



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

**IN CASES NO:**

**FPPCA – 93 / 18 – 19 AND  
APR – 73 / 18 - 19**

**IN RE APPLICATIONS OF CESC LIMITED FOR  
FUEL & POWER PURCHASE COST  
ADJUSTMENT (FPPCA) AND ANNUAL  
PERFORMANCE REVIEW (APR) FOR  
THE FINANCIAL YEAR 2017- 2018**

**SRI SUTIRTHA BHATTACHARYA, CHAIRPERSON  
SRI PULAK KUMAR TEWARI, MEMBER**

**DATE: 01.08.2022**



## Chapter 1

### PREAMBLE

- 1.1 The 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 application for Annual Performance Review for 2017 - 18 on 28.02.2019 in terms of the provision contained in Tariff Regulations. CESC has also submitted Fuel and Power Purchase Cost Adjustment (in short 'FPPCA') application for 2017 - 18 on 04.02.2019 in pursuance to regulations 2.8.7 and 5.8 of the Tariff Regulations for ascertaining the Fuel and Power Purchase Cost Adjustment separately. Both the FPPCA and APR applications were admitted by the Commission on 08.09.2021 and were registered as FPPCA-93/18-19 and APR-73/18-19.
- 1.2 The APR covers the areas of determination of permissible annual fixed charges to the applicant, permissible incentives and the effect of gain sharing as per Schedule-9B and Schedule 10 to the Tariff Regulations respectively. In the APR for the year 2017 - 18, 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 2017 - 18.
- 1.3 The instant application of CESC for APR of the fifth control period, i.e., for 2017 – 18 is based of the audited annual report and accounts of CESC for 2017 – 2018. 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 04.07.2018 of CESC for 2017-18 in Case No. TP-72 / 16-17 will be considered for giving effect 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.



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- 1.4 On admission of the APR application, CESC was directed to publish the combined gist of the FPPCA and APR applications for 2017-18, as submitted by CESC and approved by the Commission with reference to the Commission's letter vide no WBERC/APR-73/18-19/1131 dated 14.09.2021. Accordingly, the gist was published in four newspapers inviting suggestions / objections, if any, from the public as per following table:

Table 1.4

Sl No	Date of Publication	Newspapers	Last date for submission of suggestions / objections as per notification
1	18.09.2021	The Telegraph	21 days from date of publication (inclusive of date of publication)
2	18.09.2021	Bartaman	
3	18.09.2021	Aajkaal	
4	18.09.2021	Dainik Vishwamitra	

The approved gist along with the APR petition for 2017 – 18 was also published in the website of CESC. Opportunities were also afforded to all to inspect the application and take copies thereof.

- 1.5 In the application of APR for 2017 - 18, CESC submitted the required data and information and also a copy of its audited Annual Report and Accounts for 2017 - 18. CESC further submitted its response through letters vide memo No. ED(F):74798 dated 31.12.2021 and memo no ED(HR&A):8572 dated 11.02.2022 and submitted some additional information justifying their claim on 10.05.2022.
- 1.6 No comment, suggestion and /or objection on applications for APR and FPPCA for the year 2017-18 of CESC has been received.





## 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 2017-18 considering the allowable normative parameters.
- 2.2 The Fuel and Power Purchase Cost (FPPC) during the referred adjustment period, i.e., financial year 2017–18, 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





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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.

**Table 2.4**

Sl No	Power Station	Particulars	Unit	As per Tariff Order / Norms	As per Actual
1	<b>Budge Budge</b>	Rate of Auxiliary Consumption	%	9.00	7.79
		Specific Consumption of Oil	ml/kWh	1.30	0.13
		Station Heat Rate	kCal/kWh	2470	2108.96
2	<b>Southern</b>	Rate of Auxiliary Consumption	%	9.00	9.48
		Specific Consumption of Oil	ml/kWh	2.10	5.89
		Station Heat Rate	kCal/kWh	2900	3709.42

- 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, need 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 2017 – 18 was considered to be 14.30% under the Regulations. As it comes out from the data as provided by CESC for the year 2017 – 18, 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 9.65% as shown below:

**Table 2.6: Distribution loss**

Sl No	Particulars	Figures in Million Units
<b>Inputs to System</b>		
(a)	Gross Generation	6337.135
(b)	Less: Actual Auxiliary consumption	499.080
(c)	Net Sent Out Energy [(a) – (b)]	5838.055
(d)	Energy purchased during the year	5637.504
(e)	Less: Sale to persons other than Consumers and WBSEDCL including Transmission loss to effect that sale	193.092
(f)	Less: Swap-out energy including permissible loss	430.449



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Table 2.6: Distribution loss

SI No	Particulars	Figures in Million Units
(g)	Add: Unscheduled Interchange (Net)	20.010
(h)	<b>Energy delivered to the system for sale to consumers and licensee [(c)+(d) – (e) – (f) + (g)]</b>	<b>10872.028</b>
(i)	Sales to Consumers and WBSEDCL	9776.292
(j)	Energy consumed in own premises	47.039
(k)	Distribution loss to effect sale to consumers, sale to WBSEDCL and own consumption. [(h) – (i) – (j)]	1048.697
(l)	Distribution loss in % [(k/h)x100]	9.65%
(m)	Total Utilization [(j) + (k) + (l)]	<b>10872.028</b>

2.7 The actual sale to consumers and WBSEDCL is 9776.292 MU. Energy consumed in the own premises is 47.039 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 1639.132 MU  $\{[(9776.292 + 47.039) / (1.00 - 0.1430)] - (9776.292 + 47.039)\}$  and actual quanta of distribution loss against that sale and own consumption works out at 1048.697 MU. The savings in this regard thus comes to 590.435 MU (1639.132 MU – 1048.697 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.

**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





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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 2017 – 18 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	2470	2900
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. 143357.03 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	5563.093	133343.84	239.69
Southern	274.962	8479.89	308.40
Total	5838.055	141823.73	242.93

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 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 are as under:





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Table 2.10.2.1: Heat value of coal and oil

Generating Station	Heat Value of Coal (Kcal/Kg)	Heat Value of Oil (Kcal/Litre)
Budge Budge	3480.00	9570.00
Southern	5073.00	9588.00

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 in terms of provision of regulation 5.8 of the Tariff Regulations. The weighted average heat value of coal for each generating station as claimed by CESC has been compared with the station wise actual weighted average heat value of coal duly certified by the auditors and the minimum weighted average heat value of coal as per formula given in regulation 5.8.1 of the Tariff Regulations. The computations of the minimum allowable heat value of coal for different generating stations vis-à-vis the actual heat value of coal have been shown in Annexure – 3D to this chapter. In this context it is to be mentioned that the minimum allowable heat value of coal is considered as per provisions of the Tariff Regulations. As is observed from the aforesaid annexures, the actual heat value of coal received by CESC is lower than the minimum allowable heat value in terms of the Tariff Regulations and thus the Commission considers the minimum allowable heat value of coal for different generating stations as computed.

2.10.2.2 The weighted average price of coal and oil, as certified by the auditors in Annexure C3 of the application, came as under:

Table 2.10.2.2: price of coal and oil

Generating Station	Price of Coal (Rs/MT)	Price of Oil (Rs/KL)
Budge Budge	3519.87	46313.97
Southern	4738.13	45890.27



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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 of Rs. 2/MT and Rs. 3/MT is paid in Budge-Budge and Southern generating stations respectively during the year. It is observed that, demurrage charge of the plants are gradually reducing. Thus, the Commission In terms of clause (vi) of regulation 5.8.1, admits the demurrage amount for the year 2017-18 and directs CESC to take further measures to improve their rake unloading capacity.

2.10.2.3 Following Coal Mines (Special Provisions) Act, 2015 a coal block has been allocated to Budge Budge Generating Station against reverse auction and it has become necessary to adjust the cost of captive coal. Only the fixed rate of Rs. 100 per Tonne is payable for coal procured from this mine, apart from all statutory duties/ levies/ cess/ royalty / taxes and other applicable charges. Captive coal is linked with Budge-Budge power plant. Hence, considering the coal mix from captive coal mine in Budge-budge generating station, the allowable coal cost for Budge-budge generating station is determined as below:

**Table 2.10.2.3-a : Disallowance of additional cost of captive coal claimed**

Sl No	Particulars	Unit	Budge-budge
1	Basis input ROM coal cost claimed	Rs/MT	1182
2	Allowable basic cost	Rs/MT	100
3	Disallowance rate for ROM coal [(2) – (1)]	Rs/MT	1082
4	Disallowance rate for washed coal* [(3) / 0.70729]	Rs/MT	1529
5	% mix of captive ROM coal	%	17.14%
6	% mix of captive ROM washed	%	20.82%
7	Overall disallowance rate for budge-budge coal [(3)x(5) + (4)x(6)]	Rs/MT	503.72

\* a factor of 0.70729 (yield of washing) is considered to take care the cost of washed coal

CESC has not considered adjustment of value of coal rejects for the year 2017 – 18 as stated by them through affidavit dated 22.01.2020. Thus, the Commission finds it prudent to adjust the value from sale of rejects from washing of coal from captive mine considering the price of rejects mentioned in letter dated 23.12.2019 for 2014-15 (no rates for subsequent years has been specified) as follows:





**Table 2.10.2.3-b: Adjustment on sale of washery rejects**

SI No	Particulars	Unit	Budge-Budge
1	Annual quantity of raw coal used for washing	MT	1100280
2	Annual quantity of washed coal derived	MT	778220
3	Annual quantity of rejects [(1) – (2)]	MT	322060
4	% of yield by washing	%	70.729
5	Sale price of washery rejects	Rs. /MT	400
6	Revenue earned from sale of rejects [(3) x (5)]	Rs	128824000
7	Quantity of coal as per auditor's certificate	MT	3654262
8	Deductible amount on sale of washery rejects (6/7)	Rs/MT	35.25

