



**ORDER  
OF THE  
WEST BENGAL ELECTRICITY REGULATORY COMMISSION**

**IN CASES NO:**

**FPPCA – 95 / 19-20  
APR – 80 / 19-20**

**IN REGARD TO THE APPLICATION OF CESC LIMITED FOR FUEL &  
POWER PURCHASE COST ADJUSTMENT (FPPCA) AND ANNUAL  
PERFORMANCE REVIEW (APR) FOR THE FINANCIAL YEAR 2018 –  
2019**

**PRESENT:  
SRI MALLELA VENKATESWARA RAO, CHAIRPERSON  
SRI PULAK KUMAR TEWARI, MEMBER**

**DATE:22.09.2023**



## Chapter 1

### PREAMBLE

- 1.1 Regulation 2.6 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time (hereinafter referred to as the 'Tariff Regulations'), the generating companies or the licensees, as the case may be, are required to undergo an Annual Performance Review (in short 'APR') process. CESC Limited (hereinafter referred to as 'CESC') submitted their petition for Fuel and Power Purchase Cost Adjustment (in short 'FPPCA') application for 2018 - 19 on 02.09.2019 in pursuance to regulations 2.8.7 and 5.8 of the Tariff Regulations for ascertaining the Fuel and Power Purchase Cost Adjustment. CESC also submitted their petition for Annual Performance Review for 2018-19 on 07.02.2020 in terms of the provision contained in Tariff Regulations.
- 1.2 Further, the Commission vide Suo-motu order dated 31.03.2020 directed all licensees and generating companies to submit their APR petitions for 2018-19 within 3 months from the date of issue of tariff orders for the years 2018-19 and 2019-20. Tariff order of CESC for the years 2018 – 19 and 2019 – 20 was issued on 03.02.2022 in Case No. TP- 77 / 18-19, However, CESC prayed for extension of timeline for submission of the Supplementary Petition by one month through Communication No. CORP: SERV:2487 dated 02.05.2022 and the Commission extended the said timeline for submission of Supplementary Petition upto 03.06.2022 vide its Communication No. WBERC/B-8/16/2179 dated 13.05.2022. Accordingly, CESC submitted a supplementary petition dated 30 May 2022 to FPPCA and APR petitions for the year 2018-19 submitted on 02.09.2019 and 07.02.2020 respectively in terms of the Suo-Motu order dated 31.03.2020. CESC has also prayed for consideration of the supplementary petition along with the FPPCA petition submitted vide communication dated 02.09.2019 (9 volumes) and volumes 3,5,6,7,8,9 and 10 of the APR petition vide communication dated 07.02.2020. The supplementary petition to FPPCA and APR Petition for 2018-19 dated 30 May 2022 submitted by CESC along with the FPPCA petition vide communication dated 02.09.2019 and volumes 3,5,6,7,8,9 and 10 of the APR petition vide communication dated 7 February 2020 have been admitted by the Commission on 15.06.2022 and were registered as FPPCA-95/19-20 and APR-80/19-20.



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- 1.3 The APR covers the areas of permissible annual fixed charges, the effect of gain sharing and permissible incentives as per Schedule-9B and Schedule 10 to the Tariff Regulations respectively. In the APR for the year 2018 - 19, therefore, the review of the different elements of fixed charges, categorized as controllable and uncontrollable have been done to find out the amounts to be permitted to CESC against each head of element vis-a-vis the amount allowed under tariff order for 2018 - 19.
- 1.4 The instant application of CESC is based on the audited annual report and accounts of CESC for 2018 – 2019. The adjustment as may arise out of the review of the instant application with reference to the aforesaid audited annual reports and accounts and the Commission's tariff order dated 03.02.2022 of CESC for 2018-19 in Case No. TP-77/18-19 will be considered for giving effect to while determining the amount of revenue recoverable through tariff order of further ensuing year or through separate order as specified in regulation 2.6.6 of the Tariff Regulations.
- 1.5 On admission of the APR application, CESC was directed to publish the combined gist of the FPPCA and APR applications for 2018-19, as submitted by CESC and approved by the Commission with reference to the Commission's letter vide no WBERC/APR-80/19-20/2367 dated 21.06.2022. Accordingly, the gist was published in four newspapers inviting suggestions / objections, if any, from the public as per following table:

**Table 1.5: Publication Details of Combined Gist of FPPCA & APR Applications**

Sl. No.	Date of Publication	Newspapers	Last date for submission of suggestions / objections as per notification
1	27.06.2022	The Telegraph	21 days from date of publication (inclusive of date of publication)
2	27.06.2022	Bartaman	
3	27.06.2022	Aajkaal	
4	27.06.2022	Dainik Vishwamitra	

The approved gist along with the APR petition for 2018 – 19 was also published in the website of CESC. Opportunities were also afforded to all to inspect the application and take copies thereof.

- 1.6 In the application of APR for 2018 - 19, CESC submitted the required data and information and also a copy of its audited Annual Report and Accounts for 2018 - 19. On 11.11.2022 the Commission also asked for certain additional information from CESC through its letter no. WBERC/APR-80/19-



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20/3130 dated 11.11.2022 and CESC submitted its' response through letter vide memo No. ED(F): 75460 dated 18.11.2022 and submitted some additional information justifying their claim. Further, on 11.01.2023, CESC was directed to submit certain information through electronic communication. CESC submitted its' response through letter vide memo No. ED(F): 75566, dated 13.01.2023. Further on 22.02.2023, CESC was again directed to submit certain information through electronic communication. CESC submitted its' response through letter vide memo No. ED(F): 75656, dated 27.02.2023. In response to the letter of the Commission dated 25.07.2023, CESC has clarified the queries of the Commission vide letter dated 28.07.2023.

- 1.7 No comment, suggestion and /or objection on applications for APR and FPPCA for the year 2018-19 of CESC has been received within due date.



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## Chapter 2

### COMPUTATION OF THE ALLOWABLE AMOUNT OF FUEL & POWER PURCHASE COST

- 2.1 In this part of the order, the Commission takes up for determination of fuel and power purchase cost allowable to CESC on the quantum of power generated, purchased and sold by it to the consumers during the year 2018-19 considering the allowable normative parameters.
- 2.2 The Fuel and Power Purchase Cost (FPPC) during the referred adjustment period, i.e., financial year 2018–19, is to be admitted in terms of the following formula as specified by the Commission in schedule 7A to the Tariff Regulations.
- 2.3 FPPCA formula provides for adjustment of allowable fuel and power purchase cost for gain sharing in accordance with Schedule-9B to the Tariff Regulations. The schedule – 9B to the Tariff Regulations, contains provisions for sharing the gains derived by the licensee, if any, on account of its better performances of generating stations over the operating and fuel consumption norms set by the Commission for the concerned year. The operational parameters which are to be considered for such sharing of gains accrued to the licensees are:
- i) Oil consumption rate,
  - ii) Rate of Auxiliary Consumption,
  - iii) Gross Station Heat Rate.

In addition to above, schedule -9B to the Tariff Regulations also provides for sharing of gains accruing to a distribution licensee on account of improvement in distribution loss than the normative loss with the consumers at a ratio of 75:25 through APR.

- 2.4 Before ascertaining the amount of admissible fuel and power purchase cost as well as the amount of gains to be shared with the consumers and other licensees under the provisions of the Tariff Regulations explained in earlier paragraphs, it needs to view the actual performances of CESC in comparison to the operational and fuel efficiency norms set by the Commission in the Tariff Order for the concerned year. Such comparisons are made here.



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Table 2.4: Details of Performance Parameter

Sl. No.	Power Station	Particulars	Unit	As per Tariff Order / Norms	As per Actual
1	Budge Budge	Rate of Auxiliary Consumption	%	9.00 %	7.68 %
		Specific Consumption of Oil	ml/kWh	1.30	0.14
		Station Heat Rate	kCal/kWh	2,470.00	2,143.83
2	Southern	Rate of Auxiliary Consumption	%	9.00 %	9.28 %
		Specific Consumption of Oil	ml/kWh	2.10	5.07
		Station Heat Rate	kCal/kWh	2,900.00	3,630.33

There was no generation in Titagarh generating stations of CESC as per Form 1.2 and Auditor's certificate submitted with the petition, however, 100% availability is mentioned for the generating station in Form 1.1. CESC has stated the following in Note below Form 1.2:

*“Despatch of stations is planned according to relative economics subject to radial load, network constraints and exigencies. With highly skewed demand position, backing down in lean period is inevitable. CESC has widely varying peak and lean demand scenarios. 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. **Given the high variable cost of Titagarh Generating Station, it is not meriting despatch under the current scenario, in the best interest of the consumers.**”*

The Commission has treated the matter appropriately in relevant paragraphs.

- 2.5 As is seen from the above statement, CESC succeeded in performing better than norms for auxiliary consumption, oil consumption and station heat rate in the generating station at Budge Budge. Part of the benefits accrued to it in financial terms is, therefore, needs to be passed on to its consumers and other licensees in terms of the provisions of Schedule 9B to the Tariff Regulations.
- 2.6 The norm for distribution loss of CESC for the year 2018-19 was considered to be 14.30% under the Regulations. As it comes out from the data as provided by CESC for the year 2018-19, the actual rate of distribution loss experienced by CESC on the quanta of sales to consumers, sales to WBSEDCL and on its own consumption works out at 8.96% as shown below:



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Table 2.6: Distribution Loss

Sl. No.	Particulars	Figures in Million Units
<b>Inputs to System</b>		
(a)	Gross Generation	6,298.458
(b)	Less: Actual Auxiliary consumption	488.511
(c)	Net Sent Out Energy [(a) – (b)]	5,809.947
(d)	Energy purchased during the year	5,581.323
(e)	Less: Sale to persons other than Consumers and WBSEDCL including Transmission loss to effect that sale	286.796
(f)	Less: Swap-out energy including permissible loss	410.898
(g)	Add: Unscheduled Interchange (Net)	22.341
<b>(h)</b>	<b>Energy delivered to the system for sale to consumers and licensee [(c)+(d) –(e) –(f) +(g)]</b>	<b>10,715.917</b>
(i)	Sales to Consumers and WBSEDCL	9,718.545
(j)	Energy consumed in own premises	36.727
(k)	Distribution loss to effect sale to consumers, sale to WBSEDCL and own consumption. [(h) – (i) – (j)]	960.645
(l)	Distribution loss in % [(k/h)x100]	8.96%
(m)	Total Utilization [(i) + (j) + (k)]	10,715.917

- 2.7 The actual sale to consumers and WBSEDCL is 9,718.545 MU. Energy consumed in the own premises is 36.727 MU for the concerned year. The allowable quantum of distribution loss as per norms @ 14.30% on actual quanta of sales to consumers and WBSEDCL as well as the energy consumed in own premises works out at 1,627.776 MU  $\{[(9,718.545 + 36.727) / (1.00 - 0.1430)] - (9,718.545 + 36.727)\}$  and actual quanta of distribution loss against that sale and own consumption works out at 960.645 MU. The savings in this regard thus comes to 667.131 MU (1,627.776 MU – 960.645 MU). As provided in paragraph C of Schedule – 9B to the Tariff Regulations, entitled gain in this regard is required to be shared with the consumers.
- 2.8 The amount of fuel and power purchase cost that can be allowed to CESC, after carrying out the adjustments towards gain sharing and the accrual of benefits for savings in the quanta of distribution loss, is being taken up in the next chapter.
- 2.9 The Commission now proceeds to determine the fuel and power purchase costs allowable to CESC in terms of the formula specified in schedule -7A to the Tariff Regulations.



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## 2.10 F.C.: FUEL COST:

2.10.1 Fuel cost of own generation is to be allowed as per normative parameters fixed by the Commission, or on actual basis in absence of any norms, and heat value of coal as may be allowed under regulation, commensurate with actual level of energy sales to own consumers and / or licensees during the adjustment period. The fuel costs to be allowed to CESC for the year 2018 – 19 for its different power stations shall be based on the following normative parameters:

Table 2.10.1: Normative Parameters

Particulars	Unit	Budge Budge	Southern
Auxiliary consumption	%	9.00 %	9.00 %
Station Heat Rate	Kcal/kWh	2,470.00	2,900.00
Specific Oil Consumption	MI/kWh	1.30	2.10
Transit loss of Coal	%	0.75 %	0.75 %

2.10.2 On the basis of normative parameters as stated above, the amount of fuel cost allowable to CESC for own generation comes to Rs. 1,51,150.71 lakhs as per computations given in Annexure – 2A.

Table 2.10.2: Energy Charge

Generating stations	Ex-bus generation (MU)	Fuel cost (Rs. Lakh)	Energy charge (Paisa/kWh)
Budge-Budge	5,552.508	1,43,052.10	257.64
Southern	257.439	8,098.61	314.58
<b>Total</b>	<b>5,809.947</b>	<b>1,51,150.71</b>	<b>260.16</b>

The detailed considerations in this regard are as under:

2.10.2.1 The weighted average calorific values of coal and oil are, however, variable factors for assessing the quantity of coal and oil requirements and depend on the actual grade mix of their use in the power stations. Moreover, the declared Heat Value of each grade of coal varies between ranges. The weighted average heat value of coal for each generating station of CESC, as considered in the tariff order, was based on the lower value of the range of the





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proposed grade mix of use. With reference to actual grade mix of coal and oil at different generating stations, heat value of coal and heat value of oil as claimed by CESC and as admitted by the Commission are as under:

**Table 2.10.2.1: Heat Value of Coal and Oil**

Generating Station	As claimed by CESC		As admitted by the Commission	
	Heat Value of Coal (Kcal/Kg)	Heat Value of Oil (Kcal/Litre)	Heat Value of Coal (Kcal/Kg)	Heat Value of Oil (Kcal/Litre)
Budge Budge	3,612	9,567	3,611.73	9,567.00
Southern	5,070	9,572	5,069.95	9,572.00

Above heat values of coal have been considered with reference to the grade-wise coal consumption of the concerned generating stations, as per documents submitted by CESC, the declared heat value of different grades of coal varying within a range and the minimum allowable heat value of each grade computed in terms of regulation 5.8.15 of the Tariff Regulations. The weighted average heat value of coal for each generating station as claimed by CESC duly certified by the auditors has been compared with the minimum weighted average heat value of coal computed as per formula given in regulation 5.8.1 of the Tariff Regulations. The computations of the weighted average minimum allowable heat value of coal for different generating stations have been shown in Annexure – 2D to this chapter..

2.10.2.2 CESC submitted the information of distance from coal mines to nearest siding, a weighted average of such distance for more than one location for a particular source, bidding documents for selection of successful service providers, work orders to the successful service provider etc. in support of the road transportation cost. The Commission has noted the submission of CESC and as per the para 4.8.8 of tariff order 2018-19, after the prudence check of such documents, the Commission has considered the weighted average price of coal and oil as per audited certificate provided in Annex C3 of Vol-1 of FPPCA for further computation, as shown in table below:

**Table 2.10.2.2-a: Price of Coal and Oil**

Generating Station	Price of Coal (Rs/MT)	Price of Oil (Rs/KL)
Budge Budge	4,060.28	43,264.36



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Generating Station	Price of Coal (Rs/MT)	Price of Oil (Rs/KL)
Southern	4,815.20	50,881.76

The above prices are inclusive of freight charges which also includes payment made to Kolkata Port Trust for Southern generating station. It includes demurrage charge paid in Budge-Budge and Southern generating stations respectively during the year.

**Table 2.10.2.2-b: Demurrage Charges**

Sl. No.	Demurrage Charge	Budge Budge	Southern
1	Coal Consumed (MT)	35,67,905.00	2,00,484.00
2	Demurrage Cost (Lakhs)	141.85	3.83
3	Demurrage Charges (Rs. /MT)	3.98	1.91

It is observed that, demurrage charges of the plants are gradually reducing from 2013-14 only in case of Southern as follows:

**Table 2.10.2.2-c: Trends of Demurrage Charges (Rs. /MT)**

Sl. No.	Description	Budge Budge	Southern
1	Demurrage for FY 13-14	6.43	5.96
2	Demurrage for FY 14-15	6.50	5.29
3	Demurrage for FY 15-16	8.05	4.81
4	Demurrage for FY 16-17	5.17	4.45
5	Demurrage for FY 17-18	2.18	2.96

Thus, the Commission In terms of clause (vi) of regulation 5.8.1, admits the demurrage amount for the year 2018-19 as follows and directs CESC to take further measures to improve their rake unloading capacity:

**Table 2.10.2.2-d: Disallowance of Demurrage Charges (Rs. /MT)**

Sl. No.	Description	Budge Budge	Southern
1	Demurrage for FY 13-14	6.43	5.96
2	Demurrage for FY 14-15	6.50	5.29



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Sl. No.	Description	Budge Budge	Southern
3	Demurrage for FY 15-16	8.05	4.81
4	Demurrage for FY 16-17	5.17	4.45
5	Demurrage for FY 17-18	2.18	2.96
6	Demurrage for FY 18-19	3.98	1.91
7	Admissible Demurrage (min since FY13-14)	2.18	1.91
8	Disallowance of Demurrage (6-7)	1.80	0.00

2.10.2.3 The Commission notes that, CESC vide its' Supplementary petition Volume 1, has submitted that it has consumed about 41% of annual coal requirement, from its' captive coal mine located at Sarisatolli and provided the cost and quantum of captive coal in terms of relevant form (form D(1), D(2) and D(3)). As per the Goods and Services Tax (GST) regime from 1<sup>st</sup> July, 2017, the Clean Environment Cess of Rs. 400.00/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 same is 18% on mining support services. The Commission had directed CESC to obtain appropriate ruling for 'Nil' rating of GST on captive coal consumption. Accordingly, CESC submitted that, though no GST is applicable on captive coal consumption, under applicable statutes, it needs to pay GST to agencies engaged for mining, sizing, transportation, evacuation facility charges, washing, security, road repair etc. Beside that it also has to pay GST at applicable rate on Reverse Charge Basis on Fixed Rate, Additional Premium, Royalty etc.

