



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

IN CASES NO:

**FPPCA – 71 / 14 – 15 AND
APR – 44 / 14 - 15**

**IN RE APPLICATIONS OF CESC LIMITED FOR
FUEL & POWER PURCHASE COST
ADJUSTMENT (FPPCA) AND ANNUAL
PERFORMANCE REVIEW (APR) FOR
THE FINANCIAL YEAR 2013- 2014**

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

DATE: 02.03.2020



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CHAPTER – 1 INTRODUCTION

- 1.1 In terms of the provisions contained in regulation 2.6 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended (hereinafter referred to as the “Tariff Regulations”) the generating companies or the licensees, as the case may be, are subject to an Annual Performance Review (in short ‘APR’). The West Bengal Electricity Regulatory Commission (hereinafter referred to as the “Commission”) introduced Multi Year Tariff (in short “MYT”) procedure and as such, APR aims at carrying out adjustments arising out of difference between the actual performance and projected performance under different factors / heads of accounts. Such adjustments are to be done in the manner as specified in the Tariff Regulations. Accordingly, CESC Limited submitted their application of APR to the Commission on 29th November, 2014 for the financial year 2013 – 2014. Prior to submission of APR 2013-14 CESC Limited has also submitted FPPCA application for 2013-14 on 11.09.2014 in pursuance to regulations 2.8.7 and 5.8 of the Tariff Regulations.
- 1.2 The instant applications of CESC Limited are their third application for the FPPCA and APR of the third control period. The adjustments, as were found necessary on review of the performance of the previous years, were effected while determining the amount recoverable through tariff during the years following the years of such review. Similarly, the adjustments, as may arise out of the review of the instant application for 2013 – 2014 will be considered for giving effect while determining the amount of revenue recoverable through tariff of any ensuing year or through separate order as specified in regulation 2.6.6 of the Tariff Regulations.





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- 1.3 CESC Limited has submitted their applications for Fuel and Power Purchase Cost Adjustment and Annual Performance Review for 2013 – 2014 in terms of the provision contained in the Tariff Regulations.
- 1.4 Admissible fuel and power purchase costs are to be worked out with reference to the actual quantum of energy sold to its own consumers and to other licensee(s) during the concerned adjustment period applying the following formula specified in Schedule – 7A to the Tariff Regulations on the basis of normative parameters as was used in the tariff order for 2013-14 and also on the basis of regulation 5.8.1 of the Tariff Regulations. APR is to cover the annual fixed costs and fixed charges that are to be allowed to the licensee as per the Tariff Regulations. The Commission has taken careful note of the representations made by CESC Limited and the relevant issues will be addressed to and the views will be taken accordingly while examining the admissibility of expenses under different heads of accounts in the subsequent chapter.
- 1.5 The APR for the year 2013 – 2014 is, therefore, the review of the different factor elements of fixed charges, categorized as controllable and uncontrollable allowed to CESC Limited through the ARR of the tariff order for the year 2013 – 2014, vis-à-vis the actuals as per the audited accounts. The instant application of CESC Limited for the year 2013 – 2014 is being viewed in the subsequent parts of this order.
- 1.6 After receiving the APR application for 2013-14 of CESC Limited as submitted on 29th November, 2014 Commission has sought lot of clarification, justification and information vide letters no. WBERC/FPPCA-72/14-15/1126 dated 11.03.2015 and WBERC/FPPCA-72/14-15/0118 dated 5th May 2015. Subsequently the Commission further issued letters vide dated 11th April, 2016 and 12th May, 2016 to CESC Limited to furnish some other information / data as per format prescribed in the Tariff Regulations for the purpose. CESC Limited, accordingly, provided the requisite data / information vide their letters 06.06.2016 and



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26.06.2016 in the specified proforma. The applications for FPPCA and APR for the year 2013 – 2014 submitted on 11.09.2014 and 29.11.2014 respectively and the information / data furnished on 06.06.2016 and 26.06.2016 (collectively called as 'application') were subsequently admitted by the Commission for processing.

- 1.7 In terms of regulation 2.6.12 of the Tariff Regulations, the gist of the application was published simultaneously in 'Ananda Bazar Patrika', 'Bartaman', 'The Telegraph' and 'Sanmarg' on 14th August, 2015. The gist along with the application was also posted in the website of CESC Limited. The publication invited the attention of all interested parties, stakeholders and the members of the public to the application of CESC Limited and requested for submission of suggestions and objections, if any, on the application to the Commission. The last date of submission of suggestions and objections was 2nd September, 2015. Opportunities were also afforded to all to inspect the application and take copies thereof.
- 1.8 Only Ganatantrik Nagarik Samity, Howrah has offered their comment, suggestion and objection on applications for FPPCA and APR for the year 2013 – 2014 of CESC Limited within the stipulated time i.e., 02.09.2015.





CHAPTER – 2 OBJECTIONS

Objections and suggestions against the application of APR and FPPCA for 2013-14 submitted by CESC Limited

- 2.0 Objections and suggestions on the application of APR and FPPCA for 2013 – 2014 of CESC Limited have been received from Ganatantrik Nagarik Samity, Howrah (in short 'GNS') within the stipulated time as mentioned in Paragraph 1.8 of Chapter-1. The points of objections and suggestions are summarized in subsequent paragraphs of this Chapter along with the views of the Commission.
- 2.1. GNS, being a social and non-party organization engaged with social movement in Howrah and Kolkata, has come forward with some aspects relating to environment, ecology, global warming, ozone layer depletion, flora and fauna for the interest of the common people and society as a whole. GNS has made suggestion to protect the environment by introducing policies regarding the use of non-fossil fuel and renewable sources and reducing the carbon emission to make our daily life more eco-friendly. GNS has appealed before the consumers to consume less power and to become eco-friendly for the protection of the environment from danger of global warming in the days to come.
- 2.2. GNS proposes that the consumers should be given incentives for consuming less power. The benchmark consumption of each domestic and commercial consumer can be derived through a suitable and transparent process based on average consumption of last three years. Thereafter, whoever consumes less power in a month should be given an incentive in tariff on a graded scale.

APR is a truing up exercise and the Commission does not determine the retail tariff in the APR orders. Thus, this suggestion is not implementable in the APR.



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2.3. According to GNS, the licensee should undertake forestation programme and other environmental programmes and make adequate provision for spending on environmental aspects. Some environmental awareness programmes are suggested for the public interest particularly in the matter of theft of power and allied issues. The Samity has emphasized to develop general awareness for procurement of power from renewable energy sources and proposed to introduce a subsidy to consumers for procurement of renewable power as well as promotion of utility of green energy. With a view to environment preservation and impending fuel scarcity, the Samity has requested to direct CESC Limited for implementation above proposal so that prodigal energy consumption may be done away with.

2.4. GNS is also of the opinion that the Commission should direct CESC Limited to set up their own renewable and non-conventional power generation unit. Since CESC Limited has also prayed for allowing expensive power procurement from renewable and non-conventional sources, it will definitely be a better proposition for them to set up their own units for renewable power generation. In this respect, GNS also appreciates procurement of power from cogeneration sources within the price cap specified by the Commission as the lowest cost option of cheaper renewable power. GNS does not recommend purchase of REC to meet RPO obligation as this is a paper transaction and does not help environmental concerns.

The Commission observes that its existing regulation covers the issue as suggested by GNS.

2.5. GNS has stated that CESC Limited has effected net metering arrangements in a few places for energy injected from solar roof-top photovoltaic power plants in its distribution area. Such procurement of energy, as a separate transaction, should be encouraged and recognized towards RPO.



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In terms of the existing Regulations of the Commission, energy generated from solar roof-top photovoltaic power plants shall be considered both on the consumption side and as input energy from renewable sources while determining the RPO obligations, in terms of the Electricity Act, 2003 and the relevant regulations.

- 2.6. GNS stated that the New Cossipore Plant of the company is incurring higher cost as well as causing higher pollution. GNS urged the Commission not to allow CESC Limited for sharing 1348 lakh of heat rate inefficiency in FPPCA application.
- 2.7. GNS has stated that CESC Limited has claimed to be alive to the need to 'arrange for/ create reserve generation capacities' and have a vision of 'building up a robust reliable network, matching megacities of the world.' GNS finds from various reports that the company is still largely dependent on power purchase from the State grid/ other licensees. If that be the situation, the company should be directed to increase generation from plants installed/ to be installed by their own group through additional investment, if required.

The Commission noted the point and provides appropriate direction in this respect in the relevant chapter.

- 2.8. GNS expressed deep concern with the proposal for steep rise in selling price of power by WBSEDCL to CESC Limited to a level which is far more than the average tariff proposed by WBSEDCL for its consumers. GNS also stated that peak power demand occurs in the evening for any Licensee largely because of demands of small consumers who need such power only for this time. Purpose of supply as a stipulated consideration for differentiation of tariff, envisaged in the Act, should be given due weightage. Also tariff specified by the Commission for WBSEDCL considers lower tariff and additional rebates for power procurements at 132 KV. Considering relative tariffs of two licensees and the fact that more



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than 50% of CESC Limited's consumers are small, such tariff to Licensees should not exceed 50% to 60% of the average cost of supply of WBSEDCL. The major source of power purchase of the company is WBSEDCL who in turn, procures power from WBPDC. According to GNS, the Company should be directed to make purchase from WBPDC, a far more cost effective source. This will reduce the burden on CESC Limited's consumers. Moreover, as CESC Limited claims that due to low demand in its area during night, it cannot fully utilize its generating potential. If so, CESC Limited should be directed to look for further opportunities to export power outside its area during such low demand periods and through such export of power, positive contribution earned therefrom will also benefit the consumers. GNS further stated that power purchased from WBPDC is sold by WBSEDCL to CESC Limited Such rate should not exceed the average rate at which power is sold by WBPDC to WBSEDCL plus 20 paise per Kilowatt-hour towards transmission charges. Such fixation will go to protect CESC Limited's consumers' interest. That CESC Limited's consumers should not be asked to subsidize consumers of WBSEDCL.

In regard to the suggestion of GNS, Commission's view is that the tariff for sale of power by WBSEDCL to CESC Limited is found to be reasonable if per unit cost is considered. But due to skewed drawal pattern in peak and off-peak period per unit sale price by WBSEDCL to CESC Limited seems to be high. The cost of power purchased by CESC Limited from different sources including WBSEDCL is admitted in tariff order of CESC Limited for the respective year. The Commission took a view after detailed examination of the figures involved, component of power purchased by WBSEDCL from short term market and its price and whether it is two-part or single part etc. However, CESC Limited was directed earlier to separately search for power from other source(s) having supply pattern and cost involvement / economics more favourable for CESC Limited's consumers so that CESC Limited can reduce its dependency on WBSEDCL which primarily has thermal sources, in order to check the rise in retail price of



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electricity for the consumers also in future in a better way. However, a separate direction is being given also in Chapter 5 of this order.

- 2.9. GNS stated that the Commission should allow reasonable claims of other costs subject to verification. The Commission should incentivize efficiency but should be strict on inefficiency. In the opinion of GNS, savings in normative distribution loss and generation from efficient pulverized fuel fired station, which are environment friendly and cheap, should be encouraged with incentive as per the provisions of the Regulations. Similarly, unreasonable claims such as extra cost for New Cossipore should not be allowed.

The Commission has noted the comments made.

- 2.10. According to GNS many of the consumers are forced to arrange for alternative power sources like own generators, invertors and solar power in case of shortage in supply. GNS further pointed out that the alternative sources of power is costly, even going up to Rs. 12 to Rs. 14 per unit. GNS is of the opinion that as CESC Limited's duty is to cater to the total need of all the consumers within their jurisdiction, CESC Limited should be directed to procure power from other sources so long as such power is cheaper than the cost of alternative power. As per GNS, load shedding is not acceptable by the consumers who would prefer to pay the just cost of power.

The Commission has noted the comments made and necessary direction in the subsequent chapter is given.

- 2.11. GNS also made submission that as a custodian of all stakeholders' interests, the Commission is requested not to accept every claim for cost push. Tariff increase should be allowed only where there are genuine reasons for higher cost.

The suggestion has been noted by the Commission.





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2.12. GNS criticized accumulation of arrear fuel cost in electricity bills. GNS has accepted the cost incidence of MVCA for the purpose of precluding the additional burden of working capital requirement. GNS has reiterated that fuel surcharge mechanism is an effective tool for immediate settlement of fuel and power purchase related cost by way of true-up the petition for making streamline the sector. It also prevents the accumulation of dues recoverable from the consumers, meets up the financial servicing cost of the utility and reduces the burden of the consumers. GNS believes that additional cost should not be allowed in case of controllable nature of expenditures. The Samity requested to the Commission for early settlement of dues in the interest of consumers as well as the utility.

The suggestion has been noted by the Commission.