After adjustment of disallowance of mining cost and adjustment of income from washery rejects the admissible coal cost for budge-budge generating station comes to Rs. 2980.90 /MT as below:

**Table 2.10.2.3-c: Admissible cost of coal**

SI No	Particulars	Unit	Budge-Budge	Southern
1	Average coal cost as per auditor's certificate	Rs. /MT	3519.87	4738.13
2	Disallowance rate for mining costs of captive coal	Rs. /MT	503.72	-
3	Adjustment of income from washery rejects	Rs. /MT	35.25	-
4	Admissible average cost of coal (1 – 2 – 3)	Rs. /MT	2980.90	4738.13

## 2.11 PPC: POWER PURCHASE COST:

2.11.1 The power purchase requirement of CESC during 2017 –18 was considered 5333.00 MU; vide the statement of Energy Balance at paragraph 4.7 of the Tariff Order dated 4 July, 2018 for the concerned year. The total quanta of actual purchase and the cost incurred thereon as submitted in the petition are as under:





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Table 2.11.1: Power purchase

Sources	Quantum MU	Cost incurred (Rs in lakh)	Avg Rate (paisa/kWh)
WBSEDCL	5.470	426.94	780.51
HEL	4105.914	224851.72	547.63
RPGPTCL (Other than Cogeneration)	303.870	14393.47	473.69
RPGPTCL (Cogeneration)	73.38	2785.22	379.56
TPTCL (Cogeneration)	105.81	3638.75	343.89
Solar	2.30	150.02	652.26
Power Exchanges	821.17	34535.20	420.56
Short-term purchase	21.98	848.49	386.03
<b>Total</b>	<b>5439.894</b>	<b>281629.81</b>	<b>517.71</b>

\* In addition, licensee has paid Rs. 3891.27 lakhs to WBSEDCL for bill raised in respect of the year 2015-16, adjustment of such payment has been separately considered.

\*\* Further CESC has mentioned swap-in of 197.61 MU energy amounting to Rs. 10297.38 lakh during the year.

- 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 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)	221.143	11448.79	192.28*	11448.79
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)			5.33*	300.20



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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)	209.306	10835.98		
	Total	430.449	22284.77	197.61	11748.99

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

2.11.3 CESC in its petition considered surplus sale to persons other than consumers and licensee from its Budge-Budge power plant. The Commission in the MYT order for fourth control period for 2014-15, 2015-16 and 2016-17 dated 04.03.2015, has already not considered similar proposal of CESC while computing fuel cost of Budge-Budge power plant and considered the entire generation of power plants for primarily meeting the demand of consumers in the CESC supply area. The Commission is of considered opinion that, primary responsibility of a distribution licensee is to supply power to its consumers from its own generating plants and/or from other sources through PPA on merit order basis. During the process of managing the load-generation balance, licensee may require to sale its incidental surplus power or arrange for banking, etc in such a way that ultimate consumers are get benefitted. This has been clearly mentioned in paragraph 4.6.2 of the tariff order for 2017-18.

From the energy balance of 2017-18 mentioned in paragraph 3.6 above, it is observed that, CESC has sold 193.092 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 2017-18 comes to 264.97 paisa/kwh. Accordingly, cost of surplus power sold to person other than consumers and licensee comes to Rs. 5116.36 lakh (193.092 x 264.97/10). 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

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





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Table 2.11.4: Admissible cost of power

Sl	Particulars	Energy	Amount
1	Total Power Purchase as in para 2.11.1 above	5439.894	281629.81
2	Add: Swap-in power as in para 2.11.2 above	197.61	11748.99
3	Less: Swap-out power as in para 2.11.2 above	430.449	22284.77
4	Less: Sale to other than consumer & licensee as in para 2.11.3 above	193.092	5116.36
5	Net Power Purchase for to sale consumers and WBSEDCL	5013.963	265977.67

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.

Table 2.12.1: Disallowable cost

Sl	Factor	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	5838.055
4	E	Excess amount of auxiliary	MU	0.00
5	Ep	Net energy purchased (including UI)	MU	5033.973
6	Eo	Admitted energy for own consumption	MU	47.039
7	Esc	Energy sale to consumers	MU	9738.582
8	Esl	Energy sale to licensee	MU	37.31





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9	Eadm	Admitted amount of energy entitled for purchase (Esc + Eo) / (1-dx0.01) + Es / (1-tx0.01) - E - Eg	MU	5624.408
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 Rs. 3891.27 Lakh has been paid to WBSEDCL regarding arrear bills raised in respect of 2015-16. The amount is considered for prior period adjustment.

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. 419671.88 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	149802.94
2	PPC: Power purchase cost	265977.67
3	C <sub>D</sub> : Cost disallowable	0.00
4	±A :Adjustment relating to earlier period	3891.27
5	<b>FC+(PPC-C<sub>D</sub>)+( ± A)</b>	<b>419671.88</b>

2.15 The amount of fuel and power purchase cost of Rs. 419671.88 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



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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.

**2.16 Gain Sharing for better Oil Consumption Rate:**

2.16.1 The actual specific oil consumption rates for Budge Budge and Southern generating stations are 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 2.16-1: Oil consumption norms**

Generating Station	As per Tariff Order/ Norms	Actual as per submission	Savings
	(ml /kWh)		
Budge Budge	1.30	0.13	1.17
Southern	2.10	5.89	(3.79)

2.16.2 The gain to be shared with the consumers and to 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 2.16-2**

SI No	Particulars	Unit	Budge Budge
1	Gross generation with normative auxiliary consumption (refer table in Annexure 2A)	MU	6113.289
2	Normative Oil consumption rate	MI/kwh	1.30
3	Oil Consumption at normative rates	KL	7947.276
4	Actual Oil Consumption as per auditor's certificate	KL	767.640
5	Actual Oil consumption rate (refer table under paragraph 2.4)	MI/kwh	0.13
6	Savings / difference	KL	7179.636
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	46313.97
10	Gains accrued on saving of Oil	Rs. Lakh	3325.17





Table 2.16-2

SI No	Particulars	Unit	Budge Budge
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	864.55

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

2.17.1 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 2.17-1

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	79.899	218.12	1742.76	B	20%	348.55
Southern	(1.589)	N/A	N/A	N/A		
Total						348.55

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

2.18.1 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:





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Table 2.18-1

Generating Station	Station Heat Rates as per Norm set (Kcal/kWh)
Budge Budge	2470.00
Southern	2900.00

2.18.2 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.

2.18.3 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. 2698.37 lakh with the following station wise break-up (Detail computation in Annexure 2E):

	Rs. in Lakh
Budge Budge	2666.83
Southern	0.00
<b>Total</b>	<b>2666.83</b>

## 2.19 Benefits for savings in Distribution Loss:

2.19.1 As analysed in paragraph 2.6 and 2.7, CESC Limited saved 590.435 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 2.19-1

Sl. No.	Particulars	Quantum (MU)	Amount (Rs. in Lakh)
1	Ex-bus generation from own generators (Vide Annexure 2A)	5838.055	141823.73
2	Purchase of Energy (vide paragraph 2.11.4)	5013.963	265977.67
3	<b>Total</b>	<b>10852.018</b>	<b>407801.40</b>
4	Average cost per unit in the Distribution System		375.78 Paise / KWh
5	Cost of quantity saved (vide paragraph 2.7)	590.435	22187.37

2.19.2 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. 16640.53 lakh (75% of Rs. 22187.37 lakh computed above) is to be retained by the licensee balance benefit of Rs. 5546.84 lakh has been passed on to the consumers by way of considering actual power purchase cost. Out of the amount of Rs. 16640.53 lakh, a total amount of Rs. 7979.21 lakh (Rs. 149802.94 lakh – Rs. 141823.73 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. 8661.32 lakh (Rs. 16640.53 lakh – Rs. 7979.21 lakh) is now being allowed.

2.20 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. 151419.14 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





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adjustments of the shares of gains attributable to the consumers and WBSEDCL comes as under:

Table 2.20			
Sl. No.	Particulars	Amount (Rs. in Lakh)	Amount (Rs. in Lakh)
1	Fuel Cost on normative basis		149802.94
	Less: Shares of gains attributable to consumers and WBSEDCL		
	i) cost saving on use of Oil	864.55	
2	ii) on improvement in the rate of Auxiliary Consumption	348.55	
	iii) for achieving better Station Heat Rate	2666.83	3879.93
3	Net amount of allowable fuel cost		145923.01

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

Table 2.21				
Sl. No.	Particulars	Budge Budge	Southern	Total
1	Fuel cost on normative basis	140845.96	8956.98	149802.94
	Less: Share of Gains attributable to Consumers and WBSEDCL			
	i) Cost saving on use of OIL	864.55	0.00	864.55
2	ii) On improvement in the rate of Auxiliary Consumption	348.55	0.00	348.55
	iii) For achieving better Station Heat Rate	2666.83	0.00	2666.83
	<b>Total (2)</b>	<b>3879.93</b>	<b>0.00</b>	<b>3879.93</b>
3	Net amount of allowable fuel cost (1-2)	<b>136966.03</b>	<b>8956.98</b>	<b>145923.01</b>

2.22 Actual amount of power purchase cost incurred by CESC for supply to its consumers and WBSEDCL from different sources, as enumerated in paragraph 2.11.2 including arrear is Rs. 269868.94 lakh (Rs. 265977.67 lakh + Rs. 3891.27 lakh).

2.23 An additional amount of Rs. 8661.32 lakh is found admissible to CESC on account of savings in the rate of distribution loss as shown in paragraph 2.19.2.



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2.24 Summing up the findings as stated above, the net amount of fuel and power purchase cost allowed to CESC for the year 2017 – 18 comes as under:

Table 2.24

Particulars	Rs. in Lakh
Fuel Cost	145923.01
Power Purchase Cost for won consumers & WBSEDCL (including arrear)	269868.94
Additional amount on account of savings in the rate of Distribution loss	8661.32
<b>Re-determined Fuel and Power Purchase Cost</b>	<b>424453.27</b>

2.25 The Commission decides, in terms of regulation 2.8.7.1 of the Tariff Regulations, to consider this amount of Rs. 424453.27 lakhs allowable towards fuel and power purchase cost along with the Annual Performance Review for the year 2017 – 18.





