkhand for use of state roads and / or bridges in mining areas by the mineral transporting vehicles.

Thus, all the aforesaid factors resulted in considerable increase in the overall landed cost of coal. Supporting documents, in form of notifications / sample bills are placed in the Petition as mentioned in Paragraph 32.

Particulars	Notified by / Imposed on	Impact
Basic Prices of Non-coking coal	CIL	Around 14-20% increase for most prevalent grades, resulting in ad-valorem increase in royalty, taxes and duties. Rs. 10 per tonne enhancement of price (with effect from 01.12.2020) for all grades of coal.
Basic prices of washery grades of high volatile medium coking coal	BCCL	Around 10% increase

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

Notified by / **Particulars Impact** Imposed on Basic price of CCL Around 16% increase washery grade of coal Railway Freight increase and applicability of Ministry of enhanced rates Around 8.7% increase Railways across the year without seasonal distinction CIL About 10% increase Sizing Charge Imposition of Rs. 50 per tonne and Rs. Evacuation CIL 60 per tonne from **Facility Charge** 01.08.2021 Imposition of Ministry of Rs. 20 per tonne **Terminal Charge** Railways Imposition of Government Covid 19 Rs. 10 per tonne of Jharkhand **Pandemic Cess** Imposition of Government **Forest Transit** Rs. 57 per tonne of Jharkhand Fee



45

Particulars	Notified by / Imposed on	Impact
Imposition of Admin charges	CCL e- auction	Rs. 77 per tonne
Imposition of Composition User Fee	Government of Jharkhand and recovery by CCL from consumers	Rs. 60 per tonne

40. The Hon'ble Commission is kindly aware that multiple agencies are involved in the coal supply chain – the CIL and its subsidiaries, sampling agencies, Indian Railways and various other government agencies to name a few. The Company, in the interest of the end consumers and to ensure timely delivery of adequate quantity of coal, needs to maintain close liaising with these offices / agencies. Such activities are undertaken by Coal Handling Agents on behalf of the Company and the associated costs have been shown as "Handling, Sampling and such other similar Charges" in the applicable format. It is worthwhile to mention that in terms of the Tariff Regulations, handling, sampling and such other similar charges are a part of landed cost of fuel in terms of Regulation 1.2.1 (Ivi). Handling agents are normally identified through

competitive bidding. Relevant supporting documents in adherence

46

to the directives of the Hon'ble Commission in this respect, to the extent feasible and practicable have been placed in the **Appendix**, in pages 23 to 284, Volume 3 of this Petition. As already submitted, for linkage and e-auction rail mode, loading of coal on railway wagons is on the scope of CIL and its subsidiaries and the Handling agents have no wherewithal to control overloading / underloading of wagons and other related matters.

- 41. Coal handling agents provide host of services, some of which are detailed hereinbelow:
 - (a) Release of delivery order
 - (b) Rake allotment, rake offering, indent placement and rake loading as per advise of CESC. Responsibility of loading of coal at railway siding for coal sourced through linkage mode and e-auction route via rail mode lies with the Coal Company
 - (c) Coordination with supplier (ECL, BCCL, CCL or MCL as applicable) mines staff and Headquarters for ensuring

KOLKATA

KAMAL KUMARPALE

REGIN NO 271000

47

smooth and continuous flow of rakes from sidings as per advice of CESC

- (d) Arrangement of sufficient tipplers / trucks and manpower for supervision to ensure regular and smooth dispatches of coal supplies from colliery
- (e) Supervision of loading and ensuring coal of proper quality and quantity matching with grades declared by supplier free from shale / stone, big size boulders etc. Responsibility of loading of coal at railway siding for coal sourced through linkage mode and e-auction route via rail mode lies with the Coal Company
- (f) Transportation of coal as per road delivery order (RDO) against monthly allocation, to the railway siding for onward movement to the generating station in case of RCR coal
- (g) Service provider will ensure that all railway wagons are healthy and shall be responsible for monitoring of sick wagons which have been detached from running train

48

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

- (h) Collection of coal invoices, RRs and other documents from supplier immediately after issuance and forwarding the same to CESC
- (i) Submission of E-way bill for transportation of coal by rail mode.
- 42. Copies of coal price notification of CIL along with other related documents, royalty rates notified by Ministry of Coal, Government of India, railway freight notified by Ministry of Railways, Government of India, terminal charge notified by the Ministry of Railways, GST Compensation Cess from Ministry of Finance, Government of India, notifications under the amended Mines and Minerals (Development and Regulations) Act, 1957 towards payment for District Mineral Foundations and National Minerals Explorations Trust, cess / charges imposed by the Government of Jharkhand along with some sample bills are placed in the Appendix in pages 380 to 387 of Volume 2 of the petition. Kindly refer to pages 132 to 134 and 137-138 of Volume 1 of the petition, containing further references to the notification mentioned above.

For captive coal, deductions have been made in terms of the tariff

49

order dated 01.08.2022 in Case No: TP – 96/20-21 and ultimately the price charged to the end consumers are in terms of the agreement with the Nominated Authorities. Needless to mention that, all levies / royalties / cess and other charges on coal are allowable in terms of various directions / notifications of competent authorities and has been allowed in the APR-FPPCA Orders dated 01.08.2022. Relevant documents, relevant parameters relating to coal as per applicable forms of Tariff Regulations and price for captive coal have been placed in the pages 116 to 138 of Volume 1 of the Petition. Various requirements of the Regulations of the Hon'ble Commission have been adhered to in the coal procurement process including price therefor. It is respectfully submitted that duties, levies, cess etc. have been considered in terms of applicable statutes to arrive at cost of coal, duly certified by Auditors. Details of coal procurement and methodology for the same are furnished in the petition. (pages 191 to 199 of Volume 1).

E. Power Purchase

COLKATA

KOLKATA

KOLKATA

KAMAR KUMARPALL

REGN. NO-278000

50

43. To meet the demands of the consumers of the Company, optimal utilisation of all available sources has been made (both long term and short term, from, inter alia, independent generators as well as the Traders, government portal and the Power Exchanges) following relative economics, in the best interest of the end consumers. As desired by the Hon'ble Commission, the Company has made arrangement for procurement of power from DEEP portal under Section 63 of the Electricity Act, 2003 on short term basis, under Regulation 7.5.1 of the Tariff Regulations. The Company has submitted the requisite documents to the Hon'ble Commission about the outcome of the competitive bidding process and the executed PPA. Necessary documents relating to the above have been placed in the Petition in pages 236 to 265 of Volume 5 of the Petition. The Company obtains power on long term basis from own generating stations and Haldia Energy Limited (HEL) under an approved PPA, in terms of applicable regulations / orders of the Hon'ble Commission. The Company considered the cost, as certified by Auditor, based on the rates charged by HEL in terms of Order dated 27.11.2017 in Case No TP - 68 / 16-17 and 29.01.2016 in Case No TP - 63 / 14 - 15 as Orders dated 08.09.2021 in Case No TP - 75 / 18 - 19 and the Order dated

51

20.04.2022 in Case No TP - 67 / 16 - 17 are under Appeal etc., as appropriate, adjusted for units received at CESC bus.

44. Power purchase cost also includes cost of short-term power purchase from supplemental sources (significant portion from energy exchanges) made in terms of the extant Regulations and applicable order to meet the requirement of power in CESC's licensed area. The Company has also procured power through banking which has been valued in terms of Regulation 5.15.2(iv) of the Tariff Regulations and APR-FPPCA Orders dated 01.08.2022. Energy swapped in against swapped out energy of earlier years (2019-20 and 2020-21) and during the year under consideration, i.e. 2021-22 has been valued at the pooled power purchase cost of the respective years as per the principle adopted by the Hon'ble Commission in the APR-FPPCA Orders dated 01.08.2022. Accordingly, cost of swap-in energy, against energy swapped-out in 2019-20, 2020-21 and 2021-22 have been considered as part of the power purchase cost in terms of the APR-FPPCA Orders dated 01.08.2022. Utilisation of banking (swap-in / swap-out) mechanism, in terms of the relevant regulations, helped the Company to fulfill its statutory universal supply obligation in an

52

optimum manner in the interest of the consumers. CESC undertook swap-in / swap-out transactions in consumer interest, keeping in mind usual market trend with respect to prices in power exchange. CESC has also procured power from power exchanges in terms of Regulation 7.4.4 of the Tariff Regulations. It is respectfully submitted that in terms of Regulation 7.5.5, no PPA is required for procurement through Power Exchange.

45. Injection/ generation from roof-top solar sources through net metering has also been considered, as directed by the Hon'ble Commission. CESC has also purchased solar and other non-solar renewable power through Green Term Ahead Market (G-TAM) and Green Day Ahead Market (G-DAM) and power from cogeneration sources, to the extent available to fulfill its RPO obligation. Through such mode of procurement, the Company has been able to completely fulfil its solar obligation and achieve its overall obligation almost completely.

A Writ Petition [WPA No. 19019 of 2021 : M/s Bengal Energy Limited & Anr. Vs. The West Bengal Electricity Regulatory

Commission & Ors.] filed before the High Court, Calcutta, assailing

53

the vires of the West ... Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (First Amendment) Regulations, 2020 ("Amendment Regulations") was disposed of by a judgment and order delivered by the Hon'ble Justice Sabyasachi Bhattacharyya on 15.03.2022 wherein it was held that the said Amendment Regulations were ultra vires the Electricity Act, 2003 and the Tariff Policy, 2016. Subsequently, on the prayer of the Ld. Senior Advocate of the Hon'ble Commission, the operation of the judgment and order was stayed till 30.04.2022 to facilitate filing of an appeal. However, the operation of the Amendment Regulations were also stayed till 30.04.2022. By virtue of stay of operation of the Amendment Regulations, no further steps can be taken in terms thereof and consequently, as per legal opinion obtained by the Company, the unamended West Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2013 continue to have effect and be in force (without any amendment). Similar stay has been granted by the Appeal Court in a pending appeal against the said judgment and the same

is subsisting. In this context, it is respectfully submitted that

54

availability of renewable energy in West Bengal is a serious constraint as the State is not blessed with renewable energy generation potential. Situation for the Company is even more problematic as it operates within an urban area with extremely low possibility of generation of electricity from renewable sources.

- 46. CESC has procured minuscule power from West Bengal State Electricity Distribution Company Limited (WBSEDCL) on emergency basis in terms of the relevant order of the Hon'ble Commission and as per the approved rate of procurement. Sourcing of power from the available sources was optimised through the dispatch schedule, with due cognisance of technical and allied considerations as provided for under the relevant Regulations.
- 47. Energy sold to persons other than own consumers and licensee (i.e. exported energy) has been valued at the system variable cost (power purchase and own generation sources) following principles enunciated by the Hon'ble Commission in the recent FPPCA Orders dated 01.08.2022. The valuation of export (except swap-

out), following Hon'ble Commission's determination in APR-

55

FPPCA Orders dated 01.08.2022, has been furnished at marginal cost equivalent to pooled variable cost of power including own generation of CESC Limited, but excluding the power form renewable, cogeneration, hydro, power exchange and through short term open access. Swapped out energy during the year has been valued at the cost equivalent to that of the corresponding swapped in energy within the year. Above costs have been deducted from the overall power purchase cost to arrive at the net power purchase cost for the concerned year in terms of the principle adopted in the FPPCA orders of the Hon'ble Commission.

48. Copies of Power Purchase Agreements / arrangements, details on swap-in / swap-out arrangements, procurement arrangements and sample copies of the Connectivity Agreements entered into with consumers having roof-top solar sources are also collectively enclosed in the "Appendix" in Volumes 5 to 7 of the petition.

Computation Details

49. The figures contained in this petition have been worked out as perthe relevant formula specified in Schedule – 7A of the Tariff

56

Regulations and applicable electricity statutes read with order(s) of the Hon'ble Commission. FPPC, in terms of the above formula, being "Re-determined Fuel and Power Purchase Cost" against application of FPPCA has thus been derived. Other applicable Regulations and/ or other relevant orders of the Hon'ble Commission have been relied upon, as applicable. The norms specified in the Tariff Regulations have been applied in computing the FPPC amount. Other Regulations and/ or relevant orders of the Hon'ble Commission have also been appropriately applied.

- 50. FPPC computation, with detailed workings, is incorporated in "Annex A". The petition also proposes passing on substantial benefits to the consumers through operation of Schedule 9B of the Tariff Regulations. The detailed workings relating to Schedule 9B, are furnished under "Annex B". Gross benefit of Rs. 10752 lakhs is proposed to be passed on to the consumers, on account of the Company's performance being better than the operating norms.
- 51. The Hon'ble Commission may be pleased to determine and fix the

gross re-determined fuel and power purchase cost prior to passing

57

of benefits to consumers and WBSEDCL in terms of Schedule – 9B of the Tariff Regulations, at Rs. 426708 lakhs for the year 2021-22. The above figure is without prejudice to the Company's entitlement arising from interpretation of statutes. The computation is based on power purchase rate of long-term source approved by the Hon'ble Commission along with applicable MFCA for the relevant period. Supplemental short term and other procurements have been made well within the limits specified under the extant Regulations and order. Any variation in tariff arising out of any variation of FPPC / power purchase cost allowed to long term source for the year 2021-22 and / or for any earlier year(s) will result in a corresponding variation in CESC's entitlement and may be considered accordingly.

52. The consumers' share in terms of Schedule – 9B works out to Rs. 10752 lakhs arising out of efficient performance of the Company in relation to operating norms as provided in the Tariff Regulations. A respectful prayer has been made for sharing of losses of Southern Generating Stations, as detailed hereinafter. The Company has also furnished computations on the savings on

the variable portion of distribution loss after considering sharing

58

with consumers in accordance with applicable Regulations. This savings is included in the aforesaid amount proposed to be shared with consumers.

- False of the Statutory auditors, is submitted in the Appendix (Volume 2, pages 2 to 244).
- 54. Additional requirements in terms of the Tariff Regulations are furnished through the Appendix. Copies of monthly worksheets for Monthly Variable Cost Adjustment (MVCA) (which were furnished earlier before the Hon'ble Commission) are collectively enclosed in the Appendix in pages 141 to 336 of Volume 4 of the petition. Compliance requirements with respect to MVCA along with furnishing of relevant fuel parameters as per specified formats in the regulations, as applicable from time to time including uploading in website of the Company as well as maintenance of last 24 months' MVCA rates including the present month, have been duly complied with and the details of such compliance are in the records of the Hon'ble Commission. It is respectfully submitted that in the instant petition, the Petitioner has prayed for Rs. 437863 lakhs as



59

FPPC towards variable cost for 2021-22. Through MVCA and applicable tariff, the Petitioner has already recovered about 94% of the aforesaid claim. A Reconciliation Statement in this regard has been furnished in the Appendix (page 140 of Volume 4 of the petition).

- 55. The present application is being submitted within the timeline as stipulated by the Hon'ble Commission in the Tariff Regulations, with all relevant computations and annexures to the best of our knowledge and understanding of the regulatory requirements after considering all relevant costs upto the time of audit duly done by the statutory auditor. This petition also contains submissions on fuel quality, taxation on captive coal and sale of washery rejects in light of the observations made by the Hon'ble Commission in Order dated 03.02.2022 in Case No. TP-77/18-19 and 01.08.2022 in Case No. TP-96/20-21.
- 56. In the above premises, the Company states and submits that the Hon'ble Commission, after approving the re-determined fuel and power purchase cost including amounts payable to the consumers by the Company, may also be pleased to give direction for



60

incorporation of the said consolidated FPPC amount in the final Aggregate Revenue Requirement to be determined through Annual Performance Review for the year 2021-22 or suitably allow the same to be recovered earlier, in accordance with the Regulations of the Hon'ble Commission, in a manner the Hon'ble Commission deems fit and proper. Commensurate deduction in respect of benefits to be passed on to the consumers is necessary, in the eventuality that any amount claimed herein is not considered recoverable by the Hon'ble Commission.

57. Since, the Company submits cost of captive coal in the present petition in terms of the APR-FPPCA Orders dated 01.08.2022, to the extent consistent with the regulations of the Hon'ble Commissio and Hon'ble CERC, duly considering relevant netting off of mining cost, it has resulted in significant under-recoveries of captive coal cost for CESC. In case, any additional entitlement arises from legal interpretation of the statutes, the Company prays for recovery of the same at a later date.

<u>General</u>



61

- 58. The Annexes and the Appendix may be considered as a part of this petition. The Annexes are placed in Volume 1 of the Petition. Kindly refer to the detailed index provided in Volume 2 for various documents placed in Appendix.
- 59. Figures have been rounded off, where necessary, for appropriate presentation.
- 60. Various compliance requirements relating to variable cost as specified by the Hon'ble Commission in its orders/ communications have been complied to the extent applicable and to the best understandings of the Company. However, some of such directions can only be complied with prospectively after the passing of the order such as providing concurrence by the Company on being asked by Haldia Energy Limited before undertaking road or RCR based e-auction. A status report has been placed in the Appendix (pages 339 to 344 of Volume 4).
- 61. A Gist of this Fuel and Power Purchase Cost Petition is enclosed with this petition for approval of the Hon'ble Commission.

VAMA: RUMAH-PAUL REGN NO.270000

62

- As decision is awaited on the FPPC petitions for the years 2018-19,2019-20 and 2020-21 submitted on 02.09.2019, 21.09.2020, 31.03.2022 as well as Review Petition to the Multi Year Tariff Order for the years 2018-19 and 2019-20 submitted on 26.03.2022, the Company craves leave to file supplementary submissions to this petition at a later date, if required, during pendency or on disposal of the above proceedings. Early disposal of all these petitions is humbly prayed for.
- 63. The Company also craves leave to file supplementary submissions to this petition at a later date to substantiate its claims, as may be necessary, in light of recent orders of the Hon'ble Commission in respect of other generating companies.
- 64. This application is made bona fide, in accordance with the Regulations framed by the Hon'ble Commission and, in the interest of justice.

65. PRAYER

In the facts and circumstances as stated hereinabove the petitioner

humbly prays that the Hon'ble Commission may be pleased to:

63

(A) Pass an order to:

(e)

- (a) Approve gross re-determined fuel and power purchase cost for the year 2021-22 at Rs. 426708 lakhs in terms of the formula contained in Schedule 7A of the Tariff Regulations and order dated 1 August 2022, as incorporated in Annex A to this petition;
- Approve the amounts of benefits to be passed on to the consumers and WBSEDCL for the year 2021-22 at Rs.
 3066 lakhs in respect of specified efficiency parameters, as incorporated in Annex B to this petition;
- (c) Approve sharing of 50% loss suffered by Southern Generating Stations, working out to Rs. 813 lakhs;
- (d) Approve further savings on variable cost of distribution loss at Rs. 21093 lakhs and allowing net savings of Rs. 13407 Lakhs for the year 2021-22 after passing of benefit of Rs. 7686 lakhs to consumers as incorporated in Annex B to this petition;

Give direction for incorporating the total consolidated FPPC amount of Rs. 437863 lakhs as the amount to be

64

considered during Annual Performance Review for the year 2021-22 or allowing recovering of the same separately earlier, in a manner the Hon'ble Commission deems fit and proper;

- (B) Early disposal of the petition as the business of the Hon'ble Commission would permit;
- (C) Pass such other order or orders and/or give direction as the Hon'ble Commission may deem fit and proper;

AND THE PETITIONER, AS IN DUTY BOUND, SHALL EVER PRAY.



65



পশ্চিমবাজা पश्चिम बंगाल WEST BENGAL

29AA 398999

BEFORE THE HON'BLE WEST BENGAL ELECTRICITY REGULATORY COMMISSION, KOLKATA

FILE NO.

CASE NO.

IN THE MATTER OF:

2000

Petition for approval of FPPCA for the year 2021 - 2022 and for approval of other amounts payable to the consumers in accordance with the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011

AAIWA: # WAUL NOTARY GOVT, OF INDIA Regd. No.-2700/04 C.M.M.'s Court 2 8 3 Bankshall Street Molkate-706001





14521

PARTHA SA PATHI CHOWDHURY
ABYAKSI Dhawali
P-7, Capaninghes Square
Noikata - 69



War was a facility

AND

CESC Limited

CESC House

Chowringhee Square

Kolkata - 700001.

.....Petitioner

AFFIDAVIT

IN THE MATTER OF:

I, Rabi Chowdhury, son of Late Indra Bhusan Chowdhury, aged about 62 years, by faith Hindu, residing at Flat 12C, Devaloke Heights, 142A Raja S.C. Mullick Road, Kolkata – 700092, do hereby solemnly affirm and declare as follows:

- 1. That I am the Managing Director (Generation) of the applicant and have been acquainted with the fact and circumstances narrated in the application in respect of which the affidavit is sworn.
- I have been authorized to swear this affidavit on behalf of applicant as I am competent to do so.

3. The statements made in paragraphs 1 to 3, 6, 8, 12 to 64 are true to my knowledge and belief and the statements made in the other paragraphs of the application are matters of records made available to me and based on information received which I believe to be true and correct.

PO. Shaw Advocate

Place: Kolkata

Date 27 September 2022

Regu. NO.-2700/04

C.M.M.'s Court

2 & 3.Bankshall Street

kata-70000 I

ROTAL PORAL POR SONO POR SONO

Salemnly Affirmed & Declared Before me on Identification of Ed. Advocate

Deponent

GOVE OF TODAY PAUL NOTARY



ANNEX - 1

68

List of Forms applicable for FPPC petition

Form No.	Description Index		
Form 1.1	Availability of Plant (Plant Availability Factor) - Annually		
Form 1.1(a)	Availability of Unit (Unitwise Availability Factor) - Annually		
Form 1.2	Plant Load Factor - Annually		
Form 1.2(a)	Unit wise Plant Load Factor - Annually		
Form 1.3	Gross Energy available at Generator's Terminal for stabilised commercial operation		
Form 1.4(a)	Auxiliary Consumption for stabilised commercial operation		
Form 1.4(b)	Pumping Energy for Pumped Storage Project		
Form 1.5	Net Energy Sent out for stabilised commercial operation		
Form 1.6(a)	Energy Purchase (Sourcewise)		
Form 1.6(b)	Monthwise nondrawal of power from different sources of purchase due to low demand inspite of having availabilities at purchaser side		
Form 1.6(c)	Monthwise Generation Loss at Generating Station		
Form 1.7	T&D Loss %		
Form 1.9	Energy Balance		
Form 1.9 (a)	Energy received for wheeling		
Form 1.9 (b)	Energy sold to persons other than licensees or any consumers		
Form 1.9 (c)	Energy sold to licensees		
Form 1.9 (d)	Energy wheeled at delivery point		
Form 1.10(a)	Quantum of Purchase of Power and rate thereof (Sourcewise vis-à-vis Stationwise)		
Form 1.10(b)	Power Purchase Cost Analysis (Sourcewise vis-à-vis Stationwise)		
Form 1.11	Cost of Fuel		
Form 1.28	Statement Showing Status of FPPCA Claim		
Form D	Details of Source wise Fuel for Computation of Energy Charges		
Form E(A)	Summarized Revenue Requirement - Part-A		

Form 1.1 : Availability of plant (Plant Availability Factor) - Annually

,	in %
Station	2021-2022
Budge Budge	96.7%
Southern	97.2%

Form 1.1(a): Availability of Unit (Unit wise Availability Factor) - Annually

in % Station 2021-2022 **Budge Budge** Unit 1 98.1% Unit 2 95.6% Unit 3 96.5% Plant 96.7% Southern Unit 1 96.6% Unit 2 97.7% **Plant** 97.2%

Inter-Unit variations of availability takes place on account of statutory survey / overhauling of Units

Form 1.2: Plant Load Factor - Annually

in %
2021-2022
84.7%
13.9%

Note:

- 1. Despatch of stations is planned according to relative economics subject to radial load, network constraints and exigencies. Despatch Schedule is planned following the Hon'ble Commission's Regulations / Directives, considering cost-effectiveness of variable cost of production, with due cognisance of technical constraints of ramping up of stations.
- 2. The period under consideration posed significant challenges and adversities for the Company due to Covid-19 induced pandemic. Consumer demand was significantly suppressed during the major parts of the year. Therefore, considering the best interest of the end consumers, Southern Generating station was operated at a low PLF following appropriate economic dispatch in terms of merit order principle and associated technical issues.

Form 1.2 (a): Unitwise Plant Load Factor - annually

	in %
STATION / UNIT	2021-2022
Budge Budge	
Unit 1	82.9%
Unit 2	79.3%
Unit 3	91.8%
Plant	84.7%
Southern	
Unit 1	13.7%
Unit 2	14.0%
Plant	13.9%

Note:

Please refer to note under Form 1.2.

Form 1.3

Gross Energy available at Generators Terminal for stabilised commercial operations

BUDGE BUDGE GENERATING STATION

Capacity: 750 MW

	Gross Generation (MU)
Season/ Time of the day	2021-2022
1. Summer	
Normal (6 AM to 5 PM)	915
Peak (5 PM to 11 PM)	524
Off-peak (11 PM to 6 AM)	568
Total Summer:	2007
2. Monsoon	
Normal (6 AM to 5 PM)	942
Peak (5 PM to 11 PM)	540
Off-peak (11 PM to 6 AM)	568
Total Monsoon:	2050
3. Winter	
Normal (6 AM to 5 PM)	722
Peak (5 PM to 11 PM)	433
Off-peak (11 PM to 6 AM)	350
Total Winter:	1505
Grand Total:	5562

Form 1.3

Gross Energy available at Generators Terminal for stabilised commercial operations

SOUTHERN GENERATING STATION

Capacity: 135 MW

	Gross Generation (MU)
Season/ Time of the day	2021-2022
1. Summer	
	24
Normal (6 AM to 5 PM)	34 -
Peak (5 PM to 11 PM)	28
Off-peak (11 PM to 6 AM)	14
Total Summer:	75
2. Monsoon	
Normal (6 AM to 5 PM)	29
Peak (5 PM to 11 PM)	31
Off-peak (11 PM to 6 AM)	13
Total Monsoon:	73
3. Winter	
Normal (6 AM to 5 PM)	5
Peak (5 PM to 11 PM)	11
Off-peak (11 PM to 6 AM)	0.1
Total Winter:	16
Grand Total:	164

Form 1.4(a)

Auxiliary Consumption for stabilised commercial operations

BUDGE BUDGE GENERATING STATION

Capacity: 750 MW

	Auxiliary Consumption (MU)	
	Auxiliary Consumption (MO)	
Season/ Time of the day	2021-2022	
1. Summer		
Normal (6 AM to 5 PM)	69	
Peak (5 PM to 11 PM)	39	
Off-peak (11 PM to 6 AM)	44	
Total Summer:	152	
2. Monsoon		
Normal (6 AM to 5 PM)	70	
Peak (5 PM to 11 PM)	42	
Off-peak (11 PM to 6 AM)	45	
Total Monsoon:	157	
3. Winter		
Normal (6 AM to 5 PM)	55	
Peak (5 PM to 11 PM)	34	
Off-peak (11 PM to 6 AM)	32	
Total Winter:	121	
Grand Total:	430	

Form 1.4(a)

Auxiliary Consumption for stabilised commercial operations

SOUTHERN GENERATING STATION

Capacity: 135 MW

	r	
	Auxillary Consumption (MU)	
Season/ Time of the day	2021-2022	
1. Summer		
Normal (6 AM to 5 PM)	4	
Peak (5 PM to 11 PM)	2	
Off-peak (11 PM to 6 AM)	1.2	
Total Summer:	7	
2. Monsoon		
Normal (6 AM to 5 PM)	3	
Peak (5 PM to 11 PM)	2	
Off-peak (11 PM to 6 AM)	1	
Total Monsoon:	7	
3. Winter		
Normal (6 AM to 5 PM)	1	
Peak (5 PM to 11 PM)	0	
Off-peak (11 PM to 6 AM)	0.04	
Total Winter:	1	
Grand Total:	15	

Form 1.4(b)

Pumping Energy for Pumped Storage Project

Name	of	the	Station	
Capac	itv	:(M)	W)	

Season/ Time of the day	2021-2022
1. Summer Normal Peak Off-peak	
Total Summer:	
2. Monsoon Normal Peak Off-peak	
Total Monsoon:	
3. Winter Normal Peak Off-peak	
Total Winter:	
Grand Total:	

This Form is presently not applicable to CESC as it has no Pumped Storage Project.

Form 1.5

Net energy Sent out for stabilised commercial operations

BUDGE BUDGE GENERATING STATION

Capacity: 750 MW

	Net Energy sent out (MU)	
Season/ Time of the day	2021-2022	
1. Summer		
Normal (6 AM to 5 PM)	846	
Peak (5 PM to 11 PM)	485	
Off-peak (11 PM to 6 AM)	524	
Total Summer:	1855	
2. Monsoon		
Normal (6 AM to 5 PM)	872	
Peak (5 PM to 11 PM)	498	
Off-peak (11 PM to 6 AM)	523	
Total Monsoon:	1893	
3. Winter		
Normal (6 AM to 5 PM)	666	
Peak (5 PM to 11 PM)	400	
Off-peak (11 PM to 6 AM)	318	
Total Winter:	1384	
Grand Total:	5132	

Form 1.5

Net energy Sent out for stabilised commercial operations

SOUTHERN GENERATING STATION

Capacity: 135 MW

Capacity. 133 May		
	Net Energy sent out (MU)	
Season/ Time of the day	2021-2022	
1. Summer		
Normal (6 AM to 5 PM)	30	
Peak (5 PM to 11 PM)	26	
Off-peak (11 PM to 6 AM)	13	
Total Summer:	69	
2. Monsoon		
Normal (6 AM to 5 PM)	26	
Peak (5 PM to 11 PM)	29	
Off-peak (11 PM to 6 AM)	11	
Total Monsoon	66	
3. Winter		
Normal (6 AM to 5 PM)	4	
Peak (5 PM to 11 PM)	11	
Off-peak (11 PM to 6 AM)	0.01	
Total Winter:	15	
Grand Total:	149	

Form1.6(a) : Energy Purchase

Summary

	Energy Purchase (MU)
Sources	2021-2022
Haldia Energy Limited (HEL)	3898
Renewable and Co-generation (other than Roof top solar)	739
Roof top solar	7
Supplemental	558
Overall	5202

Form1.6(a): Energy Purchase

Name of the Source: Haldia Energy Limited

Season/ Time of the day	Energy Purchase (MU)
Season/ Time of the day	2021-2022
1. Summer	
Normal (6 AM to 5 PM)	660
Peak (5 PM to 11 PM)	377
Off-peak (11 PM to 6 AM)	382
Total Summer:	1419
Total Summer.	1419
2. Monsoon	
Normal (6 AM to 5 PM)	685
Peak (5 PM to 11 PM)	393
Off-peak (11 PM to 6 AM)	408
Total Monsoon:	1486
3. Winter	
Normal (6 AM to 5 PM)	488
Peak (5 PM to 11 PM)	306
Off-peak (11 PM to 6 AM)	198
Total Winter:	992
Grand Total:	3898
Less Grid Loss, if any	
Net Purchase	3898

Form1.6(a): Energy Purchase

Name of the Source: Renewable and Co-generation (other than Roof top solar)

	Energy Purchase (MU)
Season/ Time of the day	2021-2022
1. Summer	
Normal (6 AM to 5 PM)	149
Peak (5 PM to 11 PM)	56
Off-peak (11 PM to 6 AM)	34
Total Summer:	239
2. Monsoon	
Normal (6 AM to 5 PM)	184
Peak (5 PM to 11 PM)	71
Off-peak (11 PM to 6 AM)	31
Total Monsoon:	286
3. Winter	
Normal (6 AM to 5 PM)	171
Peak (5 PM to 11 PM)	30
Off-peak (11 PM to 6 AM)	13
Total Winter:	214
Grand Total:	739
Less Grid Loss, if any	
Net Purchase	739

Note:

Normal, Peak and Off-peak periods have been considered as per REA records. Above purchase includes power purchase from cogeneration sources and renewable power from power exchanges excluding injection from roof-top solar. Kindly refer to Annex A7 for details.