2.13. GNS has pointed out that the new Act has brought with it the threat of flight of larger consumers from the distribution licensee's ambit. Flight of larger consumers goes directly against the interest of smaller, weaker consumers. Such small consumers must be protected by levy of an appropriate surcharge on the large consumers leaving the system. Cross-subsidy surcharge as well as additional surcharge provided for in the Act should be levied on such outgoing consumers, so that small consumers do not suffer. GNS apprehends that such outgoing customers may take part of their load from the licensee and opt for Open Access for the other part of their load. Tariff for such consumers for the load taken from the Licensee cannot be equated with the tariff of other embedded consumers who have no means of separate power source. A separate sub-category with appropriate tariff higher than applicable tariff for the sub-category is called for. Also over drawal charges should be seriously reviewed by the Commission in this light and a two-part mechanism is needed. Such outgoing customers seeking Open Access for part or entire load, may depend on the Licensee for back-up power. Such back-up power arrangements



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between the Licensee and Open Access Customer should not be at the detriment of embedded consumers' interest. Priority of drawal for backup power should be least in the dispatch schedule and no ordinary consumer should be made to suffer power-cut on this account. Present Temporary Supply charge, it is submitted, cannot address this nature of demand placed on a continuous basis and a separate category for Back-up charge is required to be put in place. The demand risk put on the distribution system should be valued at least at thrice the demand charge levied with to other consumers, besides charging them appropriate energy charge for actual drawal. Any drawal beyond contracted back-up power should be levied over-drawal charge at least four times the demand charge of the relevant category. Licensee and the Open Access consumers, in their back-up power agreement must agree to this tariff fixed by the Commission and should not make any underhand deal to the detriment of the small consumers. Proceeds from such charges should go on to reduce the revenue required to be met from consumers embedded in the system.

The Commission is of the opinion that the present regulations framed by the Commission governing open access and tariff are provided in a manner to balance the interest of different groups of consumers and the issues raised by GNS are addressed in the regulations in an appropriate manner.

- 2.14. The Commission has taken note of the objections, suggestions and comments offered. Some of the objections, suggestions and comments have been dealt with in the respective paragraphs above. The objections, suggestions and comments which have not been dealt with in earlier paragraphs and are directly concerned with the instant FPPCA / APR petition, have been considered in the subsequent chapter of this combined FPPCA / APR order, in which various components of fuel and power purchase cost and fixed costs have been analyzed and discussed.



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CHAPTER – 3 COMPUTATIONS OF THE AMOUNT OF ALLOWABLE FUEL AND POWER PURCHASE COST

- 3.1 In this part of the order, the Commission takes up the determination of fuel and power purchase cost allowable to CESC Limited on the quantum of power sold by it to the consumers and other licensees during the financial year 2013 – 2014.
- 3.2 The Fuel and Power Purchase Cost (FPPC) during the referred adjustment period, i.e., financial year 2013 – 2014, is to be admitted in terms of the following formula as specified by the Commission in schedule 7A to the Tariff Regulations.

$$\text{"FPPC (In Rs.)} = \{FC + (PPC - C_D) + (\pm A)\}$$

Where –

- i) The adjustment period for fuel and power purchase cost will normally be on annual basis, if not otherwise decided by the Commission.
- ii) FPPC: Re-determined Fuel and Power Purchase Cost against application of FPPCA.
- iii) FC: Fuel cost of own generation as per normative parameters fixed by the Commission or on actual basis in absence of any norm and UHV range as may be allowed under regulation 5.8 commensurate with actual level of energy sales to own consumers and / or licensee during the adjustment period in accordance with the following methodology:

t = Norms of Transmission and Distribution loss in % considered for sale of power from licensee to licensee

d = Norms of distribution loss in %

E_o = Admitted Energy for own consumption by licensee,

E_{SL} = Energy sale to other licensee in MU



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E_{SC} = Energy sale to consumer in MU

Fuel-Cost = Fuel cost at generation bus of own generating stations = Cost determined on the basis of normative parameters of SHR and oil consumption rate against actual level of energy sent out plus normative auxiliary energy consumption.

FC_{IUC} = Per unit of Fuel Cost at distribution input
= Fuel-Cost ÷ Actual overall energy available at input of the distribution system which includes power purchase from different services.

FC_{Adm_d} = Admitted Fuel Cost for sale to licensee

$$= \frac{E_{SL}}{(1 - t \times 0.01)} \times FC_{IUC}$$

FC_{Adm_C} = Admitted Fuel Cost for sale to consumer

$$= \frac{E_{SC} + E_o}{(1 - d \times 0.01)} \times FC_{IUC}$$

FC = FC_{Adm_d} + FC_{Adm_C}

iv) PPC (Rs.): Total cost incurred including the cost for fuel for power purchase from different sources commensurate with actual level of energy sales during the adjustment period.

v) C_D (Rs.): Cost disallowable by the Commission as per following methods:

Let d = Norms of distribution loss in %

t = Norms of Transmission and Distribution loss in % considered for sale of power from licensee to licensee

E_g = Actual energy sent out in MU from own generating station



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$$\begin{aligned} E &= \text{Excess amount of auxiliary energy consumption in MU,} \\ E_P &= \text{Total energy purchased in MU} \\ E_O &= \text{Admitted Energy for own consumption by licensee} \\ E_{SC} &= \text{Energy sale to consumer in MU} \\ E_{SL} &= \text{Energy sale to other licensee in MU} \\ E_{Adm} &= \text{Admitted amount of energy entitled for purchase} \\ &= \frac{E_{SC} + E_O}{(1 - d \times 0.01)} + \frac{E_{SL}}{(1 - t \times 0.01)} - E - E_g \\ E_E &= \text{Excess energy purchased} = E_P - E_{Adm} \\ C_D &= E_E \times EP_{Avg} \end{aligned}$$

When EP_{Avg} = Average cost of power purchase.

- vi) A: Adjustment, if any, to be made in the current period to account for any claim due to excess / shortfall in recovery of fuel and power purchase cost in the past adjustment period based on directions / orders of the Commission. (+A) shall be considered as the amount to be recovered from consumer and purchaser of electricity under the purview of the Commission when the licensee has already incurred such expenses. (-A) shall be considered as the amount to be refunded to the consumer and purchaser of electricity under the purview of the Commission because such amount of less expenses has been incurred by the licensee against any prior period adjustment.
- vii) Such re-determined fuel and power purchase cost (FPPC) of the licensee will be further adjusted for gain sharing as per Schedule – 9B for the parameters related to fuel cost to the extent it has impact in the fuel cost.”

3.3 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 over the operating and fuel consumption norms set by the Commission for the





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concerned year. The operational parameters which are to be considered for such sharing the gains accrued to the licensees are:

- i) Oil consumption rate,
- ii) Rate of Auxiliary Consumption,
- iii) Gross Station Heat Rate.

3.4 The referred schedule 9B to the Tariff Regulations also provides that in case availability of a generating station of the licensee falls below the availability norm, then the total gains meant to be passed on to the consumers under the items (i) to (iii) above, is first to be used to compensate the deficit in the recovery of the fixed charges, if any, by the licensee.

3.5 Before ascertaining the amount of admissible fuel and power purchase cost as well as the amount of gains to be shared with the consumers and other licensees under the provisions of the Tariff Regulations explained in earlier paragraphs, it needs to view the actual performances of CESC Limited 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 hereunder:

Sl No	Power Station	Particulars	Unit	As per Tariff Order / Norms	As per Actual
1	Budge Budge	Rate of Auxiliary Consumption	%	9.00	8.278
		Specific Consumption of Oil	MI/kWh	1.30	0.25
		Station Heat Rate	KCal/kWh	2470	2186.39
2	Titagarh	Rate of Auxiliary Consumption	%	9.00	8.252
		Specific Consumption of Oil	MI/kWh	2.10	0.76
		Station Heat Rate	KCal/kWh	2910	2584.88
3	Southern	Rate of Auxiliary Consumption	%	9.00	8.704
		Specific Consumption of Oil	MI/kWh	2.10	0.95
		Station Heat Rate	KCal/kWh	2900	2609.33
4	New Cossipore	Rate of Auxiliary Consumption	%	10.00	17.112
		Station Heat Rate	KCal/kWh	5800	7056.96





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- 3.6 As may be seen from the above statement, CESC Limited succeeded in performing better than norms for auxiliary consumption and for oil consumption in the generating stations at Budge Budge, Titagarh and Southern. Part of the benefits accrued to it in financial terms will, therefore, need to be passed on to its consumers and other licensees in terms of the provisions of Schedule 9B to the Tariff Regulations.
- 3.7 The actual performances of CESC Limited in respect of gross station heat rates in the generating stations at Budge Budge, Titagarh and Southern are found better than the norms considered in the tariff order for the concerned year, while station heat rate at New Cossipore generating station is however above the normative level. It will, therefore, require to share the benefits (in the financial terms) accrued to it in that respect in the manner as provided in paragraph A3 of the Schedule 9B to the Tariff Regulations.
- 3.8 The norm for distribution loss of CESC Limited for the year 2013 – 2014 was considered to be 14.30% in the tariff order. As it comes out from the data as provided by CESC Limited for the year 2013 – 2014, the actual rate of distribution loss experienced by CESC Limited on the quanta of sales to consumers, sales to WBSEDCL and on its own consumption works out at 11.79% as shown below:

Sl No	Particulars	Figures in Million Units
Inputs to System		
(a)	Gross Generation	8929.704
(b)	Less: Auxiliary consumption	754.197
(c)	Net Sent Out Energy [(a) – (b)]	8175.507
(d)	Sale to persons other than Consumers and WBSEDCL including Transmission loss to effect that sale	102.526
(e)	Net energy available from own generation for sale to consumer and WBSEDCL [(c) – (d)]	8072.981
(f)	Energy purchased during the year	1720.980
(g)	Unscheduled Interchange (Net)	15.018
(h)	Energy available to the system [(e)+(f)+(g)]	9808.979
Utilization		
(i)	Sales to Consumers	8591.164





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(j)	Sales to WBSEDCL	41.668
(k)	Energy consumed in own premises	20.039
(l)	Distribution loss to effect sale to consumers, sale to WBSEDCL and own consumption. [(h) – (i) to (k)]	1156.108
(m)	Distribution loss in % [(l/m)x100]	11.79

3.9 Actual utilization of energy during the year 2013 – 2014 by way of sales to consumers and WBSEDCL and own consumption is certified to be 8652.871 MU (8591.164 MU + 41.668 MU + 20.039 MU). Actual distribution loss comes to 11.79% against normative distribution loss @ 14.30% as considered in the tariff order for the year 2013 – 2014. Thus, the resultant savings in loss for distribution are worked out as follows:

Sl No	Particulars	Million Units
1	Normative utilization of energy on the basis of actual quanta of energy utilized [8652.871 MU / (1-0.1430)]	10096.699
2	Actual utilization of energy during the year 2013 – 2014	8652.871
3	Normative distribution loss (1-2)	1443.828
4	Actual distribution loss (as per paragraph 1.7 above)	1156.108
5	Savings in distribution loss (3-4)	287.720

3.10 As provided in paragraph C of Schedule – 9B of the Tariff Regulations, CESC Limited is entitled to retain the gains accruing to it in this regard.

3.11 The values of different factors in the FPPCA formula referred to are worked out and admitted as under:

3.12 **FC (FUEL COST):**

3.12.1 Fuel cost of own generation is to be allowed as per normative parameters fixed by the Commission, or on actual basis in absence of any norms, and heat value of coal as may be allowed under regulation, commensurate with actual level of energy sales to own consumers and / or licensees during the adjustment period.





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The fuel costs to be allowed to CESC Limited for the year 2013 – 2014 for its different power stations shall be based on the following fuel consumption norms:

Particulars	Unit	Budge Budge	Titagarh	Southern	New Cossipore
Station Heat Rate	Kcal/Kwh	2470	2910	2900	5800
Specific Oil Consumption	MI/Kwh	1.30	2.10	2.10	N.A.
Transit loss of Coal	%	0.75	0.75	0.75	0.75

3.12.2 Based on the UHV of coal and average price of coal as determined in paragraphs 3.12.2.4 and 3.12.2.5 below and on application of normative parameters as stated above and normative rate of auxiliary consumption as referred to, the amount of fuel cost allowable to CESC Limited for effecting sales to its consumers and WBSEDCL comes to Rs. 211833.31 lakh as per computations given in Annexure – 3A. The explanatory notes in this regard are as under:

3.12.2.1. Out of the total ex-bus generation of 8175.507 MU, CESC Limited utilized 102.526 MU to effect sales to persons other than its consumers and WBSEDCL. This quantum has been reduced from ex-bus generation of Budge Budge generating station. Considering normative auxiliary consumption as per operating norms under paragraph – D of Schedule – 9A of the Tariff Regulations, gross generation of each generating station during the year 2013 – 2014 is worked out as shown in Annexure – 3A.