Annexure 2A

Admissible Fuel Cost

Sl. No	Particulars	Unit	Budge Budge	Southern	Total
1.	Ex Bus Generation	MU	5563.093	274.962	5838.055
2.	Rate of Normative Auxiliary Consumption	%	9%	9%	
3.	Normative Auxiliary Consumption	MU	550.196	27.194	577.390
4.	Gross Generation (1+3)	MU	6113.289	302.156	6415.445
5.	Normative Station Heat Rate	kCal/kWh	2470	2900	
6.	Station Heat Rate Required (4x5)	M. KCal	15099823.830	876252.400	15976076.230
7.	Specific Oil Consumption	ml/kWh	1.30	2.10	
8.	Normative Oil Consumption (4x7)	KL	7947.276	634.528	8581.804
9.	Wt. Average Heat Value of Oil	kCal/Ltr	9570.000	9588.000	
10.	Heat from Oil [8x9]/1000]	M. KCal	76055.431	6083.854	82139.285
11.	Heat from Coal (6-10)	M. KCal	15023768.399	870168.546	15893936.95
12.	Wt. Average Heat Value of Coal	kCal/Kg	3480.00	5073.00	
13.	Coal required for consumption [(11/12)*1000]	MT	4317174.827	171529.38	4488704.207
14.	Coal required with transit loss	MT	4349798.314	172825.572	4522623.886
15.	Weighted Average Price of Oil	Rs./KL	46313.97	45890.27	
16.	Weighted Average Price of Coal	Rs./MT	2980.90	4738.13	
17.	Cost of Oil (8 x 15)	Rs. in Lakh	3680.70	291.19	3971.89
18.	Cost of Coal (14 x 16)	Rs.in Lakh	129663.14	8188.70	137851.84
19.	Admissible Cost of fuel (17+18)	Rs. in Lakh	133343.84	8479.89	141823.73



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	47.039
E <sub>SL</sub>	Energy sale to licensee (WBSEDCL)	MU	37.710
E <sub>SC</sub>	Energy sale to consumer	MU	9738.582
Fuel Cost	Fuel cost for generation on normative parameters (Refer Annexure – 2A)	Rs. in Lakh	141823.73
FC <sub>IUC</sub>	Per unit Fuel Cost at distribution input (Refer para A of Annexure – 2C)	Paise/Kwh	130.69
FC <sub>Adm_d</sub>	Admissible Fuel Cost for sale to licensee (Refer para B of Annexure – 2C)	Rs. in Lakh	575.07
FC <sub>Adm_C</sub>	Admissible Fuel Cost for sale to consumer (Para – C of Annexure 2C)	Rs. in Lakh	149227.87
FC	Allowable fuel cost (Refer para D of Annexure 2C)	Rs. in Lakh	149802.94





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Annexure – 2C

A. Fuel Cost per Unit (Kwh) at Distribution Input		Unit	Amount
(i)	Fuel Cost (As per Annexure – 2A)	Rs. in Lakh	141823.73
(ii)	Energy sent out from own generation for the consumers and licensee (refer sl. No. 3 in Annexure-2A)	MU	5838.055
(iii)	Purchase (refer para 2.11.2)	MU	5013.963
(iv)	$FC_{IUC} [(i)/((ii)+(iii)) \times 10]$	Paise/Kwh	130.69

B. Admissible Fuel Cost for Sale to Licensee		Unit	Amount
(i)	$\frac{E_{SL}}{(1 - t \times 0.01)} \times FC_{IUC} = \frac{37.710 \text{ MU} \times 10}{0.8570} \times \frac{130.69}{100}$	Rs. in Lakh	575.07

C. Admissible Fuel Cost for sale to Consumers		Unit	Amount
(i)	$\frac{E_{sc} + E_o}{(1 - d \times 0.01)} \times FC_{IUC} = \frac{(9738.582 + 47.039) \text{ MU} \times 10}{0.8570} \times \frac{130.69}{100}$	Rs. in Lakh	149227.87

D. Allowable Fuel Cost for Sale to Licensee and to Consumers		Unit	Amount
(i)	B + C	Rs. in Lakh	149802.94

E. Excess/Savings (in Auxiliary Consumption)						
Generating Station	Energy sent out for	Normative Rate of Auxiliary Consumption	Figures in MU			
			Normative Auxiliary Consumption	Actual Auxiliary Consumption (as per pg-51 of petition)	Actual rate of auxiliary consumption	Savings
Budge Budge	5563.093	9.00%	550.196	470.297	7.79%	79.899
Southern	274.962	9.00%	27.194	28.783	9.48%	-1.589



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Annexure 2D

Budge Budge Generating Station 2017-18

Grades	Grade wise coal consumption in (%) for the period April, 2017 to March, 2018 (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	0.03	6401	6454	6049	6200	5600	6121	183.64
G4	1.22	6101	6454	6049	6200	5600	5677	6925.99
G5	3.17	5801	6049	5597	5600	4940	5238	16604.07
G6	1.02	5501	5597	5089	4940	4200	4800	4896.16
G7	14.75	5201	5597	5089	4940	4200	4363	64356.46
G8	5.46	4901	5089	4324	4200	3360	3994	21804.88
G9	4.82	4601	5089	4324	4200	3360	3664	17661.24
G10	7.80	4301	4324	3865	3360	2400	3312	25832.82
G11	1.71	4001	4324	3865	3360	2400	2684	4590.39
G13	1.09	3401	3865	3113	2400	1300	1721	1876.19
G14	1.59	3101					1282	2038.38
WIV	16.58						3854	63899.32
NCW	2.32						3021	7008.72
Non CIL Indigenous	17.14						2626	45009.64
Non CIL Indigenous Wasted	20.82						3018	62834.76
Imported	0.48						5066	2431.68





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Grades	Grade wise coal consumption in (%) for the period April, 2017 to March, 2018 (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
Weighted Average Minimum Allowable Heat Value for the year								3480.00

Southern Generating Station 2017-18

Grades	Grade wise coal consumption in (%) for the period April, 2017 to March, 2018 (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	1.44	6401	6454	6049	6200	5600	6121	8804.37
G4	38.33	6101	6454	6049	6200	5600	5677	217600.83
G5	26.84	5801	6049	5597	5600	4940	5238	140584.59
G7	22.46	5201	5597	5089	4940	4200	4363	97996.34
G8	7.55	4901	5089	4324	4200	3360	3994	30151.44
NCW	3.38						3600	12182.15
Weighted Average Minimum Allowable Heat Value for the year								5073.00



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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	6033.390	303.745
2	Oil consumed	KL	767.64	1788.12
3	Coal consumed	MT	3654262	218721
4	HV of Oil	KCal/Ltr.	9570	9588
5	HV of Coal	KCal/Kg	3480	5073
6	Heat from Oil released	M. Kcal	7346.31	17144.49
7	Heat from Coal released	M. Kcal	12716831.76	1109571.63
8	Total Heat	M. Kcal	12724178.07	1126716.12
9	Actual Station Heat Rate	KCal/kWh	2108.96	3709.41
10	Design Station Heat Rate (D)	Kcal/Kwh	2247	2707
11	Normative Gross Station Heat Rate considered for the year (SHR <sub>n</sub> )	Kcal/Kwh	2470	2900
12	Ratio of SHR <sub>n</sub> to D	-	1.099	
13	Categorization of Generating Stations as per Regulations	-	B	
14	SHR/SHR <sub>n</sub>	-	Less than 0.96	
15	Gross Generation (vide Annexure – 2A)	MU	6113.289	
16	Cost of Coal considering normative SHR	Rs in Lakh	129663.14	
17	Cost of coal at actual SHR			
a	Heat required with actual SHR (15 x 9)	M.kCal	12892681.97	
b	Heat from oil at normative (Annexure-2A)	M.kCal	76055.431	
c	Heat required from coal (a -b)	M. kCal	12816626.54	
d	Heat value of coal (vide Annexure-2A)	kCal/kg	3480	
e	Quantum of coal required (c / d / normative transit & handling loss)	MT	3710769.43	
f	Price of coal (vide Annexure-2A)	Rs./MT	2980.90	
g	Cost of coal at actual SHR (e x f /10 <sup>5</sup> )	Rs. in lakh	110614.33	
18	Savings in cost of Coal for achieving better Station Heat Rate (16-17g)	Rs. in Lakh	19048.81	
19	Share of Savings in cost attributable to consumers and WBSEDCL	%	14%	
20	Share of Savings in cost attributable to consumers and WBSEDCL	Rs. in Lakh	2666.83	



**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 are being already provided in Tariff Regulations. The amounts 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 amounts 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 :**

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. Actual expenses have also been furnished through Auditors' Certificate in Annex 6. The details are in Table 3.3-1 and Table 3.3-2 respectively.