2.10.2.4 The Commission notes that, the Section 7 of the Central Goods and Service Tax Act, 2017 ("CGST Act"), defines the scope of supply. Section 7(1)(a) states as under:

*"supply" includes all forms of supply of goods or services or both such as sale, transfer, barter, exchange, licence, rental, lease or disposal made or agreed to be made for a consideration by a person in the course or furtherance of business.*

So, according to the Section 7 of CGST Act, 2017, Captive Coal is subjected to GST. Further, Section 9 of the CGST Act deals with levy and collection of central goods and service tax, which is extracted hereunder:

*"Section 9(1) - Subject to the provisions of sub-section (2), there shall be levied a tax called the central goods and services tax on all intra-State supplies of goods or services or both, except on the supply of*



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*alcoholic liquor for human consumption, on the value determined under section 15 and at such rates, not exceeding twenty per cent., as may be notified by the Government on the recommendations of the Council and collected in such manner as may be prescribed and shall be paid by the taxable person.*

Section 9 of the CGST Act deals with levy of GST on all intra-state supplies at the rate notified by the Government. In terms of Section 9(1) of the CGST Act, the Central Government vide Notification No. 11/2017 - Central Tax (Rate) dated 28th June, 2017 notified the rate applicable on supply of services is 9 % at Sl. No. 24 of the said notification. Similarly, according to the Notification No. 1135-F.T. No. 11/2017- State Tax dated 28<sup>th</sup> June, 2017, under the West Bengal Goods and Services Tax Act, 2017 levying State GST is @ 9%. CESC is availing services which includes extraction, stacking, crushing /sizing, loading, weighment, transportation of coal and operation of Sarisatolli Coal Mine. So, the services are support services to mining unit of CESC and are chargeable to GST @ 18%.

In terms of Section 9(3) of the CGST, the Central Govt. vide Notification No. 13/2017 – Central Tax (Rate) dated 28.06.2017, specify the categories of supply of good and/or services, on which tax required to be paid under reverse charge mechanism (RCM). So, the services provided by ICML to CESC for extraction of coal form captive mine is subjected to the GST under RCM basis. Beside this, according to the Central Board of Excise and Customs on Government Services GST on Royalty, Premium Payable are to be paid to Govt. under RCM.

In terms of Coal Mine Development and Production Agreement dated 2nd March, 2015, CESC is required to pay monthly payments @ Rs. 100 per tonne as Fixed Rate plus an Additional Premium of Rs. 370.00/tonne of coal to the Central Government.

- 2.10.2.5 In view of the above reference of statute, the Commission is of the view that, GST at 18% on the fixed rate of Rs. 100 per Tonne is payable for coal procured from a coal block allocated to Budge Budge Generating Station against reverse auction while adjusting the cost of captive coal. Accordingly, the Commission has considered applicability of GST on the coal mix from captive coal mine, while computing the disallowance of additional cost of Captive Coal claimed by CESC for Budge-budge generating station as below:

**Table 2.10.2.5-a: Disallowance of Additional Cost of Captive Coal Claimed**



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Sl. No.	Particulars	Unit	Budge-budge
1	Basic input ROM coal cost claimed	Rs/MT	1,280.00
2	Allowable basic cost	Rs/MT	100.00
3	GST Claimed	Rs./MT	246.00
4	GST Allowed	Rs./MT	18.00
5	Disallowance rate for ROM coal [(1-2)+(3-4)]	Rs/MT	1,408.00
6	Disallowance rate for washed coal* [(5) / 0.74055]	Rs/MT	1,901.30
7	% mix of captive ROM coal	%	22.15%
8	% mix of captive ROM washed	%	20.11%
9	Overall disallowance rate for budge-budge coal [(3)x(5) + (4)x(6)]	Rs/MT	694.22

\* a factor of 0.74055 (yield of washing) is considered to take care the cost of washed coal

In term of response from CESC vide letter vide memo no. ED(F): 75566 dated 13.01.2023 and considering the price of rejects mentioned in CESC letter dated 15.02.2021, the Commission finds that CESC decided to sell the entire amount to Crescent Enterprise. So, the Commission adjusts the value from sale of rejects from washing of coal from captive mine as follows:

**Table 2.10.2.5-b: Sale Price of Washery Rejects from Offer Price**

Purchaser	Offer Quantity (MT)	Offer Price (Rs. /MT)
Akhankshit Enterprise	200,000.00	350.00
Godavari Enterprise	250,000.00	340.00
Crescent Enterprise	350,000.00	360.00
<b>Sale Price of Washery Rejects</b>		<b>360.00</b>

**Table 2.10.2.5-c: Adjustment on Sale of Washery Rejects**

Sl. No.	Particulars	Unit	Budge-Budge
1	Annual quantity of raw coal used for washing	MT	10,15,932.00
2	Annual quantity of washed coal derived	MT	7,52,345.00
3	Annual quantity of rejects [(1) – (2)]	MT	2,63,587.00
4	% of yield by washing	%	74.055
5	Sale price of washery rejects	Rs. /MT	360.00
6	Revenue earned from sale of rejects [(3) x (5)]	Rs	9,48,91,320.00
7	Quantity of coal as per auditor's certificate	MT	35,67,905.00
8	Deductible amount on sale of washery rejects (6/7)	Rs/MT	26.60



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After adjustment of disallowance of mining cost, adjustment of income from washery rejects and disallowance for demurrage charges, the admissible coal cost for budge-budge generating station comes to Rs. 3,337.66 Rs. /MT as below:

**Table 2.10.2.5-d: Admissible Cost of Coal**

Sl. No.	Particulars	Unit	Budge-Budge	Southern
1	Average coal cost as per auditor's certificate	Rs. /MT	4,060.28	4,815.20
2	Disallowance rate for mining costs of captive coal	Rs. /MT	694.22	
3	Adjustment of income from washery rejects	Rs. /MT	26.60	
4	Disallowance for demurrage	Rs. /MT	1.80	0.00
5	Admissible average cost of coal (1 – 2 – 3 – 4)	Rs. /MT	3,337.66	4,815.20

**2.11 PPC: POWER PURCHASE COST:**

2.11.1 The power purchase requirement of CESC during 2018 –19 was considered 5,781.480 MU; vide the statement of Energy Balance at paragraph 4.7 of the Tariff Order dated 3 February, 2022 for the concerned year. The total quanta of actual purchase and the cost incurred thereon as submitted in the petition are as under:

**Table 2.11.1: Power Purchase**

Sources	Quantum MU	Cost incurred (Rs in lakh)	Avg. Rate (paisa/kWh)
WBSEDCL	5.350	417.32	780.04
HEL	4,199.370	231,184.13	550.52
RPGPTCL (other than Cogeneration)	282.390	13,381.61	473.87
RPGPTCL(Cogeneration)	109.420	4,075.25	372.44
Solar	4.700	312.62	665.15
Power exchanges	623.840	32,465.72	520.42
short term purchase	46.160	2,416.51	523.51
<b>Total</b>	<b>5,271.230</b>	<b>284,253.16</b>	<b>539.25</b>

2.11.2 CESC further submitted that, it has made power swapping arrangement to manage its surplus / shortfall during the year and has not considered the cost for such swap-in power in its claim of total power purchase cost for the year, in view of no-gain no-loss arrangement. However, the Commission decides to adjust the cost of swap-in and swap-out power with the total



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power purchase cost in terms of clause (iv) of regulation 5.15.2 of the Tariff Regulations as below:

**Table 2.11.2: Swapping of power**

Sl. No.	Nature of swapping arrangement	Swap-out		Swap-in	
		MU	Rs. lakh	MU	Rs. lakh
A	Swap-in within the year against swap-out within the year (swap-out energy including loss at average power purchase cost of the year)	133.276	7,186.93	115.042*	7,186.93
B	Swap-in during the year against swap-out energy in previous year (equal to the cost of swap-out energy of previous year based on average power purchase cost of previous year)	-	-	195.050*	10,835.98
C	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)	277.622	14,970.90	-	-
	<b>Total</b>	410.898	22,157.83	310.093	18,022.91

\* Energy considered as proposed in-terms of banking arrangement and loss adjustments.

2.11.3 From the energy balance of 2018-19 mentioned in paragraph 2.6 above, it is observed that, CESC has sold 286.796 MU (including loss) to persons other than licensee & consumers. The Commission decides to adjust the cost of sale of surplus power at marginal cost equivalent to the weighted average pooled variable cost of power including own generation of CESC, but excluding the power from renewables, co-generation, hydro, power exchanges and through short-term open access. Such marginal cost for 2018-19 comes to 277.826 paisa/kWh. Accordingly, cost of surplus power sold to person other than consumers and licensee comes to Rs. 7,967.94, lakh (277.826 x 286.796/10). Gain, if any, on account of revenue earned shall be shared in subsequent chapter in terms of clause (iv) of regulation 5.15.2 of the Tariff Regulations.

**Table 2.11.3: Rate of Sale to Other than Consumers**

Sources	Quantum MU	Energy Charges (Rs in lakh)	Energy Charges Rate (Paisa/kWh)
WBSEDCL	5.350	417.32	780.04
HEL	4,199.370	1,21,338.55	288.94
RPGPTCL (other than Cogeneration)	282.390	13,172.53	466.47



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Sources	Quantum MU	Energy Charges (Rs in lakh)	Energy Charges Rate (Paisa/kWh)
RPGPTCL(Cogeneration)	109.420	3,802.96	347.56
Solar	4.700	312.62	665.15
Power exchanges	623.840	30,457.73	488.23
short term purchase	46.160	2,346.06	508.25
<b>Total</b>	<b>5,271.230</b>	<b>1,71,847.77</b>	<b>326.01</b>
PPC excluding Co-Gen, Solar, Exchange, Short term	4,487.110	134,928.40	300.70
Budge budge	5,552.508	1,43,052.10	257.64
Southern	257.439	8,098.61	314.58
<b>Net Variable Cost of Power Purchase</b>	<b>10,297.057</b>	<b>2,86,079.11</b>	<b>277.826</b>

2.11.4 In view of above, the admissible power purchase cost for sale to consumers and WBSEDCL is worked out as below:

**Table 2.11.4: Admissible Cost of Power**

Sl. No.	Particulars	Energy (MU)	Amount (Rs. Lakh)
1	Total power purchase as in para 2.11.1	5,271.230	284,253.16
2	Add: Swap-in power as in para 2.11.2	310.093	18,022.91
3	Less: Swap out power as in para 2.11.2	410.898	22,157.83
4	Less: Sale to other than consumer & licensee in para 2.11.3	286.796	7,967.94
5	Net power purchase for sale to consumer and WBSEDCL	4,883.629	2,72,150.30

**2.12 C<sub>D</sub>: COST DISALLOWABLE:**

2.12.1 Factor C<sub>D</sub>, in the FPPCA formula mentioned in Schedule-7A to the Tariff Regulations, stands for cost as to be found disallowable by the Commission as per the methodology specified in the FPPCA formula referred to herein. It has been observed that CESC succeeded in sending out generation from each of its generating stations a considerable quantum in excess of the target set out for the concerned year. It also succeeded in keeping the rate of distribution loss much below the norm considered for the year. Excess power purchase as per formula specified in schedule-7A to the Tariff Regulation found nil. Thus, no part of the fuel and power purchase cost is found disallowable and hence, value of factor C<sub>D</sub> is nil.





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Table 2.12.1: Disallowable Cost

Sl. No.	Factor Notation	Nomenclature	Unit	Value
1	d	Norms for distribution loss	%	14.30
2	t	Norms for T&D loss for sale to licensee	%	14.30
3	Eg	Actual generation sent-out	MU	5809.947
4	E	Excess amount of auxiliary	MU	0.000
5	Ep	Net energy purchased (including UI)	MU	4,905.970
6	Eo	Admitted energy for own consumption	MU	36.727
7	Esc	Energy sale to consumers	MU	9,705.869
8	Esl	Energy sale to licensee	MU	12.676
9	Eadm	Admitted amount of energy entitled for purchase (Esc + Eo) / (1-dx0.01) + Esl / (1-tx0.01) - E - Eg	MU	5,573.101
10	Ee	Excess energy purchased, [Ep - Eadm]	MU	Nil

2.13 (+) A: PRIOR PERIOD'S ADJUSTMENTS:

2.13.1 Factor A in the referred FPPCA formula signifies the adjustment, if any, to be made in the current period to account for any excess / shortfall in the recovery of fuel and power purchase cost for the past period. From the submission of CESC, it is observed that no amount has been considered to account for any excess / shortfall in respect of 2017-18.

2.14 Computations of the aggregate allowable amount of fuel and power purchase cost:

2.14.1 The aggregate amount of fuel and power purchase cost, commensurate with the actual quantum of sale to the consumers and to the licensee (WBSEDCL), that can be allowed to CESC works out to Rs. 433,046.50 lakh with the break-up as given hereunder. The detailed computations in this regard are shown in Annexure – 2B and Annexure – 2C. This amount, however, is inclusive of the amounts of gains derived to CESC on account of its better performances on different parameters of operations and fuel consumption norms:

Table 2.14 -1: Fuel and Power Purchase Cost

Sl. No.	Particulars/Factors	Rs. in Lakh
1	FC: Fuel cost	1,60,896.20



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Sl. No.	Particulars/Factors	Rs. in Lakh
2	PPC: Power purchase cost	2,72,150.30
3	C <sub>D</sub> : Cost disallowable	0.00
4	±A: Adjustment relating to earlier period	0.00
5	<b>FC+(PPC-C<sub>D</sub>) + (± A)</b>	<b>4,33,046.50</b>

The amount of fuel and power purchase cost of Rs. 433,046.50 lakh, as shown in paragraph 2.14.1, computed as per FPPCA formula specified in Tariff Regulations is inclusive of the amounts of gains derived by CESC on account of its better performances on different parameters of operational and fuel consumption norms. As mentioned in paragraphs 2.5, CESC is required to pass on part of such gains derived by it to its consumers and WBSEDCL. The amounts of gains attributable to the consumers and WBSEDCL are being viewed and ascertained hereafter.

### 2.15 Gain Sharing for better Oil Consumption Rate:

2.15.1 The actual specific oil consumption rates for Budge Budge is found better than the normative rate as considered in tariff order. The actual rate of oil consumption vis-à-vis rate of specific oil consumption as per tariff order / norms for the respective year for Budge Budge and Southern Generation Stations are given hereunder:

**Table 2.15-1: Oil Consumption Norms**

Generating Station	As per Tariff Order/ Norms	Actual as per submission	Savings
	(ml /kWh)		
Budge Budge	1.30	0.14	1.16
Southern	2.10	5.07	(2.97)

2.15.2 The gain to be shared with the consumers and WBSEDCL for better oil consumption rate of Budge-Budge generating station is worked out in the table below following the provisions of paragraph A1 of Schedule-9B to the Tariff Regulations:

**Table 2.15-2: Gain Sharing for Better Oil Consumption Rate**

Sl. No.	Particulars	Unit	Budge Budge
1	Gross generation with normative auxiliary consumption (Annexure 2A)	MU	6,101.657



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Sl. No.	Particulars	Unit	Budge Budge
2	Normative Oil consumption rate	ML/kWh	1.30
3	Oil Consumption at normative rates	KL	7,932.15
4	Actual Oil Consumption as per auditor's certificate	KL	851.62
5	Actual Oil consumption rate (refer table under paragraph 2.4)	ML/kWh	0.14
6	Savings / difference	KL	7,080.53
7	Category		B
8	Percentage of gain sharing attributable to consumers and WBSEDCL	%	26%
9	Average price of Oil (as per auditor's certificate)	Rs. /KL	43,264.36
10	Gains accrued on saving of Oil	Rs. Lakh	3,063.35
11	Share of gains attributable to consumers and WBSEDCL (In terms of categorization and criteria as per para A1 of Schedule 9B to Tariff Regulations)	Rs. Lakh	796.47

**2.16 Gain Sharing for Better Rate of Auxiliary Consumption:**

2.16.1 As shown in Annexure – 2C, the savings arising out of difference between normative quanta of auxiliary consumption on generation meant for supply of power to the consumers and WBSEDCL and actual such consumption were found as given hereunder. The entire benefits of savings in the quanta of auxiliary consumption have been passed on to CESC while computing the amount of allowable fuel and power purchase cost as shown in Annexure – 2B. Such benefits have been valued in monetary terms at the average rate of cost of generation of the respective generating station. In terms of paragraph A2 of Schedule 9B to the Tariff Regulations, part of the gains so derived by CESC requires to be passed on to the consumers and WBSEDCL. Share to be passed on works out as under:

**Table 2.16-1: Gain Sharing for Better Rate of Auxiliary Consumption**

Generating Station	Savings in Auxiliary Consumption (MU)	Cost of Generation (Paise / kWh)	Monetary value of Savings (Rs. in Lakh)	Category	Share to consumers & WBSEDCL	
					Percentage	Amount (Rs. in Lakh)
Budge Budge	86.976	234.45	2,039.14	B	20%	407.83
Southern	0.000	NA	NA	NA	NA	NA
Total						<b>407.83</b>

**2.17 Share of Savings in Cost of Coal for achieving better Station Heat Rates:**



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2.17.1 The normative Station Heat Rates considered in the tariff order for different generating stations of CESC Limited with reference to their respective design station heat rates and vintages were as under:

Table 2.17-1: Station Heat Rates as per Norm

Generating Station	Station Heat Rates as per Norm set (Kcal/kWh)
Budge Budge	2,470.00
Southern	2,900.00

2.17.2 The allowable cost of fuel at different generating stations, as per computations shown in Annexure – 2A, was ascertained based on such normative station heat rates. It has been seen that CESC Limited succeeded in achieving better Station Heat Rate in its Budge Budge generating station as already explained in paragraph 2.4. CESC Limited, thus, could derive some gains by way of saving the fuel cost in the generating station at Budge Budge. In terms of Schedule 9B to the Tariff Regulations, part of such gains derived on account of the savings in the cost of coal are to be passed on to the consumers and to WBSEDCL.