Form1.6(a): Energy Purchase

Name of the Source: Roof top solar

	Energy Purchase (MU)
Season/ Time of the day	2021-2022
1. Summer	
Normal (6 AM to 5 PM)	2
	2
Peak (5 PM to 11 PM)	•
Off-peak (11 PM to 6 AM)	-
Total Summer:	2
2. Monsoon	
Normal (6 AM to 5 PM)	1
Peak (5 PM to 11 PM)	.15
Off-peak (11 PM to 6 AM)	A S
Total Monsoon:	1
3. Winter	
Normal (6 AM to 5 PM)	3
Peak (5 PM to 11 PM)	₩2
Off-peak (11 PM to 6 AM)	*
Total Winter:	3
Grand Total:	7
Less Grid Loss, if any	
Net Purchase	7

Note:

Figures correspond to injection from rooftop sources through net metering. Generation from roof-top solar installations, considering 16.13% Capacity Utilisation Factor is 56.486 MU.

Form1.6(a): Energy Purchase

Name of the Source: Supplemental

	Energy Purchase (MU)
Season/ Time of the day	2021-2022
1. Summer	
Normal (6 AM to 5 PM)	94
Peak (5 PM to 11 PM)	75
Off-peak (11 PM to 6 AM)	54
Total Summer:	223
2. Monsoon	
Normal (6 AM to 5 PM)	96
Peak (5 PM to 11 PM)	88
Off-peak (11 PM to 6 AM)	38
Total Monsoon:	223
3. Winter	
Normal (6 AM to 5 PM)	46
Peak (5 PM to 11 PM)	38
Off-peak (11 PM to 6 AM)	29
Total Winter:	112
Grand Total:	558
Less Grid Loss, if any	
Net Purchase	558

Notes:

^{3.} Details of Quantum of Supplemental import from various sources for 2021-22 are furnished as under:

Name of the Sources	MU	
Energy Exchanges	203	
RPG Power Trading Company Limited		
(RPGPTCL) (other than Cogeneration)	295	
West Bengal State Electricity Distribution		
Company Limited (WBSEDCL)	0.3	
Hydro	2.3	
Banking (Swap-in during FY 22 against Swap-out	0.5	
of FY20)	25	
Banking (Swap-in during FY 22 against Swap-out of FY21)	5	
Banking (Swap-in during FY 22 against swap-out of FY 22)	1 27	
Overall	U 558	

^{1.} Apart from procurement of power from long term sources, other sources / agencies were also explored in line with advice of the Hon'ble Commission to meet the demand, keeping in mind consumers' interest and other regulatory requirements. Normal, Peak and Off-peak periods are considered as per REA records.

2. Power was procured from Energy Exchanges, RPGPTCL (other than cogeneration), WBSEDCL, Hydro and Banking (Swap-in / Swap - out), Kindly refer to Annex A7 for details.

Form1.6(b): Monthwise Non-drawal of power from different sources of purchase due to low demand inspite of having availabilities at purchaser side

Month			
April			
May			
June			
July			
August			
September			
October			
November			
December			
January			
February			
March			
Total:			

This Form is not applicable for CESC since the Company, after maximising its generation to the extent cost-effective, purchases the balance power.

Form1.6(c): Monthwise Generation Loss at different generating station

Budge Budge Generating Station

-1		_						_	-	r	r ==	_	
MU	Total Loss in generation	21.56	56.12	65.55	40.45	28.05	44.52	51.13	174.38	241.72	132.21	106.49	45.79
	Low System Demand	9.16	55.59	65.55	38.92	28.05	41.96	42.87	104.06	122.79	132.21	106.49	44.95
	Non-drawal by other than distribution licensee against scheduled drawal	NIC	NF	II.	Į.	NIL	NIL	JN.	NI	NI	NIL	NIL	NIL
	Generation restriction for partial equipment availability	Ę	NIL	NIL	NIL	NIL	JIN						
	Network Constraints	IIN	NIL	NIL	NIL	NIL	NIL	NIL	NIC	NIL	NIL	NIL	NIL
	Planned Outage	NIL	NIF	NIL	NIL	NIL	NIL	NIL	70.32 *	111.87 *	NIL	NIL	NIL
	Forced	12.40	0.54	NIL	1.5	NIL	2.56	8.3	NIL	7.05	NIL	NIL	0.8
	Poor Coal Stock	NIL	NIŁ	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Bad Coal	NIL	NIL	NIL	NIL	NIL							
	Non-drawal by concerned distribution licensee due to low demand	Nil	NIL	NIL	NIL	NIL							
	Month, Year	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22

* Statutory Overhaul of Units



partie age

Form1.6(c): Monthwise Generation Loss at different generating station

Southern Generating Station

NM	Low System Total Loss in Demand generation	54.89 56.01	95.90	92.84	80.97 100.20	92.13	70.65	62.11 62.56	76.39 88.87	93.51	100.44	89.98	75.18
	Non-drawal by other than distribution licensee against scheduled drawal	NF	ll N	NIL	NF.	II.	NI NI	JIN N	II.	NIL.	MI	NIL	Į.
	Generation restriction for partial equipment availability	ij	¥	¥	JIN N	Ŋ	Ŋ	뉟	NIC	ll l	IJ.	- N	N
	Network Constraints	NIL	ZIN	IN IN	NIL	JIN	IN IN	NIC	IN.	IIN	IN.	Jik	NIL
	Planned Outage	NIL	NIL	NIL	19.23	NIL	JIN N	NIL	J _N	JIN NI	NIL	NIL	ZIZ
	Forced Outages	1.13	NIL	NIL	NIL	0.31	NIL	0.44	12.49	NIL	NIL	NIL	NIL
	Poor Coal Stock	NIL	NIL	NIL	NIL	NIC	NIL	NIL	NIL	NIL	NIL	NIL	٦N
	Bad Coal	NIL	Nit	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Non-drawal by concerned distribution licensee due to low demand	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	Month, Year	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	20

* Statutory Overhaul of Unit

Form 1.7 : Distribution Loss %

Ref		Unit	Derivation	2021-2022
1.	Generation [Form 1,3]	MU	А	5726
2,	Auxiliary Consumption [Form 1.4(a)]	MU	B ₁	445
3.	Transformation Loss	ми	B ₂	8
4.	Units delivered to system from generation (including infirm power, if any) [Form 1.5]	MU	C=A-B ₁ -B ₂	5281
5.	Quantum of infirm power included in 1	мυ		20
6.	Energy Purchased (including Swap-in power) [Form 1.6a]	MU	D	5202
7.	Energy received for wheeling [Form 1.9a]	MU	E	4
8.	Overall Gross Energy in system	ми	F=C+D+E	10486
9.	Units sold to persons other than licensees or any consumers (including Swap-out power) [Form 1.9b]	MU	G ₁	202
10.	Additional Units allowed by Commission for Sales to person other than licensees or any consumers	MU	G ₂	4
11.	Units sold/used for pumping energy of Pumped Storage Project at bus bar [Form 1.4 b]	MU	G ₃	~
12.	Additional energy allowed by Commission against Pumping Energy for pumping loss	ми	G₄	y 98
13.	Net DSM (Actual)	MU	G ₅	10
14.	Total energy goes out of system	MU	(G=G ₁ +G ₃ +G ₄ +G ₅)	212
15.	Net Energy in System	MU	H=F-G	10274
16.	Units sold to own consumers	MU	Ŋ,	9403
	Units sold to WBSEDCL [Form 1.9 c]	MU	11	14
17.	Units wheeled at delivery point [Form 1.9d]	MU	J	4
18.	Additional Units allowed for wheeling	MU	К	0.3
19.	Units utilised in own premises including construction power	MU	L	33
20.	Quantum of Construction power included in 19	MU		2
21.	Overall Utilisation	MU	M=sum(I:L)	9454
22.	Unutilised Units	MU	N=H-M	820
23.	System Loss	%	O=N/Hx100	8.0%

Auditors' Certificates are furnished in Annex C1 and Annex C2.

Form 1.9: Energy Balance

Ref.	Particulars	Unit	Derivation	2021-2022
Α	Energy Input			
1.	Generation [Form 1,3]	мυ		5726
2.	Auxiliary Consumption [Form 1.4a]	MU		445
3.	Transformation Loss	MU		*:
4.	Units delivered to system from generation (including infirm power, if any) [Form 1,5]	MU	4=1-2-3	5281
5.	Energy Purchased (including Swap-in power) [Form 1.6a]	MU	5	5202
6.	Energy received for wheeling [Form 1,9a]	MU	6	4
7.	Gross Energy Input	MU	7=sum(4:6)	10486
8.	Units sold to persons other than licensees or any consumers (including Swap-out power) [Form 1.9b]	MU		202
9.	Additional Units allowed by Commission for Sales to person other than licensees or any consumers	MU		4
10.	Units sold/used for pumping energy for Pumped Storage Project at bus bar [Form 1.4 b]	MU		-
11:	Additional Units allowed by Commission against Pumping Energy for pumping losses	MU		*
12.	Net DSM (Actual)	MU		10
13.	Total Energy Goes out of System	мυ	13=8+10+11+ 12	212
	Energy Input for own system	MU	7-13	10274
В	Energy Utilisation [Form 1,7]	MU		9454
a.	Units sold to own consumers	ми		9403
	Units sold to WBSEDCL [Form 1.9 c]	MU		14
b.	Units wheeled at delivery point [Form 1,9d]	MU		4
c.	Additional Units allowed for wheeling	мυ		0.3
d:	Units utilised in own premises including construction power	MU		33
e.	Unutilised Units	мυ		820
	Total Energy	мυ	sum(a:e)	10274

Form 1.9 (a): Energy received for wheeling

		MU
Ref.	Particulars	2021-2022
	Energy received for wheeling	3.81

Above energy is inclusive of applicable losses.

Form 1.9 (b): Energy sold to person other than licensees or any consumers

Ref.	Particulars	2021-2022
- 22	Indian France Fash and	400
1. 2.	Indian Energy Exchange Arunachal Pradesh Power Corporation Private Limited (Swap-in/ Swap-out)	169 29
	Total	198
	Overall including additional Units allowed by Hon'ble Commission for sale to persons other than the Licensees or the consumers	202

Notes:

- 1. Figure correspond to the energy at CESC system bus-bar.
- 2. As directed by the Hon'ble Commission, CESC explores all possibilities to sell power to persons other than the licensees or the consumers to optimise utilisation.

Form 1.9 (b): Energy sold to person other than licensees or any consumers

Name of the Entity : Indian Energy Exchange

	Energy Export (MU)	
Season/ Time of the day	2021-2022	
1. Summer		
Normal (6 AM to 5 PM)	42	
Peak (5 PM to 11 PM)	13	
Off-peak (11 PM to 6 AM)	29	
Total Summer:	84	
2. Monsoon		
Normal (6 AM to 5 PM)	14	
Peak (5 PM to 11 PM)	1	
Off-peak (11 PM to 6 AM)	9	
Total Monsoon:	23	
3. Winter		
Normal (6 AM to 5 PM)	27	
Peak (5 PM to 11 PM)	8	
Off-peak (11 PM to 6 AM)	27	
Total Winter:	62	
Grand Total:	169	
Overall including additional Units allowed by Hon'ble Commission for sale to persons other than the Licensees or the consumers	172	

Note:

Figure correspond to the energy at CESC system bus-bar.

Form 1.9 (b): Energy sold to person other than licensees or any consumers

Name of the Entity: Arunachal Pradesh Power Corporation Private Limited (Swap-in/ Swap-out)

	Energy Export (MU)	
Season/ Time of the day	2021-2022	
1. Summer		
Normal (6 AM to 5 PM)	15	
Peak (5 PM to 11 PM)	1	
Off-peak (11 PM to 6 AM)	12	
Total Summer:	29	
2. Monsoon		
Normal (6 AM to 5 PM)	-	
Peak (5 PM to 11 PM)	2	
Off-peak (11 PM to 6 AM)		
Total Monsoon:	<u> </u>	
3. Winter		
Normal (6 AM to 5 PM)	0.2	
Peak (5 PM to 11 PM)	0.1	
Off-peak (11 PM to 6 AM)	0.1	
Total Winter:	0.4	
Grand Total:	29	
Overall including additional Units allowed by Hon'ble Commission for sale to persons other than the Licensees or the consumers	30	

Note:

Figure correspond to the energy at CESC system bus-bar.

Form 1.9 (c): Energy sold to WBSEDCL

ΜU

Ref	Season/ Time of the day	2021-2022
1.	Summer	
.	Normal (6 AM to 5 PM)	3
	Peak (5 PM to 11 PM)	1
	Off-peak (11 PM to 6 AM)	1
	Total Summer:	5
2.	Monsoon	
	Normal (6 AM to 5 PM)	3
	Peak (5 PM to 11 PM)	2
	Off-peak (11 PM to 6 AM)	2
	Total Monsoon:	6
3.	Winter	
	Normal (6 AM to 5 PM)	2
	Peak (5 PM to 11 PM)	1
	Off-peak (11 PM to 6 AM)	1
	Total Winter:	3
	Grand Total:	14

Form 1.9 (d): Energy wheeled at delivery point

MU

Ref.	Particulars	2021-2022
	Energy wheeled at delivery point	3.50

Above energy is exclusive of applicable losses.

Form1.10(a): Quantum of Purchase of Power and Rate thereof

Haldia Energy Limited

Particulars	Unit	Derivation	2021-2022
Details of Import Drawal			
A. Infirm	MU	Α	
B. Firm			
B1: Summer:			
Normal	MU	B1N	660
Peak	MU	B1P	377
Off-peak	MU	B1OP	382
Total Firm in Summer: (B1)			1419
B2: Monsoon:			
Normal	MU	B2N	685
Peak	MU	B2P	393
Off-peak	MU	B2OP	408
Total Firm in Monsoon: (B2)			1486
B3: Winter:			
Normal	MU	B3N	488
Peak	MU	В3Р	306
Off-peak	MU	B3OP	198
Total Firm in Winter: (B3)			992
Total Firm: (B)	MU	B=B1+B2+B3	3898
Chargeable Units	MU	A+B	3898
Applicable Rates			
A. Infirm	Paise/Unit	С	
B. Firm			
Fixed Charges	Paise/Unit	D	240
Energy Charges:			
B1: Summer:			
Normal	Paise/Unit	E	280
Peak	Paise/Unit	F	280
Off-peak	Paise/Unit	G	280
B2: Monsoon:			
Normal	Paise/Unit	Н	280
Peak	Paise/Unit	1	280
Off-peak	Paise/Unit	J	280
B3: Winter:			
Normal	Paise/Unit	к	281
Peak	Paise/Unit	_e L	281
Off-peak	Paise/Unit	М	281
C. Fuel and Power Purchase Cost Adjustment	Paise/Unit	N	3

Form1.10(b): Power Purchase Cost Analysis (Sourcewise vis-à-vis Stationwise)

Haldia Energy Limited

Particulars	Unit	Derivation from form 1.10(a)	2021-2022
Details of Power Purchase Cost			
A. Infirm	Rs. Lakhs	O=A*C	
B. Firm			
Fixed Charges	Rs. Lakhs	P = D*B	93647
Energy Charges:			
B1: Summer:			
Normal	Rs. Lakhs	Q=B1N*E	18489
Peak	Rs. Lakhs	R=B1P*F	10557
Off-peak	Rs. Lakhs	S=B1OP*G	10706
Total Firm in Summer: (B1)	Rs. Lakhs	T=Q+R+S	39752
B2: Monsoon:			
Normal	Rs. Lakhs	U=B2N*H	19184
Peak	Rs. Lakhs	V=B2P*I	10992
Off-peak	Rs. Lakhs	W=B2OP*J	11436
Total Firm in Monsoon: (B2)	Rs. Lakhs	X=U+V+W	41613
B3: Winter:			
Normal	Rs. Lakhs	Y=B3N*K	13722
Peak	Rs. Lakhs	Z=B3P*L	8603
Off-peak	Rs. Lakhs	AA=B3OP*M	5577
Total Firm in Winter: (B3)	Rs. Lakhs	AB=Y+Z+AA	27902
Total Firm : Energy Charges	Rs. Lakhs	AC=T+X+AB	109266
Total Firm : Fixed+Energy Charges	Rs. Lakhs	AD=AC+P	202912
Total Charges : Firm + Infirm	Rs. Lakhs	AE=O+AD	202912
C. Fuel and Power Purchase Cost Adjustment	Rs. Lakhs	AF=B*N	
Transmission charge for HEL dedicated line	Rs. Lakhs	AG	11401
Transmission charge (STU)	Rs. Lakhs	AH	3345
SLDC Charges	Rs. Lakhs	Al	199
Other Charges - (refer note 3)	Rs. Lakhs	AJ	403
Monthly Fuel Cost Adjustment (MFCA)	Rs. Lakhs	AK	5908
Less : Incentive/Rebate for timely payment etc.	Rs. Lakhs	AL	
Overall cost	Rs. Lakhs	AM =sum(AE:AK)-AL	224169

Notes.

^{1.} The Company considered the cost based on the rates charged by HEL in terms of Order dated 27 November 2017 in Case No TP - 68 / 16-17 and 29 January 2016 in Case No TP - 63 / 14 - 15 as Orders dated 8 September 2021 in Case No TP - 75 / 18 - 19 and the Order dated 20 April 2022 in Case No TP - 67 / 16 - 17 are under Appeal etc., as appropriate, adjusted for units received at CESC bus.

^{2.} The power purchase cost has been furnished in accordance with rates charged by HEL. MFCA considered at 15 Paise / Unit as was charged by the Company during the period. Effect of any additional amount charged by HEL in accordance with the applicable Regulations and / orders or any other payable amount as and when determined by the Hon'ble Commission will be additional to above.

^{3.} Includes past period transmission charges (STU) in terms of order dated 16.12.2020 and 25.06.2021 of the Hon'ble Commission.

Form1.10(a): Quantum of Purchase of Power and Rate thereof

Renewable and Co-generation (other than Roof-top solar)

Particulars	Unit	Derivation	2021-2022
Details of Import Drawal			
A. Infirm	MU	Α	
B. Firm			
B1: Summer:			
Normal	MU	B1N	149
Peak	MU	B1P	56
Off-peak	MU	B1OP	34
Total Firm in Summer: (B1)			239
B2: Monsoon:			
Normal	MU	B2N	184
Peak	MU	B2P	71
Off-peak	MU	B2OP	31
Total Firm in Monsoon: (B2)			286
B3: Winter:			
Normal	MU	B3N	171
Peak	MU	В3Р	30
Off-peak	MU	В3ОР	13
Total Firm in Winter: (B3)			214
Total Firm: (B)	MU	B=B1+B2+B3	739
Chargeable Units	MU	A+B	739
Applicable Rates			
A. Infirm	Paise/Unit	С	
B. Firm			
Fixed Charges		D	
Energy Charges:			
B1: Summer:			
Normal	Paise/Unit	E	413
Peak	Paise/Unit	F	436
Off-peak	Paise/Unit	G	420
B2: Monsoon:			
Normal	Paise/Unit	Н	442
Peak	Paise/Unit	1	527
Off-peak	Paise/Unit	J	456
B3: Winter:			
Normal	Paise/Unit	K	445
Peak	Paise/Unit	L	427
Off-peak	Paise/Unit	М	273
C. Fuel and Power Purchase Cost Adjustment	Paise/Unit	N	(g)

Form1.10(b): Power Purchase Cost Analysis

Renewable and Co-generation (other than Roof-top solar)

Particulars	Unit	Derivation	2021-2022
Details of Power Purchase Cost			
A. Infirm	Rs. Lakhs	O=A*C	
B. Firm			
Fixed Charges	Rs. Lakhs	P = D*12	
Energy Charges:			
B1: Summer:			
Normal	Rs. Lakhs	Q=B1N*E	6149
Peak	Rs. Lakhs	R≐B1P*F	2447
Off-peak	Rs. Lakhs	S=B1OP*G	1435
Total Firm in Summer: (B1)	Rs. Lakhs	T=Q+R+S	10030
B2: Monsoon:			
Normal	Rs. Lakhs	U=B2N*H	8147
Peak	Rs. Lakhs	V=B2P*I	3734
Off-peak	Rs. Lakhs	W=B2OP*J	1410
Total Firm in Monsoon: (B2)	Rs. Lakhs	X=U+V+W	13291
B3: Winter:			
Normal	Rs. Lakhs	Y=B3N*K	7614
Peak	Rs. Lakhs	Z=B3P*L	1279
Off-peak	Rs. Lakhs	AA=B3OP*M	351
Total Firm in Winter: (B3)	Rs. Lakhs	AB=Y+Z+AA	9245
Total Firm : Energy Charges	Rs. Lakhs	AC=T+X+AB	32566
Total Firm : Fixed+Energy Charges	Rs. Lakhs	AD=AC+P	32566
Total Charges : Firm + Infirm	Rs. Lakhs	AE=O+AD	32566
C. Fuel and Power Purchase Cost Adjustment	Rs. Lakhs	AF=B*N	ii e i
Transmission Charge (STU)	Rs. Lakhs	AG	2080
Transmission Charge (CTU)	Rs. Lakhs	АН	570
Other Charges (SDLC Charges, Meter reading charges, Wheeling Charges, PX Fees.)	Rs. Lakhs	AJ	425
Other Charges - (refer note 2)	Rs. Lakhs	AK	4
Less : Incentive/Rebate for timely payment etc.	Rs. Lakhs	AL	61
Overall cost	Rs. Lakhs	AM =sum(AE:AK)-AL	35584

Notes:

- 1. Power Purchase costs have been furnished on the basis of certified quantum of energy and cost thereof on this account. Power Purchase Agreements have been furnished in the appendix to this petition.
- 2.Includes past period transmission (STU) and SLDC handling charge for the period April 2020 to March 2021 in terms of order dated 25.06.2021 of the Hon'ble Commission.
- 3. Includes power purchase from cogeneration sources and renewable sources from power exchanges excluding roof-top solar injection. Kindly refer to Annex A7 for details.

Form1.10(a): Quantum of Purchase of Power and Rate thereof

Roof-top solar

Particulars	Unit	Derivation	2021-2022
Details of Import Drawal			
A. Infirm	MU	A	
B. Firm			
B1: Summer:			
Normal	MU	B1N	2
Peak	MU	B1P	a
Off-peak	MU	B1OP	2
Total Firm in Summer: (B1)			2
B2: Monsoon:			
Normal	MU	B2N	1
Peak	MU	B2P	51
Off-peak	MU	B2OP	
Total Firm in Monsoon: (B2)			1
B3: Winter:			
Normal	MU	B3N	3
Peak	MU	В3Р	
Off-peak	MU	B3OP	E.
Total Firm in Winter: (B3)			3
Total Firm: (B)	MU	B=B1+B2+B3	7
Chargeable Units	MU	A+B	7
Applicable Rates			
A. Infirm	Paise/Unit	С	
B. Firm			
Fixed Charges		D	
Energy Charges:			
B1: Summer:			
Normal	Paise/Unit	E	552
Peak	Paise/Unit	F	552
Off-peak	Paise/Unit	G	552
B2: Monsoon:			
Normal	Paise/Unit	н	625
Peak	Paise/Unit	Ï	625
Off-peak	Paise/Unit	J	625
B3: Winter:			
Normal	Paise/Unit	К	590
Peak	Paise/Unit	L	590
Off-peak	Paise/Unit	М	590
C. Fuel and Power Purchase Cost Adjustment		N	*

Form1.10(b): Power Purchase Cost Analysis

Roof-top solar

Particulars	Unit	Derivation	2021-2022
Details of Power Purchase Cost			
A. Infirm	Rs. Lakhs	O=A*C	
B. Firm			
Fixed Charges	Rs. Lakhs	P = D*12	
Energy Charges:			
B1; Summer:			
Normal	Rs. Lakhs	Q=B1N*E	129
Peak	Rs. Lakhs	R=B1P*F	5 6 3
Off-peak	Rs. Lakhs	S=B1OP*G	120
Total Firm in Summer: (B1)	Rs. Lakhs	T=Q+R+S	129
B2: Monsoon:			
Normal	Rs. Lakhs	U=B2N*H	84
Peak	Rs. Lakhs	V=B2P*I	· •
Off-peak	Rs. Lakhs	W=B2OP*J	
Total Firm in Monsoon: (B2)	Rs. Lakhs	X=U+V+W	84
B3: Winter:			
Normal	Rs. Lakhs	Y=B3N*K	169
Peak	Rs. Lakhs	Z=B3P*L	3.5
Off-peak	Rs. Lakhs	AA=B3OP*M	398
Total Firm in Winter: (B3)	Rs. Lakhs	AB=Y+Z+AA	169
Total Firm : Energy Charges	Rs. Lakhs	AC=T+X+AB	382
Total Firm : Fixed+Energy Charges	Rs. Lakhs	AD=AC+P	382
Total Charges : Firm + Infirm	Rs. Lakhs	AE=O+AD	382
C. Fuel and Power Purchase Cost Adjustment	Rs. Lakhs	AF=B*N	1,23
Transmission charges	Rs. Lakhs	AG	141
Other charges	Rs. Lakhs	АН	122
Monthly Variable Cost Adjustment	Rs. Lakhs	AI	
Less: Incentive/Rebate for timely payment etc.	Rs. Lakhs	AJ	*
Overall cost	Rs. Lakhs	AK =sum(AE:AI)-AJ	382

Note:

Rate for solar (net metering) has been arrived at on the basis of applicable consumer tariff.

Form1.10(a): Quantum of Purchase of Power and Rate thereof

Supplemental

Particulars	Unit	Derivation	2021-2022
	Offic	Derivation	2021-2022
Details of Import Drawal			
A. Infirm	MU	Α	
B. Firm			
B1: Summer:			
Normal	MU	B1N	94
Peak	MU	B1P	75
Off-peak	MU	B1OP	54
Total Firm in Summer: (B1)			223
B2: Monsoon:			
Normal	MU	B2N	96
Peak	MU	B2P	88
Off-peak	MU	B2OP	38
Total Firm in Monsoon: (B2)			223
B3: Winter:			
Normal	MU	B3N	46
Peak	MU	B3P	38
Off-peak	MU	B3OP	29
Total Firm in Winter: (B3)			112
Total Firm: (B)	MU	B=B1+B2+B3	558
Chargeable Units	Мυ	A+B	558
Applicable Rates			
A. Infirm	Paise/Unit	С	
B. Firm			
Fixed Charges		D	
Energy Charges			
B1: Summer:			
Normal	Paise/Unit	E	471
Peak	Paise/Unit	F	531
Off-peak	Paise/Unit	G	450
B2: Monsoon:			
Normal	Paise/Unit	н	568
Peak	Paise/Unit	ï	678
Off-peak	Paise/Unit	J	439
B3: Winter:			
Normal	Paise/Unit	K	317
Peak	Paise/Unit	L	444
Off-peak	Paise/Unit	M	309
C. Fuel and Power Purchase Cost Adjustment	Paise/Unit	N	

Form1.10(b): Power Purchase Cost Analysis

Supplemental

Particulars	Unit	Derivation	2021-2022
Details of Power Purchase Cost			
A. Infirm	Rs. Lakhs	O=A*C	
B. Firm			
Fixed Charges	Rs. Lakhs	P = D*12	
Energy Charges:			
B1: Summer:			
Normal	Rs. Lakhs	Q=B1N*E	4419
Peak	Rs. Lakhs	R=B1P*F	3973
Off-peak	Rs. Lakhs	S=B1OP*G	2445
Total Firm in Summer: (B1)	Rs. Lakhs	T=Q+R+S	10837
B2: Monsoon:			
Normal	Rs. Lakhs	U=B2N*H	5461
Peak	Rs. Lakhs	V=B2P*I	5978
Off-peak	Rs. Lakhs	W=B2OP*J	1684
Total Firm in Monsoon: (B2)	Rs. Lakhs	X=U+V+W	13123
B3: Winter:			
Normal	Rs. Lakhs	Y=B3N*K	1459
Peak =	Rs. Lakhš	Z=B3P*L	1665
Off-peak	Rs. Lakhs	AA=B3OP*M	888
Total Firm in Winter: (B3)	Rs. Lakhs	AB=Y+Z+AA	4012
Total Firm : Energy Charges	Rs. Lakhs	AC=T+X+AB	27971
Total Firm : Fixed+Energy Charges	Rs. Lakhs	AD=AC+P	27971
Total Charges : Firm + Infirm	Rs. Lakhs	AE=O+AD	27971
C. Fuel and Power Purchase Cost Adjustment	Rs. Lakhs	AF=B*N	127
Transmission charge (STU)	Rs. Lakhs	AG	1367
Transmission charge (CTU)	Rs. Lakhs	AH	919
Other Charges (SDLC Charges, Meter reading charges, IEX Fees)	Rs. Lakhs	Al	69
Other Charges - (refer note 4)	Rs. Lakhs	AJ	11
Less : Incentive/Rebate for timely payment etc.	Rs. Lakhs	AK	176
Overall cost	Rs. Lakhs	AL =sum(AE:AJ)-AK	30160

Notes :

Accordingly, energy swapped in against swapped out energy of earlier years (2019-20 and 2020-21) and during the year under consideration, i.e. 2021-22 has been valued at the pooled power purchase cost of the respective years as per the principle adopted by the Hon'ble Commission in the APR-FPPCA Orders dated 01.08.2022. Accordingly, cost of swap-in energy, against energy swapped-out in 2019-20, 2020-21 and 2021-22 have been considered as part of the power purchase cost in terms of the APR-FPPCA Orders dated 01.18.2022.

^{1.} Valuation of energy swap-in during the year and swap-in corresponding to swap-out in 2019-20 and 2020-21 have been done in terms of Regulation 5.15.2.(iv) of Tariff Regulations of the Hon'ble Commission and APR-FPPCA Orders dated 01.08.2022 of the Hon'ble Commission.

- 2. Total power purchase cost claimed after netting off export of power including swap-out energy valued in the terms of the principle adopted in the APR-FPPCA Orders dated 01.08.2022 of the Hon'ble Commission for the year under consideration. Kindly refer to Annex A7 and Annex A8 for details.
- 3. Power Purchase costs from various agencies have been furnished on the basis of certified quantum of energy and cost thereof on this account. Power Purchase Agreements have been furnished in the appendix to this
- 4. Includes past period transmission (STU) and SLDC handling charge for the period April 2020 to March 2021 in terms of order dated 25.06.2021 of the Hon'ble Commission.
- 5. Supplemental Power Procurement includes power purchase from Energy Exchanges, RPGPTCL (other than cogeneration), WBSEDCL, Hydro and Banking. Power procurement from supplemental sources made in terms of the extant Regulations to meet the requirement of power in the licensed area. Kindly refer to the Annexure attached with this this Petition.
- 6. As per Hon'ble Commission's directive, arrangement has been made by the Company to procure power from DEEP portal following competitive bidding.

Annexure to 1.10

Long-term and Medium-term Power purchase details

PPA submitted			Yes Page 2-19 Volume 5	
Avg rate	J=1/A	Paise / Unit	575	575
Other charges (Refer note 4)	I= C+D+E+F+G+ H		224169	224169
Other charges (Refer note 4)	±		403	403
SLDC	9		199	199
Transmission charge (STU)	ц	Rs, in Lakh	3345	3345
Transmissi on charge for HEL dedicated line	ш		11401	11401
Capacity Charge	D		93647	93647
Energy charge	C = A * B / 10		115174	115174
Energy charge rate	æ	Paise / Unit	295	295
Scheduled MU purchased	۷		3898	3898
MW contract			from Hadia Generating Station of HEL by CESC at Subhasgram SubStation of PGCIL after adjusting applicable transmission loss of the 400 kV dedicated overhead transmission line	
Whether exempted under Reg 7.4.4#			∢ 2	
Prior approval as Whether per Reg 7.4.1, exempteo with reference noder Reg 7.4.4#			Yes (WBERC/PPA- 65/12-13/0248 dated 2,5,13)	
Whether Power is purchased under Section 63 of the			o Z	
Tenure of Contract			25 years	
Name of the Trader, if any			ч	
Name & type of source			Thermal	TOTAL
Name of the Seller			Haldia Energy Limited	
SI No			H	

Notes:

- 1. The Company considered the cost based on the rates charged by HEL in terms of Order dated 27 November 2017 in Case No TP 68 / 16-17 and 29 January 2016 in Case No TP 63 / 14 15 as Orders dated 8 September 2021 in Case No TP - 75 / 18 - 19 and the Order dated 20 April 2022 in Case No TP - 67 / 16 - 17 are under Appeal etc., as appropriate, adjusted for units received at CESC bus.
- additional amount charged by HEL in accordance with the applicable Regulations and / orders or any other payable amount as and when determined by the Hon'ble Commission will be additional 2. The power purchase cost has been furnished in accordance with rates charged by HEL. MFCA considered at 15 Paise / Unit as was charged by the Company during the period. Effect of any to above.
- 3. Units received at CESC bus after adjustment of losses as considered by SLDC. Auditor's certificate for energy received at CESC bus has been furnished through Annex C5.
- 4. Includes transmission charge (STU) in terms of Order dated 16.12.2020 and 25.06.2021 of the Hon'ble Commission.