**Table 3.3-1 : Water Charges**

Rs. Lakh						
Generating Station	Target Generation in Tariff Order (MU)	Admitted in Tariff Order	Actual Generation (MU)	Expenses proportionate to Actual generation	Actual Expenses	Expenses admitted in APR in 2017-18
Budge Budge	5590	5.00	6033.390	5.40	5.00	5.00
Titagarh	-	-	-	-	0.3	0.00



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Generating Station	Target Generation in Tariff Order (MU)	Admitted in Tariff Order	Actual Generation (MU)	Expenses proportionate to Actual generation	Actual Expenses	Expenses admitted in APR in 2017-18
Southern	950	76.00	303.745	24.30	19.00	19.00
<b>Total</b>	<b>6540</b>	<b>81.00</b>	<b>6337.1435</b>	<b>29.70</b>	<b>24.30</b>	<b>24.00</b>

**Table 3.3-2:** Coal and Ash Handling Charges

Rs in Lakh

Generating Station	Target Generation (MU)	Admitted in Tariff Order	Actual Generation (MU)	Expenses proportionate to Actual generation	Actual Expenses	Expenses admitted in APR in 2017-18
Budge Budge	5590	949.00	6033.390	1024.28	975.00	975.00
Titagarh	-	-	-	-	-	-
Southern	950	373.00	303.745	119.26	86.00	86.00
<b>Total</b>	<b>6540</b>	<b>1322.00</b>	<b>6337.135</b>	<b>1143.53</b>	<b>1061.00</b>	<b>1061.00</b>

**3.4 Operation and Maintenance Expenses for Generation function:**

CESC has claimed O&M expense of Rs. 10039 lakh, Rs. 2139 lakh and Rs. 1062 lakh for Budge-Budge TPS, Southern TPS and Titagarh TPS respectively for the year 2017-18. The O&M expenses is controllable cost in terms of Tariff Regulations and the normative value of O&M expense is to be determined as per the guideline set out by the Commission in paragraph 5.5.1 of the tariff order of 2017-18 for CESC in pursuance to regulation 2.8.6.1 of Tariff Regulations. Accordingly, the escalation rate for 2017-18 over the normative O&M expenses of 2016-17 is found to be 2.98% based on average of actual hybrid inflation index for 2017-18. In absence of any at Titagarh TPS, no O&M cost has been considered. Details of Generation O&M expenses is in Table 3.4-1.





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**Table 3.4-1:** Generation O&M Expenses (applying escalation of 2.98% on normative expenses of 2016-17)

Particulars	Installed Capacity	2016-17 norms	2017-18 norms applying escalation	Normative O&M 2017-18	Actual claimed	Admitted
	MW	Lakh/MW	Lakh/MW	Lakh	Lakh	Lakh
Budge-Budge TPS	750	13.12	13.51	10132.50	10039.00	10039.00
Southern TPS	135	15.53	15.99	2158.65	2139.00	2139.00
Total O&M				12291.15	12178.00	12178.00

### 3.5 Other Operational expenses for generation

Rent of Rs 48 lakhs for generation as provided in form E(B) of the petition, being uncontrollable, has been allowed at actuals in terms of regulations

### 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 addition 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 fifth control period pertaining to 2017-18 the expenditures for different heads which are sensitive to business volume parameters had been projected by the Commission on the basis of trend of inflation as well as the business volume growth of the previous years' 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



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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.

Particulars	Tariff Order	Actual Value of 2017-18	Variation in %
Distribution Line Length in CKM	22857	22231	(2.74%)
Consumer strength in number	3158500	3188950	0.96%
WPI in %	2.88%	2.92%	1.39%
CPI in %	4.45%	3.08%	(30.79%)
Inflation in hybrid index [WPI : CPI (60 : 40)] in %	3.51%	2.98%	(14.99%)
Please see WPI and CPI detail in Annexure-3F			

Accordingly, for controllable items for 2017-18 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. 17688 Lakh. This claimed amount of Rs 17688 lakhs includes the security expenses of Rs 1410 lakhs which is basically the part of A&G expenses. Thus, the net amount of R&M expenses for 2017-18 comes to Rs 16278.45 lakhs (Rs 17688.45 lakhs – Rs 1410.00 lakhs). The Commission in the tariff order has allowed Rs. 18896 lakh as R&M expense, which includes Rs. 1110 lakh as service & entry tax. Since R&M expense is a controllable element and the claim amount of Rs. 16278.45 lakh is within the admitted amount of Rs. 17786 lakh (Rs. 18896 – Rs. 1110) allowed in the Tariff order, the actual expenditure is admitted.

**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	18896	16278	16278
Total	<b>18896</b>	<b>16278</b>	<b>16278</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.

The features of Administrative and General Expenses is a simple controllable item where no normative parameter is used. From the petition it has been seen that the actual A&G expenses incurred in 2017-18 is Rs 19026 lakhs (including security expenses of Rs. 1410 lakhs) on A&G head as per form E(b) of Volume 2. However, the approved amount as per Tariff Order being Rs. 18043 lakh. As A&G expense is a controllable item, thus, the permissible expenses under this APR cannot exceed the value of Rs. 18043 lakhs as elaborated in paragraphs 3.5.1 and 3.5.2 above. Thus, the admitted expenses under this APR or A&G expenses in 2017-18 is Rs 18043 lakh.

Detail of expenses claimed in APR petition for four referred elements is given in Table 3.6-4. On scrutiny of the table it has been found that out of four elements of the items, only in legal & professional head, expense has reduced by Rs. 13.70 lakhs whereas, the other three elements have exceeded by Rs. 996 lakhs. Thus, an amount of Rs. 13.70 lakh has been shown separately as an adjustment applying regulation 2.5.5(iv) of the Tariff Regulations.

Thus, the admitted amount on A&G expenses for APR of 2017-18 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	617	603	603.30
Audit Fee	209	223	209.00



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Particulars	Allowed in Tariff Order	Claimed in APR Petition	Now admitted in APR
Other Administrative & General expenses (incl security expense)	15986	16871	15986.00
Rent for distribution function	1231	1328	1231.00
Adjustment under regulation 2.5.5 (iv)	-	-	13.70
<b>Total</b>	<b>18043</b>	<b>19026</b>	<b>18043.00</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. 943 lakhs on account of Rates and Taxes in APR application for 2017 – 18 against approved amount of Rs 829 lakh in tariff order. As it is an expenditure which is statutory in nature, therefore the claimed amount of Rs. 943 lakhs has been admitted under this head. The segregation of such amount on different business functions has been done as proposed by CESC.

3.7.2 CESC has claimed an amount of Rs. 19 lakh on account of Service Tax & entry Tax in APR application for 2017 – 18. Service Tax & entry Tax is related to O&M expenses. O&M expenses is admitted at Rs. 34321 lakhs as against claimed amount of Rs. 35304 lakhs. Therefore, claimed amount of Rs. 19 lakhs of Service Tax & entry Tax have been prorated based on admitted amount of O&M expenses. On the basis of such proration, admitted amount under this head works out Rs. 18.47 lakhs. The segregation of such amount on different business functions has been done as proposed by CESC. This admitted service tax is also booked as a part of Rates & Taxes. Accordingly, the admitted amount under Rates and Taxes is Rs 961.47 lakhs (Rs 943 lakhs + Rs 18.47 lakhs).





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- 3.7.3 CESC has claimed an amount of Rs. 1265 lakhs on account of insurance in APR application for 2017 – 18 against approved amount of Rs. 799 lakhs in MYT order. CESC in volume-2 of its 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 the amount of Rs. 1265 lakh.
- 3.7.4 CESC has claimed an amount of Rs. 1023 lakh on account of lease rental charges in APR application for 2017 – 18 against approved amount of Rs 1072 lakhs in tariff order CESC's claim, being lower than the above approved amount for 2017-18 as well as the actual expenditure of Rs. 1158 lakhs incurred in 2016-17. Thus, CESC's claim of Rs 1023 lakhs is being admitted for this APR order on CESC for 2017-18.
- 3.7.5 CESC has claimed an amount of Rs. 1375 lakhs on account of cost of Outsourcing for call centre in APR application for 2017 – 18 against approved amount of Rs 964 lakhs in tariff order. CESC under Form 1.17(j) has claimed the entire amount as manpower related cost under the head of out-sourcing, which is an uncontrollable item as per regulation 2.5.5 of the Tariff Regulations. In terms of clause (iii) of regulation 2.6.10 for uncontrollable items, the Commission may admit excess expenditure or part of it at the Commission's discretion based on prudence check.

In the previous years, the Commission admitted Rs. 967 lakh in APR order of 2014-15, Rs. 891 lakh in APR order of 2015-16 and Rs. 925.57 lakh in APR order of 2016-17 under the head of call centre expenses. The principle adopted in the MYT order is applied for determination of the amount under this head. For admitting the value under this head the escalation rate is determined by using the formula set out in paragraph graph 5.6.2.1(g) of the tariff order. The applicable inflation rate comes to 2.98% (i.e.  $2.98\% + 0 \times 1.67\% + 0$ ) on the basis of actual inflation rate of 2.98% as per combined / hybrid index (the index on which such expenses is sensitive), 1.67% increase in business volume parameter as well as considering nil value for Ad\_F in terms of



### Order on APR of CESC for the year 2017-18

principles set out in paragraph 8.4 of the MYT order. In view of previous years admitted figures value of R is considered as zero. Considering the above escalation rate on the value of expenditure on outsourcing of Rs 925.57 lakhs considered for 2016-17 in APR order, the call centre expenses for 2017-18 comes to Rs. 953.15 lakhs.

In view of above analysis, the Commission does not find it prudent to allow any additional cost over and above the amount of Rs. 964 lakhs admitted in the tariff order.

3.7.6 Item wise expenses on the head of other operational expenses is being provided in Table 3.7-1

**Table 3.7-1: Other Operational expenses linked to activity level and inflation**

Particulars	Units	Allowed in Tariff Order	2017-18 (Accounts & APR Petition)	2017-18 (Admitted)
Rates & Taxes (including service tax)	Rs. Lakh	829	962	961.47
Insurance	Rs. Lakh	799	1265	1265.00
Lease Rental	Rs Lakh	1072	1023	1023.00
Outsourcing expenses for call centre	Rs. Lakh	964	1375	964.00

### 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:

**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 2017-18 (after allocation/ transfer to capital account of Rs. 15895 Lakh) and auditors' certificate	86037
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 IndAS Accounting Standard)	2084





**Order on APR of CESC for the year 2017-18**

Particulars	Amount (Rs. Lakh)
Less : Shared cost relating to non-licensed business as per Petition ( Notes on Expenditure in Annex-1 of Volume-2 of APR Petition of 2017-18)	343
Less: Restructuring impact (in terms of response dated 31 December 2021, vide letter No. ED(F): 74798) (Rs 418 lakh – Rs 343 Lakh)	75
Less : IND AS adjustment of employee loan (Notional assessment as per INDAS)	34
CESC own employee cost in this APR petition	87670

3.8.2 However as per Form E(B) the claimed amount by CESC is 87670 lakh. Accordingly, the amount admitted for APR of CESC for the year 2017-18 is Rs 87670 lakh and has been segregated between generation and distribution function as proposed in the E(B) form.