2.17.3 Following the methodology enunciated by the Commission in paragraph A3 of Schedule 9B to the Tariff Regulations, share of such gains attributable to the consumers and WBSEDCL is 14% for Budge Budge Generating Station. The total amount so to be passed on to consumers comes to Rs. 2,874.99 lakh with the following station wise break-up (Detail computation in Annexure 2E):

Table 2.17-3: Share of Savings for Achieving Better Station Heat Rates

Name of Plant	Amount (Rs. in Lakh)
Budge Budge	2,874.99
Southern	0.00
<b>Total</b>	<b>2,874.99</b>

2.18 Benefits for saving in Distribution Loss:

2.18.1 As analysed in paragraph 2.6 and 2.7, CESC Limited saved 667.131 MU by making improvements in the extent of distribution loss. In terms of paragraph C of the Schedule 9B to



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the Tariff Regulations, 25% of benefits of such savings are required to be passed on to the consumers. The computations in monetary terms work out as under:

**Table 2.18-1: Monetary Value of Saved Power**

Sl. No.	Particulars	Quantum (MU)	Amount (Rs. in Lakh)
1	Ex-bus generation from own generators (Vide Annexure 2A)	5,809.947	1,51,150.71
2	Purchase of Energy (vide paragraph 2.11.4)	4,883.629	2,72,150.30
3	<b>Total</b>	<b>10,693.576</b>	<b>4,23,301.01</b>
4	Average cost per unit in the Distribution System (Paise / kWh)		<b>395.85</b>
5	<b>Cost of quantity saved (vide paragraph 2.7)</b>	<b>667.131</b>	<b>26,408.12</b>

2.18.2 In terms of paragraph C of Schedule – 9B to the Tariff Regulations, gain due to better performance of distribution loss shall be shared between the distribution licensee and the consumers at the ratio of 75:25. Thus, in addition to the actual power purchase cost 75% of the gain i.e., Rs. 19,806.09 lakh (75% of Rs. 26,408.12 lakh computed above) is to be retained by the licensee and balance benefit of Rs. 6,602.03 lakh has been passed on to the consumers by way of considering actual power purchase cost. Out of the amount of Rs. 19,806.09 lakh, a total amount of Rs. 9,745.49 lakh (Rs. 1,60,896.20 lakh – Rs. 1,51,150.71 lakh) has already been passed on to CESC while computing the allowable fuel costs for sales to WBSEDCL and the consumers by way of adopting the normative rate of distribution loss in the denominator of the fraction for such computation. The balance amount of Rs. 10,060.60 lakh (Rs. 19,806.09 lakh – Rs. 9,745.49 lakh) is now being allowed.

The analyses show that the amount of fuel cost computed on the basis of normative parameters and in terms of the specified FPPCA formula comes to Rs. 1,60,896.20 lakh. The amount is inclusive of the gains accrued on to CESC for its better performances in regard to fuel consumption norms. In terms of Schedule 9B to the Tariff Regulations, a part of such gains is to be passed on to the consumers and WBSEDCL. Such shares attributable to them have been worked out in this chapter. The net amount of fuel cost allowable to CESC after carrying out adjustments of the shares of gains attributable to the consumers and WBSEDCL comes as under:



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Table 2.18-2: Summary of Overall Gain

Sl. No.	Particulars	Amount (Rs. in Lakh)
1	Fuel Cost on normative basis	1,60,896.20
2	Less: Shares of gains attributable to consumers and WBSEDCL	
	i) cost saving on use of Oil	796.47
	ii) on improvement in the rate of Auxiliary Consumption	407.83
	iii) for achieving better Station Heat Rate	2,874.99
3	<b>Total</b>	<b>4,079.29</b>
4	<b>Net amount of allowable fuel cost</b>	<b>1,56,816.91</b>

2.19 Station-wise break-up of the allowable fuel cost is given below:

Table 2.19: Station-wise Break-up of Gain

Sl. No.	Particulars	Budge Budge	Southern	Total
1	Fuel cost on normative basis	1,52,275.43	8,620.77	1,60,896.20
2	Less: Share of Gains attributable to Consumers and WBSEDCL			
	i) Cost saving on use of OIL	796.47	0.00	796.47
	ii) On improvement in the rate of Auxiliary Consumption	407.83	0.00	407.83
	iii) For achieving better Station Heat Rate	2,874.99	0.00	2,874.99
	<b>Total (2)</b>	<b>4,079.29</b>	<b>0.00</b>	<b>4,079.29</b>
3	<b>Net amount of allowable fuel cost (1-2)</b>	<b>1,48,196.13</b>	<b>8,620.77</b>	<b>1,56,816.91</b>

2.20 Actual amount of power purchase cost incurred by CESC for supply to its consumers and WBSEDCL from different sources, as enumerated in paragraph 2.11.4 including arrear is Rs. 2,72,150.30 lakh (Rs. 2,72,150.30 lakh + Rs. 0.00 lakh).

2.21 An additional amount of Rs. 10,060.60 lakh is found admissible to CESC on account of savings in the rate of distribution loss as shown in paragraph 2.18.2.

2.22 Summing up the findings as stated above, the net amount of fuel and power purchase cost allowed to CESC for the year 2018-19 comes as under:



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Table 2.22: Redetermination of Fuel & Power Purchase Cost

Particulars	Rs. Lakh
Fuel Cost	1,56,816.91
Power Purchase Cost for won consumers & WBSEDCL (including arrear)	2,72,150.30
Additional amount on account of savings in the rate of Distribution loss	10,060.60
<b>Re-determined Fuel and Power Purchase Cost</b>	<b>4,39,027.81</b>

2.23 The Commission decides, in terms of regulation 2.8.7.1 of the Tariff Regulations, to consider this amount of Rs. 4,39,027.81 lakhs allowable towards fuel and power purchase cost along with the Annual Performance Review for the year 2018 – 19.



Order of APR of CESC for the year 2018-19

Annexure 2A  
Admissible Fuel Cost

Sl. No.	Particulars	Unit	Budge Budge	Southern	Total
1.	Ex Bus Generation	MU	5,552.508	257.439	5,809.947
2.	Rate of Normative Auxiliary Consumption	%	9%	9%	
3.	Normative Auxiliary Consumption	MU	549.149	25.461	574.610
4.	Gross Generation (1+3)	MU	6,101.657	282.900	6,384.557
5.	Normative Station Heat Rate	kCal/kWh	2,470.00	2,900.00	
6.	Station Heat Rate Required (4x5)	M. KCal	1,50,71,093.14	8,20,410.00	1,58,91,503.14
7.	Specific Oil Consumption	ml/kWh	1.30	2.10	
8.	Normative Oil Consumption (4x7)	KL	7,932.15	594.09	8,526.24
9.	Wt. Average Heat Value of Oil	kCal/Ltr	9,567.00	9,572.00	
10.	Heat from Oil [8x9)/1000]	M. KCal	75,886.92	5,686.63	81,573.55
11.	Heat from Coal (6-10)	M. KCal	1,49,95,206.22	8,14,723.37	1,58,09,929.59
12.	Wt. Average Heat Value of Coal	kCal/Kg	3,611.73	5,069.95	
13.	Coal required for consumption [(11/12)*1000]	MT	41,51,802.37	1,60,696.50	43,12,498.87
14.	Coal required with transit loss	MT	41,83,176.19	1,61,910.84	43,45,087.03
15.	Weighted Average Price of Oil	Rs./KL	43,264.36	50,881.76	
16.	Weighted Average Price of Coal	Rs./MT	3,337.66	4,815.20	
17.	Cost of Oil (8 x 15)	Rs. in Lakh	3,431.80	302.28	3,734.08
18.	Cost of Coal (14 x 16)	Rs.in Lakh	1,39,620.30	7,796.33	1,47,416.63
19.	Admissible Cost of fuel (17+18)	Rs. in Lakh	1,43,052.10	8,098.61	1,51,150.71





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Order of APR of CESC for the year 2018-19

Annexure – 2B

Computations of allowable fuel and power purchase cost

Factor Notation	Nomenclature	Unit	Value
t	Norms of Transmission and Distribution loss considered for sale to licensee	%	14.30
D	Norms of distribution loss for sale to consumers	%	14.30
E <sub>o</sub>	Admitted energy for own consumption	MU	36.727
E <sub>SL</sub>	Energy sale to licensee (WBSEDCL)	MU	12.676
E <sub>SC</sub>	Energy sale to consumer	MU	9,705.869
Fuel Cost	Fuel cost for generation on normative parameters (Refer Annexure – 2A)	Rs. in Lakh	1,51,150.71
FC <sub>IUC</sub>	Per unit Fuel Cost at distribution input (Refer para A of Annexure – 2C)	Paisa/kWh	141.35
FC <sub>Adm_d</sub>	Admissible Fuel Cost for sale to licensee (Refer para B of Annexure – 2C)	Rs. in Lakh	209.07
FC <sub>Adm_C</sub>	Admissible Fuel Cost for sale to consumer (Para – C of Annexure 2C)	Rs. in Lakh	1,60,687.14
FC	Allowable fuel cost (Refer para D of Annexure 2C)	Rs. in Lakh	1,60,896.20



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Order of APR of CESC for the year 2018-19

Annexure – 2C

A. Fuel Cost per Unit (kWh) at Distribution Input		Unit	Amount
(i)	Fuel Cost (As per Annexure – 2A)	Rs. in Lakh	1,51,150.71
(ii)	Energy sent out from own generation for the consumers and licensee (refer sl. No. 1 in Annexure-2A)	MU	5,809.947
(iii)	Purchase (refer sl. no. 5 of table 2.11.4 of para 2.11.4)	MU	4,883.629
(iv)	$FC_{IUC} [(i)/\{(ii)+(iii)\} \times 10]$	Paise/kWh	141.35

B. Admissible Fuel Cost for Sale to Licensee		Unit	Amount
(i)	$\frac{E_{SL}}{(1-t \times 0.01)} \times FC_{IUC} = \frac{12.676 \text{ MU} \times 10}{0.8570} \times \frac{141.35}{100}$	Rs. in Lakh	209.07

C. Admissible Fuel Cost for sale to Consumers		Unit	Amount
(i)	$\frac{E_{SC} + E_O}{(1-d \times 0.01)} \times FC_{IUC} = \frac{(9,705.869+36.727) \text{ MU} \times 10}{0.8570} \times \frac{141.35}{100}$	Rs. in Lakh	1,60,687.14

D. Allowable Fuel Cost for Sale to Licensee and to Consumers		Unit	Amount
(i)	B + C	Rs. in Lakh	1,60,896.20

E. Excess/Savings (in Auxiliary Consumption)						
Figures in MU						
Generating Station	Energy sent out from own generation for the consumers and licensee	Normative Rate of Auxiliary Consumption	Normative Auxiliary Consumption	Actual Auxiliary Consumption	Actual rate of auxiliary consumption	Savings
Budge Budge	5,552.508	9%	549.149	462.173	7.68%	86.976
Southern	257.439	9%	25.461	26.338	9.28%	0.000



Order on ARR of CESC for the year 2018-19

Annexure 2D

Budge Budge Generating Station 2018-19

Grades	Grade wise coal consumption in (%) for the period April, 2018 to March, 2019 (A)	Min GCV (G1)	Max GCV of Band (X2)	Min GCV of Band (X1)	Max UHV of Band (Y2)	Min UHV of Band (Y1)	Mean UHV Interpolation $U = \frac{Y1+(G1-X1)}{X1} \times (Y2-Y1)$	Product = A X U
(1)	(2)						(3)	(4) = (2) X (3)
G3	0.02	6,401.00	6,454.00	6,049.00	6,200.00	5,600.00	6,121.48	122.43
G4	5.89	6,101.00	6,454.00	6,049.00	6,200.00	5,600.00	5,677.04	33,437.75
G5	6.41	5,801.00	6,049.00	5,597.00	5,600.00	4,940.00	5,237.88	33,574.79
G6	0.64	5,501.00	5,597.00	5,089.00	4,940.00	4,200.00	4,800.16	3,072.10
G7	9.71	5,201.00	5,597.00	5,089.00	4,940.00	4,200.00	4,363.15	42,366.18
G8	3.23	4,901.00	5,089.00	4,324.00	4,200.00	3,360.00	3,993.57	12,899.23
G9	1.90	4,601.00	5,089.00	4,324.00	4,200.00	3,360.00	3,664.16	6,961.90
G10	5.10	4,301.00	4,324.00	3,865.00	3,360.00	2,400.00	3,311.90	16,890.67
G11	0.59	4,001.00	4,324.00	3,865.00	3,360.00	2,400.00	2,684.44	1,583.82
WIV	21.13						3,854.00	81,435.02
NCW	3.12						3,327.00	10,380.24
Non CIL Indigenous	22.15						2,475.00	54,821.25
Non CIL Indigenous Wasted	20.11						3,164.00	63,628.04
<b>Weighted Average Minimum Allowable Heat Value for the year</b>								<b>3,611.73</b>



Order on ARR of CESC for the year 2018-19

**Southern Generating Station 2018-19**

Grades	Grade wise coal consumption in (%) for the period April, 2018 to March, 2019 (A)	Min GCV (G1)	Max GCV of Band (X2)	Min GCV of Band (X1)	Max UHV of Band (Y2)	Min UHV of Band (Y1)	Mean UHV Interpolation $U = Y1 + (G1 - X1) / (X2 - X1) * (Y2 - Y1)$	Product = A X U
(1)	(2)						(3)	(4) = (2) X (3)
G3	0.40	6,401.00	6,454.00	6,049.00	6,200.00	5,600.00	6,121.48	2,448.59
G4	50.11	6,101.00	6,454.00	6,049.00	6,200.00	5,600.00	5,677.04	284,476.33
G5	12.06	5,801.00	6,049.00	5,597.00	5,600.00	4,940.00	5,237.88	63,168.79
G6	4.71	5,501.00	5,597.00	5,089.00	4,940.00	4,200.00	4,800.16	22,608.74
G7	19.30	5,201.00	5,597.00	5,089.00	4,940.00	4,200.00	4,363.15	84,208.79
G8	6.45	4,901.00	5,089.00	4,324.00	4,200.00	3,360.00	3,993.57	25,758.52
G10	4.68	4,301.00	4,324.00	3,865.00	3,360.00	2,400.00	3,311.90	15,499.67
WIV	2.29						3,854.00	8,825.66
<b>Weighted Average Minimum Allowable Heat Value for the year</b>								<b>5069.95</b>



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Order on APR of CESC for the year 2018-19

**Annexure 2E**

**Computations of the share of savings in cost of coal on account of achieving better station heat rate**

Sl. No.	Particulars	Unit	Budge Budge	Southern
1	Gross Generation	MU	6,014.681	283.777
2	Oil consumed	KL	851.62	1,437.43
3	Coal consumed	MT	35,67,905.00	2,00,484.00
4	HV of Oil	KCal/Ltr.	9,567.00	9,572.00
5	HV of Coal	KCal/Kg	3,611.73	5,069.95
6	Heat from Oil released	M. Kcal	8,147.45	13,759.08
7	Heat from Coal released	M. Kcal	1,28,86,324.18	10,16,444.02
8	Total Heat	M. Kcal	1,28,94,471.63	10,30,203.10
9	Actual Station Heat Rate	KCal/kWh	2,143.83	3,630.33
10	Design Station Heat Rate (D)	Kcal/Kwh	2,247.00	2,707.00
11	Normative Gross Station Heat Rate considered for the year (SHR <sub>n</sub> )	Kcal/Kwh	2,470.00	2,900.00
12	Ratio of SHR <sub>n</sub> to D	-	1.10	1.07
13	Categorization of Generating Stations as per Regulations	-	B	B
14	SHR/SHR <sub>n</sub>	-	0.87	1.25
15	Gross Generation (vide Annexure – 2A)	MU	6,101.657	
16	Cost of Coal considering normative SHR	Rs in Lakh	1,39,620.30	
17	Total Coal Consumed	MT	35,67,905.00	
18	Proportionate actual use of coal for sale to consumers and WBSEDCL (vide Auditors' Certificate)	MT	35,67,905.00	
19	Actual Cost of coal for supply to consumers and WBSEDCL	Rs. in Lakhs	1,19,084.62	
20	Savings in Cost of Coal for achieving better Station Heat Rate	Rs. in Lakhs	20,535.68	
21	Share of savings in costs attributable to consumers and WBSEDCL	%	14.00%	
22	Share of savings in costs attributable to consumers and WBSEDCL	Rs. in Lakhs	2,874.99	



### Chapter 3

#### FIXED CHARGES

3.1 In terms of regulation 2.5.5 of the tariff Regulations and Table 2.5.5-1, items of expenditure are categorised as uncontrollable / controllable. The definition of uncontrollable and controllable items is being already provided in Tariff Regulations. The amount of actual expenses / charges under such different heads of accounts are, therefore, to be considered on prudence check for carrying out positive or negative adjustments, as the case may be. The review of each of such controllable and uncontrollable heads of fixed charges with reference to the cost allowed through tariff and the actuals based on the audited accounts of CESC is being taken up hereunder one by one on the basis of principles laid down in Tariff Regulations / Tariff Order.