Short-term Power purchase details (Except Exchange)

Name of the Seller	_	Name & type of source	Name of the Trader, if any	Tenure of Contract	Whether Post Facto approval under Regulation 7.5,4, with reference	Whether price is discovered through bidding under Regulation 7,5.1	Whether purchased without bidding under Regulation 7.5.3	Purchased under Regulation 7.5,6 & 7,5,7 (specify u purpose)	Whether exempted under Regulation 7.5.8	MW contract
WBSEDCL (Emergency Power)					N/A	N/A	N/A.	N/A	N/A	
RPGPTCL (Other than Cogeneration) ²	ion) ²		RPGPTCL	365 days	N/A	Kindly refer to note 2 below	N/A	A/N	A/N	Upto 36 MW
RPGPTCL and Bilateral 3 (Cogeneration)	al 3 (Co-		RPGPTCL & TPTCL	1 to 14 days	N/A	N/A	N/A	N/A	N/A	Upio 37 MW
Dikchu Hydro-Electric Project (DHEP)	Project	Hydro	KEIPL	Daily	N/A	N/A	Kindly refer to note 6 below	N/A	N/A	Upto 200 MW
Rooftop Solar PV *		solar			N/A	N/A	N/A	N/A	N/A	

Notes:

- 1. Emergency power was procured from WBSEDCL in terms of the Order of the Hon'ble Commission dated 4 July 2018.
- 2, Power had been procured in terms of the Order dated 02,03.2020 read with the Order dated 15,06.2020 of the Hon'ble Commission, following transparent competitive bidding process under section 63 of the Electricity Act, 2003 through DEEP Portal, Status reports dated 18,08,2020 and 26.07.2021 have already been submitted to the Hon'ble Commission. Power procurement also had been done in terms of the Regulation 7,5.2.
- 3. Cogeneration power had been procured by the Company to the extent available.
- 4. Connectivity arrangements were facilitated by a dedicated team resulting in solar capacity of 41.241 MWp at year-end. Estimated generation from solar rooftop installations at 16.13% Capacity Utilisation Factor was 56.486 MU.
- 5. Includes past period transmission (STU) and SLDC handling charge in terms of order dated 25.06.2021 of the Hon'ble Commission.
- 6. Power Procurement from Dikchu Hydro Electric Project (DHEP) was done in the month of October during festival season on Day Ahead basis, to meet the energy deficit and at a price 20 paise/ kWh less than the price discovered at the Day Ahead Market (DAM) in IEX during this period. Such power procurement had been done in terms of the Regulation 7.5.3.

Short-term Power purchase details (Except Exchange)

PPA or LOA submitted	(If yes, reference in the Petition)		As per Order dated 26 April 2016 read with Order dated 4 July 2018	Pgs 236-265, Volume-5	Pgs 20 - 235, Volume -5	Pgs 266 - 269, Volume - 5	Connectivity agreements Sample placed in Pg 382 - 395, Volume -	
	Τ	T _E	As pe April Ord	321 Pgs 2	329 Pgs 2	1782 Pgs 2	584 Sar	335
Average Rate	K=JIA	Palse / Unit	7	8	, es	17	LS.	
Total charges	J=sum(C:l)		20	9470	4571	411	382	14854
Other Charges - (refer note 5)	22			#	4	343	•	15
Wheeling	Έ			*	227	R ®)	11:	722
Meter Reading Charges	9	4		·	-	20)		2
SLDC	14.	Rs. Lakh		13	53	0	•:-	18
Transmission charge (CTU)	ш			62		Ξ		#
Transmission charge (STU)	۵			812	451	æ	(4)	1270
Energy Charge	C=A*B/10		20	8633	3883	394	382	13312
Energy charge rate		Paise / Unit	780	293	280	1706	584	
Schedule Units purchased *	4	MU	0.2	295	139	2	2	443
Name of the Seffer			WBSEDCL (Emergency Power) ¹	RPGPTCL (Other than Cogeneration) ²	RPGPTCL and Bilateral ³ (Co-generation)	Dikchu Hydro-Electric Project (DHEP)	Rooftop Solar PV 4	
<u>2</u>			-	5	60	4	s	

* Units received at CESC bus after adjustment of losses as considered by SLDC.,

MANAGING DIRECTOR (GENERATION) CESC LIMITED

Si No Name of the Exchange	Time of purchase	Schedule MU purchased	Energy charge rate (paisa/unit)	Energy charge	Transmission charge (STU)	Transmission charge (CTU)	LDC Charge	IEX Fees & Taxes	Other charges	Total charges (in Rs lakh)	avg rate (in paisa/unit)
		∢	В	C=A*B	٥	Е	L	b	r	I=C+H	J=I/A
						Rs Lakhs					
1 IEX-DAM	Normal period	47									
	Peak Period	59			C	C	254	(
	Off peak	13			370	875	(an)	30	880		
	Overall	119	843	10024						10904	917
2 IEX-RTM	Normal period	27									
	Peak Period	46			,	0		ě	į		
	Off peak	11			877	380	'n	71	632		
	Overall	84	645	5408						6040	720
3 IEX-GTAM (Solar)	Normal period	262									
	Peak Period	4				r	1	Ţ			
	Off peak	0			410	ر د د	1/	/9	835		
	Overall	596	419	11139						11974	451
4 IEX-GTAM (Non-Solar)	Normal period	09									
	Peak Period	94			רני		÷	Ç	r C		
	Off peak	39			776	4	2	y V	/x		
	Overall	194	532	10299						10887	563
100 100 100 100 100 100 100 100 100 100											
J PAIL-G AM (NOR-Solar)	Normal period	17									
	Peak Period	0			34	4	~	'n	44		
	Off peak	0					1)			
	Overali	12	487	299						643	523
6 IEX-GDAM	Normal period	52									
	Peak Period	16				į		ļ			
	Off peak	0			788 T	/87	-	1/	493		
	Overall	89	268	3855						4349	641
7 PXIL-GTAM (Solar)	Normal period	59									
	Peak Period	2									
	Off peak	0			169	241	9	15	431		
	Overall	61	448	9222						0075	1

Form 1.11: COST OF FUEL

Budge Budge Generating Station

	STATION	DERIVATION	UNIT	2021-2022
1.	Sent-out Energy	а	MU	5132
2.	Auxiliary consumption	2	MU	508
3.	Gross Generation for own consumers and WBSEDCL	3=1+2	MU	5640
4.	Station Heat Rate	4	kCal/kWh	2470
5.	Total Heat Required	5=3x4	generated GCal	13929565
6.	Specific Oil Consumption	6	ml/kWh	1.30
7.	Oil Consumption	7=6x3	KL	7331
8.	Heat Value of Oil	8	kCal/Litre	9473
9.	Heat from Oil	9=7x8	GCal	69450
10.	Permitted Heat from Blended Primary Fuel	10=5-9	GCal	13860115
11.	(Coal, Biomass Pellet) Heat Value of Blended Primary Fuel	11	kCal/Kg	3840
	(Coal, Biomass pellet) Permitted Blended Primary Fuel	12=10/11	Tonne	3609405
13.	(Coal, Biomass Pellet) Consumption Permitted Blended Primary Fuel (Coal, Biomass Pellet) Consumption considering Transit Loss	13	Tonne	3636680
	Average Price of Oil	14	Rs./KL	54043
	Cost of Blended Primary Fuel (Coal, Biomass Pellet) per Tonne after due adjustment as per Annex A5 of FPPCA Petition	15	Rs./Tonne	3411
16.	Cost of Oil	16=7x14	Rs. Lakhs	3962
	Cost of Blended Primary Fuel (Coal, Biomass Pellet)	17=13x15	Rs. Lakhs	124044
	Total Fuel Cost	18=16+17	Rs. Lakhs	128006

Note:

Kindly refer to Annex A1 to Annex A5 for details.

Form 1.11: COST OF FUEL

Southern Generating Station

	STATION	DERIVATION	UNIT	2021-2022
1.	Sent out energy for own consumers and WBSEDCL	1	МИ	149
2.	Auxiliary consumption	2	ми	15
3.	Gross Generation for own consumers and WBSEDCL	3=1+2	ми	164
4.	Station Heat Rate	4	kCal/kWh	2900
5.	Total Heat Required	5=3x4	generated GCal	475507
6.	Specific Oil Consumption	6	ml/kWh	2.10
7.	Oil Consumption	7=6x3	KL	344
8.	Heat Value of Oil	8	kCal/Litre	9435
9.	Heat from Oil	9=7x8	GCal	3249
10.	Heat from Coal	10=5-9	GCal	472258
11.	Heat Value of Coal	11	kCal/Kg	4787
12.	Coal Consumption	12=10/11	Tonne	98654
13.	Coal Consumption considering Transit loss	13	Tonne	99400
14.	Average Price of Oil	14	Rs./KL	56610
15.	Average Price of Coal	15	Rs./Tonne	4784
16.	Cost of Oil	16=7x14	Rs. Lakhs	195
17:	Cost of Coal	17=13x15	Rs. Lakhs	4756
18.	Total Fuel Cost	18=16+17	Rs. Lakhs	4950

Overall Fuel Cost - All Stations	Rs. Lakhs	132957

Note:

Kindly refer to Annex A1 to Annex A5 for details.

Form 1.28: Statement showing status of FPPCA Claim

SI. No.	order is yet to	tion submitted but be issued by the nmission	Clain	n application is yet to b	oe applied
	Related Year	Date of submission	Related Year	Expected date of submission	Reasons of delay against regulation 2.8.7.2
1	2018-19	02.09.2019			
2	2019-20	21.09.2020			
3	2020-21*	01.04.2022			

^{*} Supplementary petition to FPPCA for 2020-21 is being resubmitted.



	Particulars	2021-2022
A.		MU
1,	Generation (including in-firm power, if any) [Form 1,3]	5726
2.	Auxiliary Consumption [Form 1.4a]	445
3.	Transformation Loss	:=
4.	Units delivered to system from generation (including infirm power, if any) [Form 1.5] (1-2-3)	5281
5.	Energy Purchased (including Swap-in power) [Form 1.6a]	5202
6.	Energy received for wheeling [Form 1.9a]	3.81
7.	Overall Gross Energy in System (4+5+6)	10486
8.	Units sold to persons other than licensees or any consumers (including Swap-out power) [Form 1.9b]	202
9.	Units sold/used for pumping energy or pumped storage project at bus bar [Form 1.4(b)]	NE:
10.	Additional Units allowed by the Commission against pumping energy for pumping loss	變
11.	Total Units sold / used for pumping energy or pumped storage project (9 + 10)	
12.	Net DSM (Actual)	10
13.	Total Energy goes out of System (8+11+12)	212
14.	Net Energy in system (7-13)	10274
15.	Units sold to own consumers	9403
	Units sold to WBSEDCL [Form 1.9 c]	14
16.	Units wheeled at delivery point [Form 1.9 d]	4
17.	Additional allowed Units wheeled	0.3
18,	Units utilised in own premises including construction power	33
19.	Overall Utilisation (15+16+17+18)	9454
20,	Unutilised Units (14-19)	820
21.	Distribution Loss %	8.0%

Annex A

Calculation of Gross Redetermined Fuel and Power Purchase Cost

2021-22

112

Calculation of FPPC

Parameters	Details	Reference / Basis	Unit	Amount
Fuel-Cost	Fuel Cost at generation bus of CESC generating stations	Annex A1	Rs Lakhs	132956,64
E _{Sys}	Annual Energy available at distribution input, including power purchases from different sources, for sale to consumers and WBSEDCL:			
	 i) Energy available from unit sent out by CESC generating stations, for sale to consumers and WBSEDCL 	Annex A1	MU	5281.156
	ii) Energy purchased from HEL	Annex A6	MU	3897.894
	iii) Energy purchased from Cogeneration sources	Annex A7	ми	138.762
	iv) Energy from Renewable Sources	Annex A7	MU	606,852
	v) Supplemental Energy purchased including swap-in of 57,603 MU	Annex A7	MU	558.006
	vi) Less: swap out and sale to persons other than consumers and WBSEDCL	Annex A8	MU	201.781
E _{Sys}	Annual Energy available at distribution input, including power purchases from different sources, for sale to consumers and WBSEDCL netting off sale to persons other than consumers and WBSEDCL including swap out	E _{Sys} = i)+ii)+iii)+iv)+v)-vi)	MU	10280,890
FC _{IUC}	Per Unit of Fuel Cost at Distribution input	Fuel-Cost/E _{sys}	Paise/Unit	129.32
E _{sc}	Energy Sale to consumers	Annex C2	MU	9403.186
E _{sL}	Energy Sale to WBSEDCL	Annex C2	MU	14.201
Eo	Energy for own consumption	Annex C2	MU	32.914
t	Normative Distribution Loss for sale to WBSEDCL	Table D, Schedule 9A of Tariff	%	14.30%
d	Normative Distribution Loss for sale to consumers	Regulations		
FC Adm_d	Admitted Fuel Cost for sale to WBSEDCL	E _{SL} *FC _{IUC} /(1-t)	Rs Lakhs	214.30
FC Adm_c	Admitted Fuel Cost for sale to consumers	(E _{sc} +E _o)*FC _{IUC} /(1-d)	Rs Lakhs	142393.80
FC	Fuel Cost of CESC generation as per Normative Parameters laid down by the Hon'ble Commission, commensurate with actual level of sales to own consumers and WBSEDCL during 2021-22	$FC_{Adm_c} + FC_{Adm_d}$	Rs Lakhs	142608,11
PPC	Total net cost of Power Purchase from different sources commensurate with actual level of energy sales to consumers and WBSEDCL during 2021-22 (after adjustment of cost relating to sale to persons other than consumers and WBSEDCL including swap out)	Annex A8	Rs Lakhs	284100.25
E	Differential auxiliary consumption	Annex B2 & Table A, Schedule 9A of Tariff Regulations and Audited Data	MU	-77.407
E _P	Energy purchased	$E_P = E_{sys} : ii)+iii)+iv)+v)$	ми	5201.515
Ē _{Adm}	Energy entitled for purchase	E _{SL} /(1-t)+(E _{SC} +E _O)/(1-d) - i)-E	мυ	5995.610
E _E	Difference between actual energy purchased and energy entitled for purchase	E _P -E _{Adm}	MU	-794.096
C _D	Cost Disallowed		Rs Lakhs	
A	Adjustment, if any, to be made in 2021-22 to account for any excess/ shortfall in recovery of fuel and power purchase cost in the past adjustment periods based on directions/ orders of the Commission		Rs Lakhs	
FPPC	Gross Redetermined Fuel and Power Purchase Cost for 2021-22 prior to adjustments relating to Schedule - 9B	FC+(PPC-C _D)-(<u>+</u> A)	Rs Lakhs	426708.36

COST OF FUEL - Normative

2021-22

STATION	DERIVATION	LINO	Budge Budge	Southern	Overall
Sent out Energy - overall	∢	ΩW	5131.945	149.211	5281.156
Auxiliary Consumption	В	M	507.555	14.757	522.312
Generation	C = A + B	MU	5639.500	163.968	5803.468
Heat Rate	۵	kCal/kWh generated	2470	2900	
Permitted Oil Consumption	Ш	ml/kWh	1.30	2.10	
Heat Value of Oil	IL.	kCal/Litre	9473	9435	
Heat Value of Blended Primary Fuel (Coal, Biomass pellet)	ŋ	kCal/Kg	3840	4787	
Overall Permitted Heat	H=C*D	GCal	13929565.000	475507.200	
Permitted Heat from Oil	I=C*E*F/10^3	GCal	69449.879	3248.780	
Permitted Heat from Blended Primary Fuel (Coal, Biomass Pellet)	-H=C	GCal	13860115.121	472258.420	
Permitted Oil Consumption	K=(I/F)*10^3	귛	7331.350	344.333	
Permitted Blended Primary Fuel (Coal, Biomass Pellet) Consumption	L=J/G/.9925*10^3	Tonne	3636680.080	99399.859	
Cost of Oil per KL	Σ	Rs./KL	54042.60	56610.18	
Cost of Blended Primary Fuel (Coal, Biomass Pellet) per Tonne after due adjustment as per Annex A5	z	Rs./Tonne	3410.92	4784.23	
Cost of Oil	O=K*M/10^5	Rs. Lakhs	3962.05	194.93	4156.98
Cost of Blended Primary Fuel (Coal, Biomass Pellet)	P=L*N/10^5	Rs. Lakhs	124044.14	4755.52	128799.66
Overall Cost of Fuel	Q=0+P	Rs. Lakhs	128006,19	4950.45	132956.64
Cost of Fuel	R = Q	Rs. Lakhs	128006.19	4950.45	132956.64

Overall sale to persons other than own consumers and WBSEDCL including permissible losses is 201.781 MU, including swap-out power of 29.612 MU, which is valued in terms of Regulation 5.15.2(iv) and APR-FPPCA Orders dated 01.08.2022. Kindly refer to Annex A8.

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

Stationwise Heat Value of Oil

2021-22	Budge Budge Generating Station	Southern Generating Station
Month	Heat Value	Heat Value
MOUNT	(KCal / Litre)	(KCal / Litre)
Apr-21	9547	9537
May-21	9533	9570
Jun-21	9321	9325
Jul-21	9541	9528
Aug-21	9532	9532
Sep-21	9522	9548
Oct-21	9552	9515
Nov-21	9533	9521
Dec-21	9147	9023
Jan-22	9399	9287
Feb-22	9571	9310
Mar-22	9478	9527
2021-22	9473	9435

Certificates of heat value of oil are submitted in Volume 1 of this petition.

Technical Certificates by NABL accredited agency are placed in pages 116 to 139 of Volume 4 of this petition.



Budge Budge Generating Station Heat Value Summary - 2021-22

																						,		ATION)
GCV As Received -120 (Kcal/Kg)	5432	5114	4773	4647	4375	4066	4382	4081	3797	3892	3728	3478	3031	2793	3405	3568	3769	3455	3087	3954	2856	4081	3840	MANAGING DIRECTOR (GENERATION) CESC LIMITED
GCV As Received (Kcal/Kg)	5552	5234	4893	4767	4495	4186	4502	4201	3917	4012	3848	3598	3151	2913	3525	3688	3889	3575	3207	4074	2976	4201	3960	SING DIRE CE
GCV Equilibrated (Kcal/Kg)	5812	5514	5221	4914	4616	4308	4623	4310	4012	4318	4013	3718	3416	3132	3740	3927	4021	3719	3426	4310	3199	4317	4154	MANAC
Equilibrated Moisture (%)	4.41	6.52	5.99	1.95	1.29	1.54	0.85	1.30	1.35	7.32	6.61	7.91	5.12	4.57	1.59	1.62	7.00	6.82	5.20	6.14	5.11	1.74	2.69	
Total Moisture (%)	8.69	11.26	11.89	4.88	3.89	4.33	3.43	3.79	3.69	13.89	10.45	10.88	12.47	11.25	7.23	7.59	10.05	10.42	11.27	11.26	11.70	4.36	7.30	1 79
Coal Receipt in FY 21-22 (%)	0.264%	9.324%	3.245%	0.565%	5.895%	9.226%	0.079%	5.185%	3.910%	0.169%	0.443%	0.016%	0.102%	0.059%	24.323%	14.694%	%922.0	0.121%	3.331%	1.090%	7.376%	9.807%	100.000%	
Grade	G3	G4	G5	G6	G7	G8	WIV	WV	WVI	G8	69	G10	G11	G12	G12		69	G10	G11	NCW	G12	G8		
Моде	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	Rail	RCR								
Source	ECL Linkage	BCCL Linkage	BCCL Linkage	BCCL Linkage	CCL	CCL	CCL	CCL	CCL	Captive ROM	Captive Washed	CCL E-auction	CCL E-auction	CCL E-auction	CCL E-auction	MCL E-auction	ECL E-auction	Total						

Budge Budge Generating Station Heat Value Summary - 2021-22

Note:

1. GCV As Received has been derived after applying Moisture correction over GCV Equilibrated in terms of regulation 1.2.1(ixa) and para 6.2 of IS 1350(Part II), 1970

GCV As Received = GCV Equilibrated x (1- Total Moisture %)/(1- Equilibrated Moisture %)

placed in pages 4 to 105 of Volume 4 of this Petition. The list of CIL for such tester is also placed in page 2. An Auditors' Certificate, certifying grade-wise "GCV as received" for the year 2021-22 has been placed in pages 171 to 174, Annex C4, Volume 1 of this petition. 2. Consignment wise quality certification by third party selected from the list maintained by Coal India Limited, for domestic coal procured in 2021-22, have been

Southern Generating Station Heat Value Summary - 2021-22

Source	Mode	Grade	Plant Coal Receipt in FY 21-22 (MT)	Total Moisture (%)	Equilibrated Moisture (%)	GCV Equilibrated (Kcal/Kg)	GCV As Received (Kcal/Kg)	GCV As Received -120 (Kcal/Kg)
ECL Linkage	Rail	63	4.030%	9.48	5.28	5808	5550	5430
ECL Linkage	Rail	G4	54.007%	12.20	7.28	5513	5220	5100
ECL Linkage	Rail	G5	8.990%	11.79	7.78	5212	4986	4866
ECL Linkage	Rail	99	2.090%	5.60	1.20	4911	4692	4572
ECL Linkage	Rail	C2	18.911%	6.91	1.42	4616	4359	4239
ECL Linkage	Rail	G8	9.407%	5.35	1.39	4308	4135	4015
BCCL Linkage	Rail	\W	1.242%	3.57	1.00	4311	4199	4079
BCCL Linkage	Rail	MVI	1.323%	2.99	1,01	4005	3925	3805
Total			100.000%	10.04	5.30	5167	4907	4787

Note:

1. GCV As Received has been derived after applying Moisture correction over GCV Equilibrated in terms of regulation 1.2.1(lxa) and para 6.2 of IS 1350(Part II), 1970

GCV As Received = GCV Equilibrated x (1- Total Moisture %)/(1- Equilibrated Moisture %)

2. Consignment wise quality certification by third party selected from the list maintained by Coal India Limited, for domestic coal procured in 2021-22, have been placed in pages 106 to 115 of Volume 4 of this Petition. The list of CIL for such tester is also placed in page 2. An Auditors' Certificate, certifying grade-wise "GCV as received" for the year 2021-22 has been placed in pages 171-174, Annex C4, Volume 1 of this petition.

Blended Primary Fuel (Coal, Biomass Pellet) Mix : 2021-22

Budge Budge Generating Station

	Grade Mix	Heat Value
Grades	%	KCal/kg
G3	0.264%	5432
G4	9.324%	5114
G5	3.245%	4773
G6	0.565%	4647
G7	5.895%	4375
G8	19.202%	4072
G9	1.219%	3754
G10	0.137%	3458
G11	3.432%	3085
G12	7.435%	2856
WIV	0.079%	4382
WV	5.185%	4081
WVI	3.910%	3797
NCW	1.090%	3954
Non-CIL Indigenous	24.323%	3405
Non-CIL Indigenous Washed	14.694%	3568
Biomass Pellet	0.001%	3695
Overall	100.000%	3840

Southern Generating Station

	Grade Mix	Heat Value
Grades	%	KCal/kg
Orades	70	Roaling
G3	4.030%	5430
G4	54.007%	5100
G5	8.990%	4866
G6	2.090%	4572
G7	18.911%	4239
G8	9.407%	4015
WV	1.242%	4079
WVI	1.323%	3805
Overall	100.000%	4787

Notes:

- 1. Heat value considered on 'as received' basis adjusted for stacking loss of 120 kCal/kg in terms of Regulation 5.8.4 read with Regulation 1.2.1 (lxa) as per third party tester selected from the list of CIL empanelled testing agency.
- 2. Auditors' Certificate on heat value of coal is submitted in Volume 1 of this petition.

č
Ü
>
pt
nerg
č
щ
*
O
드
.0
쑱
تن
\equiv
끋
ᆂ
,0
_
7
÷
70
ž
wise Fue
a
.≌
wise
a
Source
Ξ.
ត
Ψ
0
<u>-2</u>
٠Ē
4
ŏ
Ξ.
0
٦
÷
E
'n
ĭ