**Table 3.8-2**

Item heads	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
Generation Employee Cost (Rs. lakh)	19538	17594	17594.00
Distribution Employee Cost (Rs. lakh)	61756	70076	70076.00

3.8.3 CESC in its petition claimed Rs. 4033 lakh as employee cost related to contracted manpower engaged in regular establishment in the generating stations. CESC through additional submission provided break-up of cost and contracted manpower engaged in Budge-Budge and Southern 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:

**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	1185	724	799	5121	461	2954.67



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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)
Titagarh	876	418				
Southern	473	388	293	971	85	281.69
<b>Total</b>	<b>2534</b>	<b>1530</b>	<b>1092</b>	<b>6092</b>	<b>546</b>	<b>3236.36</b>

### 3.9 Corporate Social Responsibility (CSR)

3.9.1 The claim of Rs. 1935 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 From the submitted Form-C the interest on capital borrowings that have been allowed after prudence check of loan details furnished in Form – C as shown in Table 4.10-1 :

**Table 3.10-1 : Interest Expenses**

Sl No	Particulars	Amount (Rs. Lakh)
1	Interest (audited annual accounts – Note 36)	49042
2	Less : Amount capitalized (Form C of petition)	1500
3	Total Amount of interest allowable as above (1-2)	47542
4	Less : Total amount of actual interest on short term loan paid on revenue account under temporary accommodation (Form C of petition)	20764
5	Total Amount of Interest towards capital borrowing	<b>26778</b>

3.10.2 The interest claimed on different heads in Form – C are shown in Table 3.10-2 :

**Table 3.10-2 : 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)	28277
2	Less : Amount capitalised (Form - C)	1500





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Sl. No.	Particulars	Amount (Rs. Lakh)
	Total amount of interest claimed towards capital borrowings (1-2)	26778
	B. Interest claimed on normative borrowings in terms of Tariff Regulations [Form 1.20(b)]	471
	C. Interest on Working Capital [Form 1.17(b)]	6593
	D. Interest on temporary accommodation [Form 1.17(a)]	31201
	Total (A+B+C+D)	65042

3.10.3 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-I of WBERC tariff Regulations, 2011.

**Table 3.10-3** : Calculation of normative debt

Particulars	Derivative	Amount (Rs. Lakh)
Opening balance before adjustment of normative debt	A1	14008.40
Less : Cumulative Repayment of Normative Debt upto previous year	A2	5980.73
Opening balance of net normative debt	$a = A1 - A2$	8027.67
Actual addition to debt this year	b	50000.00
Addition to the fixed asset during the year	c	66560.00
Normative addition to debt @70% of c above	$d = c \times 0.7$	46592.00
Addition to debt for the year to be considered to APR	e = higher of b and d	50000.00
Additional gross normative debt for the year	$F1 = e - b$	-
Repayment of normative debt during the year on actual	F2	4924.00
Net additional gross normative debt during the year	$G = F1 - F2$	(4924.00)
Closing balance of net normative debt	$h = a + g$	3103.67
Average balance of Normative Debt	$i = (a+h)/2$	5565.67
Weighted average rate of interest paid on term loan during the year	j	9.66%
Interest on normative debt allowed in APR for 2017-2018	$k = j \times i$	537.64
Closing Balance of Gross Normative Debt	$B1 = A1 + F1$	14008.40
Cumulative Repayment of Normative Debt upto the end of the year	$B2 = A2 + F2$	10904.73



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CESC has claimed interest on normative debt for Rs 471 lakh in form 1.20b of APR-2017-18 petition as mentioned at SI B of Table 3.10-2 above. Commission accordingly admits a sum of Rs 471 lakh as interest on normative debt in APR-2017-18 being the minimum of admissible amount of Rs 538 lakh computed above at Table 3.10.3 and Rs 471 lakh as claimed by CESC Ltd.

3.10.4 Computation of interest on admissible Working Capital has been shown under Table 3.10.4 below.

**Table 3.10-4** : Calculation of normative interest on Working Capital

SI No	Particulars	Amount Rs. Lakhs
A1	Gross Fixed Cost	332432.36
A2	Fuel and Power Purchase Cost	424453.27
A	Annual fixed Cost, fuel cost and power purchase ( A1 + A2)	756885.63
B1	Less : Depreciation including Advance Depreciation	59340.15
B2	Less : Deferred Revenue Expenditure	-
B3	Less : Return on Equity including Performance Incentive etc.	61435.40
B4	Less : Bad Debt	3575.00
B5	Less : Reserve for unforeseen exigencies	-
B	Total Deductions : (sum B1:B5)	124350.55
C.	Allowable Gross Sales for Working Capital	632535.08
D.	Allowable Working Capital @ 10% on C (A - B)	63253.51

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 63253.51 lakh. Considering the security deposit amount held by CESC being Rs. 181778.00 lakh, there was no further need of working capital by CESC during the year 2017 – 2018. Thus, no interest on working capital is being admitted in the APR for 2017 – 2018.





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- 3.10.5 Interest on temporary accommodation as claimed by CESC in Form 1.17 (a) dated 28.02.2019 is Rs 31201 lakhs @ 9.69% on unrealised arrears from sale of power arising out of Commission Orders, claim for recoverable amount out of sale of power for the year 2017-18 considering actual expenditure prior to truing up exercise by the Commission along with requirement of fund for statutory additional levy incurred by CESC up to the year 2013-14 as submitted at page 38 of their petition in Volume 2. CESC submitted one petition before the Commission for allowing Rs 89673 lakh incurred by them as an additional levy which was admitted by the Commission in Casw No OA-211/15-16.. However, CESC subsequently revised such claim as per submission dated 10.05.2022 to Rs 21180 lakh updated with admitted recoverable amount of APR 2013-14. Commission has since rejected claim of additional levy on coal vide Order dated 30.07.2022 in Case No. OA-211/15-16. Accordingly, such claim is not considered for the purpose of computation of interest on temporary accommodation. CESC has shown detailed computation of Interest on Temporary Accommodation for Rs 21180 lakh as claimed @9.69% on Average balance of Rs 218577 lakh mentioning requirement of fund has arisen out of different tariff orders and APR Orders of the Commission which remained unrealised in 2017-18. As per regulation 5.6.5.4 of WBERC Tariff Regulations, 2011 interest on temporary accommodation becomes due on unrealised arrears from the consumers / beneficiaries. The claim of CESC Limited for temporary accommodation includes recoverable amounts for the period 2013-14 to 2017-18. The Commission has computed the allowable amount of temporary accommodation in the APR order of CESC for the year 2016-17, which reveals that after cumulative adjustment of all regulatory assets, Rs 30369.79 lakhs still recoverable by CESC as on 31.03.2017. Considering the weighted average interest of temporary accommodation at 8.79%, the admissible interest on temporary accommodation works out to Rs. 3080.39 lakh. As evidenced from Form C read with additional submission dt 10.05.2022 the borrowing cost incurred to meet various short-term requirements is Rs. 20764 Lakh. Thus Rs 3080.39 lakhs being lower than the claim is admitted in APR 2016-17 for interest on temporary accommodation.



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Table 3.10-5

Sl. No.	Particulars	Amount (Rs. Lakhs)
A	Opening balance Admissible Temporary Accommodation Requirement on 01.04.2017	30369.79
<b>Addition during the year</b>		
B	Recoverable as per APR Order 2017-18	11695.03
	Total Addition during the year	11695.03
<b>Adjustment during the year</b>		
C	Adjustment for 2016-17	
	(i) Adjustment for recovery related to Tariff Order 2016-17	2346.00
	Total Adjustments	2346.00
D	Closing Balance of Admissible Ty Accommodation Requirement as on 31.3.2018 (A + B – C)	39718.82
E	Average Balance in 2015-16 requiring temporary accommodation (A+D) / 2	35044.31
F	Rate of interest	8.79%
G	Interest on Temporary Accommodation (E x F)	3080.39

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

Table 3.10-6 : Approved borrowing costs

Particulars	Amount (Rs. Lakh)
Amount of Interest towards capital expenditure	26778.00
Interest on normative debt	471.00
Interest cost on capital borrowing	27249.00
Interest cost on working capital	-
Interest on Temporary Accommodation	3080.39

### 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. 10801 lakh as against an amount of Rs. 11722 lakh allowed in the tariff order for the concerned





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year. The total amount of such security deposit at the beginning of the year was Rs. 161854 lakh and at the end of the year was Rs. 150559 lakh as per balance sheet ended 31 March, 2018.

CESC Limited submitted a certificate from their auditors at Annex 16 of Volume 3 of the petition. As per that certificate an amount of Rs.10801 lakh has been settled during the year 2017- 2018 in the following manner:

(a) Credit to consumers' account	Rs. 6976 lakh
(b) Addition to security deposit of Existing consumer	Rs. 3400 lakh
(c) Payment of Tax as per I. T. Act 1961	Rs. 425 lakh
Total	Rs. 10801 lakh

The Commission admits an amount of Rs. 10801 lakh in the APR 2017 - 2018 under this head of expense under with allocation to distribution function only.

**3.12 Other Finance Charges**

Other Finance charges of Rs. 1100 lakhs based on auditors' certificate under Annex 11 of Volume 3 of the petition are allowed on actual basis and distributed among different functions as per form E(B) of the APR Petition.