3.2 The rationale behind the Commission's disposal of relevant item heads, after prudence check, is detailed in subsequent paragraphs.

#### 3.3 Water Charges & Coal and Ash Handling Charges:

Actual expenses have been furnished through Auditors' Certificate in Annex 6. In response to the letter of the Commission dated 25.07.2023, CESC has clarified in letter dated 28.07.2023 that revenue from sale of ash has been fully passed on to the consumers, as reflected under 'Credit for Recoveries' (of Abridged Cost Statement) in Page 172 of Volume 4 of the Supplementary Petition to FPPCA and APR Petition for 2018-19. Water charges and coal and ash handling charges being uncontrollable items of expenditure are allowed in proportion to actual generation, as furnished through Auditors' Certificate in Annex 14. The details are in Table 3.3-1 and Table 3.3-2 respectively.

**Table 3.3-1: Water Charges**

Generating Station	Target Generation in Tariff Order (MU)	Admitted in Tariff Order (Rs. Lakh)	Actual Generation (MU)	Expenses proportionate to Actual generation (Rs. Lakh)	Actual Expenses (Rs. Lakh)	Expenses admitted in APR in 2018-19 (Rs. Lakh)
Budge Budge	5,590.000	6.66	6,014.681	7.17	5.00	5.00
Southern	950.000	64.76	283.777	19.34	18.00	18.00



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Generating Station	Target Generation in Tariff Order (MU)	Admitted in Tariff Order (Rs. Lakh)	Actual Generation (MU)	Expenses proportionate to Actual generation (Rs. Lakh)	Actual Expenses (Rs. Lakh)	Expenses admitted in APR in 2018-19 (Rs. Lakh)
Titagarh	0.000	0.00	0.00	0.00	0.30	0.00
<b>Total</b>	<b>6,540.000</b>	<b>71.42</b>	<b>6,298.458</b>	<b>26.51</b>	<b>23.30</b>	<b>23.00</b>

Table 3.3-2: Coal and Ash Handling Charges

Generating Station	Target Generation (MU)	Admitted in Tariff Order (Rs. Lakh)	Actual Generation (MU)	Expenses proportionate to Actual generation (Rs. Lakh)	Actual Expenses (Rs. Lakh)	Expenses admitted in APR in 2018-19 (Rs. Lakh)
Budge Budge	5,590.000	843.07	6,014.681	907.12	1,007.00	907.12
Southern	950.000	238.88	283.777	71.36	99.00	71.36
Titagarh	0.000	0.00	0.000	0.00	0.00	0.00
<b>Total</b>	<b>6,540.000</b>	<b>1,081.95</b>	<b>6,298.458</b>	<b>978.48</b>	<b>1,106.00</b>	<b>978.48</b>

3.4 Operation and Maintenance Expenses for Generation function:

CESC has claimed O&M expense of Rs. 10,620.00 lakh, Rs. 2,263.00 lakh and Rs. 1,090.00 lakh for Budge-Budge TPS, Southern TPS and Titagarh TPS respectively for the year 2018-19 in Form E(B) whereas the actual expenses for the respective generating stations as per Form 1.12 are Rs. 7,716.00 lakh, Rs. 1,673.00 lakh and Rs. 1,090.00 lakh totalling to Rs. 10,478.00 lakh. In Form 1.12, CESC has further claimed adding 'Differential O&M Expenses' with the actual O&M expense to arrive at the O&M expenses allowed in MYT order for Budge-Budge TPS and Southern TPS, on normative basis however, actual expense is claimed for Titagarh TPS. CESC has stated that O&M expense for Titagarh is required to keep the plant at a ready stage for any contingency as well as safe keeping of the plant. Details of Generation O&M expenses claimed by CESC is shown in Table 3.4-1 below.



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Table 3.4-1: Generation O&M Expenses claimed by CESC

Particulars	Installed Capacity	Admitted amount for FY 2018-19 as per Tariff Order based on norms of O&M Expenses	Actual expense	Differential O&M expense (Normative O&M Expense Less Actual O&M Expenses)	Claimed
	MW	Lakh	Lakh	Lakh	Lakh
<b>Budge Budge</b>	750.00	10,620.00	7,716.00	2,904.00	10,620.00
<b>Southern</b>	135.00	2,262.60	1,673.00	590.00	2,263.00
<b>Titagarh</b>	375.00	0.00	1,090.00	0.00	1,090.00
<b>Total O&amp;M</b>	<b>1,260.00</b>	<b>12,882.60</b>	<b>10,478.00</b>	<b>3,494.00</b>	<b>13,973.00</b>

The O&M expenses is controllable cost in terms of Tariff Regulations and the admitted O&M expense is provided as per the guideline set out by the Commission in paragraph 5.5.1 of the tariff order of 2018-19 for CESC in pursuance to regulation 2.8.6.1 of Tariff Regulations. The Commission while listing the O&M expenses norms under Schedule 9B referred the same following regulation 5.7 as expressed at sl (i) of note under such Schedule 9B. Regulation 5.7.3 of WBERC Tariff Regulations dealing with O&M Expenses provides that the "Commission shall accept Operation & Maintenance Expenditure subject to prudence check and other specific provision on this respect in these regulations". Thus, such norms of O&M Expenses act as a ceiling only and never debars Commission from applying prudence check on such expenses. APR is a truing up exercise based on actual expenses and admission is dependent upon actual incurrence of the expenditure and not merely on any normative ceiling of expenses whatsoever in case of any item of expenditure. Thus actual O&M Expenses as actually incurred are admissible. CESC has claimed the differential amount arising out of gap between the normative O&M expenses and the actual O&M expenses incurred without actually incurring such differential expenditure.

Further, this is noted by the Commission that the actual expenses of Budge Budge and Southern is 72.66% and 73.96% respectively of the normative expenses allowed in the Tariff Order. Regulation 2.6.10 inter-alia specifies that if the actual expenditure under any sub-head of





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controllable item of O&M expenses or O&M expenses as a whole, as may be applicable, or on the controllable item of outsourcing is less than 90% of the admitted amount in the tariff order, then the Commission may direct in APR to use such savings below 90% of the projected level by carrying forward such amount for expenses in Repair and Maintenance or Human Resource Skill Development programme in future for any generating station or licensee. However, if the concerned generating company or the licensee requests for this carry forward specifically, then the Commission shall allow such carry forward till the period for which such carry forward is requested for or till the end of the concerned control period, whichever is earlier. Relevant portion of regulation 2.6.10 (iv) is reproduced below:

*"If the actual expenditure under any sub-head of controllable item of O & M expenses or O&M expenses as a whole, as may be applicable, or on the controllable item of outsourcing is less than 90% of the admitted amount in the tariff order, then the **Commission may direct in APR to use such savings below 90% of the projected level by carrying forward such amount for expenses in Repair & Maintenance or human resource skill development programme in future** for any generating station or distribution system or transmission system of the licensee or generating company. However, if the concerned generating company or the licensee requests for this carry forward specifically, then the Commission shall allow such carry forward till the period for which such carry forward is requested for or till the end of the concerned control period, whichever is earlier:*

*....."*

CESC has not proposed any carry forward of such savings and as per the above provisions it is the discretion of the Commission to allow such carry forward of savings in cost if such carry forward is proposed by the licensee. The Commission is of the view that such carry forward will eventually impact the tariff of the end consumers and more so when CESC has already realised the entire actual cost of O&M expenses, no extra cost is allowable to burden the consumers.



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The Commission admits the actual O&M expense as incurred by CESC during 2018-19 in full in the instant order for Budge Budge and Sothern Generating Stations as the same is within the normative ceiling of O&M Expenses stipulated in the WBERC Tariff Regulations. Further, in absence of any operations at Titagarh TPS, no O&M cost has been considered for the generating station. Details of admitted Generation O&M expenses is shown in Table 3.4-2 below.

Table 3.4-2: Generation O&M Expenses admitted

Particulars	Installed Capacity	Admitted amount for FY 2018-19 as per Tariff Order	Claimed	Actual expense	Admitted
	MW	Lakh	Lakh	Lakh	Lakh
Budge Budge TPS	750.00	10,620.00	10,620.00	7,716.00	7,716.00
Southern TPS	135.00	2,262.60	2,263.00	1,673.00	1,673.00
Titagarh TPS	375.00	0.00	1,090.00	1,090.00	0.00
<b>Total O&amp;M</b>	<b>1,260.00</b>	<b>12,882.60</b>	<b>13,973.00</b>	<b>10,478.00</b>	<b>9,389.00</b>

3.5 Other Operational expenses for generation

CESC has claimed rent of Rs. 62.00 lakhs for generation for southern power plant as provided in form E(B) of the petition, against the admitted amount of Rs. 40.00 lakhs in Tariff Order. As rent is considered as controllable, the expenses of rent is allowed up-to the value admitted in Tariff Order i.e., Rs. 40.00 lakh. Thus, the allowed expenses under this APR for rent of generation of Southern power plant for 2018-19 is Rs 40.00 lakh.

3.6 Operation and Maintenance (O&M) Expenses under Distribution function:

3.6.1 O&M expenses primarily consists of Repair & Maintenance expenses, Administrative & General Expenses and other operational expenses including outsourcing-etc. In Tariff Regulations O&M expenses are basically considered as controllable expenses, except manpower related costs. As per regulation 2.6.10 of the Tariff Regulations any additional expense to any controllable item may be allowed if inflation is found more than 15% with respect to the price considered in tariff order or the business volume parameter increases by more than 5% to the values considered in the tariff order.

3.6.2 In the tariff order of sixth control period pertaining to 2018-19 the expenditures for different heads which are sensitive to business volume parameters had been projected by the Commission on



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the basis of trend of inflation as well as the business volume growth of the previous year's vis-à-vis the expenditure projected by CESC. For this purpose, a hybrid index (HI) consisting of 60% and 40% weightage on WPI (Wholesale Price Index) and CPI (Consumer Price Index) respectively has been used by the Commission. From the analysis of business volume parameters and inflation indexes in table below, it is found that the variations are well within the limits specified in regulation 2.6.10 of the Tariff Regulations.

**Table 3.6.2: Business Volume parameters and Inflation Indexes**

Particulars	Tariff Order	Actual Value of 2018-19	Variation in %
Distribution Line Length in CKM	22,589.00	22,595.00	0.03%
Consumer strength in number	32,66,000.00	32,67,439.00	0.04%
WPI in %	4.26%	4.25%	(0.23) %
CPI in %	5.40%	5.44%	0.74%
Inflation in hybrid index [WPI: CPI (60:40)] in %	4.72%	4.73%	0.21%
Please see WPI and CPI detail in Annexure-3F			

Accordingly, for controllable items for 2018-19 the permissible expenses as admitted are shown in the following paragraphs:

**3.6.3 Repair and Maintenance (R&M) Charges for Distribution function:**

In APR application the actual expenditure under Repair & Maintenance head is shown by CESC is Rs. 16,346.00 Lakh. This claimed amount of Rs 16,346.00 lakhs includes the security expenses of Rs 1,323.00 lakhs which is basically the part of A&G expenses. Thus, the net amount of R&M expenses for 2018-19 comes to Rs 15,023.00 lakhs (Rs 16,346.00 lakhs – Rs 1,323.00 lakhs). The Commission in the tariff order allowed Rs. 19,125.00 lakh as R&M expense. Since R&M expense is a controllable element and the claimed amount of Rs. 15,023.00 lakh is within the admitted amount of Rs. 19,125.00 lakh allowed in the Tariff order, the actual expenditure is admitted.



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Table 3.6-3: R&M Expenses (Distribution & Supply / Selling)

Particulars	Allowed in Tariff Order	Claimed in APR Petition	Now admitted in APR
Repairs & maintenance	19,125.00	15,023.00	15,023.00
<b>Total</b>	<b>19,125.00</b>	<b>15,023.00</b>	<b>15,023.00</b>

3.6.4 Administrative & General (A&G) Expenses for distribution function:

A&G expenses has four major elements such as Rent, Legal Charges, Audit fees & expenses and Other Administrative & General Expenses. As per regulation the other administrative & General expenses together with rent, legal charges, audit fees & expenses are part of the A&G expenses and the variation of actual expenses corresponding to the admitted amount in tariff order is permissible to the extent allowed under regulation 2.5.5 (iv) only.

As per the provisions of Tariff Regulations, A&G expenses are controllable. The Commission noted that as per form E(b) of Volume 2, actual A&G expenses incurred in 2018-19 is Rs. 22,543.00 lakhs (including security expenses of Rs. 1,323.00 lakhs). Further the Commission has shifted the bank charges for cash management services (from Other Finance Charges) (Rs. 235 lakh) to other A&G expenses. Accordingly, the revised A&G expenses is Rs. 22,778.00 lakh. However, the approved amount as per Tariff Order being Rs. 19,339.00 lakh. As A&G expense is a controllable item, thus, the permissible expenses under this APR cannot exceed the value of Rs. 19,339.00 lakhs as elaborated in paragraphs 3.6.1 and 3.6.2 above. Thus, the admitted expenses under this APR for A&G expenses in 2018-19 is Rs 19,339.00 lakh.

Thus, the admitted amount on A&G expenses for APR of 2018-19 is as per detailed out in Table 3.6-4 below considering principles discussed above.

Table 3.6-4: A&G Expenses (Distribution & Supply / Selling)

Particulars	Allowed in Tariff Order	Claimed in APR Petition	Now admitted in APR
Legal & Professional Charges	662.00	905.00	662.00
Audit Fee	222.00	326.00	222.00
Other Administrative & General expenses (incl. security expense)	17,145.00	20,202.00	17,145.00



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Particulars	Allowed in Tariff Order	Claimed in APR Petition	Now admitted in APR
Rent for distribution function	1,310.00	1,345.00	1,310.00
<b>Total</b>	<b>19,339.00</b>	<b>22,778.00</b>	<b>19,339.00</b>

**3.7 Other Operational expenses:**

In respect of allowance of expenses such as, Rates & Taxes, Insurance, Lease Rental, Cost of outsourcing, the principle adopted in the Tariff Order has been followed and the admitted expenses are discussed in the following paragraphs based on submitted forms and Auditors' Certificate.

3.7.1 CESC has claimed an amount of Rs. 805.00 lakhs (Rs. 385.00, 85.00, 2.00 and 333.00 lakhs respectively for Budge Budge, Titagarh & Southern generating station and distribution function against admitted amount of Rs. 728.00 lakh (Rs. 389.00, 0.00, 11.00 and 328.00 lakhs) in tariff order on account of Rates and Taxes in APR application for 2018 – 19. CESC has claimed Rs. 85 Lakhs for Titagarh plant which is currently in operative. The Commission has disallowed the claim of CESC for Titagarh plant as per the provision of the Regulation 5.25.1 and 5.25.2 of the Tariff Regulation. As the other claims of CESC for Budge Budge, Southern generating station and distribution function are statutory in nature, the Commission has admitted the claimed amount of Rs. 720.00 lakh under this head. The segregation of such amount on different business functions has been considered as proposed by CESC. The allocation of the total cost is provided in Annexure 3A-3D.

3.7.2 CESC has claimed an amount of Rs. 1,197.00 lakhs (Rs. 781.00, 6.00, 78.00 and 332.00 lakhs respectively for Budge Budge, Titagarh & Southern generating station and distribution function against admitted amount of Rs. 497.00, 0.00, 102.00 and 173.00 lakhs in tariff order) on account of Insurance in APR application for 2018 – 19 against approved amount of Rs 772.00 lakh in tariff order. CESC in volume-2 of its supplementary petition has submitted that, the premium has been settled for the year based on competitive offer obtained from different insurance companies through quotation. In terms of regulation 5.23 of the Tariff Regulations, based on the submissions made by the petitioner and the amount recorded in the audited account, the Commission admits



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the amount of Rs. 1,191 lakhs. The Commission has disallowed the claim of CESC for Rs. 6 Lakh for Titagarh plant as per the provision of the Regulation 5.25.1 and 5.25.2 of the Tariff Regulation as Titagarh plant is currently inoperative.