Name of the Generating Station: Budge Budge Generating Station

St. No. Description Unit FSA Captive Mine		The state of the s						
						2021-22		
OpenNIG QUANTITY 1	SI. No.	Description	Onit	FSA	Captive Mine	e-auction	Import	Biomass
Opening Chantry Chair Opening Chair Opening Chair Opening Chair Opening Chantry Chair Opening Cha				1	2	ĸ	4	יעו
1 Opening Canatrity of Coal Supplied by Coal Company MT 1282830 34412600 3692697 369	₹	OPENING QUANTITY						
2 Value of Stock? 2 Value of Stock? 36412500 3692697 3692697 3 Outanity of Coal supplied by Coal Company MT 1282830 1300738 750131 4 Adjustment (+/-) in quantity supplied by Coal Company (3+4) MT 1282830 1300738 750131 5 Cost supplied by Coal Company (3+4) MT 1282830 1300738 750131 6 Amount chaged by Coal Company (3+4) MT 1282830 135893626 135931834 5 Adjustment (+/-) in amount chaged made by Coal Company ₹ 108511303 356329325 185640022 10 Transportation chages by rail (*ship / road transport Company) ₹ 1005904973 364304617 1368740022 11 Adjustment (+/-) in amount charged by railways / Transport Company ₹ 1005904973 37639748 862234148 by Road by Road amount charged made by railways / Transport Company ₹ 1005904973 37639748 862234148 11 Transportation charges for coal supplied including Transportation (*barged for coal supplied for foal ₹	П	Opening Quantity of coal	TM	203240	10382	7795		
Quantity of consequence year, month) 3 Quantity of consequence year, month) 4 Adjustment (for current year, month) 5 Cost of supplied by Coal Company (3+4) Young of supplied (4+5-17) Young of supplied (4+5-17) Young of supplied (4+5-17) Young of supplied (5-14-17-17) Young of supplied (5-14-17-17) Young of supplied (5-14-17-17-17-17-17-17-17-17-17-17-17-17-17-	2	Value of Stock ¹	H⁄	831554099	36412500	26922697		
3 Quantity of Coal supplied by Coal Company MT 1282830 1300738 750131 4 Adjustment (+/+) in quantity supplied by Coal Company MT 1282830 1300738 750131 5 Coal supplied by Coal Company 4	B)	QUANTITY (for current year / month)						
4 Adjustment (+/-) in quantity supplied by Coal Company MT 1282830 (2007 COAL COAL Company (3+4) MT 1282830 (2007 COAL COAL COAL COAL COMPANY (3+4) MT 1282830 (2007 COAL COAL COAL COAL COAL COAL COAL COAL	m	Quantity of Coal supplied by Coal Company	TM	1282830	1300738	750131		20
Cost Stopping by Coal Company (3+4)	4	Adjustment (+/-) in quantity supplied by Coal Company	M	(9)	34	31		
Cost Octoon. Cost Octoon. Cost Octoon. Second Company ₹ 4640200541 3528292529 1859631834 558 Adjustment (+)-) in amount charged made by Coal Company ₹ 1,233,300 259391826	5	Coal supplied by Coal Company (3+4)	ΜT	1282830	1300738	750131		50
Adjustment targed by Coal Company	ΰ	COST OF COAL						
7 Adjustment (+/-) in amount charged made by Coal Company ₹ 10851330 259391626 <td< td=""><td>9</td><td>Amount charged by Coal Company</td><td>ih⁄</td><td>4640200541</td><td>3528292529</td><td>1859631834</td><td></td><td>557031</td></td<>	9	Amount charged by Coal Company	ih⁄	4640200541	3528292529	1859631834		557031
Handling, Sampling and such other similar charges	7	Adjustment (+/-) in amount charged made by Coal Company	₩	-2532300	259391626	Û		
Total amount Charged (6+7+8) Tansportation charged (6+7+8) Tansportation charged (6+7+8) Tansportation charged (6+7+8) Tansportation charges by rail / ship / road transport Company ₹ 10055004973 976397436 8105332874 8105332874 91701274 917	∞	Handling, Sampling and such other similar charges ²	₩	108511303	56620461	127108188		
Transportation charges by rail / ship / road transport Transportation charges by rail / ship / road transport Transportation charges by rail / ship / road transport Company \$\pi\$ \$1005904973 \$976397436 \$10532448 \$1001274	6	Total amount Charged (6+7+8)	₩	4746179544	3844304617	1986740022		557031
10 Transportation charges by rail / ship / road transport by Rail by Rail by Rail by Rail by Ship 11 Adjustment (+/-) in amount charged made by railways / Transport Company 12 Construct confices in transportation Charges (10+11+12+13) 13 Cost of diesel in transportation Charges (10+11+12+13) 14 Total Transportation Charges (10+11+12+13) 15 Total amount Charges (10+11+12+13) 16 Total amount Charges (10+11+12+13) 17 Total Transportation Charges (10+11+12+13) 18 Total Transportation Charges (10+11+12+13) 19 Total Transportation Charges (10+11+12+13) 19 Total Transportation Charges (10+11+12+13) 19 Total Transportation Charges (10+11+12+13) 11 Total Transportation Charges (10+11+12+13) 11 Total Transportation Charges (10+11+12+13) 12 Consumption of coal (2+15)/(1+5) 13 Consumption of coal (2+15)/(1+5) 14 Total Transportation (9+14) 15 Total Transportation (9+14) 16 Total Transportation Charges (10+11+12+13) 17 Total Transportation (9+14) 18 Closing stock (1+5-17) 19 Closing stock (1+5-17) 19 Closing stock (1+5-17) 10 Closing stock (1-5-17) 10 Closing stock (1-5-17) 11 Total Transportation (9+14) 11 Total Transportation (9+14) 12 Closing stock (1-5-17) 11 Total Transportation (9+14) 12 Closing stock (1-5-17) 13 Closing stock (1-5-17) 14 Closing stock (1-5-17) 15 Closing stock (1-5-17) 16 Closing stock (1-5-17) 17 Consumption of coal (2-15)/(1+5) 18 Closing stock (1-5-17) 19 Closing stock (1-5-17) 10 Closing stock (1-5-17) 10 Closing stock (1-5-17) 11 Total Transportation (1-14-12+13) 11 Total Transportation (1-14-12+13) 11 Total Transportation (1-14-12+13) 12 Closing stock (1-5-17) 13 Closing stock (1-5-17) 14 Total Transportation (1-14-12+13) 15 Closing stock (1-5-17) 16 Closing stock (1-5-17) 17 Closing stock (1-5-17) 18 Closing stock (1-5-17) 19 Closing stock (1-5-17) 19 Closing stock (1-5-17) 19 Closing stock (1-5-17) 10 Closing stock (1-5-17) 10 Closing stock (1-5-17) 11 Total Trans	۵)	TRANSPORTATION COST						
by Rail by Rail by Rail by Rail by Rail by Rail by Raid by Ship 11 Adjustment (+/-) in amount charged made by railways / Transport Company 12 Demurrage Charges, if any 13 Cost of diesel in transportation Charges (10+11+12+13) 14 Total Transportation Charges (10+11+12+13) 15 Total amount Charges (10+11+12+13) 16 Landed cost of coal (2+15)/(1+5) 17 Total Cost of diesel in transportation (9+14) 18 Cost of diesel in transportation Charges (10+11+12+13) 1	10	Transportation charges by rail / ship / road transport	W	1005904973	976397436	862234148		
by Road by Load by Ship by Road by Adjustment (+/-) in amount charged made by railways / Transport Company ₹ 1005904973 976397436 862234148 976397436 976397436 976397436 976397436 976397436 976397436 976397436 976397436 976397436 976397436 976397436 976397436 976397436 9763974170 97630740 97630740		by Rail	th/	1005904973	976397436	810532874		
11 Adjustment (+/-) in amount charged made by railways / Transport Company 12 Demurrage Charges, if any 13 Cost of diesel in transporting coal through MGR System, if applicable 14 Total Transportation Charges (10+11+12+13) 15 Total amount Charges (10+11+12+13) 16 Landed cost of coal (2+15)/(1+5) 17 Consumption of coal 18 Closing value (2+15-16+17) 19 Closing value (2+15-16+17) 20 Weighted average cost of coal supplied 21 GCV as brilled' of coal 22 Weighted average GCV as billed' of coal 23 GCV as billed' of coal less 120 KCal/kg 24 Weighted average GCV as received' of coal less 120 KCal/kg 25 GCV as received' of coal less 120 KCal/kg 26 Weighted average GCV as received' of coal less 120 KCal/kg 27 Weighted average GCV as received' of coal less 120 KCal/kg 28 Weighted average GCV as received' of coal less 120 KCal/kg 3840 3840 3840 3840 3840 3840 3840 3840		by Road	H			51701274		
11 Adjustment (+/-) in amount charged made by rallways / Transport Company 12 Demurrage Charges, if any 13 Cost of diesel in transporting coal through MGR System, if applicable 14 Total Transportation Charges (10+11+12+13) 15 Total amount Charged for coal supplied including Transportation (9+14) 16 Landed cost of coal (2+15)/(1+5) 17 Consumption of coal 18 Closing stock (1+5-17) 19 Closing value [2+15-16+17] 19 Closing value [2+15-16+17] 20 Weighted average cost of coal IS(16*17)/∑17] 21 GCV as billed¹ of coal supplied 22 Weighted average GCV as billed¹ of coal less 120 kCal/kg 23 GCV as received¹ of coal less 120 kCal/kg 24 Weighted average GCV as received¹ of coal less 120 kCal/kg 25 Weighted average GCV as received¹ of coal less 120 kCal/kg 26 Weighted average GCV as received¹ of coal less 120 kCal/kg 27 Weighted average GCV as received¹ of coal less 120 kCal/kg 28 Weighted average GCV as received¹ of coal less 120 kCal/kg 3840 3840		by Ship	w					
12 Demurrage Charges, if any 13 Cost of diesel in transporting coal through MGR System, if applicable	11	Adjustment (+/-) in amount charged made by railways / Transport Company	w) à :	*			
13 Cost of diesel in transporting coal through MGR System, if applicable 14 Total Transportation Charges (10+11+12+13) 1 Total Transportation Charges (10+11+12+13) 1 Total amount Charges (10+11+12+13) 1 Total amount Charged for coal supplied including Transportation (9+14) 1 Total amount Charged for coal supplied including Transportation (9+14) 1 Total amount Charged for coal supplied including Transportation (9+14) 1 Total amount Charged for coal supplied including Transportation (9+14) 2 Total amount Charged for coal supplied including Transportation (9+14) 2 Consumption of coal 2 (15+15)/(1+5) 3 Gossing salock (1+5-17) 3 Consumption of coal 2 (15+17)/(217) 3 Gov as billed¹ of coal supplied coal 2 (15+17)/(217) 3 Gov as received¹ of coal less 120 kCal/kg 4410 3466 3512 3623448 3783 3783 3783 3784 3784 3784 3784	12	Demurrage Charges, if any	Hr.					
14 Total Transportation Charges (10+11+12+13)	13	Cost of diesel in transporting coal through MGR System, if applicable	H⁄	ti:	6	•0)		
15 Total amount Charged for coal supplied including Transportation (9+14)	14	Total Transportation Charges (10+11+12+13)	H	1005904973	976397436	862234148		(0)
TOTAL COST TOTAL COST Landed cost of coal (2+15)/(1+5) Consumption of coal Consider average cost of coal Cosing value [2+15-16*17] Consumption of coal Consumption of coal Consider average cost of coal Cosing value [2+15-16*17] Consumption of coal Cosing value [2+15-16*17] Consumption of coal Cosing value [2+15-16*17] Cosing value [2+15-16*		Total amount Charged for coal supplied including Transportation (9+14)	h	5752084517	4820702053	2848974170		557031
16 Landed cost of coal (2+15)/(1+5) 17 Consumption of coal 18 Closing stock (1+5-17) 19 Closing stock (1+5-17) 20 Weighted average cost of coal supplied 21 'GCV as billed' of coal supplied of coal supplied coal supplied sess 120 kCal/kg 22 Weighted average 'GCV as billed' of coal supplied less 120 kCal/kg 23 'GCV as received' of coal supplied less 120 kCal/kg 24 Weighted average 'GCV as received' of coal less 120 kCal/kg 25 Weighted average 'GCV as received' of coal less 120 kCal/kg 26 Weighted average 'GCV as received' of coal less 120 kCal/kg 27 Weighted average 'GCV as received' of coal less 120 kCal/kg 28 Weighted average 'GCV as received' of coal less 120 kCal/kg 29 Weighted average 'GCV as received' of coal less 120 kCal/kg 29 Weighted average 'GCV as received' of coal less 120 kCal/kg 20 Weighted average 'GCV as received' of coal less 120 kCal/kg 20 Weighted average 'GCV as received' of coal less 120 kCal/kg 21 Weighted average 'GCV as received' of coal less 120 kCal/kg 22 Weighted average 'GCV as received' of coal less 120 kCal/kg 23 'GCV as received' of coal supplied less 120 kCal/kg 24 Weighted average 'GCV as received' of coal less 120 kCal/kg 25 'Main to a coal supplied less 120 kCal/kg 26 'Main to a coal supplied less 120 kCal/kg 27 'Main to a coal supplied less 120 kCal/kg 28 'Main to a coal supplied less 120 kCal/kg 3840	(L)	TOTAL COST						
17 Consumption of coal NT 1211992 1300822 750294 N 18 Closing stock (1+5-17) NT 274078 10297 7632 19 Closing value [2+15-16*17] ₹/MT 4004 29846725 29846725 20 Weighted average cost of coal supplied kCal/kg kCal/kg 5295 3742 4361 21 'GCV as billed' of coal supplied kCal/kg kCal/kg 4410 4450 22 Weighted average 'GCV as billed' of coal supplied less 120 kCal/kg kCal/kg 4410 3466 3512 23 'GCV as received' of coal supplied less 120 kCal/kg kCal/kg 4410 3466 3512 24 Weighted average 'GCV as received' of coal less 120 kCal/kg kCal/kg 3840 3512	16	Landed cost of coal (2+15)/(1+5)	₹/MT	4453	3707	3793		11235
18 Closing stock (1+5-17) 19 Closing value [2+15-16*17] 21 Closing value [2+15-16*17] 22 Weighted average cost of coal supplied 23 Vor as received of coal supplied less 120 kCal/kg 24 Weighted average 'GCV as received' of coal less 120 kCal/kg 25 Weighted average 'GCV as received' of coal less 120 kCal/kg 26 Weighted average 'GCV as received' of coal less 120 kCal/kg 27 Vor a received of coal less 120 kCal/kg 28 Vor a received of coal less 120 kCal/kg 29 Vor a received of coal less 120 kCal/kg 20 Vor a received of coal less 120 kCal/kg 21 Vor a received of coal less 120 kCal/kg 22 Vor a received of coal less 120 kCal/kg 23 Vor a received of coal less 120 kCal/kg 24 Vor a received of coal less 120 kCal/kg 25 Vor a received of coal less 120 kCal/kg 26 Vor a received of coal less 120 kCal/kg 27 Vor a received of coal less 120 kCal/kg 28 Vor a received of coal less 120 kCal/kg 3840	17	Consumption of coal	MT	1211992	1300822	750294		20
5 Closing value [2+15-16*17] ₹ 1186557266 35440510 29846725	18	Closing stock (1+5-17)	TM	274078	10297	7632		É
20 Weighted average cost of coal [Σ(16*17)/Σ17] ₹/MT 4004 21 'GCV as billed' of coal supplied 479	19	Closing value [2+15-16*17]	H-	1186557266	35440510	29846725		(ē
QUALITY QUALITY KCal/kg 5295 3742 4361 22 Weighted average 'GCV as billed' of coal supplied less 120 kCal/kg kCal/kg 4479 3466 3512 23 'GCV as received' of coal less 120 kCal/kg kCal/kg kCal/kg 3840 3512 A		Weighted average cost of coal $[\Sigma(16*17)/\Sigma17]$	₹/MT	4004				
'GCV as billed' of coal supplied Weighted average 'GCV as billed' of coal less 120 kCal/kg Weighted average 'GCV as received' of coal less 120 kCal/kg KCal/kg KCal/kg KCal/kg KCal/kg KCal/kg KCal/kg A479 A479 S466 S512	Œ	QUALITY						
Weighted average 'GCV as billed' of coal 'GCV as received' of coal supplied less 120 kCal/kg Weighted average 'GCV as received' of coal less 120 kCal/kg kCal/kg kCal/kg 3840	21	'GCV as billed' of coal supplied	kCal/kg	5295	3742	4361		3692
'GCV as received' of coal supplied less 120 kCal/kg kCal/kg kCal/kg 3840 3466 3512 A 3512 A Weighted average 'GCV as received' of coal less 120 kCal/kg kCal/kg 3840	22	Weighted average 'GCV as billed' of coal	kCal/kg	4479				
Weighted average 'GCV as received' of coal less 120 kCal/kg kCal/kg kCal/kg	23	'GCV as received' of coal supplied less 120 kCal/kg	kCal/kg	4410	3466	3512		3698
	24	Weighted average 'GCV as received' of coal less 120 kCal/kg	kCal/kg	3840				,

Notes:

- . Includes washing charge of Rs. 292.85/ Tonne for captive washed coal. Yield for washed coal is 80.804%.
- Includes contractual liabilities of Rs. (-) 1 / Tonne in terms of FSA, prior year grade adjustments of Rs. 5 / Tonne and supplementary adjustments of Rs.73 / Tonne. Kindly refer to notes 3 and 10 under Statement 2 for further details.
- Includes handling charges paid to handling agents, FCI charges, other charges comprising railway track maintenance, siding charges, RITES etc. Kindly refer to notes 14 to 18 of Statement 2 for further details.
- Details of fuel cost has been provided in terms of regulation 1.2.1 (Ivi) read with regulation 5.8 of Tariff Regulations. Auditor's Certificate on coal consumption and price is placed in , pages 167 to 170 of Volume 1 of the Petition. 4,
- Consignment wise quality certification by third party selected from the list maintained by Coal India Limited, for domestic coal procured in 2021-22, have been placed in pages 4 to 105 of Volume 4 of this Petition. The list of CIL for such tester is also placed in page 1. An Auditors' Certificate, certifying grade-wise "GCV as received" for the year 2021-22 has been placed in pages 171 to 174, Annex C4, Volume 1 of this petition. ŝ
- 6. Further details are provided in Statement 1 and 2.

MANAGING DIRECTOR (GENERATION)

CESC LIMITED

Name of the Generating Station: Budge Budge Generating Station

No. T	TYPE Description	Unit								vise details	2021-22					-0.	11		1
			G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	WIV	wv	WVI	Captive Washed	Captive ROM	Biomass	NCW
Form	n - D(a): Details of coal sourced through FSA																		
	SOURCE: Eastern Coalfield limited														i –				
	Quantity	MT	8802	310792	108188	18844	196521	307553											
	Amount charged by the coal company	₹/MT	4748	4563	4397	3656	3164	2746							- ·				
	Handling, Sampling and such other similar charges	₹/MT	81	81	127	81	81	81											
	Transportation cost	₹/MT	785	757	651	756	752	741											
	GCV as billed	kcal/kg	6401	6101	5801	5501	5201	4901											
	GCV as received less 120 kCal/kg	kcal/kg	5432	5114	4773	4647	4375	4066											
	SOURCE: Bharat Coking Coal Limited		0.02		1112	1017	1313	4000											_
	Quantity	MT											2639	172850	130334				
\neg	Amount charged by the coal company	₹/MT							-				3836	3726	3505				
	Handling, sampling and such other similar charges	₹/MT						-					81	81	81				
_	Transportation cost	₹/MT					-				-		955	886	898				
	GCV as billed	kcal/kg													4601				-
	GCV as received less 120 kCal/kg	kcal/kg											5201 4382	4901 4081	3797				
_	SOURCE: Central Coalfield Limited	KCal/KB											4382	4081	3/9/				
	Quantity	MT						5645	14770	534	3300	1000							_
_	Amount charged by the coal company	₹/MT						2590	14770		3390	1968							_
		₹/MT							2202	2057	1921	1817							
_	Handling, sampling and such other similar charges Transportation cost	₹/MT					-	81	81	81	81	81							
_				_				1169	1171	1160	1149	1153							
	GCV as billed	kcal/kg						4901	4601	4301	4001	3701							
_	GCV as received less 120 kCal/kg TOTAL QUANTITY	kcal/kg MT	0000	710707	100100	10044	100521	3893	3729	3478	3031	2793		177050					
		₹	8802	310792	108188	18844	196521	313198	14770	534	3390	1968	2639	172850	130334				
	TOTAL COST OF COAL	₹	41798223	1418060501	475738363	68901574	621717421	859173439	32517187	1099089	6511745	3576368	10122774	644121669	456862187				
	TOTAL OF HANDLING, SAMPLING AND SUCH OTHER SIMILAR CHARGES	₹	710438	25083861	13706534	1520870	15861071	25278034	1192097	43125	273567	158829	213004	13950648	10519223				
_	TOTAL TRANSPORTATION COST	_ `	6909079	235310096	70424802	14249524	147720898	234401329	17289281	619732	3893464	2268735	2519923	153204983	117093127				
	Wt, average GCV as billed	kcal/kg	6401	6101	5801	5501	5201	4901	4601	4301	4001	3701	5201	4901	4601		12		
-	Wt_average GCV as received less 120 kCal/kg	kcal/kg	5432	5114	4773	4647	4375	4062	3729	3478	3031	2793	4382	4081	3797				
Form	n - D(b): Details of coal sourced from captive mines		-				-									4			
	SOURCE: Captive ROM			1										1		1			
	Quantity	MT														l	810860		
	Amount charged by the coal company	₹/MT														1	2379		
	Handling, sampling and such other similar charges	₹/MT															44		
	Transportation cost	₹/MT															751		
_	GCV as billed	kcal/kg					1	l — —									3701		
	GCV as received less 120 kCal/kg	kcal/kg															3405		
	SOURCE: Captive Washed	wang ng						1									3403		-
	Quantity	MT														489877			
	Amount charged by the coal company	₹/MT						-											
_	Handling, sampling and such other similar charges	₹/MT							-							3264			
_	Transportation cost	₹/MT														44			_
_	GCV as billed									-						751			
		kcal/kg														3810			
	GCV as received less 120 kCal/kg	kcal/kg MT						1								3568			
_	TOTAL QUANTITY	MII														489877	810860		
_	TOTAL COST OF COAL	₹		-				-								1598921053	1929371477		
_	TOTAL OF HANDLING, SAMPLING AND SUCH OTHER SIMILAR CHARGES						-									21324116	35296346		
	TOTAL TRANSPORTATION COST	₹ ()/(-				-								367725931	608671505		
	Wt. average GCV as billed	kcal/kg														3810	3701		
	Wt. average GCV as received less 120 kCal/kg	kcal/kg		1												3568	3405		(

Name of the Generating Station: Budge Budge Generating Station

SI. No.	TYPE Description	Unit							Grade w	rise details	2021-2	2							
			G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	WIV	wv	WVI	Captive Washed	Captive ROM	Biomass	NCW
F	Form - D(c): Details of coal sourced through e-auction																		
1	SOURCE: Eastern Coalfield Limited RCR																		
	Quantity	MT						326946											
	Amount charged by the coal company	₹/MT	1					2740											
	Handling, sampling and such other similar charges	₹/MT						292							×				
	Transportation cost	₹/MT						920											
	GCV as billed	kcal/kg						4901											
	GCV as received less 120 kCal/kg	kcal/kg						4081											
2	SOURCE: Central Coalfield Limited													5-0					
	Quantity	MT							25884	4034	111032								36332
	Amount charged by the coal company	₹/MT							2587	2133	2022								2973
	Handling, sampling and such other similar charges	₹/MT							82	82	82								82
	Transportation cost	₹/MT							1252	1148	1302								1173
	GCV as billed	kcal/kg							4601	4301	4001								4901
	GCV as received less 120 kCal/kg	kcal/kg							3769	3455	3087								3954
3	SOURCE: Mahanadi Coalfields Limited																		
	Quantity	MT										245902							
	Amount charged by the coal company	₹/MT										2261							
	Handling, sampling and such other similar charges	₹/MT										70						-	
_	Transportation cost	₹/MT										1372							
	GCV as billed	kcal/kg										3701							
	GCV as received less 120 kCal/kg	kcal/kg										2857							
A	TOTAL QUANTITY	MT						326946	25884	4034	111032	245902							36332
В	TOTAL COST OF COAL	₹						895703602	66967268	8606392	224459902	555889224							108005446
C	TOTAL OF HANDLING, SAMPLING AND SUCH OTHER SIMILAR CHARGES	₹						95403182	2132050	332279	9145685	17102356							2992636
D	TOTAL TRANSPORTATION COST	₹						300705554	32416411	4632134	144571108	337290623							42618318
E	Wt. average GCV as billed	kcal/kg						4901	4601	4301	4001	3701							4901
F	Wt_average GCV as received less 120 kCal/kg	kcal/kg						4081	3769	3455	3087	2857					(- Y		3954
F	Form - D(e): Details of Biomass																		
1	SOURCE: Non-torrefied Biomass Pellet																		
	Quantity	MT																50	
	Amount charged by the supplier	₹/MT																	
	Handling, sampling and such other similar charges	₹/MT																11235	
	Transportation cost	₹/MT		7.															
	GCV as billed	kcal/kg																3695	
	GCV as received	kcal/kg																3695	
Δ	TOTAL QUANTITY	MT																50	
В	TOTAL COST	₹																30	
_	TOTAL OF HANDLING, SAMPLING AND SUCH OTHER SIMILAR CHARGES	₹																557031	
0	TOTAL TRANSPORTATION COST	7														1		33.031	
E	Wt. average GCV as billed	kcal/kg										-				1		3695	
c	Wt. average GCV as offied Wt. average GCV as received	kcal/kg									3.0							3695	
1	AAT AAELARE OCA 97 LEFEIAER	KLdI/Kg																2022	

Name of the Generating Station: Southern Generating Station

SI. No.	Description	:			2021-22		
			FSA	Captive Mine	e-auction	Import	others
¥	OPENING QUANTITY		1	2	3	4	2
→	Opening Quantity of coal	ŀ					
7	Value of Stock	<u> </u>	47388				
B)	QUANTITY (for current year / month)	*	201164690				
m	Quantity of Coal supplied by Coal Company	F	1				
4	Adjustment (+/-) in quantity supplied by Coal Company	- F	145574				
Ŋ	Coal supplied by Coal Company (3+4)	_ <u>}</u>	236				
O	COST OF COAL	<u>-</u> ≥	145574				
9	Amount charged by Coal Company	н					
7	Adjustment (+/-) in amount charged made by Coal Company	Y H	5913/0201				
∞	Handling, Sampling and such other similar charges	Y H	-T0000000				
6	Total amount Charged (6+7+8)	K	43340746				
â	TRANSPORTATION COST	*	624710947				
10	Transportation charges by rail / ship / road transport						
	by Rail		109603168				
	by Road	Hr I	109603168				
	by Ship	h H					
11	Adjustment (+/-) in amount charged made by railways / Transport Community	b~ H					
12		Y H	Ĩ				
13	Cost of diesel in transporting coal through MGR System if applicable	Y 1					
14	Total Transportation Charges (10+11+12+13)	∀ H					
15	Total amount Charged for coal supplied including Transportation (9+14)	h' Hv	109603168				
<u> </u>	TOTAL COST	,	734214113				
16	Landed cost of coal (2+15)/(1+5)	₹/N/T	7027				
17	Consumption of coal	- 12 Y	4/84				
18	Closing stock (1+5-17)	_ <u>}</u>	133398				
19	closing value [2+15-16*17]	<u> </u>	59565				
20	Weighted average cost of coal $[\Sigma(16*17)/\Sigma17]$	Y W	29/2/1191				
<u> </u>	QUALITY	101	4/84				
21		kCal/kg	2272				
22		NCal/NB	00/00				
23		kCal/kg	7970				
74		94/100	201				

Includes contractual liabilities of Rs. (-) 69 / Tonne in terms of FSA. Kindly refer to note 3 under Statement 2 for further details.

Includes handling charges paid to handling agents, KPT charges, other charges comprising railway track maintenance, terminal charges, RITES etc. Kindly refer to notes 10 to 14 under Statement 2 for further details. Details of fuel cost has been provided in terms of regulation 1.2.1 (Ivi) read with regulation 5.8 of Tariff Regulations. Auditor's Certificate on coal consumption and price is placed in pages 167 to 170 of Volume 1 of the Petition. Consignment wise quality certification by third party selected from the list maintained by Coal India Limited, for domestic coal procured in 2021-22, have been placed in pages 106 to 115 of Volume 4 of this Petition. The list of CIL for such tester is also placed in page 1. An Auditors' Certificate, certifying grade-wise "GCV as received" for the year 2021-22 has been placed

Further details are provided in Statement 1 and 2.

MANAGING DIRECTOR (GENERATION) CESC LIMITED

SI, No.	TYPE					2021-22	2			
o)		Jin C				Grade wise details	fetalis			
t	FSA		63	G4	G5	95	67	68	w	W
1	SOURCE: Eastern Coalfield limited									
	Quantity	Σ	5864	78621	13087	3043	27530	13695		
1	Amount charged by the coal company	₹/MT	4747	4563	4233	3660	3169	2747		
Ť	Handling, sampling and such other similar charges	₹/MT	298	298	298	298	298	298		
-	Transportation cost	₹/MT	673	758	733	753	748	743		
+	GCV as billed	kcal/kg	6401	6101	5801	5501	5201	4901		
	GCV as received less 120 kCal/kg	kcal/kg	5430	5100	4866	4572	4239	4015		
Н	SOURCE: Bharat Coking Coal Limited									
-	Quantity	Ψ							1808	1977
\dashv	Amount charged by the coal company	₹/MT							3712	3475
-	Handling, sampling and such other similar charges	₹/MT							298	
-	Transportation cost	T/M/							905	506
	GCV as billed	kcal/kg							4901	4601
	GCV as received	kcal/kg							4079	3805
	TOTAL QUANTITY	Σ	5864	78621	13087	3043	27530	13695	1808	1977
Н	TOTAL COST OF COAL	le/	27837459	358720620	55396622	11136174	87249266	37624069	6710804	6695186
+	TOTAL OF HANDLING, SAMPLING AND SUCH OTHER SIMILAR CHARGES	IV.	1745779	23407378	3896321	905874	8196356	4077253	538172	573613
+	TOTAL TRANSPORTATION COST	RY	3948521	59627632	9595991	2289682	20588496	10171792	1636637	1744417
+	Wt. average GCV as billed	kcal/kg	6401	6101	5801	5501	5201	4901	4901	4601
	Wt. average GCV as received less 170 kCal/kg									

Coal Details for 2021-22 Budge Budge Generating Station

1. FSA Rail									
Source	Grade	Quantity (%)	Basic Cost (Rs./Ton)	Rail Transport Cost (Rs./Ton)	Distance Slab as per Railway Freight Table (km)	Road Transport Cost (Rs./Ton)	Weighted Average Distance from Coal Mine to	Handling Cost (Rs./Ton)	Total Cost (Rs./Ton)
ECL	63	0.264%	4748	785	201-275	٠	\ VZ	200	5614
ECL	G4	9.324%	4563	757	201-275		Ϋ́Z	2 20	5401
ECL	G5	3.245%	4397	651	201-275	ĭ	ĄZ	127	5175
ECL	99	0.565%	3656	756	201-275	Ē	AN	. 80 100	4493
ECL	G7	5.895%	3164	752	201-275	i	Ϋ́Z	28	3996
ECL	68	9.226%	2746	741	201-275		AN AN	81	3567
CCL	89	0.169%	2590	1169	426-500	=1	A Z	200	3840
CCL	69	0.443%	2202	1171	426-500		ĄZ	2 8	3453
CCL	G10	0.016%	2057	1160	426-500	(June	ĄZ	2 8	3298
CCL	G11	0.102%	1921	1149	426-500		ď Z	200	3151
CCL	G12	0.059%	1817	1153	426-500		₹Z	180	3051
BCCL	WIV	0.079%	3836	955	276-350	7.8	Ϋ́Z	200	4871
BCCL	\W	5.185%	3726	886	276-350	17	₹Z	81	4694
BCCL	IVW	3.910%	3505	868	276-350	51	A'N	158	4484
Total		38.482%	3617	784		(19)	AN	85	4486



Coal Details for 2021-22 Budge Budge Generating Station

2. Captive

Source	Grade	Quantity (%)	Basic Cost (Rs./Ton)	Rail Transport Cost (Rs./Ton)	Distance Slab as per Railway Freight Table (km)	Road Transport Cost (Rs./Ton)	Weighted Average Distance from Coal Mine to Siding	Handling Cost (Rs./Ton)	Total Cost (Rs./Ton)
ROM	G12	24.323%	2379	751	201-275	ě	NA	44	3174
Washed		14.694%	3264	751	201-275	3.9	AN	44	4058
Total		39.017%	2713	751		(2)	AN	44	3507

3. E-Auction Rail

Source	Grade	Quantity (%)	Basic Cost (Rs./Ton)	Rail Transport Cost (Rs./Ton)	Distance Slab as per Railway Freight Table (km)	Road Transport Cost (Rs./Ton)	Weighted Average Distance from Coal Mine to Siding	Handling Cost (Rs./Ton)	Total Cost (Rs./Ton)
CCL	69	0.776%	2587	1252	426-500	Vi	AN	82	3922
CCL	G10	0.121%	2133	1148	426-500	0	AN	82	3364
CCL	G11	3.331%	2022	1302	426-500,501-600	9	AN	82	3406
CCL	NCW	1.090%	2973	1173	426-500	9.	ΑN	82	4228
MCL	G12	7.376%	2261	1372	501-600	¥K	AN	70	3702
Total		12.694%	2278	1327		•	AN	75	3680

Coal Details for 2021-22 Budge Budge Generating Station

4. E-Auction RCR

Source	Grade	Quantity (%)	Basic Cost (Rs./Ton)	Rail Transport Cost (Rs./Ton)	Distance Slab as per Railway Freight Table (km)	Road Transport Cost (Rs./Ton)	Weighted Average Distance from Coal Mine to	Handling Cost (Rs./Ton)	Total Cost (Rs./Ton)
ECL	68	9.807%	2740	762	201-275	158	12	292	3951
Total		9.807%	2740	762		158	12	292	3951

Adjustments (FSA)		7				
Adjustments (Captive)		78				
Biomass	0.001%	11235				11235
Overall	100.000%	3085	838	16	88	4026



Coal Details for 2021-22

77-1707 101 01000	Southern Generating Station	

1. FSA Rail									
Source	Grade	Quantity (%)	Basic Cost (Rs./Ton)	Rail Transport Cost (Rs./Ton)	Distance Slab as per Railway Freight Table (km)	Road Transport Cost (Rs./Ton)	Weighted Average Distance from Coal Mine to Siding	Handling Cost (Rs./Ton)	Total Cost (Rs./Ton)
ECL	63	4.030%	4747	673	201-275		₹N	298	5718
ECL	G4	54.007%	4563	758	201-275	1	ΑN	298	5619
ECL	G5	8.990%	4233	733	201-275		AN	298	5264
ECL	G6	2.090%	3660	753	201-275	**	AN	298	4710
ECL	G7	18.911%	3169	748	201-275	(0)	ΑN	298	4215
ECL	68	9.407%	2747	743	201-275	Ü	Ϋ́	298	3788
BCCL	WV	1.242%	3712	902	276-350	ř	ΑN	298	4916
BCCL	WVI	1.323%	3475	905	276-350	Ñ	ΑN	298	4678
Total		100.000%	4062	753		•	AN	298	5113
Adjustments			69-	10					
Overall		100.000%	3994	753		Ē		298	5044

BUDGE BUDGE GENERATING STATION

MANAGING DIRECTOR (GENERATION)
CESC LIMITED

131

COST OF BLENDED PRIMARY FUEL (COAL, BIOMASS PELLET)	SIOMASS PELLE	F											Rs/Tonne	
Grade	Basic	Sizing Charges	Royalty	Charges to DMF	Charges to NMET	GST Compensation Cess	R.E. CESS	P. E. CESS	Miscellaneous cess and statutory charges 7	Average Incidental Charges	SST	Evacuation Charges	TOTAL	
ECL - 'Grade G3'	3154	87	7	2	0	400	631	158	2	41	208	09	4748	
ECL - 'Grade G4'	3010	87	7	2	0	400	602	150	2	45	199	59	4563	
ECL - 'Grade G5'	2747	87	Ø	2	0	400	549	137	2	214	193	09	4397	
ECL - 'Grade G6'	2327	87	9	2	0	400	465	116	2	39	156	57	3656	
BCCL - 'Grade WIV'	2594	78	363	109	7	400	,	0(16)	26	32	168	20	3836	
ECL - 'Grade G7'	1936	78	06	27	2	400	263	99	60	86	133	54	3164	
BCCL - 'Grade WV'	2427	78	340	102	7	400	•	(90)	24	122	159	28	3726	
ECL - 'Grade G8'	1475	78	7	2	0	400	291	73	2	239	112	- 28	2746	
ECL - 'Grade G8' e-auction RCR	1660	87	4	-	0	400	282	74	2	50	11	55	2740	
CCL - 'Grade GB'	1475	78	207	62	4	400	a	((•	2	201	105	50	2590	
BCCL - 'Grade WVI'	2254	78	316	95	9	400	\$11	**	23	120	150	56	3505	
CCL - 'Grade G9'	1150	87	191	48	ю	400	763		1 0	216	98	50	2202	
CCL - 'Grade G9' e-auction	1569	87	220	99	4	400	Si	.91	200	83	108	50	2587	
CCL - 'Grade G10'	1034	28	145	43	ю	400	\$5	93	*:	216	79	90	2057	
CCL - 'Grade G10' e-auction	1137	78	159	48	m	400	45	98	*	167	83	90	2133	
CCL - 'Grade G11'	965	78	135	41	ю	400	40	×		167	74	20	1921	
CCL - 'Grade G11' e-auction	1046	78	146	44	ю	400	¥š	**		166	79	90	2022	
CCL - 'Grade G12'	896	78	125	38	ю	400	111	¥2	*	150	89	50	1817	
Indigenous Washed	1850	107	ю	0	0	45	222	55	73	530	399	20	3264	
Indigenous ROM	1495	98	т	0	0	36	179	45	2	164	319	20	2379	
CCL - NCW e-auction	2247	•	94	34	()	400	74	1945	((*))	153	123	50	2973	
MCL - 'Grade G12' e-auction	1311	87	184	55	4	400	94	04	2	7.1	89	09	2261	
Biomass	10700	28	*	*	35	i.	774	34	и	<u>(i)</u>	535	11621	11235	
Overall						A							3008	
Contractual liability - Kindly refer to note 3											1		7	
Prior year grade adjustment													ທ	
Supplementary adjustments - Kindly refer to note 10	note 10										×		73	
Total Landed without freight											2		3085	
Freight and other freight										>	ا		941	
Total										•	+		4026	

Notes:

- 1. Actual cost per Tonne of coal are furnished in this form. Wherever applicable, relevant notifications of appropriate authorities and sample copies of bills are enclosed for ease of reference. Auditor's Certificate on coal consumption and price of Rs. 4003.79 / Tonne, biomass of Rs. 11235 / Tonne is placed in Annex C3 in Volume 1 (Pages 167 to 170 of Volume 1). Reconciliation between purchase rate of Rs. 4003.90 / Tonne is shown in note 12 below.
- 2. Basic cost is as per price notifications dated 8 January 2018, 27 November 2020, 20 October 2020, 29 December 2018. Above Notifications are placed in pages 246 to 255 of Volume 2 of the petition.
- Surface Transportation Charges are as per notifications dated 31 January 2019, 1 August 2019, 31 August 2020, 26 May 2021, 19 January 2022, 5 October 2020, 3 December 2020, 23 June 2021, 1 February 2021, 30 July 2021 and 31 January 2022. Notifications are enclosed in pages 265 to 277 of Volume 2 of the Petition.
- Crushing Charges /Sizing Charges are as per notification dated 31 August 2017. Notification is enclosed at pages 262 to 264 of Volume 2 of the Petition.
- Royalty is as per notification dated 10 May 2012 of Ministry of Coal. Notification is enclosed at pages 341 to 342 of Volume 2 of the petition.
- GST Compensation Cess is as per notification dated 28 June 2017 of Ministry of Finance. Notification is enclosed at page 367 to 371 of Volume 2 of the Petition.
- GST on coal is 5% (2.5% CGST + 2.5% SGST or 5% IGST) as applicable. Relevant notification and sample bills are placed in pages 372 to 379 and 380 to 387 of Volume 2 of the petition.
- Charges to NMET and DMFT are as per notifications dated 20 October 2015 and 26 March 2015. Notifications are enclosed at pages 348 to 352 of Volume 2 of the petition.
- R.E. Cess, P.E. Cess, Stowing Excise Duty, AMBH cess, MADA tax etc. as per Notification dated 12 December 2007 enclosed at pages 343 to 347 of Volume 2 of the petition.
- Evacuation Facility Charge as per Notifications dated 19 December 2017 and 30 July 2021. Notifications are placed at pages 364 and 365 of Volume 2 of the petition.