3.12.2.2. 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 Limited, as considered in the





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tariff order for the year 2013 – 2014, 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, CESC Limited computed and claimed heat value of coal and heat value of oil as under:

Generating Station	Heat Value of Coal (Kcal/Kg)	Heat Value of Oil (Kcal/Litre)
Budge Budge	3607.44	9572.00
Titagarh	4043.54	9366.00
Southern	3734.37	9287.00
New Cossipore	5801.84	N.A.

Above heat values of coal have been viewed with reference to the grade-wise coal consumption of the concerned generating stations, as per documents submitted by CESC Limited, 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 Limited 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.

- 3.12.2.3. As per direction of the Commission CESC Limited submitted through a letter dated 8.07.2016 the grade-wise receipt of coal from different sources indicating the quantity, GCV received and corresponding heat value in UHV based on which weighted average heat value of coal has been determined and considered for fuel cost computation. CESC Limited stated that UHV of each grade of coal has been determined in terms of Regulation 5.8.15 of the Tariff Regulations. Regulation 5.8.15 of the Tariff Regulations stipulates, where conversion of heat value to UHV from GCV of coal is required, the determination of UHV based on the sets of GCV range of different grades of coal with corresponding sets of UHV ranges, through the process of interpolation and / or extrapolation. It is noticed



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that CESC Limited determined UHV corresponding to the received GCV in the following manner:

Actual GCV	-	6401 Kcal / kg = say X
GCV range	-	6049 to 6454 = say (X1 to X2)
UHV range	-	5600 to 6200 = say (Y1 to Y2)
Y = UHV determined = $(X/X1)*Y1 = 6401/6049*5600 = 5925.87$ Kcal/kg		

The interpolation formula for determination of UHV against a given GCV shall be as below:

$$Y-Y1 = (Y2-Y1) / (X2 -X1) * (X - X1)$$

Where –

X = Given GCV

(X1, X2) is the lowest and highest value in the GCV range

(Y1, Y2) is the lowest and highest value in the UHV range corresponding to X1 and X2, respectively.

Y= UHV to be determined

Following the above defined formula, UHV of the corresponding GCV of 6401 Kcal / kg (X) is worked out at 6121.48 Kcal / kg (Y). The Commission considers the above stated interpolation formula for determination of UHV.

3.12.2.4. On the basis of the methodology stated in paragraph 3.12.2.3 above, the weighted average UHV of coal received during the year in respect of each power station has been determined. Details furnished in Annexure- 3B to 3E attached to this order. Station-wise UHV so determined is considered for computation of fuel cost in the APR order for 2013-14 as given in the Table below:



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Generating Station	UHV originally considered by CESC	UHV admitted by the Commission	Wt. Avg. as per CESC's Annex.- A & B
Budge Budge	3607.44	3658.70	3607.45
Southern	3734.37	3745.80	3734.30
Titagarh	4043.54	4061.68	4040.97
New Cossipore	5801.84	5877.02	5801.34

3.12.2.5. The weighted average price of coal including freight thereof and oil, as certified by the auditors in Annexure C3 of the application, are depicted below:

Generating Station	Price of Coal (Rs/MT)	Price of Oil (Rs/KL)
Budge Budge	3100.42	74304.66
Titagarh	3462.70	61550.52
Southern	3014.28	74807.04
New Cossipore	7897.35	N.A.

According to the auditors, the consumption of quantity and value for ascertaining the above average coal cost including freight thereof and oil cost are arrived at on the basis of physical quantity and value of coal / oil purchased after adjusting opening and closing stock physical quantity and its value. Out of the above four generating stations of CESC Limited, the freight cost of Southern generating station includes payments made to Kolkata Post Trust. The average cost of coal consumed and freight thereof per tonne and the average cost of oil consumed per KL has been arrived at by dividing the respective value of coal consumed, oil consumed and freight incurred during the year by quantity consumed.

3.12.2.6. Based on the UHV of coal and average price of coal as determined in paragraph 3.12.2.4 and 3.12.2.5 above and on application of normative parameters, fuel cost of each generating stations are determined and given in Annexure – 3A to this chapter.



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3.12.2.7. Allowable fuel cost for the year 2013 – 2014 is computed in terms of methodology prescribed in Schedule – 7A of the Tariff Regulations as under:

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 _o	Admitted energy for own consumption				MU	20.039
E _{SL}	Energy sale to licensee (WBSEDCL)				MU	41.668
E _{sc}	Energy sale to consumer				MU	8591.164
Fuel Cost	Fuel cost for generation on normative parameters (Refer Annexure – 3A)				Rs. in Lakh	211833.31
FC _{IUC}	Per unit Fuel Cost at distribution input (Fuel cost ÷ energy available in system including purchase – i.e., 211833.31 lakh ÷ 9808.974 MU) (refer paragraph 3.8)				Paise/kWh	215.96
FC _{Adm_d}	Admissible fuel cost for sale of power to licensee				Rs. in Lakh	1050.01
	$\frac{E_{SL}}{(1-t \times 0.01)}$	X	FC _{IUC}	$= \frac{41.668 \text{ MU} \times 10}{0.857}$		
FC _{Adm_C}	Admissible Fuel Cost for sale to consumer				Rs. in Lakh	216998.30
	$\frac{E_{sc} + E_o}{(1-d \times 0.01)}$	X	FC _{IUC}	$= \frac{(8591.164+20.039) \text{ MUX}10}{0.857}$		
FC	Allowable fuel cost for sale to licensee and consumers (FC _{Adm_d} +FC _{Adm_C})				Rs. in Lakh	218048.31

3.13 PPC (POWER PURCHASE COST):

3.13.1 The power purchases were made from WBSEDCL, IEX, RPGTCL, Cogeneration. The breakup of such purchase is given below. The power purchase requirement of CESC Limited during 2013 – 2014 was considered 2892.80 MU; vide the statement of Energy Balance at paragraph 4.6 of the Tariff order dated 06 March, 2012 for the concerned year. The total quanta of actual purchase and the cost incurred thereon for the year 2013 – 2014 as certified by the auditors are as under:

Sources	Quantum MU	Cost incurred (Rs in lakh)
WBSEDCL	1357.142	72710.52
RPGTCL	289.974	13697.20
Cogeneration	69.210	2507.25
IEX	4.655	189.52
Total	1720.981	89104.49



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3.14 C_D : COST DISALLOWABLE:

3.14.1 Factor C_D, as referred to in the FPPCA formula mentioned in paragraph 3.2 above, stands for cost as to be found disallowable by the Commission as per the methodology specified in the FPPCA formula referred to above. It has been observed that CESC Limited succeeded in sending out generation from each of its generating stations except New Cossipore generating station a considerable quantum in excess of the target set for the concerned year. It also succeeded in keeping the rate of distribution loss much below the norm considered for the year. Paragraph 3.9 above may be referred to in this regard. No part of the fuel and power purchase cost is found disallowable and hence, value of factor C_D is nil.

3.15 (±) A: PRIOR PERIOD'S ADJUSTMENTS:

3.15.1 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. CESC Limited did not ask for any such adjustment and no such adjustment is also found necessary. The value of this factor is, therefore, considered nil.

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

3.16.1 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 Limited works out to Rs. 370152.80 lakh with the break-up as given hereunder. The detailed computations in this regard are shown in paragraph 3.12.2.7 above. 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.





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SI No	Particulars/Factors	Rs. in Lakh
1	FC: Fuel cost	218048.31
2	PPC: Power purchase cost	89104.49
3	C _D : Cost disallowable	0.00
4	±A :Adjustment relating to earlier period	0.00
5	FC+(PPC-C_D)+(± A)	307152.80

3.17 The amount of fuel and power purchase cost of Rs. 307152.80 lakh, as shown in paragraph 3.16.1 above, computed as per FPPCA formula specified in Tariff Regulations is inclusive of the amounts of gains derived by CESC Limited on account of its better performances on different parameters of operational and fuel consumption norms. As mentioned in paragraphs 3.6 and 3.7, CESC Limited 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.

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

3.18.1 The actual specific oil consumption rates for Budge Budge, Titagarh 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, Titagarh and Southern Generation Stations are given hereunder:

Figures in MI/kWh

Generating Station	As per Tariff Order/ Norms	Actual as per submission	Savings
Budge Budge	1.30	0.25	1.05
Titagarh	2.10	0.76	1.34
Southern	2.10	0.95	1.15



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3.18.2 With reference to actual generation for effecting supply to the consumers and to WBSEDCL, the normative and actual consumption of oil at above mentioned specific consumption rate works out as under:

SI No	Particulars	Unit	Budge Budge	Titagarh	Southern	Total
1	Gross generation for consumers and WBSEDCL with normative auxiliary consumption (refer table in Annexure 3A)	MU	5924.001	1790.613	1042.910	
2	Normative Oil consumption rate	MI/kwh	1.30	2.10	2.10	
3	Oil Consumption at normative rates for consumers and WBSEDCL	KL	7701.201	3760.288	2190.111	
4	Actual Oil Consumption for consumers and WBSEDCL	KL	1477.940	1347.850	984.760	
5	Actual Oil consumption rate (refer table under paragraph 3.5)	MI/kwh	0.25	0.76	0.95	
6	Savings / difference	KL	6223.261	2412.438	1205.351	
7	Category		B	C	C	
8	Percentage of gain sharing attributable to consumers and WBSEDCL	%	26%	26%	30%	
9	Average price of Oil	Rs./KL	74304.66	61550.52	74807.04	
10	Gains accrued on saving of Oil	Rs. in Lakh	4624.17	1484.87	901.69	
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. in Lakh	1202.29	386.07	270.51	1858.87

3.19 Gain Sharing for Better Rate of Auxiliary Consumption:

3.19.1 The actual 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 are computed hereunder. The entire benefits of savings in the quanta of auxiliary consumption have been passed on to CESC Limited while computing the amount of allowable fuel and power purchase cost as shown below. 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 Limited requires to be passed on to the consumers and WBSEDCL:



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Sl. No.	Particulars	Derivation	Unit	Budge Budge	Titagarh	Southern	New Cossipore	
1	Energy sent out for Licensee and Consumers		MU	5390.841	1629.458	949.048	103.634	
2	Normative Rate of Auxiliary Consumption		%	9.000	9.000	9.000	10.000	
3	Normative Auxiliary Consumption		MU	533.160	161.155	93.862	11.515	
4	Actual Auxiliary Consumption		MU	490.389	146.551	90.48	21.393	
5	Actual Rate of Auxiliary Consumption		%	8.278	8.252	8.704	17.111	
6	Savings in aux. consumption	[(3) - (4)]	MU	42.77	14.604	3.382	0.000	
7	Cost of generation		Paise/kWh	219.49	249.26	261.20	785.27	
8	Gain accrued	[(6)x(7)]/10]	Rs. in lakh	938.76	364.02	88.34	0.00	
9	Category of normative aux. consumption			B	B	B	B	
10	Percentage of gains attributable to consumers & WBSEDCL		%	30	30	40		
11	Share of gain attributable to consumers & WBSEDCL			281.63	109.21	35.34	0.00	426.18

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

3.20.1 The normative gross station heat rates considered in the tariff order for 2013 – 2014 for different generating stations of CESC Limited with reference to their respective designed gross station heat rates and actual station heat rates were as under:

Generating Station	Normative Gross Station Heat Rates (Kcal/kWh)	Designed Gross Station Heat Rates (Kcal/kWh)	Actual Gross Station Heat Rates (Kcal/kWh)
Budge Budge	2470	2247	2155.79
Titagarh	2910	2659	2573.37
Southern	2900	2707	2601.39
New Cossipore	5800	2920	6966.69

3.20.2 The allowable cost of fuel at different generating stations, as per computations shown in Annexure – 3A, was ascertained based on such normative gross station heat rates. It has been seen that CESC Limited succeeded in achieving better Station Heat Rates in all the generating stations except New Cossipore



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generating station as already explained in paragraph 3.5. CESC Limited, thus, could derive some gains by way of saving the fuel cost in the generating stations at Budge Budge, Titagarh and Southern. 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. However, CESC Limited experienced higher gross station heat rate than the norms in the generating station at New Cossipore and suffered loss due to higher station heat rate. CESC Limited in their petition prayed to pass on 50% of the loss suffered by them at New Cossipore generating station due to higher station heat rate to the consumers as a portion of the gain achieved in the other generating stations are to be passed on to the consumers. In their application CESC Limited has also given the justification for running the old power station at New Cossipore during peak hours. Since any losses suffered by the licensee in any generating station for achieving operating norms, are on the account of the licensee the loss suffered by CESC Limited at New Cossipore generating station cannot be passed on to the consumer.