3.7.3 CESC has claimed an amount of Rs. 1,026.00 lakhs on account of lease rental in APR application for 2018 – 19 against approved amount of Rs 1,023.00 lakhs in tariff order. Based on the formula provided in 5.5.2.7 of tariff order 2018-19, the net admissible cost under this head (only for distribution function) comes out to be Rs. 1,088.83 lakhs. Being lower than the net admissible cost, the amount of Rs. 1,026.00 lakh is admitted under the head of distribution function.

Admissible Cost = (Approved Amount in Previous APR/Actual DLL in Previous Year) \* (Inflation Rate based of CPI & WPI for the current year) \* Actual DLL in current year.

Net Admissible Cost = Maximum of (Admitted in Tariff Order, Admissible Cost)

3.7.4 CESC has claimed an amount of Rs. 1,494.00 lakhs on account of cost of out-sourcing in APR application for 2018 – 19 against approved amount of Rs 1,026.00 lakhs in tariff order. Based on the formula provided in 5.5.2.7 of tariff order 2018-19, the net admissible cost under this head (only for distribution function) is Rs. 1,026.04 lakhs. But, being higher than the net admissible cost, Rs. 1,026.04 lakh has been admitted for distribution function

**Table 3.7-4: Other Operational expenses**

Particulars	Units	Allowed in Tariff Order	2018-19 (Accounts & APR Petition)	2018-19 (Admitted)
Rates & Taxes (including service tax)	Rs. Lakh	728.00	805.00	720.00
Insurance	Rs. Lakh	772.00	1,197.00	1,191.00
Lease Rental	Rs. Lakh	1,023.00	1,026.00	1,026.00
Outsourcing expenses for call centre	Rs. Lakh	1,026.00	1,494.00	1,026.04

**3.8 Employee cost:**

3.8.1 The own employee cost determined on the basis of annual accounts and submitted petition is as follows in Table 3.8-1:



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**Table 3.8-1: Own Manpower Cost**

Particulars	Amount (Rs. Lakh)
Own Employee cost claimed as per Note 35 of the audited statement of Profit and Loss account for the year ended 2018-19 (after allocation/ transfer to capital account of Rs. 15,988.00 Lakh) and auditors' certificate	92,603.00
Add: Remeasurement of defined benefit plan transferred to Other Comprehensive Income (This is an Ind AS disclosure in respect of actuarial gain/loss forming part of actuarial valuation which was earlier included in Employee cost, but required to be separately disclosed pursuant to the Ind-AS Accounting Standard)	4,103.00
Less: Ind AS adjustment of employee loan (Notional assessment as per Ind AS provided in communication no. ED(F):75460 dated 18 November 2022)	35.00
Less: Employee Cost attributable to other activities (in term of response dated 18 November 2022 vide letter no ED(F):75460)	581.00
Add: Director sitting fees and expenses	140.00
CESC own employee cost in this APR petition	96,230.00

3.8.2 Also, as per Form E(B) the claimed amount by CESC is 96,230.00 lakh. Accordingly, the amount admitted for APR of CESC for the year 2018-19 is Rs 96,230.00 lakh and has been segregated between generation and distribution function as proposed in the E(B) form.

**Table 3.8-2: Allocation of own Employee Cost**

Item heads	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
Generation Employee Cost (Rs. lakh)	16,826.00	18,411.00	18,411.00
Distribution Employee Cost (Rs. lakh)	69,119.00	77,819.00	77,819.00

3.8.3 CESC in its petition claimed Rs. 3,562.00 lakh as employee cost related to contracted manpower engaged in regular establishment in the generating stations. In Schedule-9A to the Tariff Regulations man/MW ratio of each power plant has been specified. Accordingly, contracted manpower cost is allowed considering that, the total number of manpower including own employee remains within the man/ MW limits specified in the regulations as below:



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**Table 3.8-3: Contractual manpower cost in regular generation establishment**

Generating Station	Allowable manpower as per man/MW ratio in schedule-9A to the Tariff Regulations	Number of Own employees	Number of contractual manpower engaged	Actual cost of contractual manpower (Rs. lakh)	Admissible number of contractual manpower limited to man/MW	Admissible cost of contracted manpower (Rs. lakh)
	A	B	C	D	E=A-B	F = D x E/C
Budge Budge	1,185	679	768	4,847.00	506	3,193.00
Southern	473	367	293	1,020.00	106	369.00
Titagarh	876	354				
<b>Total</b>	<b>2,534</b>	<b>1,400</b>	<b>1,061</b>	<b>5,867.00</b>	<b>612</b>	<b>3,562.00</b>

**3.9 Corporate Social Responsibility (CSR)**

3.9.1 The claim of Rs. 2,039.00 lakh as furnished in Form 1.17 towards Corporate Social Responsibility has not been allowed since the same is an allocation of profit and a statutory obligation.

**3.10 Borrowing cost**

3.10.1 The interest claimed on different heads in Form – C are shown in Table 3.10-1:

**Table 3.10-1: Interest claimed**

Sl. No.	Particulars	Amount (Rs. Lakh)
A. Interest on Capital Borrowings		
1	Gross amount of interest on capital Borrowings (vide detailed computations submitted in Form - C)	25,238.00
2	Less: Amount capitalised (Form - C)	1,191.00
Total amount of interest claimed towards capital borrowings (1-2)		24,047.00
B. Interest claimed on normative borrowings in terms of Tariff Regulations [Form 1.20(b)]		124.00
C. Interest on Working Capital [Form 1.17(b)]		6,948.00
D. Interest on temporary accommodation [Form 1.17(a)]		39,025.00
<b>Total (A+B+C+D)</b>		<b>70,144.00</b>





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For Titagarh generating station, CESC has not claimed any loan, repayment, interest on loan in Form C of the petition.

3.10.2 CESC has added net assets of Rs. 66,003.00 lakhs during the 2018-19. The net cost of assets added is shown as the below table:

**Table 3.10-2: Net Assets Added During the Year 2018-19**

Sl. No.	Asset Added During the Year 2018-19 to be Serviced through Tariff	Amount (Rs. Lakhs)
1	Addition to fixed assets	69,630.00
2	Less: Normal Retirement of Assets	3,627.00
3	Net Asset including Assets on Consumer contribution added during the year as per Form 1.18 ((1)-(2))	66,003.00
4	Less Assets on consumer contribution added during the year	11,145.00
5	Asset excluding asset on Consumer contribution Added During the year 2018-19 ((3)-(4))	54,858.00
6	Less Asset created in terms of Regulation 5.15.1.(iv)	509.00
7	<b>Net Asset Added during 2018-19= (5)-(6)</b>	<b>54,349.00</b>
8	Serviceable through Equity as per Table 3.16.3	16,304.70
9	Serviceable through Debt ((7)-(8))	38,044.30
10	Asset created under Regulation 5.15.1.(iv) fully serviced through Equity	509.00
11	<b>Total Asset to be serviced in Tariff ((7) + (10))</b>	<b>54,858.00</b>

In response to the letter of the Commission dated 25.07.2023, CESC has clarified in letter dated 28.07.2023 that (i) assets having Original Cost of Rs 3627 lakhs have been retired during the year 2018-19 as reflected in Note 7 of Form 1.18 of the Petition and no depreciation has been claimed on the aforesaid assets from the date of retirement; (ii) the said Assets had a Written Down Value of Rs 792 lakhs and were sold for Rs 509 lakhs resulting in a loss of Rs 284 lakhs, which is reflected in Note 38 of Page 112 of Annual Report of 2018-19; (iii) the aforesaid loss on sale of assets was not claimed in Supplementary APR Petition.

3.10.3 Till APR 2015-16 the assets added during the year used to be considered excluding assets on consumer contribution and such amount of consumer contribution was not included in the non-tariff income. However, in APR 2016-17 & APR 2017-18 assets added during the year were serviced



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including assets on consumer contribution while such consumer contribution was included in the non-tariff income as per petition submitted by CESC. CESC introduced such change w.e.f. 2016-17 following INDAS adjustments as required. Prior to that such assets as added on consumer contribution used to be excluded for servicing through tariff and such contribution was also not considered under non-tariff Income. The Commission, in parity of treatment followed for other utilities decides to consider assets added during the year excluding assets on consumer contribution. Simultaneously, such consumer contribution will not form the part of non-tariff income. However, since assets on consumer contribution as added during the years 2016-17 & 2017-18 for Rs 13,021.00 lakh & Rs 11,615.00 lakh were serviced through corresponding debt & equity in those years, the Commission, as a logical consequence, decides to discontinue servicing of such assets for debt & equity from 2018-19 onwards. Necessary adjustments as required on carried over balance in 2018-19 has been made following normative debt: equity pattern while considering servicing of such assets on consumer contribution added in 2016-17 & 2017-18. Accordingly, adjustment for Interest on capital borrowing, Depreciation, Return on Equity for the assets created from the consumer's contribution in the APR for 2016-17 and 2017-18 and necessary adjustments for consumer contribution considered in Non-tariff income in the APR for 2016-17 and 2017-18 have been made in this APR in separate para 3.10.4. The Interest on capital borrowing is computed as below after due adjustment as mentioned above to arrive at the admissible interest on debt:

**Table 3.10-3: Interest on Capital Borrowings (Amount Rs. Lakhs)**

Assets Added on Consumer Contribution (Amount Rs. Lakh)		
Sl. No.	Years	Consumers Contribution Allowed in APR Order under Non-Tariff Income
1	2016-17	13,021.00
2	2017-18	11,615.00
3	Total	24,636.00
4	70% of (3)	17,245.20
5	2018-19	11,145.00
6	70% of (5)	7,801.50



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Interest expenses (Amount Rs. Lakhs)							
Sl. No.	Particulars	Opening Loan	Repayment	Drawal	CI Loan	Interest	Wgt. Avg Rate
1	As per Form C of FY 2018-19	2,87,118.00	50,355.00	46,800.00	2,83,563.00	25,237.50	8.84%
2	Less Adjustment of carried over loan attributable to Assets on Consumer Contribution added during 2016-17 & 2017-18 following 70:30 debt: Equity pattern and serviced through tariff in 2016-17 & 2017-18 and thus included in Opening Balance and proportionate repayment thereon as claimed in Form C	17,245.20	3,024.48				8.84%
3	Admissible loan position in 2018-19 after adjustment as per Sl. No. 2 above	2,69,872.80	47,330.52	38,044.30			8.84%
4	Net Interest Admissible in 2018-19 (Op Bal +CI Bal)/2* 8.84% prior to adjustment of 2016-17 and 2017-18 shown separately in the table 3.10-4(c) below	2,69,872.80	47,330.52	38,044.30	2,60,586.58	23,446.30	8.84%

3.10.4 Adjustment for Interest on capital borrowing, depreciation, Return on Equity for the assets created from the consumer's contribution in the APR for 2016-17 and 2017-18 and necessary adjustment for consumer's contribution considered in non-tariff income in the APR for 2016-17 and 2017-18 have been shown below:

**Table 3.10-4(a): Adjustment of Depreciation for FY 2016-17 and FY 2017-18**

Adjustment of Depreciation (Rs. Lakh)				
Particulars	FY 2016-17		FY 2017-18	
	Depreciable Asset	Depreciation Approved	Depreciable Asset	Depreciation Approved
(a) Before Adjustment of Consumer Contribution	10,95,594.00	39,133.38	11,60,576.00	41,101.25
(b) Consumer Contribution & proportionate Depreciation	13,021.00	465.10	11,615.00	411.34
<b>Total</b>			<b>876.44</b>	

**Table 3.10-4(b): Adjustment of RoE for FY 2016-17 and FY 2017-18**

Adjustment of RoE (Rs. Lakh)				
Particulars	FY 2016-17		FY 2017-18	
	Asset from consumer contribution	RoE Approved	Asset from consumer contribution	RoE Approved
(1)	(2)	(3)= (2)*30%*16.5%	(4)	(5)=(4)*30%*16.5%



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Adjustment of RoE (Rs. Lakh)				
Particulars	FY 2016-17		FY 2017-18	
	Asset from consumer contribution	RoE Approved	Asset from consumer contribution	RoE Approved
Consumer Contribution & RoE thereupon@16.5%	13,021.00	644.54	11,615.00	574.94
<b>Total</b>	<b>1,219.48</b>			

Table 3.10-4(c): Adjustment of Interest on Capital Borrowing for FY 2016-17 and FY 2017-18

Adjustment of Interest on Capital Borrowing						
Particulars	FY 2016-17			FY 2016-17		
	Drawal of loan as serviced through tariff (Rs. Lakh)	Corresponding Interest on Capital Borrowing serviced in tariff (Rs. Lakh)	Avg. Interest Rate	Drawal of loan as serviced through tariff (Rs. Lakh)	Corresponding Interest on Capital Borrowing serviced in tariff (Rs. Lakh)	Avg. Interest Rate
(1)	(2)	(3)=(2)*(4)	(4)	(5)	(6)=(5)*(7)	(7)
Consumer Contribution & Equivalent Interest of 70% of Consumer Contribution	13,021.00*70% =9114.70	916.94	10.06%	11,615.00*70% =8130.50	785.41	9.66%
<b>Total</b>	<b>1,702.35</b>					

Table 3.10-4(d): Overall net impact of adjustment for assets from consumer contribution for FY 2016-17 and FY 2017-18 (Rs. Lakhs)

Particulars	Derivative	FY 2016-17	FY 2017-18	Total
Consumer Contribution included in Non-Tariff income in 2016-17 & 2017-18	(a)	13,021.00	11,615.00	24,636.00
Impact of Depreciation for 2016-17 & 2017-18 (Table No 3.10-4(a))	(b)	-465.10	-411.34	-876.44
Impact of RoE for 2016-17 & 2017-18 (Table No 3.10-4(b))	(c)	-644.54	-574.94	-1,219.48
Impact of Interest on capital Borrowing for 2016-17 & 2017-18 (Table No 3.10-4(c))	(d)	-916.94	-785.41	-1,702.35
<b>Overall net impact of adjustment for assets from consumer contribution</b>	<b>(e) =(a)+(b)+(c)+ (d)</b>	<b>10,994.42</b>	<b>9,843.31</b>	<b>20,837.73</b>

3.10.5 Interest on normative debt is computed after adjusting cumulative normative repayment at the beginning of the year as well as current year's repayment of normative debt as at Form 1.20(a) of Annex-1 of WBERC Tariff Regulations, 2011.



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**Table 3.10-5(a): Calculation of normative debt**

Particulars	Derivative	Amount (Rs. Lakh)
Opening balance before adjustment of normative debt	A1	14,008.40
Less: Cumulative Repayment of Normative Debt up-to previous year	A2	10,904.73
Opening balance of net normative debt	$a = A1 - A2$	3,103.67
Actual addition to debt this year	b	46,800.00
Addition to the fixed asset during the year	c	54,349.00
Normative addition to debt @70% of c above	$d = c \times 0.7$	38,044.30
Addition to debt for the year to be considered to APR	e = higher of b and d	46,800.00
Additional gross normative debt for the year	$F1 = e - b$	0.00
Repayment of normative debt during the year on actual	$F2 = a / 10$	310.37
Net additional gross normative debt during the year	$G = F1 - F2$	-310.37
Closing balance of net normative debt	$h = a + g$	2,793.30
Average balance of Normative Debt	$i = (a + h) / 2$	2,948.49
Weighted average rate of interest paid on term loan during the year	j	8.84%
Interest on normative debt allowed in APR for 2018-2019	$k = j \times i$	260.65
Closing Balance of Gross Normative Debt	$B1 = A1 + F1$	14,008.40
Cumulative Repayment of Normative Debt up to the end of the year	$B2 = A2 + F2$	11,215.10

CESC has claimed interest on normative debt for Rs 124.25 lakh in form 1.20(b) of APR-2018-19 petition as mentioned at Sl. No. B of Table 3.10-5(a) above. The Commission accordingly admits a sum of Rs 124.25 lakh as interest on normative debt in APR-2018-19 being the minimum of admissible amount of Rs 260.65 lakh computed above at Table 3.10-5(a) and Rs 124.25 lakh as claimed by CESC.

Based on above components of interest on Capital borrowing including interest on normative debt is as per the following table.

**Table 3.10-5(b): Approved Total interest on capital borrowings for FY 2018-19**

Particulars	Amount (Rs. Lakh)
Actual Interest on capital borrowing	23,446.30
Interest on normative debt	124.25
Total Interest on capital borrowing	23,570.55



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3.10.6 Computation of interest on admissible Working Capital has been shown under Table 3.10-6 below:

**Table 3.10-6: Calculation of Normative Interest on Working Capital**

Sl. No.	Particulars	Amount (Rs. Lakh)
A1	Net Fixed Cost	3,31,493.30
A2	Fuel and Power Purchase Cost	4,39,027.81
A	Annual fixed Cost, fuel cost and power purchase (A1 + A2)	<b>7,70,521.11</b>
B1	Less: Depreciation including Advance Against Depreciation	47,712.07
B2	Less: Deferred Revenue Expenditure	
B3	Less: Return on Equity	61,889.01
B4	Less: Bad Debt	2,453.00
B5	Less: Reserve for unforeseen exigencies	
B	Total Deductions: (sum B1:B5)	<b>1,12,054.08</b>
C.	Allowable Gross Sales for Working Capital (A – B)	6,58,467.03
D.	Allowable Working Capital @ 10% on C	65,846.70
E.	Cash Security Deposit	1,48,432.00
F.	Requirement of Working Capital Loan	0.00
G.	Interest on Working Capital	0.00

The Commission has viewed the requirement of working capital as per provision of regulations 5.6.5.1 and 5.6.5.2 of the Tariff Regulations as Rs 65,846.70 lakh. Considering the security deposit amount held by CESC being Rs. 1,48,432.00 lakh, there was no further need of working capital by CESC during the year 2018 – 19. Thus, no interest on working capital is being admitted in the APR for FY 2018 –19.