Sample bills to illustrate each price component are placed in pages 380 to 387 of Volume 2 of the petition.

- 3. Current rate Schedule of CIL enclosed in Appendix for comprehensive details. As per Fuel Supply Agreement with Coal India Limited, contractual liability of about Rs. (-) 1 / Tonne incurred for the year concerned. Prior year grade adjustment impact is about Rs. 5 / Tonne.
- 4. For captive coal, while the Basic price shown above includes reserve price of Rs. 100 / Tonne and additional premium paid of Rs. 370 / Tonne, only reserve price of Rs. 100 / Tonne has been considered in terms of applicable statute in arriving at admissible fuel cost. GST and Rs. 400 per tonne GST Compensation Cess are not applicable on captive coal. However, GST is applied on support services to mining and on Additional Premium. Fixed Rate, Royalty etc., on Reverse Charge Basis. Writeup is placed in pages 397 to 428 of Volume 2 of the petition.
- 5. Cost of Captive washed coal has been considered at cost of captive indigenous coal, grossed up with washery yield of 80.804%. Washing charges for captive washed coal is Rs. 292.85/ tonne as included under Average Incidental Charges which also includes Transportation of coal from mine to washery and from washery to railway siding. GST and Rs. 400 per tonne GST Compensation Cess are not applicable on captive coal, However, GST is applied on support services to mining and on Additional Premium, Fixed Rate, Royalty etc. on Reverse Charge Basis. A writeup is placed in pages 397 to 428 of Volume 2 of the Petition.
- 6. E-auction: Coal procured through ECL and MCL were through e-auction during 2021-22. Premium for ECL varied between 0-25% while that for MCL was about 40%. Notably, reserve price was itself higher than 25% on all aforesaid instances except one instance. Coal procurement through e-auction was to augment supply from designated sources as also to maintain adequate coal stock. Coal procured from CCL (G9, G10, G11, NCW) were booked through e-auctions held in 2020-21. Details relating to notice for sale of coal, sale intimation notices pertaining bid price discovered are enclosed in pages 278 to 317 of Volume 2 of the petition.
- 7, Miscellaneous cess and statutory charges include PWD Cess, Road Cess, AMBH, MADA, Covid cess etc. as applicable. Relevant notifications are placed in pages 343 to 347, 354 of Volume 2 of the petition.
- 8. Average Incidental charges include surface transportation charge, washing charges etc. as applicable. CIL also imposed Forest Transit Fee as detailed hereunder. Such charges are included in Average Incidental Charges, Relevant notifications / bills are placed in pages 362, 385, 386 of Volume 2 of the petition.

Charges	Rate (Rs. / Tonne)	Levied on
Forest Transit Fee	57	BCCL WV, WVI, CCL G8, G9, G10, G11, G12 CCL e-auction G9, G10, G11, NCW

2021-22

9. Royalty for coal sourced from mines of West Bengal are imposed at a fixed rate (Rs. 2.5 / Te to Rs. 7.0 / Te based on coal quality), while for coal sourced from outside West Bengal carry royalty at 14% ad-valorem basis. Royalty for ECL G7 (Rs. 90/Te) & Grade G8 (Rs. 7/Te) are higher due to supply from mines located outside West Bengal, drawing 14% royalty, making effective royalty higher.

10. Supplementary adjustments include, inter alia, differential rate for applicable charges on ad-valorem basis, differential surface transport charges, forest cess imposition etc. duly considering compensation for shortlitting. Impact of all these are about Rs. 73 / Tonne which are not included in above rates. Sample illustrative bills are enclosed in the pages 399 to 407 of Volume 3 of the petition.

11. Railway freight and associated charges of Rs 941 / MT not included in the above rates.

12. Consumption rate of primary blended fuel has been arrived at on the basis of rate of quantity purchased, adjusted for opening and closing stock

Particulars	Tonne (MT)	Rate (Rs./T)
Opening stock	221417	4042
Purchase	3333698	4026
Closing Stock	292007	4287
Consumption (Auditors' Certificate placed in Annex C3 in Volume 1)	3263108	4003.90

wagons specified by the Indian Railways. CIL refunds for underloading on the basis of difference of actual weight of coal and the stenciled capacity; hence, cost for carriage based on carrying capacity is not neutralised by compensation for underloading. Due to this reason and imposition of GST, actual railway freight on Rs. Tonne basis is normally higher than the rates provided in the railway freight table placed in pages 14 to 16 of Volume 3 of the petition. Railway freight is being recovered in terms of Regulation 1.2.1 (Ivi) and Regulation 5.8.2 of the Tariff Regulations. Relevant circular on Railway Freight is enclosed in pages 14 to 16 of Volume 3 of the Stenciled capacity of wagons is the allowable capacity which can be safely loaded onto a particular wagon considering its age. Overloading charges are computed on the basis of the permissible carrying capacity of Petition. Notification relating to imposition of GST on railway freight is placed in pages 19 to 21 of Volume 3 of the petition. Sample copies of the bills / railway receipts and a summary of railway freight based on such 13. Freight is charged by Indian Railways on full carrying capacity of wagons and not on the actual quantity loaded. Railway wagons are often not capable to carry upto the original carrying capacity due to ageing receipts are enclosed in pages 285 to 310 of Volume 3 of the petition.

Base Freight Rate Char	Charged on the Permissible Carrying Capacity of the wagon instead of actual weight being transported.
Overloading Charge Char	Charged on the load in excess of the Permissible Carrying Capacity of the wagon.
Underloading Charge Selle	Seller to bear underloading charges based on difference of actual weight and Stenciled Carrying Capacity / Permissible Carrying Capacity, whichever is lower,
Siding Charge Char	Charged for loading end siding by Railways
Terminal Charge Char	Charged on both inward and outward traffic handled at Railway sidings
GST Cha	Charged at the rate of 5% on Base Freight Charge and Other Freight Charges

14. Coal Handling Agents are engaged to ensure timely delivery of coal through close liaison and co-ordination with various agencies, e.g. Coal India subsidiaries, Indian Raliways etc. and the associated costs have been shown as Handling and Coal Co-ordination Charge. Coal Handling agents were identified through competitive bidding. Sample illustrative documents (Request for Qualification, Note for Approval and Work Orders) are placed in the Appendix in pages 23 to 284 of Volume 3 of the petition. Handling charges are allowed in terms of regulation 1.2.1 (IvI) and regulation 5.8.2 of the Tariff Regulations. 15. Siding / Trip Basis Charge — Coal is transported to Budge Budge Generating Station (BBGS) upper yard near the railway station at Budge Budge. The same is then transported to the generating plant which is about 7 kilometers away from the abovementioned railway station yard. Some oil installations are located in this route and therefore electrification in this route was not permitted. Hence, diesel engines are engaged for transportation of coal through this path. Railways imposes trip basis charge for involving diesel engines in this route. Sample illustrative bills are placed in pages 377 to 382 of Volume 3 of the petition.

16. FCI Charge - The 7 kilometer railway route from upper yard near the railway station at Budge to the plant consists of two parts, 4 kilometer path through Food Corporation of India (FCI) campus and 3 kilometer path beyond FCI campus. The 4 km track within the FCI campus is used to carry wagons of FCI as well as meant for BBGS plant. Railways issue bills to FCI for maintenance of 4 km. track within FCI campus. FCI in turn issues bills to BBGS on a proportionate basis. Sample illustrative 4bills are placed in pages 374 to 376 of Volume 3 of the petition.

17. Railway Track Maintenance Charge— Beyond the FCI campus, 3 kilometer track is maintained by an agency having requisite expertise. The same agency is also involved in railway track maintenance within plant for BBGS. Charges for the same is shown as Railway Track Maintenance. Sample illustrative bills are placed in pages 383 to 384 of Volume 3 of the petition

charge pertaining to unloading end on CESC. Time permitted to unload wagons is called the 'free time'. Free time for BOBR wagon is 2.5 hours and the same is 7 hours for BOXN wagon. The demurrage rate increases as repeatedly requested Railway authority not to send two rakes simultaneously consisting of BOXN wagons. However, the prayers have fallen on deaf ears. This accentuates the problem further. Sample illustrative bills are BBGS has the scope of operating two wagon tipplers on a parallel basis to unload two rakes involving BOXN wagons. However, there are certain practical difficulties of operating two wagon tipplers in parallel. CESC has 18. Demurrage Charge - Demurrage is detention of a railway wagon beyond the stipulated time allowed for loading and unloading and the related charge for the event is defined as demurrage charge. Railway imposes the time incurred for unloading increases. Moreover, fraction of an hour is rounded up to the next higher integer (hour). Relevant notifications are placed in pages 318 to 367 of the petition. placed in pages 368 to 373 of Volume 3 of the petition.

19. Distance of coal mines from nearest siding and Wt. avg. distance for multiple locations of a particular source has been furnished in the petition

20. All the above charges are covered under the definition of Fuel cost in Regulation 1.2.1 (Ivi) / 5.8.2 of Tariff Regulations.

21. For RCR coal, available nearby railway sidings were explored and selection was done considering the parameters such as, whether sidings are operational or not, whether length of the siding could accommodate entire rake so as to minimise loading time, and whether such sidings were used exclusively for loading coal into railway rakes. Accordingly, for ECL RCR mode, ICML siding was selected for onward transportation of coal received for transportation by the Company.

Adjustment of additional cost of captive coal

SI. No.	Particulars	Unit	Budge Budge
1.	Basic input ROM coal cost for captive mine as per Statement 2	Rs. / MT	1495
2.	Basic cost as per APR-FPPCA Orders dated 01.08.2022	Rs. / MT	100
3.	Adjustment rate for ROM coal (3=2-1)	Rs. / MT	1395
4.	Adjustment rate for Washed coal (4 = 3/0.80804)	Rs. / MT	1726
5.	% mix of Captive ROM coal	%	24.323%
6.	% mix of Captive Washed coal	%	14.694%
7.	Overall adjustment rate for Budge Budge (7 = 3*5+4*6)	Rs. / MT	592.98

Z	
ō	
Ě	
⋖	
Ę	
Ö	
ž	
Ξ	
2	
æ	
Ш	
z	
m.	
9	
Z	
ĸ	
#	
Ė	
5	
ō	
S	

COST OF PRIMARY FUEL

													Rs/Tonne
Туре	Basic	Sizing Charges	Royalty	Charges to DMF	Charges to NMET	GST Compensation Cess	R.E. CESS	P. E. CESS	Miscellaneous cess and statutory charges 3	Average Incidental Charges ⁴	GST	Evacuation Charges	TOTAL
ECL - Grade'G3'	3154	87	7	2	0	400	631	158	2	40	208	09	4747
ECL - Grade'G4'	3010	87	7	2	0	400	602	151	2	45	199	29	4563
ECL - Grade'G5'	2747	87	Ø	2	0	400	549	137	7	9	183	09	4233
ECL Grade'G6'	2327	87	9	2	0	400	465	116	2	45	156	54	3660
ECL - Grade'G7'	1936	28	18	24	2	400	277	69	7	102	133	51	3169
ECL - Grade'G8'	1475	87	4	-	0	400	295	74	2	242	113	55	2747
BCCL - 'Grade WV'	2427	87	340	102	7	400	*1	*:	24	104	161	09	3712
BCCL - 'Grade WVI'	2254	87	316	96	9	400	¥	98	23	98	149	09	3475
Overall													4062
Contractual liability - Kindly refer to note 3	fer to note 3												0 1 40 1
Total Landed without freight													7006
Freight and other freight	-												1051
Total													
													5044

SOUTHERN GENERATING STATION

consumption and price of Rs. 4784.23 / Tonne is placed in Annex C3 in Volume 1 (Pages 167 to 170 of Volume 1). Reconciliation between purchase rate of Rs. 5044 / Tonne as shown above and coal consumption price of 1. Actual cost per Tonne of coal are furnished in this form. Wherever applicable, relevant notifications of appropriate authorities and sample copies of bills are enclosed for ease of reference. Auditor's Certificate on coal Rs. 4784.23 / Tonne is shown in note 8 below.

2. - Basic cost is as per price notifications dated 8 January 2018, 27 November 2020 and 20 October 2020. Above Notifications are placed in pages 246 to 252 of Volume 2 of the petition.

- Surface Transportation Charges are as per notifications dated 31 January 2019, 1 August 2019, 31 August 2020, 26 May 2021 and 19 January 2022. Notifications are enclosed in pages 265 to 269 of Volume 2 of the

- Crushing Charges /Sizing Charges are as per notification dated 31 August 2017. Notification is enclosed at pages 262 to 264 of Volume 2 of the Petition.

Royalty is as per notification dated 10 May 2012 of Ministry of Coal. Notification is enclosed at pages 341 to 342 of Volume 2 of the petition.

- GST Compensation Cess is as per notification dated 28 June 2017 of Ministry of Finance. Notification is enclosed at page 367 to 371 of Volume 2 of the Petition.

GST on coal is 5% (2.5% CGST + 2.5% SGST or 5% IGST) as applicable. Relevant notification and sample bills are placed in pages 372 to 379, 388, 389 of Volume 2 of the petition.

- R.E. Cess, P.E. Cess, Stowing Excise Duty, AMBH cess, MADA tax etc. as per Notification dated 12 December 2007 enclosed at pages 343 to 347 of Volume 2 of the petition. Charges to NMET and DMFT are as per notifications dated 20 October 2015 and 26 March 2015. Notifications are enclosed at pages 348 to 352 of Volume 2 of the petition.

Evacuation Facility Charge as per Notifications dated 19 December 2017 and 30 July 2021. Notifications are placed at page 364 and 365 of Volume 2 of the petition.

Sample bills to illustrate each price component are placed in pages 388 to 389 of Volume 2 of the petition.

3. Current rate Schedule of CIL enclosed in Appendix for comprehensive details. As per Fuel Supply Agreement with Coal India Limited, contractual liability of about Rs. (-) 69 / Tonne incurred for the year concerned.

4. Miscellaneous cess and statutory charges include PWD Cess, Road Cess, AMBH, MADA, Covid cess etc. as applicable. Relevant notifications are placed in pages 343 to 347, 354 of Volume 2 of the petition.

5. Average Incidental charges include surface transportation cost, Management charges, Covid Cess, Transit Fee (Rs. 57 per Tonne on BCCL WV and WVI), etc. as applicable.

6. Royalty for coal sourced from mines of West Bengal are imposed at a fixed rate (Rs. 2.5 / Te to Rs. 7.0 / Te based on coal quality), while for coal sourced from outside West Bengal carry royalty at 14% ad-valorem basis. Royalty for ECL Grade G7 (Rs. 81/ Te) is higher due to supply from mines located outside West Bengal, drawing 14% royalty, making effective royalty higher

7. Railway freight and associated charges of Rs 1051 / MT not included in the above rates.

8. Consumption rate of coal has been arrived at on the basis of rate of coal purchased, adjusted for opening and closing stock.

Particulars	Tonne (MT)	Rate (Rs./T)
Opening stock	47388	4245
Purchase	145574	5044
Closing Stock	59565	4991
Consumption (Auditors' Certificate)	133398	4784.23

Statement 2

capacity of wagons is the allowable capacity which can be safely loaded onto a particular wagon considering its age. Overloading charges are computed on the basis of the permissible carrying capacity of wagons specified 9. Freight is charged by Indian Railways on full carrying capacity of wagons and not on the actual quantity loaded. Railway wagons are often not capable to carry upto the original carrying capacity due to ageing. Stenciled by the Indian Railways. CIL refunds for underloading on the basis of difference of actual weight of coal and the stenciled capacity; hence, cost for camiage based on carrying capacity is not neutralised by compensation for Railway freight is being recovered in terms of Regulation 1.2.1 (Ivr) and Regulation 5.8.2 of the Tariff Regulations. Relevant circular on Railway Freight is enclosed in pages 14 to 16 of Volume 3 of the Petition. Notification underloading. Due to this reason and imposition of GST, actual railway freight on Rs. Tonne basis is normally higher than the rates provided in the railway freight table placed in pages 14 to 16 of Volume 3 of the petition. relating to imposition of GST on railway freight is placed in pages 19 to 21 of Volume 3 of the petition. Sample copies of the bills / railway receipts and a summary of railway freight based on such receipts are enclosed in pages 311 to 317 of Volume 3 of the petition.

Rail Freight Charges	Basis
Base Freight Rate	Charged on the Permissible Carrying Capacity of the wagon instead of actual weight being transported.
Overloading Charge	Charged on the load in excess of the Permissible Carrying Capacity of the wagon.
Underloading Charge	Seller to bear underloading charges based on difference of actual weight and Stenciled Carrying Capacity / Permissible Carrying Capacity, whichever is lower.
Siding Charge	Charged for loading end siding by Railways
Terminal Charge	Charged on both inward and outward traffic handled at Railway sidings
GST	Charged at the rate of 5% on Base Freight Charge and Other Freight Charges

shown as Handling and Coal Co-ordination Charge. Coal Handling agents were identified through competitive bidding. Sample illustrative documents (Request for Qualification, Note for Approval and Work Orders) are placed 10. Coal Handling Agents are engaged to ensure timely delivery of coal through close liaison and co-ordination with various agencies, e.g. Coal India subsidiaries, Indian Railways etc. and the associated costs have been in the Appendix in pages 23 to 284 of Volume 3 of the petition. Handling charges are allowed in terms of regulation 1.2.1 (Ivi) and regulation 5.8.2 of the Tariff Regulations.

corporation specialising in the field of railway transport infrastructure. Rake / wagon shunting is a specialized job and RITES has trained manpower to carry out such activities. Charge levied by RITES for shunting operation is whereas 18 wagons at a time are moved in case of BOXN. This necessitates shunting operation. RITES Ltd. is a company under the ownership of Indian Railways, Ministry of Railways, and an engineening consultancy 11. RITES Fees – Rake / wagon shunting operation is necessary at the plant end during coal unloading. Two types of wagons are usually involved – BOBR and BOXN. BOBR type wagons are transported one by one, shown as RITES fees.

Railways deliver coal at the Kolkata Port Trust siding. Rakes are thereafter transported from the Kolkata Port Trust siding to SGS through own loco and after unloading of coal, rakes are again brought back to the Kolkata Port Trust siding by own loco, RITES undertakes this entire activity and RITES fees for SGS also include costs for such operations.

- 12. KoPT Charges As the siding for SGS is located within the Kolkata Port Trust area, KoPT imposes a charge on CESC, referred to as KoPT charges. These charges are on per rake basis and have three components, namely a. Consolidated charge, b. Terminal Charge, c. Off-take charge. Sample illustrative bills are placed in pages 385 to 386 and 389 to 394 of Volume 3 of the petition.
- 13. Railway Track Maintenance Charges are levied for the similar kind of job as in case of Budge Budge Generating station. Sample illustrative bills are placed in pages 395 to 398 of Volume 3 of the petition.
- Railways at the Kolkata Port Trust siding, time is considered from the moment rakes reach the Kolkata Port Trust Siding till the empty rakes / wagons are delivered back by RITES to the Kolkata Port Trust siding. Once the rakes containing coal arrive at Kolkata Port Trust siding and information is provided to SGS, such time is denoted as "Made Over Time". Thereafter RITES takes these rakes / wagons by help of own loco to the station, where the station unloads the wagons. Afterwards, RITES takes these empty wagons back to the Kolkata Port Trust siding. The time of delivery is noted and is termed as "Tum Over Time" and time taken in excess of 11 hours for the operation attracts demurrage. Sample illustrative bills are placed in pages 387 to 388 of the petition. 14. Demurrage Charge – Demurrage is detention of a railway wagon beyond the stipulated time allowed for loading and unloading and the related charge for the event is defined as demurrage charge. As coal is delivered by
- 15. Distance of coal mines from nearest siding and Wt., avg., distance for multiple locations of a particular source has been furnished in the petition
- 16. All the above charges are covered under the definition of Fuel cost in Regulation 1.2.1 (Ivi) / 5.8.2 of Tariff Regulations.

Details of Railway sidings for Coal procured in 2021-22 Budge Budge Generating Station

1. FSA Rail

Source	Grade	Siding Code	Siding Name	Distance Slab between Siding and Generating station siding as per Railway Freight Table (km)	Distance between Siding and Generating station siding as per Railway Freight Table (km)
ECL	G3	PSEC	CHARATO -PARASIA	201-275	213
ECL	G3	PSEC	CHARATO -PARASIA	201-275	213
ECL	63	PSCE	PARASCOLE EAST	201-275	211
ECL	G3	PSCE	PARASCOLE EAST	201-275	211
ECL	G3	PSCE	PARASCOLE EAST	201-275	211
ECL	63	PSCE	PARASCOLE EAST	201-275	211
ECL	G4	PSEC	CHARATO -PARASIA	201-275	213
ECL	G4	PSEC	CHARATO -PARASIA	201-275	213
ECL	G4	PSBP	PANDEBASHAR-SONEPURBAZARI	201-275	231
ECL	G4	PSCE	PARASCOLE EAST	201-275	211
ECL	G4	PSCE	PARASCOLE EAST	201-275	211
ECL	G4	PSCE	PARASCOLE EAST	201-275	211
ECL	G4	PSCE	PARASCOLE EAST	201-275	211
ECL	G4	BCDL	BANKOLA-1	201-275	218
ECL	G4	BCDL	BANKOLA-1	201-275	218
			139	MANAGING	MANAGINE DIRECTOR (GENERATION) CESC LIMITED

Details of Railway sidings for Coal procured in 2021-22 Budge Budge Generating Station

ECL	G4	BCDL	BANKOLA-1	201-275	218
ECL	G4	BCDL	BANKOLA-1	201-275	218
ECL	G4	BCDL	BANKOLA-1	201-275	218
ECL	G4	BCDL	BANKOLA-1	201-275	218
ECL	G4	SCU	UKHRA-V	201-275	222
ECL	G5	POCP	PANDEBASHAR-1	201-275	240
ECL	G5	RNG	RANIGUNGE 1&3	201-275	214
ECL	G5	RNG	RANIGUNGE 1&3	201-275	214
ECL	G5	PSCE	PARASCOLE EAST	201-275	211
ECL	G5	scu	UKHRA-V	201-275	222
ECL	G6	BJSP	BONJEMEHARI	201-275	252
ECL	G6	BJSP	BONJEMEHARI	201-275	252
ECL	95	PSCE	PARASCOLE EAST	201-275	211
ECL	67	MMU	MUGMA	201-275	256
ECL	G7	BJSP	BONJEMEHARI	201-275	252
ECL	G7	MMU	MUGMA	201-275	256
ECL	G7	BJSP	BONJEMEHARI	201-275	7 252
ECL	G7	MMU	MUGMA	201-275	256
					No.

Details of Railway sidings for Coal procured in 2021-22 Budge Budge Generating Station

ECL		MMU	MUGMA	201-275	256
ECL	G7	MMU	MUGMA	201-275	256
ECL	G7	MMU	MUGMA	201-275	256
			*2		
ECL	G8	JMT	JAMTARA	201-275	271
ECL	G8	BJSP	BONJEMEHARI	201-275	252
ECL	G8	BJSP	BONJEMEHARI	201-275	252
ECL	85	BJSP	BONJEMEHARI	201-275	252
BCCL (via CCL)	89	CCSR	CHURI	426-500	456
BCCL (via CCL)	69	CCSR	CHURI	426-500	456
BCCL (via CCL)	G10	CCSR	CHURI	426-500	456
BCCL (via CCL)	G11	CCSR	CHURI	426-500	456
BCCL (via CCL)	G11	KASN	KHALARI	426-500	467
BCCL (via CCL)	G12	KASN	KHALARI	426-500	467
BCCL	WIV	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	WIV	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	WV	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	WV	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	WV	JNCP	GOL-2	276-350	308

Details of Railway sidings for Coal procured in 2021-22 Budge Budge Generating Station

BCCL	\w\	JNCP	GOL-2	276-350	308
BCCL	WV	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	WV	KLSK	KKC LINK	276-350	331
BCCL	IVW	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	IVW	CKWP	CK WEST(PATHERDIH)	276-350	311
BCCL	IVW	AKKK	KUSTORE	276-350	308
BCCL	IVW	CKWP	CK WEST(PATHERDIH)	276-350	311

2. Captive

Source	Grade	Siding Code	Siding Name	Distance Slab between Siding and Generating station siding as per Railway Freight Table (km)	Distance between Siding and Generating station siding as per Railway Freight Table (km)
ROM	G11	ICML	ICML	201-275	233
Washed		ICML	ICML	201-275	233

Details of Railway sidings for Coal procured in 2021-22 Budge Budge Generating Station

3. E-auction Rail

Source	Grade	Siding Code	Siding Name	Distance Slab between Siding and Generating station siding as per Railway Freight Table (km)	Distance between Siding and Generating station siding as per Railway Freight Table (km)
CCL	69	RDML	RAJDHAR	426-500	467
CCL	G10	RDML	RAJDHAR	426-500	467
CCL	G11	BCBM	BALUMATH	501-600	515
CCL	G11	RDML	RAJDHAR	426-500	467
CCL	NCW	BCSR	ВАСНКА	426-500	457
MCL	G12	SBCT	SOUTH BALANDA	501-600	566
MCL	G12	ACTR	ANANTA	501-600	566

4. E-auction RCR

	1
Distance between Siding and Generating station siding as per Railway Freight Table (km)	233
Distance Slab between Siding and Generating station siding as per Railway Freight Table (km)	201-275
Siding Name	ICML
Siding Code	ICML
Grade	G8
Source	ECL

Details of Railway sidings for Coal procured in 2021-22 Southern Generating Station

1. FSA Rail

Source	Grade	Siding Coo	Siding Name	Distance Slab between Siding and Generating station siding as per Railway Freight	Distance between Siding and Generating station siding as per Railway Freight Table (km)
ECL	63	PSEC	CHARATO -PARASIA	201-275	202
ECL	G3	PSEC	CHARATO -PARASIA	201-275	202
ECL	G3	PSCE	PARASCOLE EAST	201-275	202
ECL	63	PSCE	PARASCOLE EAST	201-275	202
ECL	63	PSCE	PARASCOLE EAST	201-275	202
ECL	G4	PSEC	CHARATO -PARASIA	201-275	202
ECL	G4	PSEC	CHARATO -PARASIA	201-275	202
ECL	G4	PSBP	PANDEBASHAR-SONEPURBAZARI	201-275	219
ECL	G4	PSCE	PARASCOLE EAST	126-200	199
ECL	G4	BCDL	BANKOLA-1	201-275	206
ECL	G4	BCDL	BANKOLA-1	201-275	206
ECL	G4	BCDL	BANKOLA-1	201-275	206
ECL	G4	BCDL	BANKOLA-1	201-275	7 206
ECL	G4	BCDL	BANKOLA-1	201-275	206

Details of Railway sidings for Coal procured in 2021-22 Southern Generating Station

ECL	G4	BCDL	BANKOLA-1	201-275	206
ECL	G4	SCU	UKHRA-V	201-275	210
ECL	G5	POCP	PANDEBASHAR-1	201-275	228
ECL	99	BJSP	BONJEMEHARI	201-275	240
ECL	G7	MMU	MUGMA	201-275	244
ECL	C7	BJSP	BONJEMEHARI	201-275	240
ECL	G7	MMU	MUGMA	201-275	244
ECL	G7	BJSP	BONJEMEHARI	201-275	240
ECL	G7	MMU	MUGMA	201-275	244
ECL	G7	MMU	MUGMA	201-275	244
ECL	G8	BJSP	BONJEMEHARI	201-275	240
ECL	G8	BJSP	BONJEMEHARI	201-275	240
ECL	G8	BJSP	BONJEMEHARI	201-275	240
BCCL	WV	CKWP	CK WEST(PATHERDIH)	276-350	299
BCCL	IVW	CKWP	CK WEST(PATHERDIH)	276-350	299

Details of RCR distance for Coal procured in 2021-22 Budge Budge Generating Station

Coal Mine	Coal	a to M	יי ני	Siding	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Coal Received	:
	Company		0.00	Selection	Signing Selection Criteria	(MT)	Distance (km)
BEGUNIA	ECL	E-auction	89	ICML	Nearest available siding	2740	12

Long Term Power Purchase Cost Analysis - Haldia Energy Limited (HEL)

Particulars	Unit	Derivation	2021-202
Details of Import Drawal			
A1: Summer:			
Normal	MU	A1N	660.10
Peak	MU	A1P	376.89
Off-peak	MU	A1OP	382.22
Total in Summer: (A1)			1419.21
A2: Monsoon:			
Normal	MU	A2N	685.18
Peak	MU	A2P	392.59
Off-peak	MU	A2OP	408.44
Total in Monsoon: (A2)			1486.21
A3: Winter:			
Normal	MU	A3N	488.09
Peak	MU	A3P	306.00
Off-peak	MU	A3OP	198.38
Total in Winter: (A3)			992.47
Total: (A)	MU	A=A1+A2+A3	3897.89
Chargeable Units	MU	В	3897.89
Annicola Bata			
Applicable Rates	S		
Fixed Charges	Paise/Unit	С	240.25
Energy Charges:			
A1: Summer:		_	
Normal	Paise/Unit	D	280.10
Peak Off model	Paise/Unit	E	280.10
Off-peak A2: Monsoon:	Paise/Unit	F	280.10
Normal	D : 41 :	_	272.00
Peak	Paise/Unit	G	279.99
	Paise/Unit	H	279.99
Off-peak A3: Winter:	Paise/Unit	I.	279.99
	D . (1)		
Normal	Paise/Unit	J	281.13
Peak	Paise/Unit	κ .	281.13
Off-peak	Paise/Unit	L	281.13
B. Fuel and Power Purchase Cost Adjustment	Paise/Unit	M	

Particulars	Unit	Derivation	2021-202
Details of Power Purchase Cost			311-
Fixed Charges	Rs. Lakhs	N = C*B	93646.55
Energy Charges:			
A1: Summer:			
Normal	Rs. Lakhs	M=A1N*D	18489.07
Peak	Rs. Lakhs	N=A1P*E	10556.68
Off-peak	Rs. Lakhs	O=A1OP*F	10705.83
Total in Summer: (A1)	Rs. Lakhs	P=M+N+O	39751.58
A2: Monsoon:			
Normal	Rs. Lakhs	Q=A2N*G	19184.40
Peak	Rs. Lakhs	R=A2P*H	10992.13
Off-peak	Rs. Lakhs	S=A2OP*I	11436.13
Total in Monsoon: (A2)	Rs. Lakhs	T=Q+R+S	41612.66
A3: Winter:			
Normal	Rs. Lakhs	U=A3N*J	13721.67
Peak	Rs. Lakhs	V=A3P*K	8602.78
Off-peak	Rs. Lakhs	W=A3OP*L	5577.12
Total in Winter: (A3)	Rs. Lakhs	X=U+V+W	27901.57
Total Energy Charges	Rs. Lakhs	Y=P+T+X	109265.81
Total Fixed + Energy Charges	Rs. Lakhs	Z=N+Y	202912.36
B. Fuel and Power Purchase Cost Adjustment	Rs. Lakhs	AA=M*B	
Transmission charge for HEL dedicated line	Rs. Lakhs	AB	11401.00
Transmission charge (STU)	Rs. Lakhs	AC	3345.02
SLDC Charges	Rs. Lakhs	AD	199.05
Other Charges - (refer note 3)	Rs. Lakhs	AE	403.38
Monthly Fuel Cost Adjustment (MFCA)	Rs. Lakhs	AF	5907.75
Less: Incentive/Rebate for timely payment etc.	Rs. Lakhs	AG	
Overall cost	Rs. Lakhs	AH =sum(Z:AF)-AG	224168.56

Notes.