3.20.3 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, Titagarh and Southern generating stations. The total amount so to be passed on to consumers comes to Rs. 3297.79 lakh with the following station wise break-up:

	Rs. in Lakh
Budge Budge	2173.76
Titagarh	759.61
Southern	364.42
Total	3297.79

3.20.4 The computations in these regards may be seen at Annexure – 3F.



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3.21 Benefits for savings in Distribution Loss:

3.21.1 As analyzed in paragraph 3.8 and 3.9 above, CESC Limited saved 287.720 MU by making improvements in the extent of distribution loss. In terms of paragraph C of the Schedule 9B to the Tariff Regulations, CESC Limited is allowed to retain the entire benefits for such savings. Such benefits in monetary terms work out as under:

Sl. No.	Particulars	Quantum (MU)	Amount (Rs. in Lakh)
1	Ex-bus generation for sale to consumers and WBSEDCL and Fuel cost thereon (Vide Annexure 3A)	8072.673	211833.31
2	Purchase of Energy (vide paragraph 3.13 above)	1720.981	89104.49
3	Total	9793.654	300937.80
4	Average cost per unit in the Distribution System		307.28 Paise/kWh
5	Cost of quantity saved (vide paragraph 3.9 above)	287.720	8841.06

3.21.2 Out of the amount of Rs. 8841.06 lakh computed above, a total amount of Rs. 6215.00 lakh (Rs. 218048.31 lakh – Rs. 211833.31 lakh) (refer table below paragraph 3.12.2.7) has already been passed on to CESC Limited 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. 2626.06 lakh (Rs. 8841.06 lakh – Rs. 6215.00 lakh) is now being allowed.

3.22 The analyses in the paragraphs stated hereinabove 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. 218048.31 lakh. The amount is inclusive of the gains accrued on to CESC Limited 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 the paragraphs above. The net amount of fuel cost allowable to CESC Limited after carrying out adjustments of



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

Sl. No.	Particulars	Amount (Rs. in Lakh)	Amount (Rs. in Lakh)
1	Fuel Cost on normative basis		218048.31
2	Less: Shares of gains attributable to consumers and WBSEDCL		
	i) cost saving on use of Oil	1858.87	
	ii) on improvement in the rate of Auxiliary Consumption	426.18	
	iii) for achieving better Station Heat Rate	3297.79	5582.84
3	Net amount of allowable fuel cost		212465.47

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

Sl. No.	Particulars	Amount (Rs. in Lakh)				Total
		Budge Budge	Titagarh	Southern	New Cossipore	
1	Fuel cost on normative basis	134392.21	47074.98	25648.45	10932.67	218048.31
2	Less: Share of Gains attributable to Consumers and WBSEDCL					
	i) Cost saving on use of OIL	1202.29	386.07	270.51	0.00	1858.87
	ii) On improvement in the rate of Auxiliary Consumption	281.63	109.21	35.34	0.00	426.18
	iii) For achieving better Station Heat Rate	2173.76	759.61	364.42	0.00	3297.79
	Total (2)	3657.68	1254.89	670.27	0.00	5582.84
3	Net amount of allowable fuel cost (1-2)	130734.53	45820.09	24978.18	10932.67	212465.47

3.24 Actual amount of power purchase cost incurred by CESC Limited for purchasing 1720.981 MU from different sources, as enumerated in paragraph 3.13.1 is Rs. 89104.49 lakh.

3.25 An additional amount of Rs. 2626.06 lakh is found admissible to CESC Limited on account of savings in the rate of distribution loss as shown in paragraph 3.21.2 above.

3.26 Summing up the findings as stated above, the net amount of fuel and power purchase cost allowed to CESC Limited for the year 2013 – 2014 comes as under:





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	Rs. in Lakh
Fuel Cost (net of shares attributable to persons other than consumers and WBSEDCL).	212465.47
Power Purchase Cost	89104.49
Additional amount on account of savings in the rate of Distribution loss	2626.06
Re-determined Fuel and Power Purchase Cost	304196.02





ANNEXURE - 3A ADMISSIBLE FUEL COST

Particulars	Derivation	Unit	Budge Budge	Southern	Titagarh	New Cossipore	Overall
Ex-bus generation	G1	MU	5493.367	949.048	1629.458	103.634	8175.507
Ex-bus generation utilised to effect sales to persons other than consumers and WBSEDCL	G2	MU	102.526	0	0	0	102.526
Energy sent -out from own generation for the consumers and WBSEDCL	$G=(G1)-(G2)$	MU	5390.841	949.048	1629.458	103.634	8072.981
Rate of normative auxiliary consumption		%	9.00	9.00	9.00	10.00	
Normative Auxiliary consumption	A1	MU	533.16	93.862	161.155	11.515	799.692
Gross Generation	$A=(G)-(A1)$	MU	5924.001	1042.910	1790.613	115.149	8872.673
Heat Rate	B	Kcal/Kwh	2470.00	2900.00	2910.00	5800.00	14080.00
Permitted oil cons.	C	ml/kwh	1.30	2.10	2.10	0.00	
Heat Value of oil	D	Kcal/lit	9572.00	9287.00	9366.00	0.00	
Heat Value of coal	E	Kcal/kg	3658.70	3745.80	4061.68	5877.02	
Overall permitted heat	$F=A*B$	G.cal	14632282.47	3024439.00	5210683.83	667864.20	
Permitted heat from oil	$G=C*D*A/1000$	G.cal	73715.90	20339.56	35218.85	0.00	
Permitted heat from coal	$H=F-G$	G.cal	14558566.57	3004099.44	5175464.98	667864.20	
Permitted oil consumption	$I=(G/D)*1000$	KL	7701.20	2190.11	3760.29	0.00	
Permitted coal consumption	$J=H/E/.9925*1000$	MT	4009233.04	808051.80	1283846.66	114498.68	
Cost of oil per KL	K	Rs./KL	74304.66	74807.04	61550.52	0.00	
Cost of coal per MT	L	Rs./MT	3100.42	3014.28	3462.70	7897.35	
Cost of oil	$M=I*K/100000$	Rs. lakh	5722.35	1638.36	2314.48	0.00	9675.19
Cost of coal	$N=J*L/100000$	Rs. lakh	124303.06	24356.94	44455.76	9042.36	202158.13
Total admissible cost of fuel	$O=M+N$	Rs. lakh	130025.41	25995.30	46770.23	9042.36	211833.31
Average fuel cost		paaise/kWh	219.49	249.26	261.20	785.27	238.75

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ANNEXURE – 3B COMPUTATION OF UHV OF COAL BASED GENERATING STATION ON MINIMUM OF DECLARED HEAT VALUE

Budge Budge Generating station

Source	Grade	Quantity	GCV	Minimum UHV of coal grade	Max GCV of Band (X2)	Min GCV of Band (X1)	Max UHV of Band (Y2)	Min UHV of Band (Y1)	Mean UHV Interpolation	Qty X Mean UHV	Wt. Av. UHV as per WBERC	UHV as per CESC	Qty X UHV as per CESC	Wt. Ave. UHV as per CESC
		MT	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg		
BCCL	G2	0	6701						6437	0.00		6437.00	0.00	
BCCL	G3	14943	6401	5600	6454	6049	6200	5600	6121.48	91471338.90		5926.00	88550321.68	
BCCL	G4	0	6101	5600	6454	6049	6200	5600	5677.04	0.00		5648.00	0.00	
BCCL	G5	9834	5801	4940	6049	5597	5600	4940	5237.88	51508226.05		5120.00	50349056.00	
BCCL	G6	0	5501	4200	5597	5089	4940	4200	4800.16	0.00		4540.00	0.00	
BCCL	G7	0	5201	4200	5597	5089	4940	4200	4363.15	0.00		4293.00	0.00	
BCCL	G11	1068	4001	2400	4324	3865	3360	2400	2684.44	2867362.49		2485.00	2654327.90	
BCCL	G12	0	3701	1300	3865	3113	2400	1300	2160.11	0.00		1546.00	0.00	
BCCL	G13	0	3401	1300	3865	3113	2400	1300	1721.28	0.00		1421.00	0.00	
BCCL	WIII	460319	5478	4200	5597	5089	4940	4200	4766.65	2194182098.07		4714.00	2169944661.66	
BCCL	WIV	335082	4853	3360	5089	4324	4200	3360	3940.86	1320511815.68		3854.00	1291405681.14	
ECL	G2	967	6701						6437	6226831.95		6437.00	6226831.95	
ECL	G3	82617	6401	5600	6454	6049	6200	5600	6121.48	505739537.42		5926.00	489589408.68	
ECL	G4	171868	6101	5600	6454	6049	6200	5600	5677.04	975703783.23		5648.00	970713231.52	
ECL	G5	69676	5801	4940	6049	5597	5600	4940	5237.88	364954150.82		5120.00	356741017.60	
ECL	G6	12233	5501	4200	5597	5089	4940	4200	4800.16	58717974.38		4540.00	55535595.40	
ECL	G7	43722	5201	4200	5597	5089	4940	4200	4363.15	190767459.61		4293.00	187700349.06	
ECL	G11	0	4001	2400	4324	3865	3360	2400	2684.44	0.00		2485.00	0.00	
ECL	G12	0	3701	1300	3865	3113	2400	1300	2160.11	0.00		1546.00	0.00	
ECL	G13	0	3401	1300	3865	3113	2400	1300	1721.28	0.00		1421.00	0.00	
ECL	WIII	0	5478	4200	5597	5089	4940	4200	4766.65	0.00		4714.00	0.00	
ECL	WIV	0	4853	3360	5089	4324	4200	3360	3940.86	0.00		3854.00	0.00	
MCL	G2	0	6701						6437	0.00		6437.00	0.00	
MCL	G3	0	6401	5600	6454	6049	6200	5600	6121.48	0.00		5926.00	0.00	
MCL	G4	0	6101	5600	6454	6049	6200	5600	5677.04	0.00		5648.00	0.00	





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MCL	G5	0	5801	4940	6049	5597	5600	4940	5237.88	0.00		5120.00	0.00	
MCL	G6	0	5501	4200	5597	5089	4940	4200	4800.16	0.00		4540.00	0.00	
MCL	G7	0	5201	4200	5597	5089	4940	4200	4363.15	0.00		4293.00	0.00	
MCL	G11	0	4001	2400	4324	3865	3360	2400	2684.44	0.00		2485.00	0.00	
MCL	G12	139704	3701	1300	3865	3113	2400	1300	2160.11	301774659.69		1546.00	215981781.06	
MCL	G13	7176	3401	1300	3865	3113	2400	1300	1721.28	12352362.81		1421.00	10197493.88	
MCL	WIII	0	5478	4200	5597	5089	4940	4200	4766.65	0.00		4714.00	0.00	
MCL	WIV	0	4853	3360	5089	4324	4200	3360	3940.86	0.00		3854.00	0.00	
ICML- ROM		1362677	4418	3360	5089	4324	4200	3360	2744.00	3739186594		2744.00	3739186593.52	
ICML-W		469113	5101	4200	5597	5089	4940	4200	3168.00	1486149984		3168.00	1486149984.00	
IMPORT		354179	4608	3360	5089	4324	4200	3360	4608.00	1632058860		4608.00	1632058859.52	
		3535179								12934173038	3658.70		12752985194.57	3607.45