3.10.7 Interest on temporary accommodation as claimed by CESC in Form 1.17 (a) is Rs 39,025.00 lakhs @ 9.78% on unrealised arrears from sale of power arising out of Commission's Orders, claim for recoverable amount out of sale of power for the year 2018-19. The Commission has computed the allowable amount of temporary accommodation in the APR order of CESC for the year 2018-19, as shown in Table 3.10-7. Considering the weighted average interest of temporary accommodation @ 9.78%, the admissible interest on temporary accommodation works out to Rs. 7,076.70 lakh which is lower than the claim of CESC in APR 2018-19.



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Table 3.10-7: Calculation of normative interest on Temporary Accommodation for FY 2018-19

Sl. No.	Particulars	Amount (Rs. Lakh)
A	Opening balance Admissible Temporary Accommodation Requirement on 01.04.2018	39,718.82
B	Addition during the year	
	Recoverable as per APR Order 2018-19	65,280.09
	Total Addition during the year	65,280.09
C	Closing Balance of Admissible Temporary Accommodation Requirement as on 31.3.2019 (A + B)	1,04,998.91
D	Average Balance in 2018-19 requiring temporary accommodation (A+C) / 2	72,358.87
E	Rate of interest	9.78%
F	Interest on Temporary Accommodation (D x E)	7,076.70

3.10.8 Based on above different components of borrowing cost are as per the following table.

Table 3.10-8: Approved borrowing costs for FY 2018-19

Particulars	Amount (Rs. Lakh)
Actual Interest on capital borrowing	23,446.30
Interest on normative debt	124.25
Total Interest cost on capital borrowing	23,570.55
Interest on working capital	0.00
Interest on Temporary Accommodation	7,076.70

3.11 Interest on Consumers' Security Deposits

The total amount of interest paid to the consumers on their security deposits was found to be Rs. 10,728.00 lakh as against an amount of Rs. 11,655.00 lakh in the tariff order for the concerned year. The total amount of such security deposit at the beginning of the year was Rs. 1,50,559.00 lakh and at the end of the year was Rs. 1,48,258.00 lakh as per balance sheet ended 31 March, 2019. CESC has submitted a certificate from their auditors at Annex 16 of Volume 3 of the petition. As per that certificate an amount of Rs.10,728.00 lakh has been settled during the year 2018-2019 in the following manner:



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**Table 3.11-1: Interest on consumer security Deposit**

Particulars	Amount (Rs. Lakh)
(a) Credit to consumers' account	7,088.00
(b) Addition to security deposit of Existing consumer	3,190.00
(c) Payment of Tax as per I. T. Act 1961	450.00
<b>Total</b>	<b>10,728.00</b>

The Commission admits an amount of Rs. 10,728.00 lakh in the APR 2018 - 19 under this head of expense under with allocation to distribution function only.

**3.12 Other Finance Charges**

CESC has claimed Other Finance charges of Rs. 1,339.00 lakhs based on auditors' certificate under Annex 11 of Volume 3 of the petition. The sub-costs under this expense are as follows:

**Table 3.12-1: Break-up of Other Finance Charges**

Particulars	Amount (Rs. Lakh)
Other borrowing costs	747.00
Bank charges for financial services	275.00
Bank charges for cash management services	235.00
Miscellaneous	82.00
<b>Total</b>	<b>1,339.00</b>

The Commission has not admitted miscellaneous charges in tariff order of 2018-19 and the bank charge for cash management are considered as part of normal operation and maintenance cost. Accordingly, the bank charge for cash management (Rs. 235 lakh) are shifted to Other A&G Expenses of distribution function and the net claimed is allowed on actual basis and distributed among different functions as per form E(B) of the APR Petition.

**Table 3.12-2: Other Finance Charges**

Particulars	Amount (Rs. Lakh)
Other borrowing costs	747.00
Bank charges for financial services	275.00
Bank charges for cash management services	235.00





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Particulars	Amount (Rs. Lakh)
Miscellaneous	82.00
<b>Total</b>	<b>1,339.00</b>
Less: Miscellaneous	82.00
Less: Bank charges for cash management services	235.00
Total Deduction	317.00
<b>Net Admissible other Finance charges</b>	<b>1,022.00</b>

Accordingly, the Commission admits an amount of Rs. 1,022.00 lakh in the APR 2018 – 2019 and allocated in proportion to generation and distribution function, however, no Other finance charges is allocated to Titagarh which is inoperative. Station wise allocation of admitted other finance charges is shown below:

**Table 3.12-3: Allocation of admitted Other Finance Charges**

Particulars	Amount (Rs. Lakh)
Budge Budge	282.28
Titagarh	0.00
Southern	27.60
<b>Subtotal</b>	<b>309.88</b>
Distribution	712.12
<b>Total</b>	<b>1,022.00</b>

### 3.13 Bad Debt

Amount actually written off as per Auditors' Certificate amounting to 2,453.00 lakh has been found to be within 0.5% of the earning from the sale of electricity of Rs 7,06,178.00 lakhs in Form 1.25, Annexure 1 of the APR petition. Hence, an amount of Rs. 2,453.00 lakh is admitted as per limit specified in the Regulations.

### 3.14 Depreciation & Amortisation charges

The total amount of depreciation as charged in the books of accounts was Rs. 43,262.00 lakh. CESC clarified vide letter dt 18.11.2022 that an amount of Rs. 373.00 lakh out of the total depreciation is on assets created by utilizing the proceeds from sale of old assets. Amounts of Rs. 185.00 lakh, Rs. 649.00 lakh, Rs. 14.00 lakh and Rs. 22.00 lakh pertain to respectively towards



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adjustment due to Ind-AS, depreciation of coal mine, depreciation on inoperative assets and depreciation relating to other activities. Accordingly, the claimed amount of depreciation in Form B therefore, comes to Rs. 42,019.00 lakh (Rs. 43,262.00 lakh - Rs. 373.00 lakh - Rs. 185.00 lakh – Rs. 649.00 lakh – Rs. 14.00 lakh – Rs. 22.00 lakh) as against an amount of Rs. 42,551.00 lakh allowed in the Tariff Order.

Further the Commission continued the view taken in Para No. 3.10.3 above for treatment to the consumer contribution for FY 2018-19. Accordingly, the Commission has deducted consumer contribution of amount Rs. 11,145.00 lakhs from Capital Assets, under the uncontrollable head of depreciation. Accordingly, the admissible amount of Rs. 40,859.53 lakh, is determined by the Commission towards depreciation in this Order for the year 2018-19 as shown in below table 3.14-1. The centre-wise break-up of the amount admitted are shown in below table 3.14-3.

**Table 3.14-1: Depreciation Expenses (Rs. In Lakhs)**

Particulars	Opening balance	Additions of Original cost of assets	Assets fully depreciated	Assets to be depreciated	No depreciation land - LH	Total	Retirement of original cost of assets	closing balance
	31.03.2018							31.03.19
A. Generating Assets								
Cost	4,25,896.00	2,734.00	1,44,532.00	2,83,246.00	795.00	4,28,630.00	57.00	4,28,573.00
Depreciation for the year								9,521.39
B. Distribution assets								
cost	8,89,275.00	60,589.00	64,647.00	8,80,402.00	2,396.00	9,49,864.00	2,419.00	9,47,445.00
Consumer Contribution for 2018-19		11,145.00						
Cumulative Consumers Contribution for 2016-17 and 2017-18		24,636.00						
Net Cost	8,89,275.00	24,808.00	64,647.00	8,44,621.00	2,396.00	9,14,083.00	2,419.00	9,11,664.00
Depreciation for the year								27,369.53
C. Metering Assets								
cost	49,025.00	4,077.00	12,304.00	39,721.00		53,102.00	1,077.00	52,025.00
Depreciation for the year								3,373.71
D. Other Assets								
Cost	20,201.00	2,231.00	5,000.00	16,062.00	1,296.00	22,432.00	74.00	22,358.00
Depreciation for the year								967.91
Over all								
Cost	13,84,397.00	33,850.00	2,26,483.00	11,83,650.00	4,487.00	14,18,247.00	3,627.00	14,14,620.00
Depreciation for the year								41,232.53



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Particulars	Opening balance	Additions of Original cost of assets	Assets fully depreciated	Assets to be depreciated	No depreciation land - LH	Total	Retirement of original cost of assets	closing balance
	31.03.2018							31.03.19
Less: Depreciation on assets created by utilising proceeds from sale of old assets								373.00
Total Depreciation (net)								40,859.53

Table 3.14-2: Allocation of Depreciation determined in above Table

Particulars	Amount (Rs. Lakh)
(A) Generation function	
Budge Budge	7,857.04
Titagarh	569.83
Southern	333.54
Total (A)	<b>8,760.41</b>
(B) Distribution Function	28,755.02
(C) Supply / Selling Function	3,344.10
<b>Total (A+B+C)</b>	<b>40,859.53</b>

CESC has not shown any interest on loan, fresh loan drawal of loan, repayment etc in Form C for Titagarh generating station. Further, there was no generation from Titagarh in the year 2018 – 19. Therefore, the Commission does not admit any depreciation for Titagarh for the year 2018 – 19 as per the provision of the Regulation 5.25.1 and 5.25.2 of the Tariff Regulation. The centre-wise break-up of the amount admitted are shown in below table 3.14-3.

Table 3.14-3: Centre wise Depreciation admitted

Particulars	Amount (Rs. Lakh)
(A) Generation function	
Budge Budge	7,857.04
Titagarh	0.00
Southern	333.54
Total (A)	<b>8,190.58</b>
(B) Distribution Function	28,755.02
(C) Supply / Selling Function	3,344.10
<b>Total (A+B+C)</b>	<b>40,289.70</b>



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3.15 Advance Against Depreciation / Interest Credit

As per the Tariff Regulations, depreciation is primarily used for repayment of capital loan. Where the amount of depreciation falls short of amount of loan repayment such as shortfall is allowed under advanced against depreciation (AAD) limited to 1/10 of original amount of allowable loan. Similarly, when amount of loan repayment in a year is more than allowed depreciation, an interest credit at the rate of weighted average cost of debt for corresponding year needs to be adjusted on such excess depreciation charged. Further, in terms of Tariff Regulations, it is required to be ensured that, the depreciation allowed should not go beyond 90% of the original cost of Asset and after repayment of entire loan the resulting depreciable amount shall be spread over the balance useful life of the fixed asset. Accordingly, the Commission decides to compute the Advance Against Depreciation/interest credit for the year 2018-19 considering cumulative amount of depreciation and Advance Against Depreciation allowed in previous APR Orders. The Commission has considered cumulative position from the year 2006-07 (1st APR Order of CESC) as below:

Table 3.15-1: Cumulative Depreciation, Advanced Against Depreciation and Repayment of Loan

Table with 5 columns: Sl. No., Year, Admitted amount of loan repayment in Rs. Lakh, Depreciation admitted in Rs. Lakh, and Advanced against depreciation in Rs. Lakh. It lists data from FY 06-07 to FY 18-19, including a total row and a row for FY 18-19.



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Cumulative depreciation admitted up-to 2018-19 is Rs 3,76,439.72 lakh and Cumulative AAD admitted up-to 2017-18 is Rs 1,26,519.77 lakh. Such Cumulative depreciation up-to 2018-19 and Cumulative AAD up-to 2017-18 when added together comes to Rs. 5,02,959.49 lakh. The cumulative admitted loan repayment up-to 2018-19 comes to Rs 5,10,486.90 lakh. The difference between the cumulative admitted loan repayment up-to FY 2018-19 and sum of cumulative depreciation allowed up-to FY 2018-19 and cumulative advance against depreciation allowed up-to FY 2017-18 is Rs. 7,527.41 lakhs. Accordingly, the Commission in this Order is considering advance Against Depreciation as Rs. 7,527.41 lakhs for FY 2018-19 and same have been allocated as proposed by CSEC for different functions. The computation is elaborated below:

(Rs. Lakh)

Advance Against Depreciation		
Sl. No.	Particulars	Amount
1	Total admitted Repayment of loan during the year	47330.52
2	1/10 th of Original Loan Amount	58158.6
3	Maximum permissible amount of loan repayment (restricted to 1/10 <sup>th</sup> of original loan amount) [Min (2,3)]	47330.52
4	Depreciation allowed in APR for 2018-19	40859.53
5	Admissible AAD during 2018-19 [(3)-(4)]	6470.99
6	Admissible Shortfall arising upto 2017-18 due to adjustment of Assets on Consumer Contribution - Sl. No. 13 of Table 3.15.1 - (Cumulative Loan Repayment -Cumulative Depreciation-Cumulative AAD upto 2017-18)	1056.42
7	Total Admissible AAD in APR 2018-19 [(5) + (6)]	7527.41

Table 3.15-2: Allocation of Advanced Against Depreciation determined above

Sl. No.	Particulars	Amount (Rs lakh)
1	Budge Budge	1,447.38
2	Titagarh	105.04
3	Southern	61.58
4	<b>Subtotal</b>	<b>1,614.00</b>
5	Distribution	5,913.41
6	<b>Total</b>	<b>7,527.41</b>



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However, Titagarh generating station of CESC being inoperative during the year 2018 – 19, the Commission does not admit any AAD for Titagarh for the year 2018 – 19 as per the provision of the Regulation 5.25.1 and 5.25.2 of the Tariff Regulation. The centre-wise break-up of the amount admitted are shown in below table 3.15-3:

**Table 3.15-3: Admitted Advanced Against Depreciation for different cost centres**

Sl. No.	Particulars	Amount (Rs lakh)
1	Budge Budge	1,447.38
2	Titagarh	0.00
3	Southern	61.58
4	<b>Subtotal</b>	<b>1,508.96</b>
5	Distribution	5,913.41
6	<b>Total</b>	<b>7,422.37</b>

### 3.16 Return on Equity

3.16.1 Details of return on equity are shown in Table 3.16-1, Table 3.16-2, Table 3.16-3, Table 3.16-4, Table 3.16-5 and Table 3.16-6 below:

**Table 3.16-1: Actual Addition to Equity during 2018 - 19 has been arrived as below:**

Sl. No.	Particulars	Amount (Rs. Lakh)
1	Profit for the year (P&L Account)	93,705.00
2	Write off of Misc. Expenditure (Annex 6 of Vol 3 of Petition)	0.00
3	Total (3 = 1+ 2)	93,705.00
	Less:	
4	Dividend including tax paid (Para (b) of Note 20 of Annual Accounts)	27,966.00
5	Unforeseen Exigencies Reserve (Annex 13 of Vol 3 of petition)	1,626.00
6	Impact of Capital Contribution from Consumers net of tax and other notional IND-AS adjustments	3425.00
7	Total (7 = 4 + 5 +6)	33,017.00
8	<b>Actual addition to equity base during 2018-19 excluding</b>	<b>60,688.00</b>



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SI. No.	Particulars	Amount (Rs. Lakh)
	assets created under regulations 5.15.1.iv (3-7)	

3.16.2 In terms of the regulations 5.1(iii)(f) and 5.4.1(iii) of Tariff Regulations, the consumers contributions to the addition to original cost of fixed assets during the year shall be deducted for the calculation of the amount of equity capital. So, in terms of Form 1.18, 1.26 of APR, read with Notes 4, 5 & 6 of audited financial statements for 2018-19 the net addition of fixed cost is as per Table 3.16-2.

Table 3.16-2: Addition to Original Cost of Fixed Asset

Particulars	Amount (Rs. Lakh)
Addition to fixed assets	69,630.00
Less: Normal Retirement of Assets	3,627.00
Less: Consumer Contribution	11,145.00
Net addition to fixed asset	54,858.00

3.16.3 Further the Commission continued the view taken in Para No. 3.10.3 above for treatment to the consumer contribution for FY 2018-19. Accordingly, the Commission has deducted consumer contribution of amount Rs. 11,145.00 lakhs from the addition to the fixed assets for the FY 2018-19. Accordingly, the amount of Rs. 509.00 lakh is excluded from the net addition to fixed assets of Rs. 54,858.00 lakh for 2018-19. The average equity base for the purpose of computation of return on equity for the year 2018 -19 works out to Rs. 3,91,254.05 lakh as per the computation shown hereunder.