- 1. The Company considered the cost based on the rates charged by HEL in terms of Order dated 27 November 2017 in Case No TP 68 / 16-17 and 29 January 2016 in Case No TP 63 / 14 15 as Orders dated 8 September 2021 in Case No TP 75 / 18 19 and the Order dated 20 April 2022 in Case No TP 67 / 16 17 are under Appeal etc., as appropriate, adjusted for units received at CESC bus.
- 2. The power purchase cost has been furnished in accordance with rates charged by HEL. MFCA considered at 15 Paise / Unit as was charged by the Company during the period. Effect of any additional amount charged by HEL in accordance with the applicable Regulations and / orders or any other payable amount as and when determined by the Hon'ble Commission will be additional to above.
- 3. Includes transmission charges (STU) for the past period.

Other Power Purchase Cost Analysis

	Signal Andrews						22							Annex A7	A7
Particulars	Unit	Derivation	RPGPTCL & Bilateral	Solar	G-TAM Solar	G-TAM Non- Solar	G-DAM	Energy Exchanges	RPGPTCL (Other than Cogeneratio	Hydro	WBSEDCL	Banking	Banking	Banking	2021-22
			(Cogene- ration)	(Rooftop)	(through IEX and PXIL)	(through IEX and PXIL)	(through IEX					(Swap-in Swap-in against Swap out of FY 20) out of FY 20)	(Swap-in against Swap out of FY21)	(Swap-in during FY22)	
Details of Import Drawal A1: Summer:															
Normal	MU	A1N	21.39	2,33	102.34	19.12	6.11	34.11	45.93						
Peak Off poor	Ñ.	A1P	20.44	(9)	90'0	33.34	2.24	41.78	25,17		16				
Total in Summer (A1)	OM	AIOP	14.06	¥	•	20.11	A	16.09	29.44	0 4)	16.3				
A 3 M			55,89	2.33	102.40	72.57	8.35	91.98	100.54	×	*	24.90	5.30	0.30	464.56
Normal	MU	A2N	18,70	1.35	135.34	79.97	0.13	38 31	73 70	29.0					
Peak	MU	AZP	10.34	8	2.79	57.71	0.07	50.31	743.73	1.27	74.0				
Off-peak	MU	AZOP	12.05	(*)		18.89		7.79	28.21	0.39	0.23				1
Total in Monsoon: (A2)			41.09	1.35	138.13	106.57	0.20	96.91	96.14	2.31	0.75	0.		27.10	210.05
A3: Winter:														01.12	CO'OTE
Normal	ΩW	A3N	19.02	2.87	83,48	23,04	45.52	1,03	44.92	×					
Peak	⊃ W	A3P	10.55	90	2.60	3.08	13.74	12.80	24.74	9.	9.				
Off-peak	ΩM	A30P	12.21	*	*	0.56	0.07	-11	28.79	(0)	1				
lotal in Winter: (A3)			41.78	2.87	86.08	26.68	59.33	13.83	98.45	*		*		.80	329.01
Total: (A)	ΩW	A=A1+A2+A3	138.76	6.55	326.61	205.82	67.88	202.72	295.13	2.31	0.25	24.90	5.30	27.40	1303.62
Chargeable Units	MU	8	138.76	6.55	326.61	202.82	88'29	202.72	295.13	2.31	0.25	24.90	5.30	27.40	1303.62
Applicable Rates														25:74	70:00
Fixed Charges	Paise/Unit	U													
Energy Charges:															
A1: Summer:															
Normal	Paise/Unit	۵	313,58	552.16	401.14	494.11	699.84	665.01	289.94	()k	780.30	591.87	591.83	557.90	
Peak	Paise/Unit	ш	313.58	552.16	401.14	494.11	699.84	665.01	289.94		780.30	591.87	591.83	557.90	
Off-peak	Paise/Unit	L.	313.58	552.16	401.14	494.11	699.84	665.01	289.94		780 30	591 87	591.83	557.00	
A2: Monsoon:											2000	10:40	201	05.755	
Normal	Paise/Unit	_ர	264.44	625.42	437.01	577.91	461.61	860,67	297.14	1706.38	780.30	591.87	591.83	557,90	
Peak	Paise/Unit	I	264.44	625.42	437.01	577.91	461.61	860.67	297.14	1706.38	780.30	591.87	591.83	557.90	
Off-peak	Paise/Unit	-	264.44	625.42	437.01	577.91	461.61	860.67	297.14	1706.38	780.30	59187	591 83	557 90	
A3: Winter:														00:100	
Normal	Paise/Unit	-	264.46	590.21	432.66	432.47	549.79	704.66	308.57	¥1	780.30	591.87	591.83	557.90	
Peak	Paise/Unit	×	264.46	590,21	432.66	432.47	549.79	704.66	308.57	(6)	780.30	591.87	591.83	557.90	
Off-peak	Paise/Unit	-1	264.46	590.21	432.66	432.47	549.79	704.66	308.57	54	780.30	591.87	591,83	557.90	
B. Fuel and Power Purchase Cost	Paise/Unit	Σ													
Adjustment	+														

MANAGING DIRECTOR (GENERATION) CESC LIMITED

149

Particulars	Unit	Derivation													
			RPGPTCL & Bilateral	Solar	G-TAM Solar	G-TAM Non- Solar	G-DAM	Energy	RPGPTCL (Other than Cogeneratio	Hydro	WBSEDCL	Banking	Banking	Banking	2021-22
			(Cogene- ration)	(Rooftop)	(through IEX and PXIL)	(through IEX and PXIL)	(through IEX					(Swap-in against Swap out of FY 20)	(Swap-in against Swap out of FY21)	(Swap-in during FY22)	
Details of Power Purchase Cost Fixed Charges	Rs. Lakhs	N = C*B	8	*)	*)	a.				38	14		(24)		
Energy Charges: A1: Summer:															
Normal	Rs. Lakhs	M=A1N*D	670.82	128.65	4105.34	944.81	427.67	2268.46	1331.70	•					
Peak	Rs. Lakhs	N=A1P*E	640.79	130	2.21	1647.12	156.88	2778.45	729,77	v; 36	D 187				
Total in Summer: (A1)	Re Lakhe	P-M4M4O	175254	130 CE	, 1010	993.78	* 11	1070.09	853.73						
A2: Monsoon:			1/35/34	179.03	4107.33	3285./I	584.55	611/.00	2915.20	•		1473.58	313.80	16.93	20995.51
Normal	Rs. Lakhs	Q=A2N*G	494.52	84.43	5914.66	1732.04	6.00	3297.38	1301,11	111.60					
Peak	Rs. Lakhs	R=A2P*H	273.30	ě	121.82	3335.30	3.25	4372.76	717.30	216.16	19,51				
Off-peak	Rs. Lakhs	S=A20P*I	318.70	8	39	1091.64	d	670.58	838.22	66.11					
Total in Monsoon: (A2)	Rs. Lakhs	T=Q+R+S	1086.52	84.43	6036.48	6158.98	9.25	8340.72	2856.63	393.87	19.51		134	1511.91	26498.30
A3: Winter:	100	*NCA-11	1700	0000											
Peak	Rs. Lakhs	V=A3P*K	279.06	169.26	3612.02	996.34	2502.59	72.60	1385.94	•					
Off-peak	Rs. Lakhs	W=A30P*I	327.86	· ·	112.30	27.30	20.13	901.75	763.45						
Total in Winter: (A3)	Rs. Lakhs	W+V+U=X	1105.03	169.26	3724.32	1153.62	3761 63	974 35	2727.67	X o					20 7545
Total Energy Charges	Rs. Lakhs	X=P+T+X	3944.09	387.34	13868 35	10898 31	3855 43	15/22 07	00000	10000					13425.88
Total Fixed + Energy Charges	Rs. Lakhs	X=N+Y	3944.09	382.34	13868.35	10898.31	3855.43	15432.07	8809.50	393.87	19.51	1473.58	313.80	1528.84	60919.69
B. Fuel and Power Purchase Cost															
Adjustment	Rs. Lakhs	AA=M*B	Rain.		K	*8	10	*1	•	(0)	*	7.5	100	7.5	<u>(i</u>
Transmission Charge (STU)	Rs. Lakhs	AB	451.45	.0.	884.96	555.90	187.76	548.46	811.85	6.35			ľ	,	3446 73
Transmission Charge (CTU) Other Charges (SDLC Charges	Rs. Lakhs	AC	68	Ų.	275.43	7.82	286.92	907,95	20.5	10.83	V M		i (#2		1488.95
Meter reading charges, Wheeling	Rs. Lakhs	AD	232.73	Ţ	106,07	67.29	18.43	55.06	13.64	0 25	(0)	100	77		73 507
Charges, PX Fees, etc.)										2		0)	r.	S	400.07
Other Charges-(Refer to Note 3)	Rs. Lakhs	AE	3.99	177	¥	8)	10	*	10.90	æ		.[9	9	39	14.89
payment etc.	Rs. Lakhs	AF	60.85	2	114	39	:(e	54	176.20	((4))		*10	ě	*	237.05
Overall cost	Rs. Lakhs	AG =sum(Z:AE)-AF	4571.41	382.34	15134.81	11529.32	4348.54	16943.54	9469.69	411.40	19.51	1473.58	313.80	1528.84	66126.78
Total Cost of Electrical Energy	Rs. Lakhs	(AH) + (AG)													290295.34
Notes:															

1. Valuation of swap-in settled during the year and swap-in corresponding to swap-out in 2019-20 and 2020-21 have been done in terms of Regulation 5.15.2.(iv) of Tariff Regulations of the Hon'ble Commission.

2. Power Purchase costs have been furnished on the basis of certified quantum of energy and cost thereof on this account. Power Purchase Agreements have been furnished in the appendix to this petition.

3. Pertains to past period transmission and SLDC handling charge in terms of WBERC orders dated 25,06,2021,

4. As per Hon'ble Commission's directive, arrangement has been made by the Company to procure power from DEEP portal following competitive bidding...

5. Figures corresponding to 'Solar (Rooftop)' refers to injection from rooftop sources through net metering, Generation from roof-top solar installations, considering 16,13% Capacity Utilisation Factor is 56,486 MU.

MANAGING DIRECTOR (GENERATION)
CESC LIMITED

bgy adopted in the APR-FPPCA Orders

Table: A8.1 Computation for rate of sale of energy to persons other than own consumers and licensee

Sources of Power Purchase	Quantum MU	Variable Cost incurred Rs. in Lakh	
WBSEDCL	0.250	19.51	
Haldia	3897.894	115173.56	
RPGPTCL (Other than Cogeneration)	295.127	8633.30	
Hydro	2,308	393,87	
Energy Exchanges	202,717	15432.07	
Renewable (sourced through GDAM, GTAM etc.)	600.304	28622.09	
RPGPTCL (Cogeneration) including solar	145,310	4265,58	
Swap in	57,603	3316.22	
BBGS	5131,945	128006.19	
sgs	149,211	4950.45	
Total	10482.671	308812.845	294.5
Less: energy exchanges (conventional and renewable), solar including cogeneration, hydro, swap in	1008.243	52029.834	516.0
Net variable cost of power purchase for valuation of export (except swap-out) for the year	9474.428	256783.01	271.0

The valuation of export (except swap-out), following Hon'ble Commission's determination in APR-FPPCA Orders dated 01.08.2022, has been furnished at marginal cost equivalent to pooled variable cost of power including own generation of CESC Limited, but excluding the power form renewable, cogeneration, hydro, power exchange and through short term open access.

Table: A8.2 Swapping of Power

Nature of swapping arrangement	Swap out		Swap in	
rotate of swapping arrangement	MU	Rs. Lakh	MU	Rs. Lakh
Swap in within the year against swap out within the year			=	
(swap-out energy including loss ¹ , valuation at pooled power purchase cost) Swap in within the year against swap out energy in 2020-21	29.612	1528.84	27.403	1528.84
(equal to cost of swap out energy of previous year based on average power purchase cost of previous year)			5,302	313.80
Swap in within the year against swap out energy in 2019-				
(equal to cost of swap out energy of previous year based on average power purchase cost of previous year)			24.897	1473.58
Swap-out during the year as initial transaction followed by return of energy (swap-in) in succeeding year (swap-out energy including loss at average power purchase cost of the year)	=	s e :		
Total	29.612	1528.84	57.603	3316.22

1, corresponding units at CESC system, in terms of the swap-in contract

Table: A8.3 Admissible cost of power

Particulars	Quantum	Cost Rs. in Lakh	
, artisulars	MU		
Total Power Purchase except swap in	5143,912	286979.12	
Add: swap in power	57.603	3316.22	
Less: swap out power for swap in during the year	29.612	1528,84	
Less: sale to other than consumer and licensee @ 271.03 paise/kWh	172,169	4666.25	
Net power purchase cost for sale to own consumers and licensee	4999.734	284100.25	



Annex B

Adjustments relating to Schedule - 9B of Tariff Regulations

2021-22

Adjustments relating to Schedule - 9B of Tariff Regulations for 2021-22

	Particulars	Basis	Reference in WBERC (Terms and Conditions of Tariff) Regulations, 2011	Rs. Lakhs
(1)	Amounts proposed to be passed on to consumers and WBSEDCL in accordance with Para A1, Schedule - 9B of Tariff Regulations	Detailed Calculations follow in Annex B1	Para A1, Schedule - 9B	930.01
(2)	Amounts proposed to be passed on to consumers and WBSEDCL in accordance with Para A2, Schedule - 9B of Tariff Regulations	Detailed Calculations follow in Annex B2	Para A2, Schedule - 9B	351,68
(3)	Amounts proposed to be passed on to consumers and WBSEDCL in accordance with Para A3, Schedule - 9B of Tariff Regulations	Detailed Calculations follow in Annex B3	Para A3, Schedule - 9B	1783.91
(4)	Amounts proposed to be passed on to consumers and WBSEDCL in accordance with Para C, Schedule - 9B of Tariff Regulations	Detailed Calculations follow in Annex B4	Para C, Schedule - 9B	7686.20
	Gross amount proposed			10751.81
(5)	Less: Share of Expenditure incurred for Generating Stations	Detailed Calculations follow in Annex B3	Kindly refer to the Petition read with Para A3, Schedule - 9B	(813.28)
	Overall adjustments to Consum	ers and WBSEDCL	U-	9938.53

Adjustments as per Para A1, Schedule - 9B of Tariff Regulations for 2021-22

1. Particulars	Unit	Budge Budge	Southern
Category of the station in accordance with Para A1 of Schedule - 9B of the Tarif Regulations	f	В	С
Difference in specific oil consumption in accordance with Para A1, Schedule - 9B of Tariff Regulations	ml/Kwh	1.17	-2.21
Difference in oil consumed - (A)	KL	6618.81	-363.17
Oil Price (Kindly see Audited data in Annex C3) - (B)	Rs./KL	54042.60	56610.18
Difference in cost of oil consumed (G) in accordance with Para A1, Schedule - 9B of the Tariff Regulations [G = A x B / 10^5]	Rs. Lakhs	3576.98	-205.59
Criteria for adjustments in accordance with Para A1 of Schedule - 9B of the Tariff Regulations		5	
% of share to own consumers and WBSEDCL in accordance with Para A1 of Schedule - 9B of the Tariff Regulations	%	26%	
Amount proposed to be passed on to consumers in accordance with Para A1 of Schedule - 9B of the Tariff Regulations	Rs. Lakhs	930.01	<i>1</i> 2
Overall amount proposed to be passed on to consumers in accordance with Para A1 of Schedule - 9B of the Tariff Regulations	Rs. Lakhs		930.01

Adjustment as per Para A2, Schedule - 9B of Tariff Regulations for 2021-22

Particulars	Unit	Budge Budge	Southern
Units sent out for supply to consumers and WBSEDCL (Annex A1)	MU	5131.945	149,211
Category of the station in accordance with Para A2 of Schedule - 9B of the Tariff Regulations		В	В
Normative Auxiliary consumption [derived from Annex C1, read with Table A, Schedule 9A of Tariff Regulations]	MU	507.555	14.757
Actual Auxiliary Consumption (U _a)	MU	430.085	14.820
Difference in Auxiliary Consumption rate in accordance with Para A2, Schedule - 9B of Tariff Regulations	%	1.27%	-0.04%
Excess Units sent out from the Generating Station [Derived from Annex C1 & C2] (U)	MU	77.470	NIL
Cost of Generation (R)	Rs./Unit	2.27	3.02
G = (U x R)	Rs. Lakhs	1758,42	
Criteria for Sharing in accordance with Para A2 of Schedule - 9B of tariff Regulations		4	- 4 - 20 - 4
% of share to consumers in accordance with Para A2 of Schedule - 9B of Tariff Regulations	%	20%	×
Amount proposed to be passed on to consumers in accordance with Para A2 of Schedule - 9B of the Tariff Regulations	Rs. Lakhs	351.68	(*
Overall amount proposed to be passed on to consumers in accordance with Para A2 of Schedule - 9B of the Tariff Regulations	Rs. Lakhs		351.68

Adjustments as per Para A3, Schedule - 9B of Tariff Regulations for 2021-22

3. Particulars	Unit	Budge Budge	Southern
Ratio of Heat Rate as per Table A, Schedule 9A to Design Heat Rate in accordance with Para A3 of Schedul 9B of the Tariff Regulations (SHR _n /D		1.099	1.071
Category of the station in accordance with Para A3 of Schedule - 9B of the Tariff regulations		В	В
SHR/SHR _n	Kcal/kwh	Less than 0,96	More than 1
Generation (Net of units used for sale to persons other than own consumers and WBSEDCL)		5639,500	163,968
Blended Primary Fuel (Coal, Biomass Pellet) Cost for sales to own consum- and WBSEDCL in accordance with Schedule 9A and related Regulations	ers Rs. Lakhs	124044_14	4755.52
Blended Primary Fuel (Coal, Biomass Pellet) Cost for sale to own consume and WBSEDCL in accordance with Audited figures in Annex C3 with due adjustment as per Annex A2	rs Rs. Lakhs	111301.91	6382,08
Blended Primary Fuel (Coal, Biomass Pellet) Cost difference	Rs. Lakhs	12742.23	(1626,56)
Applicable Criteria in accordance with para A3 of Schedule - 9B to the Tariff Regulations		5	
% of share to own consumers in accordance with para A3 of Schedule 9B to the Tariff Regulations	- %	14%	
Amount proposed to be passed on to consumers in accordance with Para A of Schedule - 9B of the Tariff Regulations		1783,91	
Overall amount proposed to be passed on to consumers in accordance with Para A3 of Schedu - 9B of the Tariff Regulations	ıle Rs. Lakhs	1783.91	
Share of Expenditure incurred (Please refer to the Petition for further details)	Rs. Lakhs		(813.28)

4. Impact of Distribution Losses

Parameters	Definition / Explanation	Unit	Based on normative parameters
A1	Fuel cost of CESC generation for actual level of sales to own consumers and WBSEDCL during the adjustment period (kindly refer Annex A1)	Rs Lakhs	132956.64
A2	Total cost incurred including the cost of power purchase from different sources for actual level of sales during the adjustment period (Kindly see Annex A8)	Rs Lakhs	284100.25
A= A1 + A2	Total allowable fuel and power purchase cost (A)	Rs Lakhs	417056.89
B1	Total energy sent out from CESC generating stations during the adjustment period (Kindly see Annex A1)	MU	5281.156
B2	Total energy purchased at the distribution input bus from different sources based on approved procurement plans during the adjustment period, net of sale to persons other than consumers and WBSEDCL, swap-out energy and energy received for conveyance (Kindly refer to Audited Data in Annex C2 & C5)	MU	4993.074
B = B1+ B2	Total energy at distribution input for sales to consumers and WBSEDCL	MU	10274.230
С	Cost of System Input for consumers and Sales to WBSEDCL (C = A/B*10)	Paise / Unit	405.93
D1	Actual Level of Sales to own consumers and WBSEDCL including energy conveyed (Kindly see Audited data in Annex C2)	MU	9421.194
D2	Consumption in Company Premises (Kindly see Audited data in Annex C2)	MU	32.914
D = D1+ D2	Total Utilisation (D)	MU	9454.109
L	Normative Distribution loss (Table D, Schedule 9A of Tariff Regulations)	%	14.30%
	Normative Loss of Units [E = D*L/(1-L)]	MU	1577.523
-	Actual Loss of Units from Auditors' Certificates attached and permissible losses for sales to persons other than consumers and WBSEDCL	MU	820.123
G = E - F	Savings due to Distribution Loss	MU	757.400
I	Savings due to Distribution Loss (H = G*C/10)	Rs Lakhs	30744.80
= H x 0.25	Savings shared with consumers @ 25%	Rs Lakhs	7686.20
= H - I	Savings retained by CESC after sharing 25% with consumers	Rs. Lakhs	23058.60
=FC-Fuel_cost	Savings included in FPPC formula (I) [Kindly refer to Annex A]	Rs. Lakhs	9651.47
1 = J - K	Net savings due to Distribution Loss	Rs. Lakhs	13407.13

Annex C

Certificates

2021-22



22, Camac Street 3rd Floor, Block 'B' Kolkata + 700 016, India Tot : +91 33 6134 4000

Independent Auditors' Certificate

The Board of Directors CESC Limited CESC House, Chowringhee Square, Kolkata 700 001

- 1. This Certificate is issued in accordance with the terms of our Service Scope letter dated September 8, 2022 and Master Engagement Agreement dated August 5, 2022 with CESC Limited (hereinafter the "Company").
- 2. The accompanying Statement of details of units generated during the year ended March 31, 2022 (hereinafter referred to as the 'Statement'), which we have initialled for identification purposes only, contains the details as prepared by the management of the Company based on audited books of accounts and other relevant records and documents of the Company for the year ended March 31, 2022 for submission of such statement along-with Fuel and Power Purchase Cost Adjustment ("FPPCA") application to West Bengal Electricity Regulatory Commission ("WBERC") in compliance with paragraph 2.11.3 of West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 (hereinafter referred to as the 'Regulations').

Management's Responsibility

- 3. The preparation of the Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.
- 4. The Company's management is also responsible for ensuring the correctness of all the technical information included in the Statement and for ensuring that the Company complies with the requirements of all the relevant regulations and for providing all relevant information to the WBERC.

Auditor's Responsibility

- 5. Our responsibility is to provide a limited assurance as to whether (i) Station-wise Installed Electricity Generating Capacity; (ii) Station-wise units generated; (iii) Station-wise Plant Load Factor (PLF); and (iv) Station-wise units sent out, particulars of which is contained in the Statement, together with explanatory notes thereon, has been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.
- 6. The audited standalone financial statements referred to in paragraph 5 above, have been audited by us, on which we issued an unmodified audit opinion vide our report dated May 13, 2022. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India ("ICAI"). Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audits were not planned and performed in connection with any specific transactions to identify matters that may be of potential interest to third parties.



Chartered Accountants

- 7. We conducted our examination of the Statement in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI. The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.
- 8. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 9. As per Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI, a limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 5 above. The procedures performed vary in nature and timing from, and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
- 10. We have performed the following procedures in relation to the Statement:
 - a) Verified Station-wise Installed Electricity Generating Capacity in the Statement from the Energy wise - Performance Status All India - Region wise Report for the month of March 2022 published by Central Electricity Authority;
 - b) Traced Station-wise electricity units generated and sent out from CESC Generating Stations from the Yearly Generation and Import/Export Statistics Report prepared and approved by the management for the financial year 2021-22;
 - c) Checked whether Plant Load Factor has been accurately computed in accordance with the formulae defined in clause 1.2.1 (Ixxix) of the Notification no. 48/ WBERC dated April 25, 2011 issued by WBERC;
 - d) Tested arithmetical accuracy of the Statement; and
 - e) Obtained necessary representations from management.

Conclusion

11. Based on our examination, as above, including the specific procedures as set out in paragraph 10 above, nothing has come to our attention that causes us to believe that the details as contained in the Statement, together with explanatory notes thereon, has not been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31,2022.

Restriction on Use

12. Our work was performed solely to assist you in meeting your responsibilities pursuant to your obligation to submit the Statement along-with FPPCA application to WBERC in compliance with paragraph 2.11.3 of the Regulations. Our obligations in respect of this certificate are entirely separate from, and our responsibility and liability are in no way changed by any other role we may have (or may have had) as auditors of the Company or otherwise. Nothing in this certificate, nor anything said or done in the course of or in connection with the services that are the subject of this certificate, will extend any duty of care we may have in our capacity as auditors of the Company.

S.R. BATLIBOI & CO. LLP Chartered Accountants

13. The certificate has been issued at the request of the Company to be submitted to WBERC and is not to be used for any other purpose or to be distributed to any other parties. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this certificate is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this certificate for events and circumstances occurring after the date of this certificate.

For S.R. Batliboi & Co. LLP Chartered Accountants ICAI Firm Registration Number: 301003E/E300005

per Navin Agrawal

Partner Membership Number: 056102

UDIN: 22056102AUZUVM4261

Place of Signature: Bangalore Date: September 26, 2022

CESC Limited

Statement showing details of units generated during the year ended 31st March, 2022

Particulars	Unit	Budge Budge (BBGS)	Southern (SGS)
(a) Installed Electricity Generation Capacity	MVV	750	135
(b) Units Generated	Million KWh	5562.030	164.031
(c) Plant Load Factor c = b / (a x 365 days x 24 hrs. / 1000)	%	84.66	13.87
(d) Units sent out from CESC Generating Stations	Million KWh	5131.945	149.211

Notes:

1. Plant Load Factor has been computed as defined in Clause 1.2.1 (lxxix) of the Notification no 48/WBERC dated 25 April 2011 issued by the West Bengal Electricity Regulatory Commission.

The above statement is certified to be true and correct.

Kolkata September 26, 2022

Executive Director & CFO

0



22, Camac Street 3rd Fleer, Slock 'B' Kelkata : 700 016, India Tel : +91 33 6134 4000

Independent Auditors' Certificate

The Board of Directors CESC Limited CESC House, Chowringhee Square, Kolkata 700 001

- 1. This Certificate is issued in accordance with the terms of our Service Scope letter dated September 8, 2022 and Master Engagement Agreement dated August 5, 2022 with CESC Limited (hereinafter the "Company").
- 2. The accompanying Statement of details of electrical units purchased/sold during the year ended March 31, 2022 (hereinafter referred to as the 'Statement'), which we have initialled for identification purposes only, contains the details as prepared by the management of the Company based on audited books of accounts and other relevant records and documents of the Company for the year ended March 31, 2022 for submission of such statement along-with Fuel and Power Purchase Cost Adjustment ("FPPCA") application to West Bengal Electricity Regulatory Commission ("WBERC") in compliance with paragraph 2.11.3 of West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, (hereinafter referred to as the 'Regulations').

Management's Responsibility

- 3. The preparation of the Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.
- 4. The Company's management is also responsible for ensuring the correctness of all the technical information included in the Statement and for ensuring that the Company complies with the requirements of all the relevant regulations and for providing all relevant information to the WBERC.

Auditor's Responsibility

- 5. Our responsibility is to provide a limited assurance as to whether (i) Electricity units purchased; (ii) Electricity units purchased/sold through Unscheduled Interchange (Net); (iii) Electricity units sold to own consumers; (iv) Electricity units sold to West Bengal State Electricity Distribution Company Limited ("WBSEDCL"); (v) Electricity units sold to persons other than own consumers and WBSEDCL; and (vi) Electricity units consumed in Company's premises, particulars of which are contained in the Statement, together with explanatory notes thereon, has been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.
- 6. The audited standalone financial statements referred to in paragraph 5 above, have been audited by us, on which we issued an unmodified audit opinion vide our report dated May 13, 2022. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India ("ICAI"). Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audit were not planned and performed in connection with any specific transactions to identify matters that may be of potential interest to third parties.

MANAGING DIRECTOR (GENERATION)

CESC LIMITED



- 7. We conducted our examination of the Statement in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI. The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.
- 8. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 9. As per Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI, a limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 5 above. The procedures performed vary in nature and timing from, and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
- 10. We have performed the following procedures in relation to the Statement:
 - a) Traced the details set out in the Statement for the year ended March 31, 2022 from the audited standalone financial statements;
 - b) Compared Electricity units purchased (other than purchase of solar energy) with Yearly "Generation and Import/Export Statistics" Report prepared and approved by the management for financial year 2021-22 compiled based on Monthly "Generation and Import/Export Statistics" Reports;
 - c) Compared on test check basis Electricity units purchased from solar sources with "Solar Injection" Report prepared and approved by the management;
 - d) Compared on test check basis compilation of Monthly "Generation and Import/Export Statistics" Reports prepared and approved by the management with the final schedule received by the management from West Bengal State Load Despatch Centre, West Bengal State Electricity Transmission Company Limited ("WBSETCL");
 - e) Compared on test check basis Electricity units purchased/sold through Unscheduled Interchange ('Ul') (Net) with "Statement on account of Ul for each 15 minutes time block" received by the management from West Bengal State Load Despatch Centre;
 - f) Compared on test check basis Electricity units sold to own consumers with monthly "Comparative Statement of revenue and units sold" prepared and approved by the management;
 - g) Compared on test check basis Electricity units sold to WBSEDCL with invoices;
 - h) Compared on test check basis Electricity units sold to persons other than own consumers and WBSEDCL with Monthly "Generation and Import/Export Statistics" Reports prepared and approved by the management, with invoices and with the final schedule received by the management from West Bengal State Load Despatch Centre, WBSETCL;
 - i) Compared Electricity units consumed in Company's premises in the Statement with the report generated from CESC LT Billing & Collection System;
 - j) Compared on test check basis Electricity units received for conveyance with the bills raised by the Company; and
 - k) Obtained necessary representations from management.

Conclusion

11. Based on our examination, as above, including the specific procedures as set out in paragraph 10 above, nothing has come to our attention that causes us to believe that the details as contained in the Statement, together with explanatory notes thereon, has not been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.

S.R. BATLIBOI & CO. LLP

Restriction on Use

- 12. Our work was performed solely to assist you in meeting your responsibilities pursuant to your obligation to submit the Statement along-with FPPCA application to WBERC in compliance with paragraph 2.11.3 of the Regulations. Our obligations in respect of this certificate are entirely separate from, and our responsibility and liability are in no way changed by any other role we may have (or may have had) as auditors of the Company or otherwise. Nothing in this certificate, nor anything said or done in the course of or in connection with the services that are the subject of this certificate, will extend any duty of care we may have in our capacity as auditors of the Company.
- 13. The certificate has been issued at the request of the Company to be submitted to WBERC and is not to be used for any other purpose or to be distributed to any other parties. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this certificate is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this certificate for events and circumstances occurring after the date of this certificate.

For S.R. Batliboi & CO. LLP Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

per Navin Agrawal

Partner

Membership Number: 056102 UDIN: 22056102AUZWVJ1341

Place of Signature: Bangalore Date: September 26, 2022

CESC Limited

Statement showing Purchase of electricity units including through Unscheduled Interchange (UI) (Net), Sales of electricity units to own consumers, West Bengal State Electricity Distribution Company Limited (WBSEDCL), persons other than own consumers and WBSEDCL and Consumption of electricity units in Company's premises during the year ended 31st March, 2022

Particulars	Million KWh
Electricity Units Purchased *	5201.517
Electricity Units Purchased / (Sold) through Unscheduled Interchange (Net)	(10.466)
Electricity units received for conveyance/wheeling	3.806
Electricity Units sold to own consumers	9403.186
	G=
Electricity Units sold to WBSEDCL	14,201
Electricity Units sold to persons other than own consumers and WBSEDCL (at CESC Bus) #	197.746
Electricity Units consumed in Company's premises	32,914
Electricity units conveyed	3.806

^{*} includes purchase of renewable electricity and electricity purchased on power banking terms.

includes electricity units sold on power banking terms.

Notes

1. The aforesaid electricity units purchased represent units received by CESC Limited at CESC Bus.

The above statement is certified to be true and correct.