**ANNEXURE – 3C
COMPUTATION OF UHV OF COAL BASED
GENERATING STATION ON MINIMUM
OF DECLARED HEAT VALUE**

Titagarh Generating Station

Source	Grade	Quantity	GCV	Minimum UHV of coal grade	Max GCV of Band (X2)	Min GCV of Band (X1)	Max UHV of Band (Y2)	Min UHV of Band (Y1)	Mean UHV Interpolation	Qty X Mean UHV	Wt. Av. UHV as per WBERC	UHV as per CESC	Qty X UHV as per CESC	Wt. Ave. UHV as per CESC
		MT	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg		
BCCL	G2	0.00	6701.00						6437.00	0.00		6437.00	0.00	
BCCL	G3	0.00	6401.00	5600.00	6454.00	6049.00	6200.00	5600.00	6121.48	0.00		5926.00	0.00	
BCCL	G4	0.00	6101.00	5600.00	6454.00	6049.00	6200.00	5600.00	5677.04	0.00		5648.00	0.00	
BCCL	G5	0.00	5801.00	4940.00	6049.00	5597.00	5600.00	4940.00	5237.88	0.00		5120.00	0.00	
BCCL	G6	0.00	5501.00	4200.00	5597.00	5089.00	4940.00	4200.00	4800.16	0.00		4540.00	0.00	
BCCL	G7	0.00	5201.00	4200.00	5597.00	5089.00	4940.00	4200.00	4363.15	0.00		4293.00	0.00	
BCCL	G11	0.00	4001.00	2400.00	4324.00	3865.00	3360.00	2400.00	2684.44	0.00		2485.00	0.00	
BCCL	G12	0.00	3701.00	1300.00	3865.00	3113.00	2400.00	1300.00	2160.11	0.00		1546.00	0.00	
BCCL	WIII	0.00	4714.00	4200.00	5597.00	5089.00	4940.00	4200.00	3653.74	0.00		4714.00	0.00	
BCCL	WIV	3486.44	3854.00	3360.00	5089.00	4324.00	4200.00	3360.00	2843.92	9915161.91		3854.00	13436739.76	
ECL	G2	13000.78	6701.00						6437.00	83686020.86		6437.00	83686020.86	
ECL	G3	74697.67	6401.00	5600.00	6454.00	6049.00	6200.00	5600.00	6121.48	457260403.61		5926.00	442658392.42	
ECL	G4	358501.15	6101.00	5600.00	6454.00	6049.00	6200.00	5600.00	5677.04	2035224306.37		5648.00	2024814495.20	
ECL	G5	18062.19	5801.00	4940.00	6049.00	5597.00	5600.00	4940.00	5237.88	94607513.43		5120.00	92478412.80	
ECL	G6	0.00	5501.00	4200.00	5597.00	5089.00	4940.00	4200.00	4800.16	0.00		4540.00	0.00	
ECL	G7	0.00	5201.00	4200.00	5597.00	5089.00	4940.00	4200.00	4363.15	0.00		4293.00	0.00	
ECL	G11	0.00	4001.00	2400.00	4324.00	3865.00	3360.00	2400.00	2684.44	0.00		2485.00	0.00	
ECL	G12	0.00	3701.00	1300.00	3865.00	3113.00	2400.00	1300.00	2160.11	0.00		1546.00	0.00	
ECL	WIII	0.00	4714.00	4200.00	5597.00	5089.00	4940.00	4200.00	3653.74	0.00		4714.00	0.00	
ECL	WIV	0.00	3854.00	3360.00	5089.00	4324.00	4200.00	3360.00	2843.92	0.00		3854.00	0.00	
ICML-ROM		502516.19	4504.00	3360.00	5089.00	4324.00	4200.00	3360.00	2797.00	1405537783.43		2797.00	1405537783.43	
ICML-W		166256.68	5111.00	4200.00	5597.00	5089.00	4940.00	4200.00	3174.00	527698702.32		3174.00	527698702.32	
IMPORT		3801.35	4655.00	3360.00	5089.00	4324.00	4200.00	3360.00	4655.00	17695284.25		4655.00	17695284.25	
		1140322.45								4631625176.19	4061.68		4608005831.04	4040.97



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ANNEXURE – 3D COMPUTATION OF UHV OF COAL BASED GENERATING STATION ON MINIMUM OF DECLARED HEAT VALUE

Southern Generating Station

Source	Grade	Quantity	GCV	Minimum UHV of coal grade	Max GCV of Band (X2)	Min GCV of Band (X1)	Max UHV of Band (Y2)	Min UHV of Band (Y1)	Mean UHV Interpolation	Qty X Mean UHV	Wt. Av. UHV as per WBERC	UHV as per CESC	Qty X UHV as per CESC	Wt. Ave. UHV as per CESC
		MT	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg		
BCCL	G2	0	6701						6437	0		6437	0	
BCCL	G3	3844	6401	5600	6454	6049	6200	5600	6121.48	23528526.22		5926	22777173.6	
BCCL	G4	0	6101	5600	6454	6049	6200	5600	5677.04	0		5648	0	
BCCL	G5	997	5801	4940	6049	5597	5600	4940	5237.88	5220538.736		5120	5103052.8	
BCCL	G6	0	5501	4200	5597	5089	4940	4200	4800.16	0		4540	0	
BCCL	G7	0	5201	4200	5597	5089	4940	4200	4363.15	0		4293	0	
BCCL	G11	0	4001	2400	4324	3865	3360	2400	2684.44	0		2485	0	
BCCL	G12	0	3701	1300	3865	3113	2400	1300	2160.11	0		1546	0	
BCCL	WIII	2470	4714	4200	5597	5089	4940	4200	3653.74	9023167.081		4714	11641552.98	
BCCL	WIV	7957	3854	3360	5089	4324	4200	3360	2843.92	22627690.4		3854	30664389.54	
ECL	G2	2406	6701						6437	15485877.12		6437	15485877.12	
ECL	G3	43299	6401	5600	6454	6049	6200	5600	6121.48	265055434.6		5926	256591237	
ECL	G4	130207	6101	5600	6454	6049	6200	5600	5677.04	739190813		5648	735409983.2	
ECL	G5	10406	5801	4940	6049	5597	5600	4940	5237.88	54506543.47		5120	53279897.6	
ECL	G6	0	5501	4200	5597	5089	4940	4200	4800.16	0		4540	0	
ECL	G7	0	5201	4200	5597	5089	4940	4200	4363.15	0		4293	0	
ECL	G11	0	4001	2400	4324	3865	3360	2400	2684.44	0		2485	0	
ECL	G12	0	3701	1300	3865	3113	2400	1300	2160.11	0		1546	0	
ECL	WIII	0	4714	4200	5597	5089	4940	4200	3653.74	0		4714	0	
ECL	WIV	0	3854	3360	5089	4324	4200	3360	2843.92	0		3854	0	
MCL	G2	0	6701						6437	0		6437	0	
MCL	G3	0	6401	5600	6454	6049	6200	5600	6121.48	0		5926	0	
MCL	G4	0	6101	5600	6454	6049	6200	5600	5677.04	0		5648	0	





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MCL	G5	0	5801	4940	6049	5597	5600	4940	5237.88	0		5120	0	
MCL	G6	0	5501	4200	5597	5089	4940	4200	4800.16	0		4540	0	
MCL	G7	0	5201	4200	5597	5089	4940	4200	4363.15	0		4293	0	
MCL	G11	0	4001	2400	4324	3865	3360	2400	2684.44	0		2485	0	
MCL	G12	7330	3701	1300	3865	3113	2400	1300	2160.11	15833882.2		1546	11332396.44	
MCL	WIII	0	4714	4200	5597	5089	4940	4200	3653.74	0		4714	0	
MCL	WIV	0	3854	3360	5089	4324	4200	3360	2843.92	0		3854	0	
ICML- ROM		353934	4550	3360	5089	4324	4200	3360	2826.00	1000218360		2826	1000218360	
ICML-W		124060	5154	4200	5597	5089	4940	4200	3201.00	397117372.4		3201	397117372.4	
IMPORT		25089	4751	3360	5089	4324	4200	3360	4751.00	119196318.7		4751	119196318.7	
		711998								2667004524	3745.80		2658817611	3734.30





**ANNEXURE – 3E
COMPUTATION OF UHV OF COAL BASED
GENERATING STATION ON MINIMUM
OF DECLARED HEAT VALUE**

New Cossipore Generating Station

Source	Grade	Quantity	GCV	Minimum UHV of coal grade	Max GCV of Band (X2)	Min GCV of Band (X1)	Max UHV of Band (Y2)	Min UHV of Band (Y1)	Mean UHV Interpolation	Qty X Mean UHV	Wt. Av. UHV as per WBERC	UHV as per CESC	Qty X UHV as per CESC	Wt. Ave. UHV as per CESC
		MT	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg	Kcal/Kg		
BCCL	G3	14472	6701	5600	6454	6049	6200	5600	6437.00	93158710.06		6437	93158710.06	
BCCL	G4	46171	6401	5600	6454	6049	6200	5600	6121.48	282632649.35		5926	273607212.64	
BCCL	G5	91688	6101	4940	6049	5597	5600	4940	5675.93	520411888.63		5648	517851056.48	
Import		780	4653	3360	5089	4324	4200	3360	4653.00	3627478.80		4653	3627478.80	
Total		153110								899830726.84	5877.02		888244457.98	5801.34

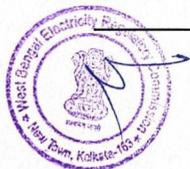


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ANNEXURE – 3F COMPUTATIONS OF THE SHARE OF SAVINGS IN COST OF COAL ON ACCOUNT OF ACHIEVING BETTER STATION HEAT RATE

Sl. No.	Particulars	Derivation	Unit	Budge Budge	Titagarh	Southern	New Cossipore	Total
1	Gross Gen		MU	5989.140	1776.009	1039.528	125.027	8929.704
3	Oil consumed		KL	1477.94	1347.85	984.76	0	3810.55
4	Coal consumed		Tonne	3575160	1127155	721695	150129	5574139
5	HV of Oil		Kcal/Ltr	9572.00	9366.00	9287.00	0.00	
6	HV of Coal		Kcal/Kg	3607.44	4043.54	3734.37	5801.84	
7	HV of oil released	2x4/1000	Kcal	14146.84	12623.96	9145.47	0.00	35916.27
8	HV of oil released	3x5/1000	Kcal	12897175.19	4557696.33	2695076.16	871024.44	21020972.11
9	Total HV	6+7	Kcal	12911322.03	4570320.29	2704221.62	871024.44	21056888.38
10	SHR for 2013-14	8/1	Kcal/kwh	2155.79	2573.37	2601.39	6966.69	
11	Designed SHR		Kcal/kwh	2247	2659	2707	2920	
12	Normative SHR		Kcal/kwh	2470	2910	2900	5800	
13	Ratio of SHRn to Designed	11/10		1.099	1.094	1.071	1.986	
14	Categorization			B	B	B	C	
15	SHR / SHRn	9/11		Less than 0.90 (0.873)	Less than 0.90 (0.884)	Less than 0.90 (0.897)	greater than 1.00 (1.201)	
16	Gross Gen for other than own consumers & WBSEDCL		MU	5924.001	1790.613	1042.910	115.149	8872.673
17	Cost of Coal		Rs. in Lakh	124303.06	44455.76	24356.94	9042.36	202158.13
19	Proportionate Coal consumed		MT	3508434.65	1127155	721695	150129	5507413.65
20	Actual cost of coal used		Rs. in Lakh	108776.21	39030.00	21753.91	11856.21	181416.33
21	Savings in cost of coal		Rs. in Lakh	15526.85	5425.76	2603.03	-2813.85	20741.80
22	Percentage of gain sharing attributable to consumers & WBSEDCL		%	14%	14%	14%	0%	
23	Share of gain attributable to consumers & WBSEDCL		Rs. in Lakh	2173.76	759.61	364.42	00	3297.79





CHAPTER – 4 FIXED CHARGES

- 4.1. The uncontrollable elements of fixed charges are those elements where variations of actual expenditure with the expenditure allowed by the Commission in the tariff order for the concerned year are caused by the factors beyond the control of the generating company or the licensee. The amounts of actual expenses / charges under such different heads of accounts are, therefore, to be considered on prudent check for carrying out positive or negative adjustments, as the case may be. On the contrary, in case of controllable head of expenses, the applicant is supposed to contain the expenditure within the total amount so allowed and any savings located under controllable head will go to their account. 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 Limited is being taken up hereunder one by one:
- 4.2. **Employee Cost:**
- 4.2.1 CESC Limited, in the Tariff Order for 2013-14, was allowed a total amount of Rs. 60631 lakh towards employees cost of own employees which includes salaries, wages, other allowances, bonus, contribution to PF and other funds as well as staff welfare expenses. This amount is exclusive of the amount of Rs. 3508 lakh allowed in the tariff in respect of contracted manpower in regular establishment in its generating stations.
- 4.2.2 The present paragraph is exclusively dealt with the employees cost of own employees. As regards employees cost of contracted manpower in regular establishment, it is observed that the amount of expenditure on this score has been booked under repairs & maintenance head of account. Under such circumstances, the same will be dealt with in subsequent paragraph under relevant head of operation and maintenance (O&M) although the expenses have been categorized as uncontrollable in terms of Tariff Regulations.