Table 3.16-3: Admissible Equity Base for 2018-19

SI. No.	Particulars	Amount (Rs. Lakh)
1	Actual equity base at the beginning of the year	6,79,021.00
2	Admissible equity base at the beginning of the year 2018 – 19	3,90,238.00
2(a)	30% of Cumulative Consumers Contribution up-to 2017-18	7,390.80
2(b)	Admissible equity base at the beginning of the year for 2018-19 after deducting the Cumulative Consumers Contribution up-to 2017-18 (2-2(a))	3,82,847.20
3	Actual addition to equity base during the year (refer to para 3.16.1)	60,688.00
4	Actual equity base at the end of the year (1+3)	7,39,709.00
5	Net addition to original cost of fixed asset (refer to para 3.16.2)	54,858.00
6	Less: Asset created in terms of regulation 5.15.1(iv) of the Tariff	509.00



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Sl. No.	Particulars	Amount (Rs. Lakh)
	Regulations	
7	Net addition to the original cost of fixed assets during the year other than the assets created in terms of regulation 5.15.1(iv) of the Tariff Regulations (5-6)	54,349.00
8	Normative addition to equity base (30% of 7)	16,304.70
9	Addition to equity base considered for the year (lower of 3 and 8)	16,304.70
10	Add: Asset created in terms of regulation 5.15.1(iv) of the Tariff Regulations	509.00
11	Addition to equity base during the year for the purpose of computation of return as per Tariff Regulations (9+10)	16,813.70
12	Admissible equity base at the closing of the year 2018 - 19 (2(b)+11)	3,99,660.90
13	Average admissible equity base for allowing returns $[(2(b)+12)/2]$	3,91,254.05

3.16.4 In terms of regulation 5.6.1.1, return on equity for generating company and transmission licensee shall be computed on the equity capital at the applicable rate provided by Central Electricity Regulatory Commission and in terms of regulation 5.6.1.2, the said rate will be one percent higher and will be related to distribution assets only. In terms of Central Electricity Regulatory Commission (Term and Conditions of Tariff) Regulations, 2014, the rate of return on equity for generation and transmission activity is 15.5%.

Allocation of equity base between generation and distribution function based on the claimed value:

(Rs. Lakh)

Table 3.16-4: Functional Allocation of Equity Base

Particulars	Opening equity base of 2018-19	Addition to equity base during 2018-19	Closing equity base of 2018-19	Average equity base of 2018-19	Return on equity (%)	Return in APR for 2018-19
Generation	1,22,893.56	669.81	1,23,563.37	1,23,228.47	15.50%	19,100.41
Distribution	2,59,953.64	16,143.89	2,76,097.53	2,68,025.58	16.50%	44,224.22
<b>Total</b>	<b>3,82,847.20</b>	<b>16,813.70</b>	<b>3,99,660.90</b>	<b>3,91,254.05</b>		<b>63,324.63</b>

3.16.5 Equity base specifically attributable to a function has been shown under such function (based on claimed amount).





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Table 3.16-5: Function-wise Allocation of the Amount of Return determined in above Table

Particulars	As determined in APR for 2018-19 (Rs. Lakh)
(A) Generation function	
Budge Budge	16,375.28
Titagarh	1,435.62
Southern	1,289.51
Total (A)	19,100.41
(B) Distribution Function	44,224.22
<b>Total (A+B)</b>	<b>63,324.63</b>

3.16.6 Since, there was no generation from Titagarh in the year 2018 – 19, the Commission does not admit any Return on Equity for Titagarh for the year 2018 – 19 as per the provision of the Regulation 5.25.1 and 5.25.2 of the Tariff Regulation. The centre-wise break-up of the amount admitted are shown in below table 3.16-6.

Table 3.16-6: Function-wise Allocation of the Amount of Return Admitted in APR for 2018 - 19

Particulars	As admitted in APR for 2018-19 (Rs. Lakh)
(A) Generation function	
Budge Budge	16,375.28
Titagarh	0.00
Southern	1,289.51
Total (A)	<b>17,664.79</b>
(B) Distribution Function	44,224.22
<b>Total (A+B)</b>	<b>61,889.01</b>

3.17 Appropriation to Reserve for Unforeseen Exigencies

As per MYT Order dated 03.02.22, no amount was allowed to CESC Limited under the head Reserve for Unforeseen Exigencies. The actual amount of such reserve created by CESC Limited at the same rate on the actual gross block of fixed assets as on 1 April, 2018 was Rs. 24,417.00 lakh and amount appropriated towards interest during 2018 - 2019 is Rs. 1,626.00 lakh. The amount of such reserve had separately been invested along with the amount of Rs. 1,626.00 lakh of interest accrued to such investments in accordance with the relevant regulation of the Tariff



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Regulations of this Commission. As per audited accounts of 2018 - 2019, CESC Limited has a closing balance of Rs. 26,043.00 lakh (Rs. 24,417.00 lakh + Rs. 1,626.00 lakh) in this fund. CESC Limited submitted the necessary audit certificates in Annex 13 of Volume 3 of this petition in this regard. Relevant details have also been furnished in response dated 18 November 2022, vide letter No. ED(F): 75460.

No such appropriation has been allowed in the tariff order and made accrued interest in terms of regulations and no amount is therefore due on account of the same.

3.18 Tax on Income

The Company has duly furnished Assessment Order for the relevant year before the Commission. Necessary Auditors' Certificate has been furnished by the company for the amount of tax paid for the assessment year 2018 – 19 and is allowed with functional allocation on the basis of respective functional admitted return of equity and furnished in Annexures 3A to 3E. Vide Communication no. ED(F):75460 dated 18 November 2022, CESC has told that the company had submitted Assessment order up-to financial year 2017-18 with the Hon'ble Commission vide communication no. 74798 dated 31 December 2021. Besides that, in Annex 12 of Vol 3 of APR petition, CESC submitted an audited report regarding the tax paid on income. Thus, Commission decides to consider the claimed amount of Rs 20,116.37 lakh as Income tax payment by CESC in APR of 2018-19. Any additional claim from the IT authority due to challenge of the assessment order, as may be prayed by the Company, shall be allowed in the year of settlement subject to prudence check. However, the Commission does not admit any tax on income for Titagarh generating station of CESC since no return on equity is admitted. The centre-wise break-up of the amount admitted are shown in below table:

Table 3.18-1: Function-wise Allocation of Admitted Tax on Income (Rs. Lakh)

Sl. No.	Particulars	Break up of Rs 20,116.37 lakh	Break up of Admitted Tax on Income
1	Budge Budge	5,184.10	5,184.10
2	Titagarh	455.01	0.00
3	Southern	408.01	408.01
4	<b>Subtotal</b>	6,047.11	<b>5,592.11</b>
5	Distribution	14,069.26	14,069.26
6	<b>Total</b>	20,116.37	<b>19,661.37</b>



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*Order on APR of CESC for the year 2018-19*

### **3.19 Permitted Incentive**

Budge Budge and Southern are non-ABT Stations and in terms of regulation 6.4.2 are eligible for incentives in terms of paragraph -1 of Schedule-10 to the Tariff Regulations, if their performance is beyond the target availability factor. CESC Limited has submitted Plant availability factor in the data-format for all the generating stations. In a separate proceeding in Case no B-36/ABT/9 on the issue of installation of ABT meter and DC certification of all the embedded generating stations of CESC by SLDC, CESC Limited has submitted through affidavit that the On-line monitoring display arrangement of generation and sent-out figures as well as dedicated voice communication from CESC Control room and WBSLDC Control room are in place since 2009. The on-line SCADA data records are also available since 01.04.2014 with CESC. It is also submitted by CESC Limited that the Availability Schedule and Injection Schedule on day-ahead basis is being provided regularly by CESC to SLDC in prescribed format of SLDC since 2009. Revision of Schedules on real time are also sent by CESC to SLDC. Initial Schedules are being uploaded on CESC website since 01.04.2014. CESC mentioned under affidavit that SLDC has neither asked for demonstration of the DC nor provided any availability certificate. Commission while dealing with the issue in the above case vide order dated 30.07.2022 in case No B-36/ABT/9, has also observed that communication and on-line monitoring are in place. Commission has also observed that CESC was never asked for demonstration of availability by SLDC. Commission has thereafter observed in such order that availability submitted by CESC needs to be considered in absence of specific direction for demonstration.

In view of the above decision taken in the order dated 30.07.2022 in Case No. B-36/ABT/9, the Commission now decided to consider the availability for the year 2018-19 for Budge Budge, Southern Generating Station as submitted by CESC in form 1.1 of the petition which are found above the normative PAF.

Further, performance of Budge Budge in terms of specific oil consumption as well as gross station heat rate is found to be better than norms. The consequent incentives in accordance with the Tariff Regulations have been worked out as under:



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**Table 3.19-1: Incentive for generation higher than Norm**

Sl. No.	Factors	Unit	Budge Budge	Southern
1	Target Plant Availability Factor	%	85%	85%
2	PLF achieved	%	91.55%	24.00%
3	Eligibility for incentive under reg 6.4.2		YES	NO
4	Sent out generation for own consumer and WBSEDCL	MU	5,552.508	
5	Normative sent out	MU	4,782.960	
6	Additional units (4-5)	MU	769.548	
7	Normative PLF	%	80.00%	80%
8	Additional PLF (6-7)	%	11.55%	-
9	Applicable category		B	
10	Applicable rate	Paise/kWh	30.00	
11	Amount eligible (6x10)/10	Rs. In Lakh	2,308.64	-

**Table 3.19-2: Incentive for Oil consumption better than norms**

Sl. No.	Factors	Unit	Budge Budge	Southern
1	Gross Generation	MU	6,101.657	282.900
2	Normative oil consumption rate	ml/kWh	1.30	2.10
3	Actual oil consumption rate	ml/kWh	0.14	5.07
4	Oil rate saved	ml/ kWh	1.16	Nil
5	Applicable Rate of incentive per unit of generation	Paise/kWh	0.4	
6	Eligible Amount [1x5/10]	Rs. In Lakh	244.07	

**Table 3.19-3: Incentive for better gross station heat rate than norms**

Sl. No.	Factors	Unit	Budge Budge	Southern
1	Gross Generation	MU	6,101.657	282.900
2	Normative SHR	kCal/kWh	2,470.00	2,900.00
3	Actual SHR	kCal/kWh	2,143.83	3,630.33
4	Applicable Rate of incentive as per Schedule-10	Paise/kWh	0.50	
5	Eligible Amount [1x4/10]	Rs. In Lakh	305.08	



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Table 3.19-4: Allocation of Overall Incentive

(Rs. Lakh)

Sl. No.	Factors	Budge Budge	Southern	Total
1	Incentive for higher generation than norms	2,308.64	-	2,308.64
2	Incentive for better oil rate	244.07	-	244.07
3	Incentive for better heat rate	305.08	-	305.08
4	Total	2,857.79	-	2,857.79

3.20 Net UI charges paid

CESC Limited paid an amount of Rs. 1,276.00 lakh during the year on account of unscheduled interchange charges (UI). In terms of regulation 5.17.2 of the Tariff Regulations, net payable UI charges shall be considered as an expenditure and shall be limited to 5% of the total power purchase cost. The claim on this account of Rs 1,276.00 lakh is well within the permissible limit of 5% of total power purchase cost of Rs. 2,84,253.16 lakh as mentioned in paragraph 2.11.1.

3.21 Written off of intangible assets

No amount in claimed under this head by CESC Limited in the APR application.

3.22 Income from non-tariff sources

As per note 32 and note 33 of audited annual reports and accounts, the total other income is Rs 36085.00 lakh and CESC has claimed such income at Rs 23,244.00 lakh for the year 2018-19 in Form 1.26 to Annex 1. In Note 3 to Form 1.26, CESC has provided reconciliation of Rs 23,244.00 lakh as Non Tariff Income instead of Rs 36085.00 lakh as summarized below:

Particulars	Rs Lakh
Total Other Income	36085
Interest Income from investment towards unforeseen exigencies reserve	(-)1626
Income from Other Auxiliary Services (Advertisement on bill etc.)	(-)220
Ind AS Adjustments	(-)241
User Fee	(-)1331
Miscellaneous Debits not claimed	47
Earnings from sale of traded goods not claimed	(-)2294
Interest Income from retained profits / share issue proceeds	(-)7176
<b>Total Income other than sale of energy (non-tariff income)</b>	<b>23244</b>



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In absence of any specific disclosure for the element 'Earnings from sale of traded goods not claimed', the Commission finds it prudent not to exclude it from non-tariff income.

Further, as per regulation 5.1(iii)(f) and 5.4.1(iii) of the Tariff Regulations, and view taken by the Commission in Para 3.10.3 of this Order, the Commission has not considered the Consumers Contribution in the Non-Tariff income. Thus, this amount is excluded from the head of non-tariff income.

Therefore, the Commission has admitted Non-Tariff Income as shown in the table 3.22-1.

Table 3.22-1: Non-Tariff Income break-up

Sl. No.	Particulars	Amount (Rs. Lakh)
1	Rental of meters and other apparatus hired out	5,123.00
2	Sale and repair of lamps etc.	198.00
3	Transfer service connection fees	0.00
4	Income from investments and bank balance	0.00
5	Surcharge for late payments	3,403.00
6	Other General receipts arising from and ancillary or incidental to the business of electricity	3,375.00
7	Consumer contribution	0.00
8	Earnings from sale of traded goods not claimed	2294.00
9	Net income from non-tariff sources	14,393.00

Rental of meters and other apparatus hired out, sale and repair of lamps etc., and surcharge for late payments (items 1, 2 and 5 in Table 3.22-1 above) have been entirely accounted in supply / selling function. Other general receipts arising from and ancillary or incidental to the business of electricity (item 6 in Table 3.22-1 above) and 'Earnings from sale of traded goods not claimed' (item 8 in Table 3.22-1 above) are allocated to all functions (generation and distribution) based on the respective return on equity computed in Table 3.16-4. Accordingly, business function-wise allocation of non-tariff income stands as Table 3.22-2.

Table 3.22-2: Allocation of non-tariff income

Particulars	As admitted in APR 2018-19 (Rs. Lakh)
(A) Generation function	
Budge Budge	1,579.10



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Particulars	As admitted in APR 2018-19 (Rs. Lakh)
Southern	-
Titagarh	125.22
Total(A)	<b>1,704.32</b>
(B) Distribution function	12,688.68
<b>Total (A+B)</b>	<b>14,393.00</b>

**3.23 Benefits passed on to consumers**

Based on form 1.24 of volume-2 of APR petition and Annual accounts and Benefits passed on to the consumers in terms of the regulations are detailed as under:

**Table 3.23-1 Benefits passed on to the consumers in terms of regulations (Rs. Lakh)**

Sl. No.	Sources	Revenue Received	Related cost	Gains derived	Rate of share of benefit to consumers	Share to Consumers & WBSEDCL
1	2	3	4	5 = (3-4)	6	7=5x6
1	Sale of power to persons other than consumers	10,218.00	7,967.94	2,250.06	50%	1,125.03
2	Auxiliary Services	414.00	194.00	220.00	40%	88.00
3	Other business - consultancy services	88.00	135.00	-47.00	40%	0.00
4	Other business - user fee	1,331.00	0.00	1,331.00	40%	532.40

Since costs pertaining to consultancy services are not part of the claim, the related revenue is also not shared. No loss is passed on to consumers as well.

(Rs. Lakh)

**Table 3.23-2 Cost Centre-wise Break up of Benefits Passed on to Consumers and WBSEDCL**

Particulars	Sale of power to persons other than consumers	Aux. Services	Other Business - consultancy Services	Other Business - User Fee
Budge Budge	-	-	-	-
Distribution Function (entirely allocated)	1,125.03	88.00	-	532.40

**3.24 Admissibility of recovery of full Capacity Charges as per provisions of regulation 6.4.2 of the Tariff Regulation**



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In terms of regulation 6.4.2 of the Tariff Regulations, from the third control period, the recovery of capacity charge for all the generating station of the licensee and generating company shall be against the normative availability. However, for this purpose licensee has to provide schedule of availability for all 15-minute time block of each generating station to SLDC for recording and subsequent demonstration of their declared capacity as mentioned in regulation 6.7 of the Tariff Regulations. For such demonstration, licensee has to provide online monitoring display arrangement of generation/ sent-out of the generating stations along with dedicated voice communication to SLDC to meet the need of Regulation 6.7 of the Tariff Regulations.

CESC has submitted the availability parameters of their own generating stations in their APR petition at Form 1.1 which was not supported with the certificate by WBSLDC. The Plant Availability Factor (PAF), as declared by the plants and submitted by CESC in their petition are above the normative PAF of the respective plants. As decided in para 3.19 of this order, Commission considers allowing the capacity charge for the generating stations of CESC for the year 2018-19 on the basis of PAF declared by the plants as submitted in Form 1.1 and decides to allow the computed fixed cost of generating stations as Rs 70,328.58 lakh and overall, at Rs. 3,31,493.30 lakh. Thus, the fixed cost for generating stations, distribution business and overall are admitted as follows:

**Table 3.24-1: Allocation of Fixed Costs**

Sl. No.	Particulars	Admissible Fixed cost on APR in 2018-2019 (Annexure 3A to 3E) (Rs. Lakh)
1	<b>Generation function</b>	
	Budge Budge	55,476.75
	Titagarh**	4,908.00
	Southern	9,943.83
	<b>Generation</b>	<b>70,328.58</b>
2	<b>Distribution Function</b>	<b>2,61,164.72</b>
	<b>Total</b>	<b>3,31,493.30</b>

\*\* For Titagarh, only employee cost is allowed.

In terms of paragraph D of Schedule- 9B of the Tariff Regulations, in case of availability of a generating station of a licensee falls below the availability norm, then the total gains meant to be





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*Order on APR of CESC for the year 2018-19*

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passed on to consumers, which shall represent the sum of the sharable gains under paragraph A to paragraph D (of Schedule- 9B), shall be used first to compensate the deficit in fixed charge recovery of the concerned generating station by the licensee, and only thereafter the balance if any shall be passed on to consumers. In such an event, the computation shall be generating station specific. As the gain on account of performance parameters in para 2.19 above is in relation to Budge-Budge generating station only, no benefit of adjustment is allowable to Southern and Titagarh generating stations.