Kolkata September 26, 2022

Executive Director & CFO



22, Camac Street 3rd Floor, Block 'B' Kolkata = 700 016, India

Tet: #91 33 6134 4000

Independent Auditors' Certificate

The Board of Directors CESC Limited CESC House, Chowringhee Square, Kolkata 700 001

- 1. This Certificate is issued in accordance with the terms of our Service Scope letter dated September 8, 2022 and Master Engagement Agreement dated August 5, 2022 with CESC Limited (hereinafter the "Company").
- 2. The accompanying Statement of Average Cost of Coal, Biomass and Light Diesel Oil (LDO) consumed during the year ended March 31, 2022 (hereinafter referred to as the 'Statement'), which we have initialled for identification purposes only, contains the details as prepared by the management of the Company based on audited books of accounts and other relevant records and documents of the Company for the year ended March 31, 2022 for submission of such statement along-with Fuel and Power Purchase Cost Adjustment ("FPPCA") application to West Bengal Electricity Regulatory Commission ("WBERC") in compliance with paragraph 2.11.3 of West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 (hereinafter referred to as the 'Regulations').

Management's Responsibility

- 3. The preparation of the Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.
- 4. The Company's management is also responsible for ensuring the correctness of all the technical information included in the Statement and for ensuring that the Company complies with the requirements of all the relevant regulations and for providing all relevant information to the WBERC.

Auditor's Responsibility

- 5. Our responsibility is to provide a limited assurance as to whether (i) Station-wise Average cost per tonne, Average freight cost per tonne and Total cost per tonne of coal consumed; (ii) Station-wise Average cost per KL of LDO consumed; and (iii) Station-wise total quantity of coal and LDO consumed, particulars of which is contained in the Statement, together with explanatory notes thereon, has been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.
- 6. The audited standalone financial statements referred to in paragraph 5 above, have been audited by us, on which we issued an unmodified audit opinion vide our report dated May 13, 2022. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India ("ICAI").

MANAGINA DIRECTOR (GENERATION)

167



Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audits were not planned and performed in connection with any specific transactions to identify matters that may be of potential interest to third parties.

- 7. We conducted our examination of the Statement in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI. The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.
- 8. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 9. As per Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI, a limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 5 above. The procedures performed vary in nature and timing from, and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
- 10. We have performed the following procedures in relation to the Statement:
 - Obtained and traced the details set out in the Statement for the year ended March 31, 2022 from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements;
 - b) Compared station-wise quantity of coal and LDO consumed, cost of coal and LDO consumed, freight cost incurred with the statement of consumption as prepared and approved by the management;
 - c) Checked whether the Station-wise Average cost per tonne, Average freight per tonne and total cost per tonne of coal consumed and Average cost per KL of LDO consumed has been accurately computed in accordance with the formulae stated in the Statement;
 - d) Tested arithmetical accuracy of the Statement; and
 - e) Obtained necessary representations from management.

Conclusion

11. Based on our examination, as above, including the specific procedures as set out in paragraph 10 above, nothing has come to our attention that causes us to believe that the details as contained in the Statement, together with explanatory notes thereon, has not been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.

Restriction on Use

12. Our work was performed solely to assist you in meeting your responsibilities pursuant to your obligation to submit the Statement along-with FPPCA application to WBERC in compliance with paragraph 2.11.3 of the Regulations. Our obligations in respect of this certificate are entirely separate from, and our responsibility and liability are in no way changed by any other role we may have (or may have had) as auditors of the Company or otherwise. Nothing in this certificate, nor anything said or done in the course of or in connection with the services that are the subject of this certificate, will extend any duty of care we may have in our capacity as auditors of the Company.

S.R. BATLIBOI & CO. LLP

Chartered Accountants

13. The certificate has been issued at the request of the Company to be submitted to WBERC and is not to be used for any other purpose or to be distributed to any other parties. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this certificate is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this certificate for events and circumstances occurring after the date of this certificate.

For S.R. Batliboi & CO. LLP Chartered Accountants ICAI Firm Registration Number: 301003E/E300005

per Navin Agrawal

Partner

MA

Membership Number: 056102 UDIN: 22056102AVAFGD1288

Place of Signature: Bangalore Date: September 26, 2022

CESC Limited

Statement showing Cost of Coal, Biomass and LDO consumed for the year ended 31st March, 2022

Particulars	Unit	Budge Budge	Southern
Coal Consumed - Quantity	Tonne	32,63,108	1,33,398
Average Cost	Rs./Tonne	3,139.09	3,777.45
Average Freight [Refer Note 1]	Rs./Tonne	864.70	1,006.78
Overall Average	Rs./Tonne	4,003.79	4,784.23
LDO Consumed - Quantity	KL	712.54	707.50
Average Cost	Rs./KL	54,042.60	56,610.18
Biomass - Quantity	Tonne	50	3
Average Cost	Rs./Tonne	11,235.00	-

Notes:

- 1. Represents freight and other related costs towards transportation of coal through Rail to Generating Stations.
- Consumption quantity and value for ascertaining the above average coal cost, freight thereof and LDO cost has been arrived at on the basis of quantity and value of coal/ LDO purchased, adjusted for opening and closing stock quantity and its value and includes other required adjustments.
- 3. Out of the above mentioned generating stations, the freight cost of Southern Generating Station includes payments made to Kolkata Port Trust.
- 4. The average cost of Coal Consumed and freight thereof per tonne and the average cost of LDO Consumed per KL has been arrived at by dividing the respective value of Coal consumed, LDO consumed and freight incurred during the year by quantity mentioned above.

The above statement is certified to be true and correct

Kolkata September 26, 2022

Executive Director & CFO



32, Camac Street 3rd Floor, Block 'B' Kolkala - 700 016, Indla Tel : +91 33 6134 4000

Independent Auditors' Certificate

The Board of Directors CESC Limited CESC House, Chowringhee Square, Kolkata 700 001

- 1. This Certificate is issued in accordance with the terms of our Service Scope letter dated September 8, 2022 and Master Engagement Agreement dated August 5, 2022 with CESC Limited (hereinafter the "Company").
- 2. The accompanying Statement of station-wise grade-wise percentage of coal purchased during the year ended March 31, 2022 (hereinafter referred to as the 'Statement'), which we have initialled for identification purposes only, contains the details as prepared by the management of the Company based on audited books of accounts and other relevant records and documents of the Company for the year ended March 31, 2022 for submission of such statement along-with Fuel and Power Purchase Cost Adjustment ("FPPCA") application to West Bengal Electricity Regulatory Commission ("WBERC") in compliance with paragraph 2.11.3 of West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 (hereinafter referred to as the 'Regulations').

Management's Responsibility

- 3. The preparation of the Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.
- 4. The Company's management is also responsible for ensuring the correctness of all the technical information included in the Statement and for ensuring that the Company complies with the requirements of all the relevant regulations and for providing all relevant information to the WBERC.
- 5. Further, the Company's management is also responsible for ensuring the correctness of the details of the information of station-wise grade-wise coal purchased and Average heat value of the coal received and resultant station-wise grade-wise mix percentage, as mentioned in the purchase invoices / credit notes and providing us with the certificates of the external technical experts employed by the management of the Company (the "Technical Expert") in this respect.

Auditor's Responsibility

6. Our responsibility is to provide a limited assurance as to whether

i) station-wise grade-wise mix percentage of coal purchased during the year and (ii) station-wise grade-wise average heat value (KCAL/Kg) of coal as received during the year, particulars of which is contained in the Statement, together with explanatory notes thereon, has been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.

7. The audited standalone financial statements referred to in paragraph 6 above, have been audited by us, on which we issued an unmodified audit opinion vide our report dated May 13, 2022. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India ("ICAI").



Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audits were not planned and performed in connection with any specific transactions to identify matters that may be of potential interest to third parties.

- 8. We conducted our examination of the Statement in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI. The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.
- 9. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 10. As per Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI, a limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 6 above. The procedures performed vary in nature and timing from, and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
- 11. We have performed the following procedures in relation to the Statement:
 - a) Obtained and traced the details set out in the Statement for the year ended March 31, 2022 from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements;
 - b) Compared the quantity of station-wise grade-wise coal purchased with the purchase register, which is verified on a test check basis with purchase invoices;
 - c) Checked on test check basis that the grade-wise mix percentage has been accurately arrived in the same proportion which purchase of each grade bears to the total purchase for each generating station;
 - d) Compared on test check basis the Average heat value of each coal grades with the certificates issued by technical expert;
 - e) Tested arithmetical accuracy of the Statement; and
 - f) Obtained necessary representations from management.

Conclusion

12. Based on our examination, as above, including the specific procedures as set out in paragraph 11 above, nothing has come to our attention that causes us to believe that the details as contained in the Statement, together with explanatory notes thereon, has not been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022 and certificates issued by technical expert as furnished to us by the management of the Company.

Restriction on Use

13. Our work was performed solely to assist you in meeting your responsibilities pursuant to your obligation to submit the Statement along-with FPPCA application to WBERC in compliance with paragraph 2.11.3 of the Regulations. Our obligations in respect of this certificate are entirely separate from, and our responsibility and liability are in no way changed by any other role we may have (or may have had) as auditors of the Company or otherwise. Nothing in this certificate, nor anything said or done in the course of or in connection with the services that are the subject of this certificate, will extend any duty of care we may have in our capacity as auditors of the Company.

S.R. BATLIBOI & CO. LLP

Chartered Accountants

14. The certificate has been issued at the request of the Company to be submitted to WBERC and is not to be used for any other purpose or to be distributed to any other parties. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this certificate is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this certificate for events and circumstances occurring after the date of this certificate.

For S.R. Batliboi & CO. LLP Chartered Accountants ICAI Firm Registration Number: 301003E/E300005

ger Navin Agrawal Partner

Membership Number: 056102 UDIN: 22056102AUZYRG7568

Place of Signature: Bangalore Date: September 26, 2022

CESC Limited

Statement showing station-wise grade-wise % of coal and biomass pellet purchased during the year ended 31st March, 2022

	Budg	je Budge	Sc	outhern
Coal*/ Biomass	Mix	Average Heat Value	Mix	Average Heat Value
	(%)	Kcal/Kg	(%)	Kcal/Kg
		T.		Š
G3	0.264	5552	4.030	5550
G4	9.324	5234	54.007	5220
G5	3.245	4893	8.990	4986
G6	0.565	4767	2.090	4692
G7	5.895	4495	18.911	4359
G8	19.202	4192	9.407	4135
G9	1.219	3874	-	-
G10	0.137	3578	NE	
G11	3.432	3205	o z -	-
G12	7.435	2976	22	-
WIV	0.079	4502		-
WV	5.185	4201	1.242	4199
WVI	3,910	3917	1.323	3925
NCW	1.090	4074	, - -	-
Non-CIL Indigenous	24.323	3525	340	
Non-CIL indigeneous washed	14.694	3688		-
Biomass pellet	0.001	3695	*	-
Overall	100.000	3960	100.000	4907

^{*} represent grade as declared by colliery in the invoice or final grade as declared by CIMFR and accepted by both parties, whereever applicable.

Notes:

- 1. The above gradewise mix has been arrived at in the same proportion which purchased quantity of each grade bears to the total purchased quantity for each generating station.
- 2. The average heat value for a particular grade of coal represents the average value of the total heat value of the coal received for the particular grade.

The above statement is certified to be true and correct and has been accurately extracted from the audited books and records/ financial statements and is mathematically accurate using the appropriate formulae.

Kolkata September 26, 2022 0

Lennf Executive Dire

MANAGING Director & CFO
(JANAGING DIRECTOR (GENERATION)

CESC LIMITED

S.R. BATLIBOI & CO. LLP

22, Camac Street 3rd Floor, Block 'B' Kolkota - 700 016, India

Tel: +91 33 5134 4000

Independent Auditors' Certificate

The Board of Directors CESC Limited CESC House, Chowringhee Square, Kolkata 700 001

- 1. This Certificate is issued in accordance with the terms of our Service Scope letter dated September 8, 2022 and Master Engagement Agreement dated August 5, 2022 with CESC Limited (hereinafter the "Company").
- 2. The accompanying Statement of cost of electrical energy purchased during the year ended March 31, 2022 (hereinafter referred to as the 'Statement'), which we have initialled for identification purposes only, contains the details as prepared by the management of the Company based on audited books of accounts and other relevant records and documents of the Company for the year ended March 31, 2022 for submission of such statement along-with Fuel and Power Purchase Cost Adjustment ("FPPCA") application to West Bengal Electricity Regulatory Commission ("WBERC") in compliance with paragraph 2.11.3 of West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, (hereinafter referred to as the 'Regulations').

Management's Responsibility

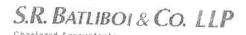
- 3. The preparation of the Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.
- 4. The Company's management is also responsible for ensuring the correctness of all the technical information included in the Statement and for ensuring that the Company complies with the requirements of all the relevant regulations and for providing all relevant information to the WBERC.

Auditor's Responsibility

- 5. Our responsibility is to provide a limited assurance as to whether (i) Quantity, Cost and Average Energy Charge for electrical energy purchased from Haldia Energy Limited ("HEL") separately for peak period, normal period and off-peak period based on period of drawal as per Clause 3.13 of the Notification No. 48/WBERC dated April 25, 2011 issued by the WBERC and cost incurred for fixed and other charges; and (ii) Quantity, Cost and Average Energy Charge of electrical energy purchased through cogeneration sources and other sources, and cost incurred for other charges, if any, relating to such purchases, particulars of which are contained in the Statement, together with explanatory notes thereon, has been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.
- 6. The audited standalone financial statements referred to in paragraph 5 above, have been audited by us, on which we issued an unmodified audit opinion vide our report dated May 13, 2022. Our audits of these financial statements were conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India ("ICAI"). Those Standards require that we plan and perform the audit to obtain reasonable assurance.

MANAGING DIRECTOR (CENERATION)
CESC LIMITED

175



about whether the financial statements are free of material misstatement. Our audits were not planned and performed in connection with any specific transactions to identify matters that may be of potential interest to third parties.

- 7. We conducted our examination of the Statement in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI. The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the ICAI.
- 8. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 9. As per Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the ICAI, a limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 5 above. The procedures performed vary in nature and timing from, and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
- 10. We have performed the following procedures in relation to the Statement:
 - a) Traced on a test check basis the quantity of electrical energy purchased from HEL separately for peak period, normal period and off-peak period based on period of drawal from the final schedule received by the management from State Load Despatch Centre, West Bengal State Electricity Transmission Company Limited ("WBSETCL");
 - b) Compared Electricity units purchased including purchase through co-generation and other sources, with Monthly "Generation and Import/Export Statistics" Reports prepared and approved by the management on test check basis;
 - c) Compared the compilation of Monthly "Generation and Import/Export Statistics" Reports prepared and approved by the management with the final schedule received by the management from State Load Despatch Centre, WBSETCL on a test check basis;
 - d) Compared on test check basis electricity units purchased from solar sources with "Solar Injection" Report prepared and approved by the management;
 - e) Compared on test check basis cost of electrical energy purchased and other charges, if any, with the statement of invoices of respective vendors;
 - f) Checked whether energy charges for electrical energy procured from banking sources as detailed in the Statement has been accurately computed in accordance with the valuation method as stated in Note to the aforesaid Statement;
 - g) Checked whether the Average Energy Charges has been accurately computed in accordance with the formulae stated in the Statement;
 - h) Tested arithmetical accuracy of the Statement; and
 - i) Obtained necessary representations from management.

Conclusion

11. Based on our examination, as above, including the specific procedures as set out in paragraph 10 above, nothing has come to our attention that causes us to believe that the details as contained in the Statement, together with explanatory notes thereon, has not been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.

9

S.R. BATLIBOI & Co. LLP

Restriction on Use

- 12. Our work was performed solely to assist you in meeting your responsibilities pursuant to your obligation to submit the Statement along-with FPPCA application to WBERC in compliance with paragraph 2.11.3 of the Regulations. Our obligations in respect of this certificate are entirely separate from, and our responsibility and liability are in no way changed by any other role we may have (or may have had) as auditors of the Company or otherwise. Nothing in this certificate, nor anything said or done in the course of or in connection with the services that are the subject of this certificate, will extend any duty of care we may have in our capacity as auditors of the Company.
- 13. The certificate has been issued at the request of the Company to be submitted to WBERC and is not to be used for any other purpose or to be distributed to any other parties. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this certificate is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this certificate for events and circumstances occurring after the date of this certificate.

For S.R. Batliboi & CO. LLP Chartered Accountants

ICAI Firm Registration Number: 301003E/E300005

per Navin Agrawa! Partner

Membership Number: 056102 UDIN: 22056102AVAAVZ7461

Place of Signature: Bangalore Date: September 26, 2022

Statement showing cost of electrical energy purchased during the year ended 31st March, 2022

(HEL)
imited
Energy l
Haldia
from
purchased
energy
electrical
Cost of
€

																		9
23	3	05	98 99	03		37		91		99		00		0,		10		999
2021-22 HEL	3897 864	1833 360	1075.488 989.046	54.175.03	295 50	31,782,37	295.52	29,216.16	295,4D	93,646,55	240,25	11,401,00	29.25	3,748.40	9 62	199,05	0.51	(+0) 2.24.168.56
Derivation 2021-22 HEL	A 3897.864	B	82	8 54,175,03	C1 = a/31*10 295 50	31,762.37	C2 = 5/B2*10 295.52	29.216.16	C3 = c/B3*10 295,40	d 93,646,55	D = 4/A*10 240,25	11,401.00	E = e/A·10 29.25	3,748.40	F = 1/A*10 9.62	199.05	G=e/A*10 0.51	H=[a+b+c+d+e+4g] 2.24,168,56
		B						+ 15										Durichae Cost No. Lakhs H=[a+b+c+d+e+f+g] 2.24,168.56 Rs. Lakhs H=[a+b+c+d+e+f+g] 2.24,168.56

Statement showing cost of electrical energy purchased during the year ended 31st March, 2022

(B) Cost of electrical energy purchased from Cogeneration, Solar sources, G-TAM, G-DAM, Energy Exchanges, Other short term, West Bengal State Electricity Distribution Company Limited, RPG Power Trading Company Limited (RPGPTCL) and Banking

B=C/A·10 279.65 583.89 (motop)	Particulars	Chair	Derivation	RPGPTCL and Bilateral	Solar	G-TAM Solar	G-TAM Non- Solar	G-DAM	Energy Exchanges	RPGPTCL (Other than	Hydro	WBSEDCL	Banking		Banking	Banking
Millian Krwh A 136.76 655 Parsoffkwh B=C/A·10 279.86 563.89 Rs Lakhs E 451.45 Rs Lakhs F 233.73 Rs Lakhs G 399				(10)	dana	and PXIL)	and PXIL)	(Inrough IEX)		Cogeneration)			S S S	(Swap-in against Swap-out S	(Swap-in against Swap-out of FY21)	
Parsoffkwn B=C/A·10 279 86 583 89 13 85 Lekrs C 3,883 24 382 34 13 Rs Lakrs E 451,46 Rs Lakrs F 232 73 Rs Lakrs G 399	Purchase Quantum	Million KWh	4	138.76	6.55	326.61	205 82	, c	בד ניחנ	64 300	100	r		1 2		6 6
Rs Lakhs B=C/A*10 279 85 583 89 S82 89 89 S92 89 S9	ible Rates								ì		100	C7.7		8	2 5	
Rs Lekhs C 3,883 24 382 382 34 382 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 382 34 38	Charge	Parse/KWh	B=C/A*10	279 85	583 89	424 61	529 52	567 99	761,25	292.53	1,706.38	780,30	396	484.63	184.63: 469.96	
Rs Lakhs E 232.73 Rs Lakhs F 232.73 Rs Lakhs G 399	Charge	Rs Lakhs	U	3,883.24	382.34	13,868 35	10,898.31	3,855 43	15,432,07	8,633.31	393.87	19.51		205 60	26 60 249 18	
Rs Lakhs F 232.73 Rs. Lakhs G 399	larges	Rs Lakhs	۵	451.45		884 96	555.90	187.76	548.46	811.85	6.35		9	64 84		13.70
Rs Lakhs G 399	sabjet	Rs. Lakhs	ш		- 2	275 43	7 82	286.92	907.95	(4)	10.83	76				26 30
Rs Lakhs G	harges	Rs. Lakhs	L	232 73	*	106 07	67.79	18 43	922	13 64	0.35	9	12	12.05		2 97
30 13574	charges - (refer note 6)	Rs Lakhs	O	86 8						10.50				-		
a contract of	ost (y)	Rs Lakhs	H= C+D+E+F+G									I		+		
Total Cost of Electrical Energy Rs. Lakhs (x) + (y)	ost of Electrical Energy	Rs. Lakhs	(x) + (x)											1 2		

4. The aforesaid purchase quantum represents units received by CESC Limited at CESC Bus.

5. The valuation of energy charges for power banking is in terms of Regulation 5.15.2 (iv) of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 notified vide Notification No. 46/WBERC dated 25 April 2011 and as amended by Notification No 54/WBERC dated by Notification No. 54/WBERC

6. Includes Transmission and SLDC Handing charges as per bill no: RPTLCESC/DN/04 dated 24 July 2021 for RPCPTCL (Cogeneration) and Bill No. 94000140457 dated 16 August 2021 for Bitaleral and bill no. RPTLCESC/DN/03 dated 24 July 21 for RPCPTCL (other than Cogeneration)

CESC Limited

Statement showing cost of electrical energy purchased during the year ended 31st March, 2022
Electrical energy purchased from Haldia Energy Limited

Quantum of Purchase of Power, Rate and Amount

Particulars	Unit	Derivation	2021-202
Details of Import Drawal	1		
A1: Summer:	i i		
Normal	MU	A1N	660.10
Peak	MU	A1P	376.89
Off-peak	MU	A1OP	382.22
Total in Summer: (A1)		ji	1419.21
A2: Monsoon:			
Normal	MU	A2N	685.18
Peak	MU	A2P	392.59
Off-peak	MU	A2OP	408.44
Total in Monsoon: (A2)			1486.21
A3: Winter:			
Normal	MU	NEA	488.09
Peak	MU	A3P	306.00
Off-peak	MU	A3OP	198.38
Total in Winter: (A3)			992.47
Total: (A)	MU	A=A1+A2+A3	3897,89
Chargeable Units	MU	В	3897.89
Applicable Rates			
Fixed Charges	Palse/Unit	С	240.25
Energy Charges:			
A1: Summer:		- 1	
Normal	Paise/Unit	D	280.10
Peak	Paise/Unit	E	280.10
Off-peak	Paise/Unit	F	280.10
A2: Monsoon:			
Normal	Paise/Unit	G	279.99
Peak	Paise/Unit	н	279.99
Off-peak	Paise/Unit		279.99
A3: Winter:			
Normal	Paise/Unit	J	281.13
Peak	Paise/Unit	К	281,13
Off-peak	Paise/Unit	L	281.13
B. Fuel and Power Purchase Cost Adjustment	Paise/Unit	M	

COST ACCOUNTAMES (FE)

Big

CESC Limited

Statement showing cost of electrical energy purchased during the year ended 31st March, 2022 Electrical energy purchased from Haldia Energy Limited Power Purchase Cost Analysis

Particulars	Unit	Derivation	2021-202
Details of Power Purchase Cost			
Fixed Charges	Rs. Lakhs	N = C*B	93646.5
Energy Charges:			
A1: Summer:			
Normal	Rs. Lakhs	M=A1N*D	18489.0
Peak	Rs. Lakhs	N=A1P*E	10556.68
Off-peak	Rs. Lakhs	O=A1OP*F	10705,8
Total in Summer: (A1)	Rs. Lakhs	P=M+N+O	39751.58
A2: Monsoon:			
Normal	Rs. Lakhs	Q=A2N*G	19184.4
Peak	Rs. Lakhs	R=A2P*H	10992.13
Off-peak	Rs. Lakhs	S=A2OP*I	11436.1
Total In Monsoon: (A2)	Rs. Lakhs	T=Q+R+S	41612.6
A3: Winter:			
Normal	Rs. Lakhs	U=A3N*J	13721.6
Peak	Rs. Lakhs	V=A3P*K	8602.7
Off-peak	Rs. Lakhs	W=A3OP*L	5577.1
Total in Winter: (A3)	Rs. Lakhs	X=U+V+W	27901.5
Total Energy Charges	Rs. Lakhs	Y=P+T+X	109265.8
Total Fixed + Energy Charges	Rs. Lakhs	Z=N+Y	202912.3
B. Fuel and Power Purchase Cost Adjustment	Rs. Lakhs	AA=M*B	
Transmission charge for HEL dedicated line	Rs. Lakhs	AB	11401.00
Transmission charge (STU)	Rs. Lakhs	AC	3345.02
SLDC Charges	Rs. Lakhs	AD	199.05
Other Charges	Rs. Lakhs	AE	403.38
Monthly Fuel Cost Adjustment (MFCA)	Rs. Lakhs	AF	5907.75
Less : Incentive/Rebate for timely payment etc.	Rs. Lakhs	AG	
Overall cost	Rs. Lakhs	AH = sum(Z:AF)-	224168.56

Notes:

- 1. The aforesaid purchase quantum represents units received by CESC Limited at CESC Bus.
- 2. Normal Period, Peak Period, Off-Peak Period mentioned above are as per Clause 3.13 of the Notification No. 48/WBERC dated 25 April, 2011 issued by the West Bengal Electricity Regulatory Commission.
- 3. The Company considered the cost based on the rates charged by HEL in terms of Order dated 27 November 2017 in Case No TP-68/16-17 and 29 January 2016 in Case No TP-63/14-15 as Orders dated 8 September 2021 in Case No TP-75/18-19 and the Order dated 20 April 2022 in Case No TP-67/16-17 are under Appeal/Review, as appropriate, adjusted for units received at CESC bus. Based on legal opinion received in this regard, necessary adjustments will be made on the matter reaching finality.
- 4. Includes past period LTOA Charges as per SI. No. 20 of bill nos: 70010003 dated 3 May 2021, 70010005 dated 1 June 2021, 70010006 dated 2 July 2021, SI. No. 20 and 30 for Bill nos. 70010009 dated 2 August 2021, 70010013 dated 1 September 2021, 70010016 dated 1 October 2021, 70010019 dated 1 November 2021, 70010021 dated 1 December 2021, 70010024 dated 3 January 2022, SI. No. 20 of Bill nos. 70010027 dated 1 February 2022, 70010031 dated 2 March 2022, 70010034 dated 1 April 2022.

MANAGING DIRECTOR (GENE

CESC Limited

Electrical energy purchased from Cogeneration, Solar sources, G-TAM, G-OAM, Energy Exchanges, Other short term, West Bengal State Electricity Distribution Company Umited, RPG Power Trading Company Limited (RPGPTCL) and Banking

Quantum of Purchase of Power, Rate and Amount

Particulars	Cnit	Derivation	RPGPTCL 8 Bilateral	Solar	G-TAM Solar	G-TAM Non- Solar	G-DAM	Energy	RPGPTCL (Other than Coge- neration)	Hydro	WBSEDC	Banking	Banking	Banking	2021-22
			(Cogene-ration)	(Rooftop)	(through IEX and PX(L)	(through IEX and	(through IEX)					(Swap-in-		(Swap-ir during FY22)	
Details of Import Drawal												out of FY 20	out of FY21)		
Normal	Ž	MIN	00.10	-											
New A		274	27.33	2.33	102 34		6.11	34.11	45.93		100				
Off-peak	2 2	A100	20.44	100	90 0		224	4178	25.17	*					
Total in Summer: (A1)		AOD.	14.06					16.09	29.44	•	1				
A2: Monsoon:			68,66	733	102.40	72.57	8.35	91.98	100,54	•		24.90	5.30	0.30	464.56
Normal	Σ	NCA	18.70		20 301				(1						
Peak	IW	0.0	200	Ties	155.34		0.13	38.31	43,79	0.65					
Off-peak	2 2	AZP	201		2.79		0.07	50.81	24.14	1.27	0.25				
Total in Moncoon (42)		1000	12.02		-			7.79	28.21	0.39					
A3: Winter:			41.03	1.35	138,13	106.57	0.20	16.91	95.14	231	0.25	٠	•	27.10	510.05
Normal	ž	MEA	000	r	0										
Peak	2	5 5	12.05	707	20 10	7	45.52	1.03	44.92	31	*			9	
	P =	Aak acc.	10.55	4	2,60		13.74	12.80	24,74	*					
Total in Manage (An)	OW	A OF	12.21	ii)	*		0.07	*	28.79	9.	•				
lotal in Winter: (A.s.)			41.78	2.87	86.08	26.68	59.33	13.83	98.45	.*		D)	7.		230 01
local: IAJ	MU	A=A1+A2+A3	138.76	6.55	326.61	205.82	62.88	202.72	295.13	231	0.25	24 9n	5 30	37.40	1303 63
Chargeable Units	MU		138.76	5.53	326.61	205.82	88 29	202.72		186	0.00	24 00	2000	47.40	1303.04
Applicable Rates						The state of the s		The second secon				05'47	25.4	0877	1303.52
Fixed Charges	Paise/Unit	U													
Energy Charges:															
A1: Summer:															
Normal	· Paíse/Unit		313.58	552.16	401.14	494 11	699 B4	665.01	200 04		000				
Peak	Paise/Unit	w	313.58	552.16	401.14		0000	10:00	10000	ol	700.30	484.63	469.95	517.27	
Off-peak	· Paise/Unit	u	313.58	552.16	401 14		PB 009	10,000	10000	e i	700.30	484.b3	469,96	517.27	
A2: Monsoon:							10.000	000-01	703.34	1	05.08/	484.53	469.96	517.27	
Normal	Paise/Unit	O	264.44	525.42	437.01	577.91	461.61	260.67	207 14	1706 30	00.001				
Peak	Paise/Unit	I	264 44	625.42	437.01	16725	461.61	860.67	207 14	1706 20	780.30	464 b3	469.96	517.27	
Off-peak	Paise/Unit	-	797 77	625.42	437.01	577.91	461.61	60000	12.727	1700.30	700.30	454.53	469.95	21/2/	
A3: Winter:								2000		1/00 30	780.30	484.53	469.30	27.77	
Normal	Paise/Unit	7	264.46	590.21	432.66	432 47	67.675	704 66	308 K7		00000	27.505	0	1	
Peak	Paise/Unit	¥	264.46	590.21	437 66		07 073	70.400	70.000	0	700 20	50.703	469.96	517.27	
Off-peak	Paise/Unit		264.46	590.27	437.66		240.70	704.00	70000	* (0E'08/	484, 53	469.96	517.27	
B. Fuel and Power Purchase Cost	Daice/Hair	2					0	30707	308.37		05.087	484.63	469 96	517.27	
Adjustment	raise/ Offic	N.													