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- 4.2.3 CESC Limited has incurred the net amount of Rs. 69418 lakh towards employee benefit expenses during the year 2013 – 2014, which included an amount of Rs. 2395 lakh for wage revision and a portion of uncontrollable own employee cost of Rs. 275 lakh. Accordingly, the balance amount of Rs. 66748 lakh (Rs. 69418 lakh – Rs. 2395 lakh – Rs. 275 lakh) out of the current year's employee cost has been claimed in Form 1.17(i) for own employee cost for the year 2013 – 2014 and the same is admitted by the Commission. CESC Limited has confirmed that no production / performance incentive has been paid to the own employees during the year 2013 – 2014.
- 4.2.4 In the APR petition for 2012 – 2013, CESC Limited claimed a lumpsum amount of Rs. 4000 lakh towards wage revision for their own employees but the Commission did not admit the same as the total impact was not assessed properly. CESC Limited was directed to submit their claim clearly on the basis of actual payment in Form 1.17(i) for arrear payment of wage revision. Accordingly, CESC Limited submitted the Memorandum of Settlement (MoS) and other relevant documents with their APR petition for 2013 – 2014 for claiming the arrear against wage revision in Form 1.17(i) in respect of own employees. As per MoS with employees with effect from 1st April, 2012, the total sum of Rs. 6895 lakh has been incurred for the entire wage revision by CESC Limited and the same has been accounted for in the annual accounts for the years 2012 – 2013 and 2013 – 2014. CESC Limited also confirmed that nothing has been paid towards production / performance incentive to the employees while paying arrear wages. However, the Commission admits the entire amount of arrear of Rs. 6895 lakh against wage revision in the APR for 2013 – 2014.
- 4.2.5 The employee cost and arrear payment due to wage revision in respect of own employees of CESC Limited are thus admitted for Rs. 73643 lakh in the APR for 2013 – 2014 with following cost center-wise breakup:





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Rs. in Lakh

Particulars	Amount admitted in APR 2013 – 2014		
	Employee cost	Arrear wage	Total
(A) Generation Function			
Budge Budge	4551	470	5021
Titagarh	5602	579	6181
Southern	3788	391	4179
New Cossipore	3001	310	3311
Total (A)	16942	1750	18692
(B) Distribution Function	49806	5145	54951
Total (A+B)	66748	6895	73643

4.2.6 CESC Limited claimed Rs. 5158 lakh towards cost of contracted manpower in regular establishment in its generating stations as against Rs. 3508 lakh allowed in the tariff order for 2013-14. The claim of the same in APR 2013 – 2014 is Rs. 5158 lakh, i.e., higher by 27% over that of the earlier year. No reason for such exorbitant increase within one year has been suitably advanced by CESC Limited. Any wage settlement agreement with the contractor for such increase in wages has neither been established. CESC Limited also has not submitted Form 1.17(h) & 1.17(i) of Annexure I duly filled up for contracted manpower as per regulation 5.9.3 & regulation 5.9.4 of Tariff Regulations. Number of contracted employees engaged station wise along with their average rate of salary to justify the claim has also not been found in their APR application. In the tariff order dated 06.03.2012, CESC Limited was directed to submit employee cost for contracted manpower in regular establishment in application of APR with audited figures. In the last Auditor's certificate of the head 'other expenses', the cost of contractor's personnel has not been shown separately. CESC Limited was also directed to submit such figures for the contracted manpower in distribution system separately. CESC Limited has not complied with the above directions of the Commission.

4.2.7 As per note 1 below of the Form 1.12, it has been stated by CESC Limited that employees cost for contractors has been derived considering the allowable number of employees as per norm and actual cost for relevant station



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employees. Actual number of contractors employees has not been stated by CESC Limited. As per the Regulations, total number of employees allowable comes to 3259 against which actual number of own employees as on 31.03.2014 was 1978. As per CESC's submission, the employee cost of own employees are as per actual and the same for contractor's man power have been derived considering the allowable number of employees as per norms and actual cost for relevant station employees. However, it is also submitted that since the New Cossipore generating station is being primarily used as a peaking station, claim on employee cost in respect of the contractor's employee in regular establishments have been restricted to a lower number of 25% of the allowable number therefor. In the absence of actual number of contractor's employees engaged during 2013 – 2014, the total number of personnel engaged in the generating stations could not be derived.

4.2.8 In view of above, the Commission is of the opinion that the claim of Rs. 5158 lakh lacks enough justification for a prudent analysis and assessment of the allowable amount, although such kind of expenditure is uncontrollable in terms of Tariff Regulations and as such restricts the same to the amount admitted in the tariff order for 2013 – 2014, i.e., Rs. 3508 lakh in the APR 2013 – 2014.

4.2.9 The cost centre wise break-up of contracted manpower in regular establishment in generating stations CESC Limited, as admitted in the tariff order for 2013 – 2014, is as follows:

Rs. in Lakh

Particulars	Amount admitted in APR 2013 – 2014
Generation Function	
Budge Budge	2016
Titagarh	587
Southern	0
New Cossipore	905
Total	3508



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4.3 Coal and Ash Handling Charges:

4.3.1 Although the coal and ash handling charges are categorized as uncontrollable but mostly variable with the quantum of generation, the Commission decides to view the amount claimed with reference to the targets set for generation and actual generation. The position in this regard comes as under:

Rs. In Lakh

Generating Station	Target Generation (MU)	Exp. as per tariff order	Actual Generation (MU)	Expenses Proportionate to Actual Generation	Actual Expenses	Expenses admitted in APR for 2013-14
Budge Budge	5600	507	5989	542	825	542
Titagarh	1805	916	1776	901	534	534
Southern	1025	223	1040	226	131	131
New Cossipore	438	74	125	21	13	13
Total	8868	1720	8930	1690	1503	1220

4.3.2 It may be seen from the above table that proportionate expenditures in reference to target generation vis-à-vis actual generation is less in Budge Budge generating station only when compared with actual coal and ash handling charges. The Commission decides to admit the proportionate expenditure with reference to actual quantum of generation, but restricted to the actual expenditure where actual expenditure is less as in such generating stations referred to above. For Budge Budge generating station, the Commission admits the expenses proportionate to actual generation rather than actual expenses irrespective of that in the tariff order on the ground that the actual generation is much less than the target generation and actual expenses are much higher in respect of the above generating stations. The amount of admitted expenditure in APR for the year 2013 – 2014 comes to Rs. 1220 lakh.

4.4 Water Charges:

4.4.1 The expenditure towards water cess is uncontrollable and is related to the quantum of water to be used in the generating stations.



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4.4.2 The actual amount of total expenditure incurred by CESC Limited under this uncontrollable head of accounts was found Rs. 218 lakh as against Rs. 343 lakh allowed in the tariff for the concerned year.

4.4.3 It is seen from the station wise break-up of the expenditure of water cess submitted by CESC Limited that the actual expenditure on water cess in respect of all generating stations is less than expenses proportionate to actual generation and hence, the Commission admits the water cess for Rs. 218 lakh in APR for 2013 – 2014 for all generating stations as follows:

Rs. in lakh

Generating Station	Target Generation (MU)	Exp. as per tariff order	Actual Generation (MU)	Expenses Proportionate to Actual Generation	Actual Expenses	Expenses admitted in APR for 2013-14
Budge Budge	5600	11	5989	12	6	6
Titagarh	1805	207	1776	204	136	136
Southern	1025	89	1040	90	66	66
New Cossipore	438	36	125	10	10	10
Total	8868	343	8930	316	218	218

4.5 Lease Rental:

4.5.1 CESC Limited used to procure certain assets in the past under leasing for various tenures generally extending upto 8 years or so on competitive basis. The Commission admitted an amount of Rs. 1200 lakh out of which Rs. 89 lakh was for generating stations and Rs. 1111 lakh was for distribution function in the tariff order for 2013 – 2014 under the head 'Lease Rental' towards rental on certain equipments taken on lease. Actual amount of such rental as per the audited accounts came to Rs. 1113 lakh. The function-wise break-up of the actual amount was found as under:

Particulars	Actual amount (Rs. in lakh)
Generation Function	
Southern	130
Total	130
Distribution Function	983
Total	1113



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4.5.2 The total amount of actual expenditure of Rs. 1113 lakh towards lease rental charges with above function wise segregation is admitted under this head in the APR for 2013 – 2014.

4.6 **Rent:**

4.6.1 An amount of Rs. 4 lakh was allowed in tariff order under the head rent for Southern generating station under generation function. The expenditure on rent for assets under distribution function was however considered under the operation and maintenance head. As per submission of CESC Limited and as per audited annual accounts, actual expenditure on rent is Rs. 847 lakh out of which, Rs. 32 lakh is for Southern generating station.

4.6.2 The Commission in terms of regulation 5.7.1 of the Tariff Regulations considers to admit the actual expenditure of Rs. 32 lakh on rent for Southern generating station under generation function. The expenditure on rent for distribution and selling function are dealt separately under operation and maintenance head.

4.7 **Rates & Taxes (Other than on Income & Profit):**

4.7.1 An amount of Rs. 487 lakh and Rs. 242 lakh aggregating to Rs. 729 lakh was considered towards Rates & Taxes (Other than on Income & Profit) in the tariff order for the year 2013 – 2014 for generation function and distribution function respectively. In the Tariff Regulations, the Commission recognized such expenditures as separate item and categorized the same as uncontrollable.

4.7.2 The actual amount of Rs. 636 lakh as claimed by CESC Limited in the APR application for the year 2013 – 2014 under the head 'Rates & Taxes' is being admitted in the APR for 2013 – 2014 as uncontrollable item.

4.7.3 Further, CESC Limited in their submission has claimed an amount of Rs. 842 lakh and Rs. 103 lakh aggregating to Rs. 945 lakh towards service tax for cable laying services and entry tax for procurement of goods respectively. The service tax of Rs. 842 lakh is a statutory component of the cost of repairs and





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maintenance job / capital works and the same is not admitted as rates and taxes. The entry tax of Rs. 103 lakh for procurement of goods is also a statutory expenditure levied by the Government w.e.f. 01.04.2012 and the same is also to be considered as a component of cost of material / works and not as a separate item of rates and taxes.

- 4.7.4 Summing up the above, the total amount of Rs. 636 lakh is admitted by the Commission in the APR for 2013 – 2014 under the head rates and taxes with the following cost centre-wise allocation

Particulars	Amount (Rs. in Lakh)
(A) Generation Function	
Budge Budge	252.00
Titagarh	84.00
Southern	18.00
New Cossipore	13.00
Total (A)	367.00
(B) Distribution Function	269.00
Total (A+B)	636.00

4.8 **Insurance Premium:**

- 4.8.1 An amount of Rs. 523 lakh for generation function and Rs. 294 lakh for distribution function aggregating to Rs. 817 lakh was considered towards insurance premium in the tariff order for the year 2013 – 2014.

- 4.8.2 In terms of regulation 5.23.1 of the Tariff Regulations, the insurance premium paid after selection of insurance company through a transparent process shall be considered subject to prudent check and as per table 2.5.5-1, it is categorized as uncontrollable and, therefore, the actual expenditure totaling to Rs. 777 lakh has been admitted with the following cost centre-wise allocation:





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Particulars	Amount (Rs. in Lakh)
(A) Generation Function	
Budge Budge	390
Titagarh	83
Southern	48
New Cossipore	12
Total (A)	533
(B) Distribution Function	244
Total (A+B)	777

4.9 **Operation & Maintenance (O&M) Expenses:**

4.9.1 Operation & Maintenance (O&M) expenses viz. Repairs and Maintenance including cost of consumables, legal and professional charges, audit fees, rent for distribution system, administrative and general expenses are categorized as controllable in terms of the Tariff Regulations.

4.9.2 **O&M Expenses for generation function:**

4.9.2.1 O&M expenses for generating stations, which are the same as was considered in the tariff order as per norm specified in Schedule 9A of the Tariff Regulations, being controllable are admitted in APR 2013 – 2014 as follows:

Generating station	Amount (Rs. in Lakh)
Budge Budge	8265
Titagarh	3074
Southern	1760
New Cossipore	1720
Total	14819

4.9.2.2 The operation and maintenance cost of generation function as per norm specified in Schedule 9A of the Tariff Regulation and mentioned above excludes the employee cost of contractual manpower in regular establishment which has been categorized as uncontrollable in terms of Tariff Regulations. This allowable cost hitherto included under employees cost is now dealt with in the following paragraphs.





4.9.3 O&M expenses for distribution function:

4.9.3.1 CESC Limited in their application for third control period considered 9% annual increase in their projection of expenditure under this head on the basis of the following two factors:

- a) The then inflation trend exists at the time of formulation of tariff application; and
- b) The projected higher demand.

CESC Limited accordingly projected their expenditure on all the sub-heads of O&M expenses in distribution function during the third control period.

In the multi-year tariff order for the third control period in 2011-12, the Commission considered such escalation rate of 9% and also admitted the amount proposed by CESC Limited for all the three years (2011-12, 2012-13 and 2013-14) under third control period. If the actual inflation rate as per Whole sale price index for the years under the third control period is considered then the picture will be as per following table:

ACTUAL INFLATION IN PERCENTAGE DURING 3RD CONTROL PERIOD			
Basis of Inflation	2011-12	2012-13	2013-14
Whole sale price index	8.96	7.36	5.98

4.9.3.2 Now from the above table it is also found that during the third control period itself the inflation rate is quite low in comparison to what had been considered in the tariff order. In fact if such lower inflation rate is considered on cumulative basis the CESC Limited has got a quite comfortable approved rate in the tariff order of 2013-14. Keeping in back the above observation Commission now analyzes the claimed amount in different sub-heads of O&M expenses for distribution function in the APR application for 2013-14 to determine the allowable amount in the APR order for the concerned year.