**3.25 In para 3.25 of the APR order of CESC dated 01.08.2022 for the year 2017 – 18, the Commission had directed the licensee to redeploy its employees engaged in Titagarh generation station to other generating stations suitably by maintaining the man/MW ratio of the respective power plants. In the instant APR Order, the Commission directs CESC to submit report on status and plan of redeployment of Titagarh generation station within three months from issuance of this order.**



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Order on APR of CESC for the year 2018-19

**Annexure 3A**

**Generation**  
**Budge Budge Generating Station**

Rs. Lakh

Sl. No.	Particulars	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
1	Water Charges/Cess	6.66	5.00	5.00
2	Coal & Ash Handling Charges	843.07	1,007.00	907.12
3	Operation & Maintenance Expenses	10,620.00	10,620.00	7,716.00
4 (a)	Employee Cost	6,402.00	8,005.00	8,005.00
4 (b)	Contractual manpower in regular establishment	3,587.00	3,193.00	3,193.00
5	Rent for generation		0.00	
6	Rates & Taxes (other than Income Tax)	389.00	385.00	385.00
7	Insurance	497.00	781.00	781.00
8	Corporate Social Responsibility		525.00	
9	Interest on Capital Borrowings (incl. interest on normative debt)	2,048.00	2,118.00	2,065.04
10	Interest on Working Capital		0.00	0.00
11	Other Finance Charges	601.60	358.00	282.28
12	Bad Debt		0.00	0.00
13	Depreciation	8,940.00	8,080.00	7,857.04
14	Advance against Depreciation	2,049.00	1,998.00	1,447.38
15	Written off Intangible Assets		0.00	0.00
16	Return on Equity	16,645.00	16,699.00	16,375.28
17	Reserve for Unforeseen Exigencies		0.00	0.00
18	Income Tax	3,587.03	5,184.00	5,184.10
19	Performance Incentive	-	1,969.00	2,857.79
20	<b>Gross Fixed Charges (1 to 19)</b>	<b>56,215.36</b>	<b>60,927.00</b>	<b>57,061.04</b>
21	Less: Income from Non-Tariff Sources	3,004.26	908.00	1,584.29
22	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee	-	1,170.00	0.00
23	Less: Benefits to pass on to consumers for Auxiliary Services	-	0.00	0.00
24	<b>Total Net amount deductible (21 to 23)</b>	<b>3,004.26</b>	<b>2,078.00</b>	<b>1,584.29</b>
25	<b>Net Fixed Charge for the year 2018 - 19 (20-24)</b>	<b>53,211.10</b>	<b>58,849.00</b>	<b>55,476.75</b>



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**Annexure 3B**

**Generation  
Titagarh Generating Station**

Rs. Lakh

Sl. No.	Particulars	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
1	Water Charges/Cess	0.00	0.30	0.00
2	Coal & Ash Handling Charges	0.00	0.00	0.00
3	Operation & Maintenance Expenses	0.00	1,090.00	0.00
4 (a)	Employee Cost	5,567.00	4,908.00	4,908.00
4 (b)	Contractual manpower in regular establishment	0.00	0.00	0.00
5	Rent for generation		0.00	0.00
6	Rates & Taxes (other than Income Tax)	0.00	85.00	0.00
7	Insurance	0.00	6.00	0.00
8	Corporate Social Responsibility		46.00	0.00
9	Interest on Capital Borrowings (incl. interest on normative debt)	0.00	0.00	0.00
10	Interest on Working Capital		0.00	0.00
11	Other Finance Charges	0.00	13.00	0.00
12	Bad Debt		0.00	
13	Depreciation	550.00	586.00	0.00
14	Advance against Depreciation	126.00	145.00	0.00
15	Written off Intangible Assets		0.00	
16	Return on Equity	1,458.00	1,464.00	0.00
17	Reserve for Unforeseen Exigencies		0.00	
18	Income Tax	314.21	455.00	0.00
19	Performance Incentive		0.00	
20	<b>Gross Fixed Charges (1 to 19)</b>	<b>8,015.21</b>	<b>8,798.30</b>	<b>4,908.00</b>
21	Less: Income from Non-Tariff Sources	132.00	80.00	0.00
22	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee		0.00	0.00
23	Less: Benefits to pass on to consumers for Auxiliary Services		0.00	0.00
24	<b>Total Net amount deductible (21 to 23)</b>	<b>132.00</b>	<b>80.00</b>	<b>0.00</b>
25	<b>Net Fixed Charge for the year 2018 - 19 (20-24)</b>	<b>7,883.21</b>	<b>8,718.30</b>	<b>4,908.00</b>



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Order on APR of CESC for the year 2018-19

Annexure 3C

**Generation**  
**Southern Generating Station**

Rs. Lakh

Sl. No.	Particulars	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
1	Water Charges/Cess	64.76	18.00	18.00
2	Coal & Ash Handling Charges	238.88	99.00	71.36
3	Operation & Maintenance Expenses	2,262.60	2,263.00	1,673.00
4 (a)	Employee Cost	4,857.00	5,498.00	5,498.00
4 (b)	Contractual manpower in regular establishment	728.00	369.00	369.00
5	Rent for generation	40.00	62.00	40.00
6	Rates & Taxes (other than Income Tax)	11.00	2.00	2.00
7	Insurance	102.00	78.00	78.00
8	Corporate Social Responsibility		41.00	0.00
9	Interest on Capital Borrowings (incl. interest on normative debt)	193.00	205.00	199.87
10	Interest on Working Capital		0.00	0.00
11	Other Finance Charges	54.53	35.00	27.60
12	Bad Debt		0.00	0.00
13	Depreciation	341.00	343.00	333.54
14	Advance against Depreciation	78.00	85.00	61.58
15	Written off Intangible Assets		0.00	0.00
16	Return on Equity	1,308.00	1,315.00	1,289.51
17	Reserve for Unforeseen Exigencies		0.00	0.00
18	Income Tax	281.83	408.00	408.01
19	Performance Incentive		0.00	0.00
20	<b>Gross Fixed Charges (1 to 19)</b>	<b>10,560.60</b>	<b>10,821.00</b>	<b>10,069.46</b>
21	Less: Income from Non-Tariff Sources	119.00	72.00	125.63
22	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee		0.00	0.00
23	Less: Benefits to pass on to consumers for Auxiliary Services		0.00	0.00
24	<b>Total Net amount deductible (21 to 23)</b>	<b>119.00</b>	<b>72.00</b>	<b>125.63</b>
25	<b>Net Fixed Charge for the year 2018 - 19 (20-24)</b>	<b>10,441.60</b>	<b>10,749.00</b>	<b>9,943.83</b>



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Order on APR of CESC for the year 2018-19

**Annexure 3D**

**Distribution**

**Rs. Lakh**

Sl. No.	Particulars	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
1	Employee Cost	69,119.00	77,819.00	77,819.00
2	Repair & Maintenance	19,125.00	15,023.00	15,023.00
3	Administrative & General	19,339.00	22,543.00	19,339.00
4	Rates & Taxes (other than Income Tax)	328.00	333.00	333.00
5	Insurance	173.00	332.00	332.00
6	Lease Rental	1,023.00	1,026.00	1,026.00
7	Cost of Outsourcing	1,026.00	1,494.00	1,026.04
8	Corporate Social Responsibility		1,426.00	0.00
9	Interest on Capital Borrowings (incl. interest on normative debt)	22,765.00	21,852.00	21,305.63
10	Interest on Temporary Accommodation		39,025.38	7,076.70
11	Interest on Consumer's Security Deposit	11,655.00	10,728.00	10,728.00
12	Interest on Working Capital	0.00	6,948.02	0.00
13	Other Finance Charges	1,585.72	933.00	712.12
14	Bad Debt	0.00	2,453.00	2,453.00
15	Depreciation	32,720.00	33,010.00	32,099.12
16	Advance against Depreciation	7,431.00	8,163.00	5,913.41
17	Written off Intangible Assets		0.00	0.00
18	Return on Equity	44,831.00	45,317.00	44,224.22
19	Reserve for Unforeseen Exigencies		0.00	0.00
20	Income Tax	9,661.08	14,069.00	14,069.26
21	Performance Incentive	-	0.00	0.00
22	Net DSM Payable		1,276.00	1,276.00
<b>23</b>	<b>Gross Fixed Charges (1 to 22)</b>	<b>2,40,791.80</b>	<b>3,03,770.39</b>	<b>2,54,755.50</b>
24	Revenue Gap / Surplus for FY 2016-17 on account of Adjustment in the Consumer Contribution			<b>10,994.42</b>
25	Revenue Gap / Surplus for FY 2017-18 on account of Adjustment in the Consumer Contribution			<b>9,843.31</b>
<b>26</b>	<b>Total Revenue Gap/ Surplus for FY 2016-17 and FY 2017-18 (24+25)</b>			<b>20,837.73</b>
<b>27</b>	<b>Gross Fixed Charges (23+26)</b>	<b>2,40,791.80</b>	<b>3,03,770.39</b>	<b>2,75,593.23</b>
28	Less: Income from Non-Tariff Sources	11,681.00	22,185.00	12,683.08
29	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee			1,125.03
30	Less: Benefits to pass on to consumers for Auxiliary Services	36.00	88.00	88.00
31	Less: Expenses attributable to Auxiliary Services		0.00	0.00



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Order on APR of CESC for the year 2018-19

Sl. No.	Particulars	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
32	Less: Benefits to pass on to consumers from other business	532.00	532.40	532.40
33	<b>Total Net amount deductible (28 to 32)</b>	12,249.00	22,805.40	14,428.51
34	<b>Net Fixed Charge for the year 2018 - 19 (27 - 33)</b>	<b>2,28,542.80</b>	<b>2,80,964.99</b>	<b>2,61,164.72</b>



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Order on APR of CESC for the year 2018-19

**Annexure 3E**

**Overall ARR of CESC**

**Rs. Lakh**

Sl. No.	Particulars	Amount admitted in Tariff Order 2018-19	Amount claimed in APR 2018-19	As admitted in APR 2018-19
1	Water Charges/Cess	71.42	23.00	23.00
2	Coal & Ash Handling Charges	1,081.95	1,106.00	978.48
3	Operation & Maintenance – Generation	12,882.60	13,973.00	9,389.00
4	Repair & Maintenance – Distribution	19,125.00	15,023.00	15,023.00
5	Administrative & General – Distribution	19,339.00	22,543.00	19,339.00
6	(a) Employee Cost - own employees	90,260.00	99,792.00	99,792.00
	(b) Cost of contractual manpower in regular generation establishment			
7	Rent	40.00	62.00	40.00
8	Rates & Taxes (other than Income Tax)	728.00	805.00	720.00
9	Insurance	772.00	1,197.00	1,191.00
10	a) Lease Rental	1,023.00	1,026.00	1,026.00
	b) Cost of Outsourcing	1,026.00	1,494.00	1,026.04
11	Corporate Social Responsibility		2,039.00	0.00
12	Interest on Capital Borrowings (incl. interest on normative debt of Rs. 124.25 lakhs)	25,006.00	24,171.00	23,570.55
13	Interest on Temporary Accommodation		39,025.38	7,076.70
14	Interest on Consumer's Security Deposit	11,655.00	10,728.00	10,728.00
15	Interest on Working Capital		6,948.02	0.00
16	Other Finance Charges	2,241.85	1,339.00	1,022.00
17	Bad Debt	0.00	2,453.00	2,453.00
18	Depreciation	42,551.00	42,019.00	40,289.70
19	Advance against Depreciation	9,684.00	10,390.00	7,422.37
20	Written off Intangible Assets		0.00	
21	Return on Equity	64,242.00	64,796.00	61,889.01
22	Reserve for Unforeseen Exigencies		0.00	
23	Income Tax	13,844.15	20,116.00	19,661.37
24	Performance Incentive		1,969.00	2,857.79
25	Net UI Payable		1,276.00	1,276.00
<b>26</b>	<b>Gross Fixed Charges (1 to 25)</b>	<b>3,15,582.97</b>	<b>3,84,313.39</b>	<b>3,26,794.00</b>
27	Total Revenue Gap/ Surplus for FY 2016-17 and FY 2017-18 for adjustment of consumer contribution			20,837.73
<b>28</b>	<b>Gross Fixed Charges (26+27)</b>	<b>3,15,582.97</b>	<b>3,84,313.39</b>	<b>3,47,631.73</b>
29	Less: Income from Non-Tariff Sources	14,936.26	23,244.00	14,393.00
30	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee		1,170.00	1,125.03
31	Less: Benefits to pass on to consumers for Auxiliary Services	36.00	88.00	88.00
32	Less: Benefits to pass on to consumers from other business	532.00	532.40	532.40
<b>33</b>	<b>Total Net amount deductible (29 to 32)</b>	<b>15,504.26</b>	<b>25,034.40</b>	<b>16,138.43</b>
<b>34</b>	<b>Net Fixed Charge for the year 2018-2019 (28-33)</b>	<b>3,00,078.71</b>	<b>3,59,278.99</b>	<b>3,31,493.30</b>



Order on APR of CESC for the year 2018-19

**Annexure 3F**

**Distribution O&M parameters:**

Particulars	Tariff Order	APR Order
WPI	4.260%	4.25%
CPI	5.400%	5.44%
WPI: CPI (60: 40)	4.716%	4.73%

**Inflation**

**Monthly Rate of Inflation in CPI number for Industrial Workers (Source: Labour Bureau, GOI)**

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2017-18	277	278	280	285	285	285	287	288	286	288	287	287
2018-19	288	289	291	301	301	301	302	302	301	307	307	309

**Monthly Rate of Inflation computed based on CPI number for Industrial workers**

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
2018-19	3.97%	3.96%	3.93%	5.61%	5.61%	5.61%	5.23%	4.86%	5.24%	6.60%	6.97%	7.67%	5.44%

Average value is computed

**Monthly Inflation Rate based on WPI from Office of the Economic Adviser, GOI**

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2017-18	113	113	113	114	115	115	116	116	116	116	116	116
2018-19	117.3	118.3	119.1	119.9	120.1	120.9	122	121.6	119.7	119.2	119.5	119.9

**Monthly Inflation Rate based on WPI**

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
2018-19	3.81%	4.69%	5.40%	5.18%	4.43%	5.13%	5.17%	4.83%	3.19%	2.76%	3.02%	3.36%	4.25%

Average value is computed





## Chapter 4

### AMOUNT ADJUSTABLE ON ANNUAL PERFORMANCE REVIEW

- 4.1 A summarised position of the fixed cost for three generating stations, distribution and selling/supply functions have been detailed in Table 3.24-1 of this order totalling to Rs. 3,31,493.30 lakh. Further, the Commission also determined the fuel and power purchase cost allowable to CESC totalling to Rs. 4,39,027.81 lakh, after meeting the amount relating to shares of various gains attributable to its consumers and WBSEDCL in terms of the Tariff Regulations in chapter 2 of this order. Revenue recovered by CESC as per Audited Accounts is now required to be adjusted against Rs. 7,50,521.11 lakh (i.e., Rs 3,31,493.30 lakh + Rs 4,39,027.81 lakh).
- 4.2 The revenue earned by CESC through sale of power to Consumer and WBSEDCL with reference to its audited accounts as detailed out below:

**Table 4.2-1: Revenue Earned by CESC**

Sl. No.	Particulars	Amount (Rs. In Lakh)
1	Earnings from sale of electricity as per Note 32(a) of audited accounts of CESC Ltd	7,55,773.00
2	Less: earnings attributable to sale of energy to persons other than own consumers & WBSEDCL including swap-out power (Annex 3 of Vol 3 of APR of FY 2018-19)	28,116.87
3	Add: Contribution to festivals (Note 1 of Form 1.25)	130.00
4	Net earnings from sale to consumers and WBSEDCL.	7,27,786.13
5	Revenue Arising out of APR Order in earlier order (APR of 2013-14) considered in MYT Order dated 03.02.2022	22,545.11
6	<b>Revenue from sale of energy to own consumers and WBSEDCL for this year 2018-19</b>	<b>7,05,241.02</b>

- 4.3 The amount adjustable on Annual Performance Review is detailed as under in Table 4.3-1:

**Table 4.3-1: Adjustment in Annual Performance Review**

Sl. No.	Particulars	Amount (Rs. lakh)
1	Total Fuel and Power Purchase Cost admitted	4,39,027.81
2	Fixed charge admitted	3,31,493.30
3	Total recoverable [(1) + (2)]	7,70,521.11



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Order on APR of CESC for the year 2018-19

Sl. No.	Particulars	Amount (Rs. lakh)
4	Amount recovered from sale of power	7,05,241.02
5	<b>Balance Recoverable / payable (-) [(3) – (4)]</b>	<b>65,280.09</b>

4.4 In terms of regulation 2.6.6 of the Tariff Regulations, the entire recoverable amount of Rs. 65,280.09 lakh or a part thereof shall be adjusted with the amount of Aggregate Revenue Requirement for the year 2022 – 23 or that for any other ensuing year or through a separate order, as may be decided by the Commission.

Sd/-  
(PULAK KUMAR TEWARI)  
MEMBER

Sd/-  
(MALLELA VENKATESWARA RAO)  
CHAIRPERSON

Dated: 22.09.2023

Sd/-  
SECRETARY