CESC Limited
Electrical energy purchased from Cogeneration, Solar sources, G-TAM, G-DAM, Energy Exchanges, Other short term, West Bengal State Electricity Distribution Company Umited, RPG Power Trading Company Limited (RPGPTCL) and Banking Power Purchase Cost Analysis

Record R	(Cogene-ration) 670.82 640.79 640.79 1752.54 794.52 794.52 273.30 318.70			exchanges	Coge-	onaku	WBSEDCI	Banking	Banking	Banking	2021-22
St. Lakhs N = C*8 N	670.82 640.79 640.79 1752.54 494.52 273.30 318.70		(through IEX and through IEX	X				(Swap-in against Swap- out of FY 20)	(Swap-In against Swap out of P/21)	(Swap-in during FY22)	
Rs. Lakhs N=All=" 670.82 128.65 4105.34 Rs. Lakhs O=AlOP* 640.79 2.21 Rs. Lakhs O=AlOP* 460.79 2.21 Rs. Lakhs O=AlOP* 440.75 2.21 Rs. Lakhs O=AlOP* 440.75 4107.55 Rs. Lakhs Q=AlOP* 273.30 213.65 Rs. Lakhs R=AlP* 273.30 213.65 Rs. Lakhs S=AlP* 273.30 213.65 Rs. Lakhs V=AlP* 232.86 237.82 Rs. Lakhs V=AlP* 232.86 232.32 Rs. Lakhs V=AlP* 3944.09 382.34 13868.35 Rs. Lakhs V=AlP* 3944.09 382.34 13868.35 Rs. Lakhs V=AlP* 3944.09 382.34 13868.35 Rs. Lakhs V=AlP* AlP* AlP* AlP* Rs. Lakhs A=AlP* AlP* AlP* AlP* Rs. Lakhs A=AlP* AlP* AlP* Rs. Lakhs AlP* AlP* AlP* Rs. Lakhs AlP* Al	670.82 640.79 440.93 1752.54 494.52 273.30 318.70				(4)		51	*	90	5.	*
Rs. Laikhs Ad-Jus Rs. Laikhs Ad-	494.52 273.30 318.70		944.81 427.67 1647,12 156.88 993.78	2268.46 8 2778.45	1331.70	*11147/19	27 563				
Rs. Lakhs Q=A2N*G 494,52 84,43 5914,66 Rs. Lakhs T=Q=R++5 138.70 121.82 Rs. Lakhs T=Q=R++5 1086,52 84,43 121.82 Rs. Lakhs T=Q=R++5 1086,52 84,43 6036,46 Rs. Lakhs V=A3N*1 593.11 169.26 3612.02 Rs. Lakhs V=A3N*1 322.86 3724.32 Rs. Lakhs V=A3N*1 3944.09 382.34 13868.35 112.30 Rs. Lakhs V=P=T++	494.52 273.30 318.70		3585.71 584.55		2915.20			1206.59	249.18	15.70	20662.68
R. Lakhs S-AZOP* 318.70			1732.04 6.00 3335.30 3.25	0 3297,38 5 4372.76	1301.11	111.60	9				
Rs. Lakhs Nu-A3N*1 S03.11 169.26 S60.202 Rs. Lakhs Vu-A3N*1 S03.11 169.26 S60.202 Rs. Lakhs Vu-A3N*1 S03.11 169.26 S60.202 Rs. Lakhs Vu-A3N*1 S03.208 S60.202 Rs. Lakhs Vu-A3N*1 S03.208 S03.203 Rs. Lakhs Vu-A3N*1 S03.208 S03.204 S03.208 Rs. Lakhs Vu-P4+1*X S944.09 S82.304 S86.35 S03.204 Rs. Lakhs AA=M*9 AS1.45 S82.304 S82.306 Rs. Lakhs AA=M*9 AS1.45 S82.306 Rs. Lakhs AA=M*9 AS1.45 S63.205 Rs. Lakhs AA=M*9 AS1.45 AS1.45 S63.205 Rs. Lakhs AA=M*9 AS1.45 AS1.45 AS1.45 Rs. Lakhs					838.22	66.11					
Rs. Lakhs	1086.52		6158.98 9.25	5 8340,72	2855.63	393,87	19.51	•		1401.80	26388.19
Rs. Lakhs V-AAP*K 279.06 . 112.30 Rs. Lakhs V-AAPVW 1105.03 169.26 3774.37 1 Rs. Lakhs Y-P+T+X 3944.09 382.34 13866.35 10 Rs. Lakhs AA=M*8 451.45 . 275.43 106.07 Rs. Lakhs AA=M*8 451.45 . 275.43 106.07	503.11	3612.02	996,34 2502.59	9 72.60	1385.94	174	,				
Rs. Lakhs V=PerTeX 3944.09 169.26 37724.32 111 Rs. Lakhs V=PerTeX 3944.09 382.34 13868.35 1106 Rs. Lakhs AA=M*B = 451.45		112.30		6	763.45	0074	CH+				
Rs. Lakhs Y=P+T-X 3944.09 382.34 13868.35 100 Rs. Lakhs AA=M*B - 451.45	1105.03		24.30 3.91				19				
Rs. Lakhs	29.44.ng	ľ		ľ				N	•	٠	13425.88
Rs. Lakhis AA=M*B	3944.09			3 15432.07	8809.50	393.87	19.51	1206.59	249.18	1417.50	60476.75
Rs. Laths AG 451.45 . 884.96 5 Rs. Laths AC 232.73 . 106.07	9			(4)	·	ľ				*	,
ling Rs. Lakhs AD 232,73 - 106,07	451.45	884,96	555.90 187.76	548.46	811.85	6.35		64.84	13.79	72 38	3597.74
Charges, PX Fees, etc.)	232.73	106.07			13.64	0.35	090	12.05	2.97	13.79	522.38
5 - (refer note 4) Rs. Lakhs AE 3,99 c/Rebate for timely Rs. Lakhs AF co. 85	u	Total !!	_ 60 O	8 9	10.90	Y	* 1	<u>e</u>		~	14.89
AG=sum[ZAE]-AF 4571.41 382.34 15134.81	4571.41		A2 82-20 CE -0-211	1,6903 CA	176.20	411.40					237,05
					Control	O CONTRACTOR OF THE CONTRACTOR	1331	G# 6977	57767	18,181	290136.66

The aloresial purchase quantum represents units received by CESC Limited at CESC Bus
Normal Period, Prak Period, Off-Peak Period mentioned above are as per Clause 3.1.3 of the Notification No. 48/WBERC dated 25 April, 2011 issued by the West Bengal Electricity Regulation Po. 48/WBERC
The valuation is in rerms of Regulation 5.1.5.2 (iv) of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 notified vide Notification No. 48/WBERC

dated 30 July 2013 issued by the West Bengal Electricity Regulatory Commission

a Includes past period Transmission and SLDC Handling charges as per bill no: RPTL/CESC/DN/09 dated 24 July 2021 for RPGPTCL (Cogeneration) and Bill No. 94000140457 dated 15 August 2021 for Bilateral and bill no: RPTL/CESC/DN/09 dated 24 July 21 for RPGPTCL (other than Cogeneration);

The above Statement is certified to be true and correct.

Kolkata

September 20, 2022

We have examined the above statement with the books and records maintained by the Company and according to the information and explanations provided to us, found the same to be in accordance therewith Auditors' Certificate

RJE

OH

For Strome and Banerjee

of CESC Limited

Membership No. 6573 UDIN: 2206573224559YS48SI

Kolkata

September 26, 2022

Annex C7 to C9



27. Camac Street 3rd Floor, Block B' Rolketa - 700 016, India Tel : +91 33 6134 4000

Independent Auditors' Report

The Board of Directors CESC Limited CESC House, Chowringhee Square, Kolkata 700 001

- This Report is issued in accordance with the terms of our Service Scope letter dated September 8, 2022 and Master Engagement Agreement dated August 5, 2022 with CESC Limited (hereinafter referred to as the "Company").
- 2. The accompanying Statement of details of earnings from Sale of Electricity to persons other than own consumers and West Bengal State Electricity Distribution Company Limited ("WBSEDCL") during the year ended March 31, 2022 (hereinafter referred to as the 'Statement'), which we have initialed for identification purposes only, contains the details as prepared by the management of the Company based on audited books of accounts and other relevant records and documents of the Company for the year ended March 31, 2022 for submission of such statement along-with / Fuel and Power Purchase Cost Adjustment ("FPPCA") / Annual Performance Review ("APR") application for the year 2021-22 to West Bengal Electricity Regulatory Commission ("WBERC") in compliance with paragraph 2.11.3 of West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 (hereinafter referred to as the 'Regulations').

Management's Responsibility

- 3. The preparation of the Statement is the responsibility of the management of the Company including the preparation and maintenance of all accounting and other relevant supporting records and documents. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Statement and applying an appropriate basis of preparation; and making estimates that are reasonable in the circumstances.
- 4. The Company's management is also responsible for ensuring the correctness of all the technical information included in the Statement and for ensuring that the Company complies with the requirements of all the relevant regulations and for providing all relevant information to the West Bengal Electricity Regulatory Commission.

Auditor's Responsibility

- 5. Our responsibility is to provide a limited assurance as to whether electricity units sold to persons other than own consumers and WBSEDCL, particulars of which is contained in the Statement, together with explanatory notes thereon, has been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.
- 6. The audited standalone financial statements referred to in paragraph 5 above, have been audited by us, on which we issued an unmodified audit opinion vide our report dated May 13, 2022. Our audit of these standalone financial statements was conducted in accordance with the Standards on Auditing, as specified under Section 143(10) of the Companies Act, 2013 and other applicable authoritative pronouncements issued by the Institute of Chartered Accountants of India. Those Standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. Our audits were not planned and performed in connection with any specific transactions to identify matters that may be of potential interest to third parties.

MANAGING DIRECTOR GENERATION)

SAME OF THE CESC LIMITED

S.R. BATLIBOI & CO. LLP

- 7. We conducted our examination of the Statement in accordance with the Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the Institute of Chartered Accountants of India. The Guidance Note requires that we comply with the ethical requirements of the Code of Ethics issued by the Institute of Chartered Accountants of India.
- 8. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.
- 9. As per Guidance Note on Reports or Certificates for Special Purposes (Revised 2016) issued by the Institute of Chartered Accountants of India, a limited assurance engagement involves performing procedures to obtain sufficient appropriate evidence on the Reporting Criteria mentioned in paragraph 5 above. The procedures performed vary in nature and timing from, and are less extent than for, a reasonable assurance. Consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.
- 10. We have performed the following procedures in relation to the Statement:
 - a) Verified the monthly reconciliation, on test check basis, of earnings from electrical energy sold to bilateral sources and cost of other charges, if any, as detailed in point no. 1 of the Statement with dedicated bank account, as relevant;
 - b) Checked on a test check basis that earnings from electrical energy sold to banking sources as detailed in point no. 2 (i) and (ii) of the Statement has been accurately computed in accordance with the valuation method as stated in Note 1 to the aforesaid Statement;
 - c) Compared on test check basis cost of other charges on Earnings from Banking Sources, if any, as detailed in point no. 2 (iii) of the Statement with the statement of invoices of respective vendors;
 - d) Compared on test check basis Electricity units sold as detailed in the Statement with monthly "Generation and Import/Export Statistics" Reports prepared and approved by the management, compiled based on final schedule received by the management from West Bengal State Load Despatch Centre, West Bengal State Electricity Transmission Company Limited ("WBSETCL");
 - e) Checked whether the Average rates as detailed in the Statement has been accurately computed in accordance with the formulae stated in the Statement;
 - f) Tested arithmetical accuracy of the Statement; and
 - g) Obtained necessary representations from management

Conclusion

11. Based on our examination, as above, including the specific procedures as set out in paragraph 10 above, nothing has come to our attention that causes us to believe that the details as contained in the Statement, together with explanatory notes thereon, has not been accurately extracted from the audited books of accounts and other relevant records and documents underlying the audited standalone financial statements as at and for the year ended March 31, 2022.

MANAGING DIRECTOR (GENERATION)

CESC LIMITED



Restriction on Use

- 12. Our work was performed solely to assist you in meeting your responsibilities pursuant to your obligation to submit the Statement along-with FPPCA / APR application to WBERC in compliance with paragraph 2.11.3 of the Regulations. Our obligations in respect of this report are entirely separate from, and our responsibility and liability are in no way changed by any other role we may have (or may have had) as auditors of the Company or otherwise. Nothing in this report, nor anything said or done in the course of or in connection with the services that are the subject of this report, will extend any duty of care we may have in our capacity as auditors of the Company.
- 13. The report has been issued at the request of the Company to be submitted to WBERC and is not to be used for any other purpose or to be distributed to any other parties. Accordingly, we do not accept or assume any liability or any duty of care for any other purpose or to any other person to whom this report is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For S.R. Batliboi & Co. LLP Chartered Accountants ICAI Firm Registration Number: 301003E/E300005

per Navin Agrawal Partner

Membership Number: 056102 UDIN: 22056102AVAEDW9806

Place of Signature: Bangalore Date: September 26, 2022

CESC Limited Statement showing Farnings from Sale of Electricity to persons other than own consumers and WBSEDCL for the year ended 31 March 2022

Particulars	Unit	Derivation	2021-22	2021-22
Earnings from :		Detroition	2021-22	2021-22
Bilateral sources (net of other charges) Indian Eneroy Exchange	Rs.Lakhs	a1		8,536.77
2. Banking sources (Note 1)		i i	1	8,536,72
(1) Swap-in/ Swap-out fully settled during the year -Arunachal Pradesh Power Corporation Private Limited	Rs.Lakhs	a2	1,417.50	
(ii) Swap-in/ Swap-out carried forward to next year -Arunachal Pradesh Power Corporation Private Limited	Rs.Lakhs	а3		1,417.50 9,954.22
(iii) Other charges relating to the above Swap-in/ Swap-out				
-Arunachal Pradesh Power Corporation Private Limited	Rs.Lakhs	a4	(6.02)	(6.02
Total Earnings	Rs. Lakhs	Α		0.040.74
Overall Quantum	KS. CORIIS	A		9,948.21
Units at CESC Busbar Indian Energy Exchange Arunachal Pradesh Power Corporation Private Limited (Swap-in/ Swap-out)	MU MU	b1 b2		168.73 29,02
fotal Units at CESC Busbar	MU	В		197.75
Average Rates (net of other charges) Indian Energy Exchange Arunachal Pradesh Power Corporation Private Limited (Swap-in/ Swap-out)	Paise/Unit Paise/Unit	c1=a1/b1*10 c2=(a2+a3+a4}/b2*10		505.95 486.39

Notes:
1. The valuation is in terms of Regulation 5.15.2 (iv) of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 notified vide Notification No. 48/WBERC dated 25th April 2011 and as amended by Notification No. 54/WBERC dated 30th July 2013 issued by the West Bengal Electricity Regulatory Commission.

The above Statement is certified to be true and correct.

September 26, 2022

Executive Director & CFO

CESC Limited
Statement showing Heat Value of LDO for the year ended 31st March, 2022

	Budge Budge Generating Station	Southern Generating Station
Months	Heat Value (k	(Cal/Litre)
Apr-21	9547	9537
May-21	9533	9570
Jun-21	9321	9325
Jul-21	9541	9528
Aug-21	9532	9532
Sep-21	9522	9548
Oct-21	9552	9515
Nov-21	9533	9521
Dec-21	9147	9023
Jan-22	9399	9287
Feb-22	9571	9310
Mar-22	9478	9527
2021-22	9473	9435

The above statement is true and correct

Kolkata

September 20, 2022

For CESC Limited

Vice President (Finance)

Auditors' Certificate

We have examined the above statement with the books and records maintained by the Company and according to the information and explanations provided to us, found the same to be in accordance therewith.

ACCOUNTAGE

Kolkata

September 20, 2022

For Shome and Banerjee Cost Accountants

Kunal Banerjee

Partner Membership No. 6573

UDIN: 2206573ZZ22VQYQB8G

CESC Limited

Statement showing details of Stationwise Plant Availability Factor(PAF)
during the year ended 31st March, 2022

Particulars	Unit	Budge Budge (BBGS)	Southern (SGS)
Plant Availability Factor (PAF)	%	96.72	97.16

Note:

1. Plant Availability Factor has been computed as defined in Clause 1.2.1 (xvi) (b), read with Clause 6.4.3 of the Notification no 48/WBERC dated 25 April 2011 issued by the West Bengal Electricity Regulatory Commission and Annexure I of the Notification no 69/WBERC dated 26 November 2021 issued by the West Bengal Electricity Regulatory Commission.

The above statement is true and correct

Kolkata

September 20, 2022

For CESC Limited

Vice President (Finance)

Auditors' Certificate

We have examined the above statement with the books and records maintained by the Company and according to the information and explanations provided to us, found the same to be in accordance therewith.

For Shome and Banerjee Cost Accountants

Kunal Banerjee

ACCOUNTAN

Membership No. 6573

UDIN: 2206573ZZWPXHSK0LY

Kolkata

September 20, 2022

Coal Procurement Process and Logistics

Coal Procurement

CESC Limited sources coal through linkage route from subsidiaries of Coal India Limited (CIL) under Fuel Supply Agreement (FSA), captive mine and E-auction. CESC, for its Budge Budge Unit 3, Titagarh and Southern Generating stations, has FSAs with subsidiaries of CIL, namely Eastern Coalfields Limited (hereinafter referred to as "ECL") and Bharat Coking Coal Limited (hereafter referred to as "BCCL"). The aggregate available quantity is generally less than what is required by the Company. The Company, through diligent efforts, was able to manage coal procurement at reasonable level. Domestic coal procured through linkage has been recognised as one of the sources of procurement in terms of regulation 5.8.4 (2) and Form D(a) of the Tariff Regulations.

CESC has consumed about 59% of its annual requirement for BBGS Unit 1 & 2 from coal produced from its captive mine located at Sarisatolli. Captive mine has been recognised as a source of coal under regulation 5.8.4 (2) and Form D(b) of the Tariff Regulations. Captive coal was mined to the extent possible as some uncontrollable factors hindered production, which include rapid spread out of fire in and around areas of coal seam close to working areas, restrictions imposed by Directorate General of Mines Safety (DGMS) on blasting in some parts, difficult geographical terrain inside the mines resulting into deeper sections with narrower angles, necessitating use of smaller equipment, existing district board road through the mine which is being used as a thoroughfare etc. All such factors have made extraction extremely difficult at times and the issues have been regularly placed before the Appropriate Authority through monthly status reports / communications. In this regard, as has already been intimated to the Hon'ble Commission that matters relating to performance standards and production issues under the Coal Mine Development and Production Agreement (CMDPA) is presently sub-judice before the Hon'ble Tribunal, Rajmahal Project Area, Lalmatia Godda, Jharkhand, constituted under the Coal Bearing Areas (Acquisition and Development) Act, 1957, which is also the appropriate authority for adjudication under the Coal Mines (Special Provisions) Act, 2015. Subsequently, in the matter of issues relating to shortfall in production from the mine, various difficulties faced in the mine was represented before the

Scrutiny Committee constituted by Ministry of Coal. The Committee recommended the Nominated Authority to take opinions / comments of Central Mine Planning and Design Institute Limited (CMPDIL. In response CMPDIL in July 2021 communicated to the Coal Ministry that "the fire is affecting the production capacity of the mine, however, for assessing the impact of fire on the annual production capacity of the mine a detail study would be required involving considerable resources in terms of time and money". A copy of the Minutes of Meeting of the Scrutiny Committee and also the report of CMPDIL have been placed in Pages 391 to 396 of Volume 2 of this Petition. Even for 2020-2021, similar representations were made and the Scrutiny Committee has so far refrained from recommending imposition of any performance shortfall penalties due to the conditions beyond the control of the Management.

A proportion of coal allotted through linkage and significant quantum of coal from indigenous source have been washed. The Hon'ble Commission has observed that washing is done to adhere to environmental needs and the associated cost impact is insignificant. The West Bengal Pollution Control Board has recently reiterated the requirement of utilisation of coal with ash content not beyond 33% at the Budge Budge Generating Station. The Company is, therefore, required to resort to coal beneficiation.

As coal through linkage and captive mine routes are not sufficient to support generation, the Company also had to procure coal through the e-auction mechanism rolled out by the Government of India from some of the specified mines of CIL and its subsidiaries, considering the quality, delivery schedule and blending requirements. E-auction coal is a permitted source of procurement under regulations 5.8.2 first proviso and Form D (c).

There was only one instance when coal was procured through RCR mode – G8 coal through ECL E-auction RCR.

Logistics

A. Mine to coal loading at Railway Siding

- a. Activities involved -
 - 1. Coal movement from mine to railway siding

- 2. Ensuring no leakage for coal in transit
- 3. Loading of coal on railway wagons at railway siding
- 4. Providing proper protection against elements of nature and society

Responsibility of the above activities is with coal company for Rail mode, with buyer for road / RCR mode

- Coordination between coal company, railways, sampling laboratories etc. responsibility with buyer
- b. Charges / costs involved -
 - 1. Road transportation cost for coal movement from mine to railway siding
 - 2. Costs involved in coal loading on to railway wagons
 - Costs associated with minimizing leakage for coal in transit and providing protection against elements of nature and society
 - 4. Cost associated with rail shunting, overloading / underloading, demurrage
 - 5. Cost associated with coordination between various agencies

Costs are incurred by parties (coal company / buyer) accordingly, considering their respective responsibilities

Loading of boulders, stones etc. is beyond Buyer's control in the above cases

B. Railway Transport

- Freight charged on wagon permissible carrying capacity, not on coal actually loaded
 - Carrying capacity is higher than coal actually loaded in most cases, increasing effective freight per tonne of coal
- Overloading is computed by the Railways based on permissible carrying capacity
 whereas underloading compensation is computed on the basis of difference
 between actual weight and stenciled carrying capacity of the wagon, thus
 increasing the chances of applicability of overloading changes and reducing chances

of underloading compensation. Therefore, cost for carriage based on carrying capacity is not neutralized by compensation for underloading.

C. Road Transportation

- In case coal mines are situated in far-away places, the procurement is riddled with issues of logistics and use of roadways is frequently needed to be taken up. Presently, insufficient infrastructural readiness of some of the mines necessitates Road-cum-Rail (RCR) mode of transports specially during e-auction mode of sourcing. Therefore, the Company had to resort to RCR mode of transport for coal sourced through e-auction mode sometimes for the period under consideration. In terms of regulation 5.8.2 read with paragraph 8.1 (iii) under Schedule-1, cost of transportation through road mode is a part of fuel cost. The cost is a defined head under Serial No. D) 10 of the specified Form D. However, in the interest of the consumers, mode of transport has been shifted from road to rail, whenever the dispensation was allowed by the Coal India subsidiaries, especially during the hardship times of Covid-19.
- Coal handling agents are engaged to ensure movement of coal from mine to railway siding, loading of wagons at siding and subsequent transfer to generating station end. Such handling agents ensure timely lifting and delivery of coal through close liaison and co-ordination with various agencies, e.g. Coal India subsidiaries, Indian Railway etc. and are also responsible for escorting the rakes to destination of use to prevent pilferage. The handling agents are identified through competitive bidding. Railway siding is identified considering availability of / congestion at the railway siding with an objective of minimizing the overall coal transportation cost. Average distance for road movement, i.e. the distance between mine and railway siding for the ECL RCR coal in 2021-22 was 12 km.
- As per the FSA signed under New Coal Distribution Policy (NCDP), introduced in 2007,
 CIL and subsidiaries had the minimum obligation of supplying only 75% of the ACQ to
 the beneficiary. Also, NCDP encouraged these coal companies to supply some part of
 ACQ through road / road-cum-rail mode instead of supplying all coal through rail
 linkage.

- In 2015, the government brought in a policy level change to shift from imported coal to developing new areas for mining and supplying domestic coal. Target were set to increase domestic coal production by the Coal India Limited ("CIL") to 1 billion tonnes per annum by 2019-20 from 462 million tonnes in 2014. In this context, it is respectfully submitted that the Ministry of Railway put in place a "Logistic Plan" to evacuate imported coal to power plants in 2011. With shift in policy from imported coal to increased focus on domestic coal, the "Logistic Plan" was kept in abeyance in 2016. Many of the heavily mined coal producing regions were getting depleted, hence new areas were developed. When the new mines opened up, coal evacuation appeared to be a great challenge as the matching infrastructure like railway siding and tracks were not yet got developed. Therefore, to evacuate the mined coal, carrying the coal over road to the railway sidings were necessary. At this juncture, as a policy decision, coal consumers were also encouraged to lift coal from mine on their own and carry it to railway siding for further transport. This mechanism is known as "Road-Cum-Rail" or RCR in common parlance.
- Reports of the sub group constituted by Infrastructure Constraints Review Committee show that not only the Independent Power Plants ("IPP"), but the Public Sector Undertakings like NTPC Limited, DVC etc. were also encouraged to lift coal through RCR route. Thus, the generating companies started procuring coal through RCR mode in addition to already existing rail mode. As per the Annual Report of Coal India Limited for the year 2020-21, around 324.80 Million Tonnes (~57%) out of a total dispatch of 573.60 Million Tonnes was through the rail mode. Even under the assumption that all of the coal dispatched by rail mode was to the power sector (~445 Million Tonnes), that would still mean that road dispatches to the power sector as of 2020-21 accounted for at least 27% of total dispatches. It may also be noted that during the fiscal year 2021-22, dispatches from Coal India Limited by road mode increased by 41% while that through rail mode increased only by 11%, showing that there has been an increasing trend in availing the road mode by the procurers. In contrast, only 9.4% of the coal sourced by the Company has been through the RCR mode, reflecting the prudence the Company has exercised to control costs in this regard.

- The Ministry of Coal has formed the Infrastructure Constraints Review Committee to look into the coal shortage issues in thermal power plants. The minutes of meetings of the Sub-Group of the Infrastructure Constraints Review Committee captures the factors behind coal shortage and the identified corrective actions communicated to various stakeholders. It is apparent from the minutes of meetings that coal transportation from mine to railway siding is a major issue for various coal companies, including ECL, BCCL and CCL, which supply coal to CESC. Transportation of coal to railway siding is affected due to
 - contractual disputes / litigation between coal companies and the coal transporter,
 - o inability of contract finalization within a stringent time frame,
 - o local law and order problems, and
 - o inequitable risk-sharing mechanism in contracts.
- In particular, CCL and BCCL have suffered immensely.
- To address this issue, coal dispatch in road / RCR mode was encouraged. It was put in place even for large Public Sector Undertakings like NTPC Limited and Damodar Valley Corporation and had concurrence / approval of the Ministry of Power and other government authorities.
- In particular, inability to conclude road transportation contracts in a reasonable timeframe affected NTPC and other stakeholders.
- To overcome the issue of transportation of coal by coal companies to railway siding, RCR mode of coal transportation had been advocated on numerous occasions during these meetings by Government authorities to improve coal production and offtake. It is pertinent to mention that the Infrastructure Constraints Review Committee was formed under the Ministry of Coal and this particular sub-group of the Infrastructure Constraints Review Committee had representation from the Ministry of Coal, the Ministry of Power, the Central Electricity Authority, Railways Coal Companies, and

NTPC among others. Relevant documents are already placed in the records of the Hon'ble Commission.

D. Unloading

- Various activities and associated charges are needed to be reckoned for the same.
 Activities would include:
 - o Transfer of coal to the private siding in case of BBGS
 - Movement of rakes / wagons from Kolkata Port Trust siding to SGS
 - Various shunting operation and related charges for the operation inside the Station yard based on types of wagons used which in turn entail a planning of track route inside the station
 - o Railway Track maintenance up to the station
 - o Demurrage charges

And accordingly, related charges, apart from Railway Freight, are imposed on coal transported to generating station (Budge Budge, Southern) namely RITES, Trip Basis Charge, FCI charges, Railway Track Maintenance, Demurrage etc.

- Transfer of coal to Private Sidings (Generating Stations)
 - Siding / Trip Basis Charge Coal is transported to Budge Budge Generating Station (BBGS) upper yard near the railway station at Budge Budge. The same is then transported to the generating plant which is about 7 kilometers away from the station upper yard. Some oil installations are located in this route and therefore electrification in this route was not permitted. Hence, diesel engines are engaged for transportation of coal through this path. Railways imposes trip basis charge for involving diesel engines in this route.
 - 2. <u>RITES Fees</u> Rake / wagon shunting operation is necessary at the plant end of Budge Budge and Southern Generating stations during coal unloading. Two types of wagons are usually involved BOBR and BOXN. BOBR type wagons are transported one by one, whereas 18 wagons at a time are moved in case of BOXN. This necessitates shunting operation. RITES Ltd. is a company under the

ownership of Indian Railways, Ministry of Railways, and an engineering consultancy corporation specialising in the field of railway transport infrastructure. Rake / wagon shunting is a specialized job and RITES has trained manpower to carry out such activities. Charge levied by RITES for shunting operation is known as RITES fees.

Apart from the above, in case of SGS, Railways deliver coal at the Kolkata Port Trust siding. Rakes are thereafter transported from the Kolkata Port Trust siding to SGS through own loco and after unloading of coal, rakes are again brought back to the Kolkata Port Trust siding by own loco. RITES undertakes this entire activity and RITES fees for SGS also include costs for such operations.

- 3. KoPT Charges As the siding for Southern is located within the Kolkata Port Trust area, KoPT imposes a charge on CESC, referred to as KoPT charges. These charges are on per rake basis and have three components, namely
 - a. Consolidated charge
 - b. Terminal Charge
 - c. Off-take charge
- FCI Charge The 7 kilometer railway route from upper yard of BBGS to the plant consists of two parts, 4 kilometer path through Food Corporation of India (FCI) campus and 3 kilometer path beyond FCI. 4 km track within FCI campus carries wagons of FCI as well as BBGS plant. However, loaded wagons are mostly pertaining to BBGS. Railways issue bills to FCI for maintenance of 4 k.m. track within FCI campus. FCI in turn issues bills to BBGS on a proportionate basis considering only the wagons relating to the latter. A tripartite agreement involving BBGS, FCI and Indian Railways is entered into.
- <u>Railway Track Maintenance Charge</u>
 Beyond the FCI campus, 3 kilometer track is maintained by an agency employed by BBGS having requisite expertise. Charges for the same is recovered as Railway Track Maintenance. The same agency is also involved in railway track maintenance within plant for BBGS and for \$65S, a different agency is

involved for track maintenance within the plant. A contract with the agency is in vogue.

• <u>Demurrage Charge</u> – Demurrage is detention of a railway wagon beyond the stipulated time allowed for loading and unloading and the related charge for the event is defined as demurrage charge. Railway imposes charge pertaining to unloading end on CESC. Time permitted to unload wagons is called the 'free time'. Free time for BOBR wagon is 2.5 hours and 7 hours for BOXN wagon. Such permissible timelines are usually not changed. However, the demurrage rate structure has been made a telescopic one, which increases as the time incurred for unloading increases. Moreover, fraction of an hour is rounded up to the next hour. Due to above factors, demurrage charge enhances on some occasions.

BBGS has the scope of operating two wagon tipplers on a parallel basis to unload two rakes involving BOXN wagons. However, there are certain practical difficulties of operating two wagon tipplers in parallel. CESC has repeatedly requested Railway authority not to send two rakes simultaneously consisting of BOXN wagons. However, the prayers have fallen on deaf ears. This accentuates the problem further.

Demurrage logic for SGS is a little different. As coal is delivered by Railways at the Kolkata Port Trust siding, time is considered from the moment rakes reach the Kolkata Port Trust Siding till the empty rakes / wagons are delivered back by RITES to the Kolkata Port Trust siding.

Once the rakes containing coal arrive at Kolkata Port Trust siding and information is provided to SGS, such time is denoted as "Made Over Time". Thereafter RITES takes these rakes / wagons by help of own loco to the station, where the station unloads the wagons. Afterwards, RITES takes these empty wagons back to the Kolkata Port Trust siding. The time of delivery is noted and is termed as "Turn Over Time". 11 hours of "Free Time" is provided between the "Made Over Time" and "Turn Over Time" and time taken in excess of 11 hours for the operation attracts demorrage.



CESC House, Chowringhee Square, Kolkata 700 001

Gist of Application for Fuel and Power Purchase Cost for the year 2021-22

- CESC Limited has submitted application before the Hon'ble West Bengal Electricity Regulatory Commission (Hon'ble Commission) for Fuel and Power Purchase Cost Adjustment (FPPC) for the year 2021-22 and the application has been admitted by the Hon'ble Commission on (date).
- The FPPC application is for approval of net Fuel and Power Purchase Cost for the financial year 2021-22, with due reduction of benefits passed on to consumers. The adjustment amount relating to the above needs to be considered during the Annual Performance Review for 2021-22 or separately, as may be considered appropriate by the Hon'ble Commission.
- 3. The FPPC application may be inspected at the office of the Hon'ble Commission at Plot No AH/5 (2nd & 4th Floor), Premises No. MAR 16 1111, Action Area 1A, New Town, Rajarhat, Kolkata 700 163 (Telephone: (033) 2962 3752; email: cp-wberc@gov.in) and / or at the Registered Office of CESC Limited at CESC House, Chowringhee Square, Kolkata 700 001 during office hours on all working days upto one day prior to the last date of submission, objections and comments and certified copies of the applications or part thereof may be obtained from the office of the Hon'ble Commission during office hours on all working days upto one day prior to the last date of submission of suggestions, objections and comments.
- **4.** The FPPC application submitted by CESC Limited has been posted on the website of the applicant at www.cesc.co.in.
- 5. The suggestions, objections and comments, if any, on the proposals contained in the applications shall be submitted separately at the office of the Hon'ble Commission mentioned above by(date).
- 6. This gist has been published with the approval of the Hon'ble Commission.

Place : Kolkata Competent Authority

Date: CESC Limited

Note: Dates may kindly be filled up by the Hon'ble Commission.