**3.13 Bad Debt**

Amount actually written off as per Auditors' Certificate amounting to 3575 lakh has been found to be within 0.5% of the earning from the sale of electricity of Rs 735638 lakhs in Form 1.25, Annexure 1 of the APR petition. Hence, an amount of Rs. 3575 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. 42564 lakh. An amount of Rs. 345 lakh out of the total depreciation is on assets created by utilizing the proceeds



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from sale of old assets. Amounts of Rs. 223 lakh, Rs. 852 lakh, Rs. 14 lakh and Rs. 29 lakh pertain to adjustment due to Ind-AS, depreciation of coal mine, depreciation on inoperative assets and depreciation relating to other activities. The chargeable amount of depreciation for determination of tariff, therefore, comes to Rs. 41101 lakh (Rs. 42564 lakh - Rs. 345 lakh - Rs. 223 lakh - Rs. 852 lakh - Rs. 14 lakh - Rs. 29 lakh) as against an amount of Rs. 39233 lakh allowed in the tariff.

Thus, in terms of the Tariff Regulations, the Commission admits the amount of Rs. 41101 lakh towards depreciation in the APR for the year 2017 - 2018. The cost center-wise breakups of the amount admitted are as follows:

Particulars	Amount (Rs. in Lakh)
<b>(A) Generation function</b>	
Budge Budge	9243.32
Titagarh	596.71
Southern	337.17
<b>Total (A)</b>	<b>10177.20</b>
<b>(B) Distribution Function</b>	27618.67
<b>(C) Supply / Selling Function</b>	3305.38
<b>Total (A+B+C)</b>	<b>41101.25</b>

Depreciation and amortisation charges have been allowed on the basis of assets capitalised and are detailed in Table 3.14-1 and Table 3.14-2

**Table 3.14-1 : Depreciation expenses**

Particulars	Amount (Rs. Lakh)
Depreciation as per accounts (P&L Accounts)	42564
Less : amount for Trademark (Note 6 of Annual Accounts)	-
Less: depreciation on assets created by utilising proceeds from one-time sale of old assets (Form B of Petition)	345





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Particulars	Amount (Rs. Lakh)
Less: Ind-AS adjustment (in terms of response dated 31 December 2021, vide letter No. ED(F): 74798)	223
Less : Depreciation on coal mine (in terms of response dated 31 December 2021, vide letter No. ED(F): 74798)	852
Less: Depreciation on inoperative assets (in terms of response dated 31 December 2021, vide letter No. ED(F): 74798)	14
Less: Depreciation of merged companies (in terms of response dated 31 December 2021, vide letter No. ED(F): 74798)	29
Chargeable amount of depreciation	41101

**Table 3.14-2** : Advance Against Depreciation

SI No.	Particulars	Amount (Rs. Lakh)
(a)	Repayment of Loan (Form C of petition)	61395.00
(b)	1/10 <sup>th</sup> of original loan amount (Form C of petition)	59340.40
(c)	Maximum permissible amount of loan repayment restricted to 1/10 <sup>th</sup> of original loan amount	59340.40
(d)	Depreciation admitted in APR for 2017 – 18 before deduction of Coal Mining Rights	41101.25
(e)	Allowable Advance against depreciation (c-d)	18239.15

Advance against depreciation has been allocated on the basis of depreciation allowed for different functions.

### 3.15 Return on Equity

3.15.1 Return on equity is detailed in Table 3.15-1, Table 3.15-2, Table 3.15-3, Table 3.15-4 and Table 3.15-5.

**Table 3.15-1** : Actual Addition to Equity during 2017 - 18 has been arrived as below :

SI No	Particulars	Amount (Rs. Lakh)
1	Profit for the year (P&L Account)	85292
2	Write off of Misc. Expenditure (Annex 6 of Vol 3 of Petition)	-



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SI No	Particulars	Amount (Rs. Lakh)
3	One time sale amount of assets invested in creation of new asset in terms of regulation 5.15.1(iv) (Form 1.20(a) of petition)	1039
4	Total (1+2+3)	86331
	Less :	
5	Dividend including tax paid (Para (b) of Note 20 of Annual Accounts)	19145
6	Unforeseen Exigencies Reserve (Annex 13 of Vol 3 of petition)	1593
7	Impact of Capital Contribution from Consumers net of tax and other notional IND-AS adjustments (in terms of response dated 31 December 2021, vide letter No. ED(F): 74798)	632
8	<b>Total (5+6+7)</b>	<b>21370</b>
9	<b>Actual addition to equity base during 2017-18 (4-8)</b>	<b>64961</b>

3.15.2 In terms of Form 1.18 of APR read with Notes 4, 5 & 6 of audited financial statements for 2017-18 the net addition of fixed cost is as per Table 3.15-2

**Table 3.15-2: Addition to original cost of fixed asset**

Particulars	Amount (Rs. Lakh)
Addition to fixed assets	73111
Less : Normal Retirement of Assets	6552
Net addition to fixed asset	66560

3.15.3 In terms of regulation 5.15.1 (iv) of the Tariff Regulations, CESC Limited invested proceeds of one time sale of asset to the tune of Rs. 1039 lakh in creation of new assets in the electricity business of the company for which no depreciation has been claimed. This amount of Rs. 1039 lakh is included in actual addition to equity base of Rs. 64961 lakh for 2017-2018 and addition to fixed assets of Rs. 66560 lakh. Return on such equity shall be admissible to the CESC Limited.

3.15.4 Equity base for allowing returns to the licensees at the specified rate is an uncontrollable factor in terms of the Tariff Regulations. In tariff order dated 04.07.2018, CESC Limited was allowed





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return on the projected average equity base of Rs. 379150 lakh comprising generation function and distribution function @ 15.5% and 16.5% respectively and that came to Rs. 19060 lakh for generation function and Rs. 42270 lakh for distribution function aggregating to Rs. 61330 lakh. The average equity base for the purpose of computation of return on equity during the year 2017 - 2018 came to Rs. 359891 lakh as per the computation shown hereunder.

3.15.5 In terms of Form 1.18 of APR read with Notes 4, 5, 6 and 20 of audited financial statements for 2017-2018 the net addition of fixed cost and admissible equity base is as per Table 3.15-3

**Table 3.15-3 : Admissible Equity Base for 2017 - 18**

Sl No.	Particulars	Amount (Rs. Lakh)
1	Actual equity base at the beginning of the year	614060
2	Admissible equity base at the beginning of the year 2017 – 18	369543
3	Actual addition to equity base during the year (refer to para 4.15.1)	64961
4	Actual equity base at the end of the year (1+3)	679021
5	Net addition to original cost of fixed asset (refer to para 4.15.3)	66560
6	Less : Asset created in terms of regulation 5.15.1(iv) of the Tariff Regulations	1039
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)	65521
8	Normative addition to equity base (30% of 7)	19656
9	Addition to equity base considered for the year (lower of 3 and 8)	19656
10	Add : Asset created in terms of regulation 5.15.1(iv) of the Tariff Regulations	1039
11	Addition to equity base during the year for the purpose of computation of return as per Tariff Regulations (9+10)	20695
12	Admissible equity base at the closing of the year 2017 - 18 (2+11)	390238
13	Average admissible equity base for allowing returns [(2+12)/2]	379891

3.15.6 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, 2009, the rate of return on equity for generation and transmission activity is 15.5%.



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3.15.7 Allocation of equity base between generation function and distribution function based on the ratio of gross cost of fixed asset at the beginning of the year and addition during the year:

**Table 3.15-4 : Functional Allocation of Equity Base**

Particulars	Opening equity base of 2017-18	Addition to equity base during 2017-18	Closing equity base of 2017-18	Average equity base of 2017-18	Return on equity (in percent)	Return admitted in APR for 2017-18
Generation	124037	1229	125266	124651.78	15.50	19321.03
Distribution	245506	19466	264972	255238.59	16.50	42114.37
<b>Total</b>	<b>369543</b>	<b>20695</b>	<b>390238</b>	<b>379890.37</b>		<b>61435.40</b>

3.15.8 Equity base specifically attributable to a function has been shown under such function. Centrally maintained capitalised expenses have been allocated to Generation and Distribution function on basis of respective capitalisation.

**Table 3.15-5 : Function-wise allocation of the amount of return admitted in APR for 2017 - 18**

Particulars	As admitted in APR for 2017-18 Rs in Lakh
<b>(A) Generation function</b>	
Budge Budge	16551.34
Titagarh	1464.39
Southern	1305.30
<b>Total (A)</b>	<b>19321.03</b>
<b>(B) Distribution Function</b>	
<b>Total (A+B)</b>	<b>61435.40</b>

Return on Equity has been computed on the basis of equity base furnished in Table 3.15-4 above.

**3.16 Appropriation to Reserve for Unforeseen Exigencies**

As per MYT Order dated 04.07.18, no amount was allowed to CESC Limited under the head Reserve for Unforeseen Exigencies. The actual amount of such reserve created by CESC Limited





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at the same rate on the actual gross block of fixed assets as on 1 April, 2017 was Rs. 22824 lakh and amount appropriated towards interest during 2017 - 2018 is Rs. 1593 lakh. The amount of such reserve had separately been invested along with the amount of Rs. 1593 lakh of interest accrued to such investments in accordance with the relevant regulation of the Tariff Regulations of this Commission. As per audited accounts of 2017 - 2018, CESC Limited has a closing balance of Rs. 24417 lakh (Rs. 22824 lakh + Rs. 1593 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 31 December 2021, vide letter No. ED(F): 74798.

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

**3.17 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 2017 – 18 and is allowed with functional allocation on the basis of respective functional admitted return of equity and furnished in Annexures 4A to 4E. According to clarification through mail dated 24.02.20, CESC has challenged additional claims of Income Tax before competent authorities. CESC has also mentioned that marginal adjustments of tax (if any) may be claimed through APR in the years of settlement. CESC's such claim is for 2013-14. Moreover, according to CESC, no income tax pertaining to any earlier period has been claimed in the APR for the year 2017-18. Vide Communication dated 14 December 2020, CESC has submitted before the Hon'ble Commission that tax assessment has been completed by the Income Tax Authority till assessment year 2017-18. Thus, Commission decides to admit the claimed amount of Rs 19306 lakh as Income tax payment by CESC in APR of 2017-18. 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.