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- a) **Repair & Maintenance(R&M) expenditure in distribution system:** Commission in the tariff order for the year 2011 – 2012 under multiyear tariff framework approved an expenditure of Rs 15329 lakh for the year 2013-14 under this sub-head of O& M expenses for distribution function which was also the projected amount for the year 2013-14 in the tariff application for the third control period for this controllable item of R&M expenses. The Commission also gave direction that in case the actual expenses under repair and maintenance head of distribution system are found to be less than the admitted amount, the Commission will allow the same in terms of the Tariff Regulations. As per certificate of cost auditor at Annexure 5 submitted by CESC Limited, the amount of actual expenditure towards repair and maintenance including consumables has been found as Rs 14246 Lakh. The Commission noted that the audit certified expenditure of Rs. 15247 lakh is excluding the components of service tax and entry tax. The Commission, thus, admits Rs. 15191.00 lakh [Rs. 14246 lakh + Rs. 842 lakh (service tax) + Rs. 103 lakh (entry tax)] as repair and maintenance cost in the APR for 2013 – 2014.
- b) **Administrative and General (A&G) Expenses in distribution system:** In the tariff order dated 06.03.2012, the Commission in the ARR for 2013 – 2014 admitted A&G expenses as Rs. 11718 lakh which includes Rs. 752 lakh as rent, Rs. 654 lakh as legal and professional charges, Rs. 66 lakh as audit fees and Rs. 10246 lakh as other administrative and general expenses. It is found from the audit certified expenditure that the actual expenditure under the term sub-heads of A&G expenses are as follows:

Items	Amount (Rs. in lakh)
Rent for distribution function	815
Legal and Professional Expenses	420
Audit fees	90
Administrative and General Exp.	9546



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In the APR application of CESC for 2013-14 it has been found that out of four elements (sub-heads) under this controllable head of A&G expenses in two elements of rent and audit fees the actual expenditure has exceeded the approved amount of tariff order by Rs 87 lakh and for other two elements (legal and general expenditure) CESC has able to contain their expenditure well within the approved amount in tariff order which is less by 934 lakh than what has been approved in the ARR of tariff order of 2013-14. Thus the total actual A&G expenditure is Rs 10871 lakh. This actual expenditure of Rs 10871 lakh on A&G head being lesser than the admitted amount of Rs 11718.00 lakh in ARR order for 2013-14, thus, in terms of clause (iv) of the regulation 2.5.5 such amount of Rs 10871 lakh can be considered as a total A&G expenses and admitted as a prudent practice.

4.9.3.3 Based on the above analysis, and O&M expenditure being controllable in nature, the amount admitted in APR for 2013 – 2014 for distribution function is as below:

Rs. in Lakh

Sl. No.	Particulars	Amount admitted in APR under O&M Head	
1	Repairs & Maintenance including consumables		15191
2	Legal & Professional Charges	420	
3	Audit Fees	90	
4	Administrative & General expenses	9546	10871
5	Rent for distribution function	815	
6	Total		26062

4.9.3.4 Summing up above, the allowable expenses under the head operation and maintenance (O&M) is summarized below:

Particulars	Amount admitted in APR 2013 – 2014 (Rs. in Lakh)		
	O&M Expenses	Employees cost of contractual employees in regular establishment.	Total
(A) Generation Function			
Budge Budge	8265	2016	10281
Titagarh	3074	587	3661
Southern	1760	0	1760
New Cossipore	1720	905	2625
Total (A)	14819	3508	18327
(B) Distribution Function	26062	0	26062
Total (A+B)	40881	3508	44389





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4.10 Interest:

The Commission allowed Rs 28229 lakh towards interest on borrowed capital in the tariff order for 2013 – 2014. The amount was exclusive of the portion of such interest and charges required to be capitalized on completion of routine capital works-in-progress. This amount also excludes an amount of Rs 40 lakh towards interest disallowed by the Commission on account of capital cost-over-run for the first two units of Budge Budge generating station. CESC Limited claimed an amount of Rs. 44078 lakh on account of interest in Form E(B) of their application for APR for 2013 – 2014. However, as per data furnished by CESC Limited in different forms, total interest claimed comes as under:

Sl. No.	Particulars	Amount (Rs. in Lakh)
A. Interest on Capital Borrowings:		
1	Gross amount of interest on capital borrowings (vide detailed computations submitted in Form – C)	31250
2	Less: Amount capitalized (Form – C)	2218
	Total amount of interest claimed towards capital borrowings [A=(1)-(2)]	29032
B. Interest claimed on normative borrowings in terms of Tariff Regulations [Form 1.20(b)]		93
C. Interest on Working Capital [Form 1.17(b)]		7228
D. Interest on temporary accommodation [Form 1.17(a)]		7726
Total (A+B+C+D)		44079

4.10.1 Interest on Capital Borrowings:

4.10.1.1 It has been observed from note 28 of the notes to accounts of the audited annual accounts that actual amount of interest chargeable to revenue accounts for the year 2013 – 2014 came to Rs. 38562 lakh and after due adjustment for capitalization of Rs. 2218 lakh the net amount of interest charges arrived at Rs. 36344 lakh (Rs. 38562 lakh – Rs. 2218 lakh). This amount of Rs. 36344 lakh includes actual interest of Rs. 7312 lakh paid by CESC Limited on short term loan to meet the immediate requirement arising out of substantial amount of unrealized arrears and claimed under the head 'Temporary Accommodation'. The amount of interest on capital borrowing charged on revenue accounts are as under:



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	Rs. in Lakh
Total amount of interest allowable as above	36344
Less: Total amount of actual interest on short term loan paid on revenue account under temporary accommodation.	7312
Total amount of interest towards capital borrowing	29032

4.10.1.2 The above amount of Rs. 7312 lakh together with Rs. 31250 lakh towards interest on capital borrowing as per Form C submitted and aggregating to Rs. 38562 lakh has been reflected as interest expenses in note 28 of the notes to accounts for 2013 – 2014.

4.10.1.3 Since the interest on short term loan under temporary accommodation is taken up separately in the following paragraph, the Commission now admits the amount of interest on capital borrowings i.e., Rs. 29032 lakh on actual basis, as arrived in the preceding paragraph.

4.10.2 Interest on Normative Debt:

4.10.2.1 In addition to interest on actual amounts of capital borrowings, CESC Limited claimed for interest on normative debt amounting to Rs. 93 lakh as per Form 1.20(b). On scrutiny it is found that CESC Limited raised more debt during the year than it was required to draw as per normative debt equity ratio pertaining to that year and on cumulative basis.

4.10.2.2 As per submission in form 1.18 of APR application along with note 4, note 11 and note 12 on audited financial statement for the year 2013-14 of CESC Limited, net addition to fixed assets during the year 2013 – 2014 works out at Rs. 75248 lakh as under:

	Rs. in Lakh
Addition to fixed assets	89183
Less: Normal retirement of assets	3297
Less: Addition to capital contribution	10638
Net addition to fixed asset	75248



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4.10.2.3 According to Form 1.20(b) and Form C submitted by CESC Limited, repayment of normative debt during 2013 – 2014 is nil while actual addition to debt during 2013 – 2014 is Rs. 57000 lakh. Considering the above along with weighted average rate of interest @ 10.99% derived from the particulars in Form C, the amount allowable towards interest on normative loan is determined as under:

Particulars	Derivative	Amount (Rs. in Lakh)
Opening balance of normative debt	a	737
Actual addition to debt for the year	b	57000
Net addition to the fixed assets during the year	c	75248
Normative addition to debt @ 70% of net addition to fixed asset during the year	$d = c \times 0.7$	52674
Addition to debt for the year to be considered to APR	$e = \text{higher of } b \text{ and } d$	57000
Additional normative debt during the year	$f = e - b$	0
Repayment of normative debt during the year	g	0
Closing balance of normative debt	$h = a + f - g$	737
Average normative debt	$i = (a + h)/2$	737
Weighted average rate of interest paid on term loan during the year	$j = 10.99\%$	
Interest on normative debt allowed in APR for 2013 – 2014	$k = i \times j$	81

4.10.2.4 Considering the above, the Commission now admits the interest in aggregate allowable in APR for 2013 – 2014 for Rs. 29113 lakh [Rs. 29032 lakh (as admitted in paragraph 2.10.1.3) + Rs. 81 lakh]. The cost center wise allocation of the total amount so admitted and as considered in the tariff order for the concerned year is as follows:

Particulars	Rs. in Lakh		
	As admitted in APR for 2013 – 2014		
	Interest on capital loan	Interest on normative loan	Total
Generation Function			
Budge Budge	7853	20	7873
Titagarh	441	1	442
Southern	327	1	328
New Cossipore	12	0	12
Distribution Function	20399	59	20458
Total	29032	81	29113





4.10.3 Interest on working capital:

4.10.3.1 No amount on this head was considered in the tariff order for 2013 – 2014. As per their submission in Form 1.17(b), CESC Limited claimed separately an amount of Rs 7228 lakh as interest on normative basis on working capital considering rate of interest as 14.75% as applicable SBI Short Term Prime Lending Rate (PLR) as on 01.04.2012.

4.10.3.2 It has been observed that CESC Limited did not make any payment towards interest on working capital vide their submission in Form 1.17(b) and Form C of Annexure – I. As such, no amount is allowable in APR 2013 – 2014 towards interest on working capital in terms of regulation 5.6.5.2 of the Tariff Regulations.

4.10.4 Interest on Temporary Accommodation:

4.10.4.1 No amount on this head was considered in the tariff order for 2013 – 2014. As per their submission in Form 1.17(a), CESC Limited claimed separately an amount of Rs. 7726 lakh as interest on temporary accommodation. CESC Limited in their submission highlighted the necessity for availing the funds by way of temporary accommodation, as the revised tariff for the year 2013 – 2014 was implemented towards the end of the financial year, giving rise to a substantial amount unrealized in the hands of the company. To recover such deficit due to unrealized arrears, the amount of temporary financial accommodation taken by CESC Limited is Rs. 45165 lakh. Accordingly, interest on such temporary accommodation has been incurred and prayed for considering the mid-year SBI PLR of 14.55% as on 30.09.2013 on average balance.

4.10.4.2 In terms of regulation 5.6.5.4 of the Tariff Regulations, the Commission may allow, if considered necessary, interest on temporary financial accommodation taken by a generating company / licensee from any source to a reasonable extent due to unrealized arrears from the consumers / beneficiaries.





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4.10.4.3 As per Form – C submitted with the APR application, it has been observed that an amount of Rs. 4838 lakh and Rs. 2474 lakh were paid towards interest on source wise short term loan and temporary facility respectively on revenue accounts during the year 2013 – 2014. CESC Limited did not specify the source of the loan, date of drawal, the rate of interest, amount of repayment during the year, if any, and other details in respect of the temporary facility of Rs. 23374.00 lakh, as required under Form-C, in order to ascertain the amount of interest allowable. However, as has been found under note 28 of the notes to accounts of the audited annual accounts for 2013 – 2014, the interest expenses of Rs. 38562 lakh includes amounts of Rs. 4838 lakh and Rs. 2474 lakh. The Commission, thus, considers the actual interest paid by CESC Limited and admits an amount of Rs. 7312 lakh (Rs. 4838 lakh + Rs. 2474 lakh) towards interest on temporary accommodation in APR for 2013 – 2014. The amount is allocated in the following cost-centre wise allocation as proposed by CESC Limited.

Rs. in Lakh		
Sl. No.	Generating Station	Amount admitted in APR under Temporary Accommodation Head
1	Budge Budge	2510
2	Titagarh	911
3	Southern	510
4	New Cossipore	228
5	Distribution	3153
	Total	7312

4.10.5 Interest on Consumers' Security Deposits:

4.10.5.1 The total amount of interest paid to the consumers on their security deposits was found to be Rs. 7889 lakh as against an amount of Rs. 7716 lakh allowed in the tariff order for the concerned year. The total amount of such security deposit at the beginning of the year was Rs. 113906 lakh and at the end of the year was Rs. 127996 lakh as per balance sheet ended 31st March, 2014.

4.10.5.2 CESC Limited submitted a certificate from their auditors that an amount of Rs. 7889 lakh has been settled during the year 2013 – 2014 in the following manner:





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(a) Credit to consumers' account	Rs. 4884 lakh
(b) Addition to security deposit of Existing consumer	Rs. 2728 lakh
(c) Payment of Tax as per I.T. Act 1961	Rs. 277 lakh
Total	Rs. 7889 lakh

4.10.5.3 The Commission admits an amount of Rs. 7889 lakh in the APR 2013 – 2014 under this head of expense under with allocation to distribution function only.