### 3.18 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 but no certificate from SLDC has been enclosed along with their APR petition.. 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 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 2017-18 for Budge Budge, Southern and Titagarh Generating Station as submitted by CESC in form 1.1 of the petition which are found above the normative PAF.





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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:

**Table 3.18-1 : Incentive for generation higher than Norm**

SL No	Factors	Unit	Budge Budge	Southern
1	Target Plant Availability Factor	%	85	85
2	PLF achieved	%	91.83	25.69
3	Eligibility for incentive under reg 6.4.2		YES	NO
4	Sent out generation	MU	5563.093	
5	Normative sent out generation	MU	4782.960	
6	Additional units (1-2)	MU	780.133	
7	Normative PLF	%	80	80
8	Additional PLF (6-7)	%	11.83	-
9	Applicable category		B	
10	Applicable rate	Paise/kwh	30	
11	Amount eligible (6x10)/10	Rs. In Lakh	2340.40	-

**Table 3.18-2 : Incentive for Oil consumption better than norms**

SL No	Factors	Unit	Budge Budge	Southern
1	Gross Generation	MU	6113.289	302.156
2	Normative oil consumption rate	ml/kWh	1.30	2.10
3	Actual oil consumption rate	ml/kWh	0.13	5.89
2	Oil rate saved	ml/ kWh	1.17	Nil
3	Applicable Rate of incentive per unit of generation	Paise/kwh	0.40	-
4	Eligible Amount [1x3/10]	Rs. In Lakh	244.53	-



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**Table 3.18-3:** Incentive for better gross station heat rate than norms

SL No	Factors	Unit	Budge Budge	Southern
1	Gross Generation	MU	6113.289	302.156
2	Normative SHR	kCal/kWh	2470	2900
3	Actual SHR	kCal/kWh	2108.96	3709.41
4	Applicable Rate of incentive as per Schedule-10	Paise/kwh	0.50	-
3	Eligible Amount [1x2/10]	Rs. In Lakh	305.66	-

**Table 3.18-4:** Incentive for better gross station heat rate than norms

SI No	Factors	Budge Budge	Titagarh	Southern	Total
1	Incentive for higher generation than norms	2340.40	-	-	2340.40
2	Incentive for better oil rate	244.53	-	-	244.53
3	Incentive for better heat rate	305.66	-	-	305.66
	<b>Total</b>	<b>2890.59</b>	<b>-</b>	<b>-</b>	<b>2890.59</b>

### 3.19 Net UI charges paid

CESC Limited paid an amount of Rs. 903 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 903 lakh is well within the permissible limit of 5% of total power purchase cost of Rs. 281629.81 lakh as mentioned in paragraph 2.11.1.





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**3.20 Written off of intangible assets**

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

**3.21 Income from non-tariff sources**

As per note 32 and note 33 of audited annual reports and accounts read with submissions in Form 1.26 to Annex 1, such income is Rs 25140 lakh for 2017-18 as detailed in Table 3.21-1.

**Table 3.21-1: Non-Tariff Income break-up**

SL No.	Particulars	Amount (Rs. Lakh)
1	Rental of meters and other apparatus hired out	5002.00
2	Sale and repair of lamps etc.	204.00
3	Transfer service connection fees	-
4	Income from investments and bank balance	-
5	Surcharge for late payments	2723.00
6	Other General receipts arising from and ancillary or incidental to the business of electricity	5596.00
7	Consumer contribution	11615.00
8	<b>Net income from non-tariff sources</b>	<b>25140.00</b>

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 3.21-1 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 3.21-1 above) is allocated to all functions based on the respective return on equity computed in Table 3.15-5 above. However, consumer contribution (item 7) has been entirely accounted in distribution function. Accordingly, business function-wise allocation of non-tariff income stands as Table 3.21.2.



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**Table 3.21-2:** Allocation of non-tariff income

Particulars	As admitted in APR 2017-18
<b>(A) Generation function</b>	
Budge Budge	1508.00
Titagarh	133.00
Southern	119.00
<b>Total (A)</b>	<b>1760.00</b>
<b>(B) Distribution function</b>	23380.00
<b>Total (A+B)</b>	<b>25140.00</b>

### 3.22 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 3.22-1 Benefits** passed on to the consumers in terms of regulations

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	5833.00	5116.36	716.64	50%	358.32
2	Auxiliary Services	311.00	221.00	90.00	40%	36.00
3	Other business - consultancy services	45.00	105.00	-60.00	40%	-
4	Other business - user fee	1210.00	-	1210.00	40%	484.00

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. Necessary details have been furnished through response dated 31 December 2021, vide letter No. ED(F): 74798)



**Table 3.22-2** 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)	358.32	36.00	-	484.00

### 3.23 Admissibility of recovery of full Capacity Charges as per provisions of regulation 6.4.2 of the Tariff Regulation

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 3.18 of this order, Commission considers to allow the capacity charge for the generating stations of CESC for the year 2017-18 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 80064.24 lakh and overall at Rs 306414.04 lakh.



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Thus, the fixed cost for generating stations, distribution business and overall are admitted as follows:

Table- 3.23-1

SI No	Particulars	Admissible Fixed cost on APR in 2017-2018 (Annexure 3A to 3E)
		Rs. lakh
1	<b>Generation function</b>	
	Budge Budge	62520.76
	Titagarh**	7664.69
	Southern	9878.79
	<b>Generation</b>	80064.24
2	<b>Distribution Function</b>	226349.80
	<b>Total</b>	<b>306414.04</b>

\*\* For Titagarh employee cost, statutory rates & taxes, etc are allowed.

3.24 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 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 2.21 above is in relation to Budge-Budge generating station only, no benefit of adjustment is allowable to Southern and Titagarh generating station stations.

3.25 CESC is directed to redeploy its employees engaged in Titagarh generation stations to other generating stations suitably by maintaining the man/MW ratio of the respective power plants.





Order on APR of CESC for the year 2017-18

**Annexure 3A**

Generation

**Budge Budge Generating Station**

Rs. in Lakh

Sl. No.	Particulars	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
1	Water Charges/Cess	5	5	5.00
2	Coal & Ash Handling Charges	949	975	975.00
3	Operation & Maintenance Expenses	9840	10039	10039.00
4 (a)	Employee Cost	6372	7868	7868.00
(b)	Contractual manpower in regular establishment	2916	3181	2954.67
5	Rent for generation	-	-	-
6	Rates & Taxes (other than Income Tax)	406	360	360.00
7	Insurance	475	840	840.00
8	Corporate Social Responsibility	-	521	-
9	Interest on Capital Borrowings	2933	2715	2715.10
10	Interest on Working Capital	-	-	-
11	Other Finance Charges	303	284	284.00
12	Bad Debt	-	-	-
13	Depreciation	9332	9243	9243.32
14	Advance against Depreciation	3353	4102	4101.74
15	Written off Intangible Assets	-	-	-
16	Return on Equity	16147	16551	16551.34
17	Reserve for Unforeseen Exigencies	-	-	-
18	Income Tax	-	5201	5201.00
19	Performance Incentive	-	2292	2890.59
20	<b>Gross Fixed Charges (1 to 19)</b>	<b>53031</b>	<b>64177</b>	<b>64028.76</b>
21	Less: Income from Non-Tariff Sources	915	1508	1508.00
22	Less : Benefits passed on to consumers for sale to persons other than consumers or licensee	-	515	0.00
23	Less: Benefits to pass on to consumers for Auxiliary Services	-	-	-
24	<b>Total Net amount deductible (21 to 23)</b>	<b>915</b>	<b>2023</b>	<b>1508.00</b>
33	<b>Net Fixed Charge for the year 2017 - 18 (20-24)</b>	<b>52116</b>	<b>62154</b>	<b>62520.76</b>



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**Annexure 3B**

Generation

**Titagarh Generating Station**

Rs. Lakhs

Sl. No.	Item heads	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
1	Water Charges/Cess	-	0.3	-
2	Coal & Ash Handling Charges	-	-	-
3	Operation & Maintenance Expenses	-	1062	0.00
4 (a)	Employee Cost	7825	4888	4,888.00
(b)	Contractual manpower in regular establishment	-	-	-
5	Rent for generation	-	-	-
6	Rates & Taxes (other than Income Tax)	25	83	83.00
7	Insurance	60	30	30.00
8	Corporate Social Responsibility	-	46	0.00
9	Interest on Capital Borrowings	-	-	-
10	Interest on Working Capital	-	-	-
11	Other Finance Charges	22	11	11.00
12	Bad Debt	-	-	-
13	Depreciation	683	597	596.51
14	Advance against Depreciation	245	264.79	264.79
15	Written off Intangible Assets	-	-	-
16	Return on Equity	1570	1464	1,464.39
17	Reserve for Unforeseen Exigencies	-	-	-
18	Income Tax	-	460	460.00
19	Performance Incentive	-	-	-
20	<b>Gross Fixed Charges (1 to 19)</b>	<b>10430</b>	<b>8906</b>	<b>7797.69</b>
21	Less: Income from Non-Tariff Sources	89	133	133.00
22	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee	-	-	-
23	Less: Benefits to pass on to consumers for Auxiliary Services	-	-	-
24	<b>Total Net amount deductible (21 to 23)</b>	<b>89</b>	<b>133</b>	<b>133.00</b>
25	<b>Net Fixed Charge for the year 2017 - 18 (20-24)</b>	<b>10341</b>	<b>8773</b>	<b>7664.69</b>





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**Annexure 3C**

Generation

**Southern Generating Station**

Rs. in Lakh

Sl. No.	Item heads	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
1	Water Charges/Cess	76	19	19.00
2	Coal & Ash Handling Charges	373	86	86.00
3	Operation & Maintenance Expenses	2097	2139	2139.00
4 (a)	Employee Cost	5341	4838	4838
(b)	Contractual manpower in regular establishment	226	853	281.69
5	Rent for generation	39	48	48.00
6	Rates & Taxes (other than Income Tax)	90	10	10.00
7	Insurance	101	88	88.00
8	Corporate Social Responsibility	-	41	-
9	Interest on Capital Borrowings	348	256	256.01
10	Interest on Working Capital	-	-	-
11	Other Finance Charges	40	30	30.00
12	Bad Debt	-	-	-
13	Depreciation	372	337	337.17
14	Advance against Depreciation	134	150	149.62
15	Written off Intangible Assets	-	-	-
16	Return on Equity	1343	1305	1305.30
17	Reserve for Unforeseen Exigencies	-	-	-
18	Income Tax	-	410	410.00
19	Performance Incentive	-	-	-
20	<b>Gross Fixed Charges (1 to 19)</b>	<b>10580</b>	<b>10610</b>	<b>9997.79</b>
21	Less: Income from Non-Tariff Sources	76	119	119.00
22	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee	-	-	-
23	Less: Benefits to pass on to consumers for Auxiliary Services	-	-	-
24	<b>Total Net amount deductible (21 to 23)</b>	<b>76</b>	<b>119</b>	<b>119.00</b>
25	<b>Net Fixed Charge for the year 2017 - 18 (20-24)</b>	<b>10504</b>	<b>10491</b>	<b>9878.79</b>



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**Annexure 3D**

**Distribution**

Rs. Lakhs

Sl. No.	Item head	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
1	Employee Cost	61756	70076	70076.00
2	Repair & Maintenance	18896	16278	16278.00
3	Administrative & General	18043	19026	18043.00
4	Rates & Taxes (other than Income Tax)	308	509	508.47
5	Insurance	163	307	307.00
6	Lease Rental	1072	1023	1023
7	Cost of Outsourcing	964	1375	964.00
8	Corporate Social Responsibility	-	1327	-
9	Interest on Capital Borrowings	25574	24276	24277.89
10	Interest on Temporary Accommodation	-	31201	3080.39
11	Interest on Consumer's Security Deposit	11722	10801	10801.00
12	Interest on Working Capital	-	6593	0.00
13	Other Finance Charges	823	775	775.00
14	Bad Debt	-	3575	3575.00
15	Depreciation	28846	30924	30924.00
16	Advance against Depreciation	10711	13723	13723.00
17	Written off Intangible Assets	-	-	-
18	Return on Equity	42270	42114	42114.37
19	Reserve for Unforeseen Exigencies	-	-	-
20	Income Tax	-	13235	13235.00
21	Performance Incentive	-	-	-
22	Net DSM Payable	-	903	903.00
23	<b>Gros Fixed Charges (1 to 22)</b>	<b>221148</b>	<b>288041</b>	<b>250608.12</b>
24	Less: Income from Non-Tariff Sources	8743	23380	23380.00
25	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee	-	-	358.32
26	Less: Benefits to pass on to consumers for Auxiliary Services	44	36	36.00
27	Less : Expenses attributable to Auxiliary Services	-	-	-
28	Less : Benefits to pass on to consumers from other business	484	484	484.00
29	<b>Total Net amount deductible (24 to 28)</b>	<b>9271</b>	<b>23900</b>	<b>24258.32</b>
30	<b>Net Fixed Charge for the year 2017 - 18 (23 - 29)</b>	<b>211877</b>	<b>264141</b>	<b>226349.80</b>





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**Annexure 3E**

**Overall CESC**

Rs. Lakh				
SL. No.	Particulars	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
1	Water Charges/Cess	81	24.30	24.00
2	Coal & Ash Handling Charges	1322	1061	1061.00
3	Operation & Maintenance – Generation	11937	13240	12178.00
4	Repair & Maintenance – Distribution	18896	16278	16278.00
5	Administrative & General – Distribution	18043	19026	18043.00
6	(a) Employee Cost - own employees	84436	91704	90906.36
	(b) Cost of contractual manpower in regular generation establishment			
7	Rent	39	48	48.00
8	Rates & Taxes (other than Income Tax)	829	962	961.47
9	Insurance	799	1265	1265.00
10	a) Lease Rental	1072	1023	1023.00
	b) Cost of Outsourcing	964	1375	964.00
11	Corporate Social Responsibility	-	1935	-
12	Interest on Capital Borrowings	28855	27247	27249.00
13	Interest on Temporary Accommodation	-	31201	3080.39
14	Interest on Consumer's Security Deposit	11722	10801	10801.00
15	Interest on Working Capital	-	6593	0.00
16	Other Finance Charges	1188	1100	1100.00
17	Bad Debt	-	3575	3575.00



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SL. No.	Particulars	Amount admitted in Tariff Order 2017-18	Amount claimed in APR 2017-18	As admitted in APR 2017-18
18	Depreciation	39233	41101	41101.00
19	Advance against Depreciation	14443	18239.79	18239.15
20	Written off Intangible Assets	-	-	-
21	Return on Equity	61330	61434	61435.40
22	Reserve for Unforeseen Exigencies	-	-	-
23	Income Tax	-	19306	19306.00
24	Performance Incentive	-	2292	2890.59
25	Net UI Payable	-	903	903.00
26	<b>Gross Fixed Charges ( 1 to 25)</b>	<b>295189</b>	<b>371734</b>	<b>332432.36</b>
29	Less: Income from Non-Tariff Sources	9823	25140	25140.00
31	Less: Benefits passed on to consumers for sale to persons other than consumers or licensee	-	515	358.32
32	Less: Benefits to pass on to consumers for Auxiliary Services	44	36	36.00
34	Less: Benefits to pass on to consumers from other business	484	484	484.00
35	<b>Total Net amount deductible (29 to 34)</b>	<b>10351</b>	<b>26175</b>	<b>26018.32</b>
36	<b>Net Fixed Charge for the year 2017 - 2018 (28-35)</b>	<b>284838</b>	<b>345559</b>	<b>306414.04</b>





Order on APR of CESC for the year 2017-18

**Annexure 3F**

Distribution O&M parameters:

Inflation

Particulars	Tariff Order	APR Order
WPI	2.88%	2.92%
CPI	4.45%	3.08%
WPI : CPI (60 : 40)	3.51%	2.98%

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
2016-17	271	275	277	280	278	277	278	277	275	274	274	275
2017-18	277	278	280	285	285	285	287	288	286	288	287	287

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
2017-18	2.21	1.09	1.08	1.79	2.52	2.89	3.24	3.97	4.00	5.11	4.74	4.36	3.08

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
2016-17	109	110	112	112	111	111	112	112	112	113	113	113
2017-18	113	113	113	114	115	115	116	116	116	116	116	116

Monthly Inflation Rate based on WPI

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
2017-18	3.85	2.26	0.90	1.88	3.24	3.14	3.68	4.02	3.58	3.02	2.74	2.74	2.92

Average value is computed

**Chapter 4****AMOUNT ADJUSTABLE ON ANNUAL PERFORMANCE REVIEW**

- 4.1 A summarised position of the fixed cost for four generating stations, distribution and selling/supply functions have been detailed in Table 3.23-1 of this order totalling to Rs. 306746.27 lakh. Further, the Commission also determined the fuel and power purchase cost allowable to CESC totalling to Rs. 424453.27 lakh, after meeting the amounts 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, duly adjusted for share of savings of 590.435 MU on distribution loss in terms of Tariff Regulations net off amount already considered in variable cost determination, is now required to be adjusted against Rs. 730867.31 lakh (i.e 306414.04 + 424453.27).
- 4.2 Adjustment of revenue from sale of energy due to better distribution loss in terms of gain sharing allowed in Tariff Regulations are computed below:

Table 4.2 -1

Sl No	Particulars	Unit	Derivation	Value
1	Allowable fixed and Fuel cost	Lakh	A	730867.31
2	Sale to consumer and licensee	MU	B	9776.29
3	per unit price	paisa/kWh	$C = AX10/B$	747.59
4	Energy save on less distribution loss	MU	D	590.435
5	Additional earning from sale of excess energy	Lakh	$E = C \times D/10$	44140.33
6	75% of such gain share of licensee	Lakh	$F = E \times 75\%$	33105.25
7	Less: gain share already allowed under FPPCA	Lakh	G	16640.53
8	Balance gain share allowed	Lakh	$H = F - G$	<b>16464.72</b>

- 4.3 The revenue earned by CESC through sale of power to Consumer and WBSEDCL with reference to its audited accounts as detailed out below:

Table : 4.3-1

SL. No.	Particulars	Amount (Rs. In Lakh)
1	Earnings from sale of electricity as per Note 32(a) of audited accounts of CESC Ltd	759512.00





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2	Less : earnings attributable to sale of energy to persons other than own consumers & WBSEDCL including swap-out power	23980.00
3	Add : Contribution to festivals	105.00
4	Less : Adjustment on account of balance gain share on better distribution losses #	16464.72
6	Net earnings from sale to consumers and WBSEDCL.	719172.28
#The net adjustment for distribution performance has been done after taking into effect of gain sharing to consumers and benefit already passed through variable cost.		

4.4 The amount adjustable on Annual Performance Review is detailed as under in Table 4.4-1

**Table 4.4-1**

Sl No	Particulars	Amount (in Rs. lakh)
1	Total Fuel and Power Purchase Cost admitted	424453.27
2	Capacity charge admitted	306414.04
3	Total recoverable [(1) + (2)]	730867.31
4	Amount recovered from sale of power	719172.28
5	Balance Recoverable / payable (-) [(3) – (4)]	11695.03

4.5 In terms of regulation 2.6.6 of the Tariff Regulations, the entire recoverable amount of Rs. 11695.03 lakh or a part thereof shall be adjusted with the amount of Aggregate Revenue Requirement for the year 2020 - 21 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/-  
(SUTIRTHA BHATTACHARYA)  
CHAIRPERSON

Dated: 01.08.2022

Sd/-  
SECREARY