4.10.6 Other Finance Charges:

4.10.6.1 As per Form 1.17(c) submitted in the petition, the amount of other finance charges claimed by CESC Limited during the year came to Rs. 948 lakh as against Rs. 956 lakh allowed in the tariff for the year 2013 – 2014 with the following breakup:

Sl. No.	Particulars	Amount as claimed by CESC Ltd (Rs. in Lakh)
1	Net borrowing cost	522
2	Bank Charges for financial service	211
3	Bank Charges for cash management service	187
4	Other miscellaneous finance charges	28
	Total	948

4.10.6.2 In terms of regulation 5.6.4.2 of the Tariff Regulations, financing charges being uncontrollable in nature consist of front-end fees, bank charges, commitment charges, guarantee fees etc. As per note 28 of the notes to accounts of the audited annual accounts for 2013 – 2014 read with the cost auditor's certificate submitted in Annexure 7, the chargeable amount under the head 'other borrowing cost' is Rs. 522 lakh after capitalization. Also, as per above certificate of the cost auditor, a further amount was incurred towards bank charges etc. for Rs. 426 lakh. Thus, the allowable amount of finance charges arrives at Rs. 948 lakh (Rs. 522 lakh + Rs. 426 lakh).





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4.10.6.3 The Commission thus admits Rs. 948 lakh under the head in the APR 2013 – 2014. The cost centre wise allocation of the amount are as follows:

Rs. in Lakh

Particulars	As admitted in APR for 2013 - 2014
Generation Function	
Budge Budge	326
Titagarh	118
Southern	66
New Cossipore	30
Distribution Function	408
Total	948

4.11 **Bad Debts:**

4.11.1 In terms of regulation 5.10.1 of the Tariff Regulations, the Commission is to allow such amount of bad debts as actually had been written off in the latest available audited accounts, subject to a ceiling of 0.5% of the annual gross sale revenue during the year. An amount of Rs. 2941 lakh was allowed in the tariff order for 2013 – 2014 under the head. The amount of earnings from sale of electricity for the year was Rs. 537052 lakh as per Form 1.25 submitted in the petition. The actual amount written off in the books of accounts towards bad debt was Rs. 2651 lakh as against the ceiling of Rs. 2685 lakh which is being 0.5% of the sales revenue earned. The amount of Rs. 2651 lakh is admitted in APR for 2013 – 2014 and this exclusively relates to distribution function.

4.11.2 CESC Limited is directed to henceforth submit the details of approval of its Board of Directors for the amounts actually written off as bad debt in the next APR petition.

4.12 **Depreciation:**

4.12.1 The total amount of depreciation as charged in the books of accounts was Rs. 33859 lakh including an amount of Rs. 750 lakh being the depreciation against trademark which is to be excluded. An amount of Rs. 184 lakh out of the



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total depreciation is on assets created by utilizing the proceeds from sale of old assets. The chargeable amount of depreciation for determination of tariff, therefore, comes to Rs. 32925 lakh (Rs. 33859 lakh – Rs. 750 lakh – Rs. 184 lakh) as against an amount of Rs. 31655 lakh allowed in the tariff.

4.12.2 In view of high growth of peak power requirement and to improve network reliability, CESC Limited incurred considerable capital expenditure towards strengthening of distribution network. In order to supply quality power to the consumers as well as to provide safety to the working personnel and faster restoration of supply in case of outages, CESC Limited is making all efforts, including making large investments, specially for installation of transformers, switchgears and associated network reorganization jobs. At the same time, the expenditures under certain heads were lower than the estimate to contain the overall capital expenditure within the reasonable limit. It was also submitted that in a few cases due to non-availability of suitable plots of land, clearances, etc. and also to meet exigencies, there has been some modification in the implementation plan including phasing thereof.

4.12.3 As the capitalization programme vis-à-vis amount of depreciation cannot be precisely determined at tariff order stage, the Commission, thus, stipulated in the tariff order that the amount of depreciation found chargeable as per audited books of accounts, shall be considered for carrying out necessary adjustment in APR for the concerned year.

4.12.4 Thus, in terms of the Tariff Regulations, the Commission admits the amount of Rs. 32925 lakh towards depreciation in the APR for the year 2013 – 2014. The cost center-wise breakups of the amount admitted are as follows:

Rs. in Lakh

Particulars	As admitted in APR for 2013 - 2014
Generation Function	
Budge Budge	12320
Titagarh	469
Southern	242
New Cossipore	110
Distribution Function	19784
Total	32925



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4.13 Advance against Depreciation:

4.13.1 To facilitate the repayment of loans, an amount of Rs. 6429 lakh was allowed to CESC Limited in the tariff order for 2013 – 2014 in terms of regulation 5.6.3.1 read with regulation 5.5.2 of the Tariff Regulations. As is seen from the submission, CESC Limited's entitlement for having such advance against depreciation based on the actual amount of loan repayments made and the actual amount of depreciation admitted during the year is as under:

Rs. in Lakh

Sl. No.	Particulars	Amount
(a)	Repayment of Loan	42228
(b)	1/10 th of original loan amount	49949
(c)	Maximum permissible amount of loan repayment restricted to 1/10 th of original loan amount	42228
(d)	Depreciation admitted in APR for 2013 – 2014	32925
(e)	Allowable advance against depreciation (c - d)	9303

4.13.2 The cost center-wise break-up of the amounts of advance against depreciation now admitted in the APR for 2013 – 2014 is found as under:

Rs. in Lakh

Particulars	As admitted in APR for 2013 – 2014
Generation Function	
Budge Budge	3481
Titagarh	133
Southern	68
New Cossipore	31
Distribution Function	5590
Total	9303

4.13.3 In terms of proviso to the regulation 5.5.2 of the Tariff Regulations, it is reiterated that upon repayment of the entire loan amount, the original cost of fixed assets shall be reduced by the aggregate accumulated depreciation and advance



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against depreciation availed by CESC Limited and the resulting depreciable value shall be spread over the balance useful life of the fixed asset.

4.14 Return on Equity:

4.14.1 Based on the inputs below, the actual average equity base for the year 2013 – 2014 is to be computed.

4.14.2 Actual addition to the equity base during 2013 – 2014 arrived at as below:

	Rs. in Lakh
Profit for the year	65189
One time sale amount of assets invested in creation of new asset in terms of regulation 5.15.1(iv)	786
Total	65975
Less:	
Dividend including tax paid	11694
Unforeseen Exigencies Reserve	3763
Total	15457
Actual Addition to equity base during 2013 – 2014	50518

4.14.3 As found from submission in Form 1.18, net addition to fixed asset during the year 2013 – 2014 was Rs. 75248 lakh.

4.14.4 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. 786 lakh in creation of new assets in the electricity business of the company for which no depreciation has been claimed. This amount of Rs. 786 lakh is included in actual addition to equity base of Rs. 50518 lakh for 2013 – 2014 and addition to fixed assets of Rs. 75248 lakh. Return on such equity shall be admissible to the CESC Limited.

4.14.5 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 06.03.2012, CESC Limited was allowed return on the projected average equity



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base of Rs. 289725 lakh comprising generation function and distribution function @ 15.5% and 16.5% respectively and that came to Rs. 18369 lakh for generation function and Rs. 28250 lakh for distribution function aggregating to Rs. 46619 lakh. The average equity base for the purpose of computation of return on equity during the year 2013 – 2014 came to Rs. 292404 lakh as per the computation shown hereunder:

Sl. No.	Particulars	Amount (Rs. in Lakh)
1	Actual equity base at the beginning of the year	402603
2	Admissible equity base at the beginning of the year 2012 – 2013	280841
3	Actual addition to equity base during the year (refer para 4.14.2)	50518
4	Actual equity base at the end of the year (1+3)	453193
5	Net Addition to the original cost of fixed assets during the year	75248
6	Less: Asset created in terms of regulation 5.15.1(iv) of the Tariff Regulations	786
7	Net addition to the original cost of fixed assets during the year other than assets created in terms of regulation 5.15.1 (iv) of the Tariff Regulations (5-6)	74462
8	Normative addition to equity base (30% of 7)	22339
9	Addition to equity base considered for the year (lower of 3 and 8)	22339
10	Add: Asset created in terms of regulation 5.15.1 (iv) of the Tariff Regulations	786
11	Addition in equity base during the year for the purpose of computation of return as per the Tariff Regulations. (9+10)	23125
12	Admissible equity base at the closing of the year 2012 – 2013 (2+11)	303966
13	Average admissible equity base for allowing returns (2+12)/2	292404

4.14.6 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%.

4.14.7 Allocation of equity base between generation function and distribution function based on ratio of the gross cost of fixed assets at the beginning of the year and addition during the year and the amount admitted is shown below:



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Rs. in Lakh						
Particulars	Opening equity base of 2013-14	Addition to equity base during 2013-14	Closing equity base of 2013-14	Average equity base of 2013-14	Return on equity (in percent)	Return admitted in APR for 2013-14
Generation	118298	1124	119422	118860	15.5	18423
Distribution	162543	22001	184544	173544	16.5	28635
Total	280841	23125	303966	292404		47058

4.14.8 The cost center-wise breakups of the amount of return now admitted in APR for 2013 – 2014 are as under:

Rs. in Lakh	
Particulars	As admitted in APR for 2013 – 2014
Generation Function	
Budge Budge	15660
Titagarh	1334
Southern	1208
New Cossipore	222
Distribution Function	28634
Total	47058

4.15 **Write-off of Intangible Assets:**

4.15.1 The amount of Rs. 72 lakh was allowed towards write-off of intangible assets in the tariff for 2013 – 2014. The actual expenditure during the year 2013 – 2014 on the same score being Rs. 72 lakh is admitted in APR for 2013 - 2014. The cost center-wise allocation is stated below:

(Rs. in Lakh)	
Particulars	Amount Admitted in APR for 2013-14
Generation Function	
Budge Budge	27
Titagarh	1
Southern	1
Distribution Function	43
Total	72

4.16 **Reserve for Unforeseen Exigencies:**

4.16.1 In terms of regulation 5.11 of the Tariff Regulations, an amount of Rs. 2489 lakh was allowed to CESC Limited in the tariff order for 2013 – 2014 towards reserve



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for unforeseen exigencies computing @ 0.25% on the projected gross value of fixed assets at the beginning of the year 2013 - 2014. The actual amount of such reserve created by CESC Limited at the same rate on the actual gross block of fixed assets as on 1 April, 2013 was Rs. 14155 lakh and amount appropriated out of profit during 2013 – 2014 is Rs. 3763 lakh. The amount of such reserve had separately been invested along with the amount of Rs. 1268 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 2013 – 2014, CESC Limited has a closing balance of Rs. 17918 lakh (Rs. 14155 lakh + Rs. 3763 lakh) in this fund. CESC Limited submitted the necessary audit certificates in this regard.

4.16.2 The actual gross value of fixed assets at the beginning of the year 2013 – 2014 is Rs. 997923 lakh. The admitted amount in APR for 2013 – 2014 is computed @ 0.25% on the gross value of opening fixed assets and the amount comes to Rs. 2495 lakh. CESC Limited has already made investment of Rs. 2495 lakh in this fund during 2013 – 2014.

4.16.3 The Cost centre-wise break-up of the amounts of such reserve now admitted in the APR for 2013 – 2014 are as under:

Rs. in Lakh

Particulars	As admitted in APR for 2013 – 2014
Generation Function	
Budge Budge	871
Titagarh	70
Southern	66
New Cossipore	13
Distribution Function	1475
Total	2495

4.17 Taxes as per Income Tax Act:

4.17.1 A total amount of Rs. 15125 lakh was provided in the tariff for the year 2013 – 2014 towards taxes payable under the provisions of Income Tax Act. The actual



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amount of taxes paid by CESC Limited for the assessment year 2013 – 2014 (previous year 2012 – 2013) came to Rs. 15480.85 lakh as certified by the statutory audit according to income tax revised return submitted on 29.03.2014 for the financial year 2012 – 2013.

4.17.2 The Commission, thus, admits the amount actually paid. The cost centre-wise allocation of the amounts of income tax admitted in APR 2013 – 2014 is as under:

Rs. in Lakh

Particulars	As admitted in APR for 2013 – 2014
Generation Function	
Budge Budge	5152
Titagarh	439
Southern	397
New Cossipore	73
Distribution Function	9420
Total	15481

4.17.3 CESC Limited has not furnished income tax assessment order for the assessment year 2014 – 2015 relating to previous year 2013 – 2014 to the Commission and hence actual amount of income tax payment has been considered in APR for 2013 – 2014. However, CESC Limited is directed to submit the relevant assessment order(s) of income tax department to the Commission.

4.18 **Performance Incentive:**

4.18.1 Schedule 10 to the Tariff Regulations provides for allowing incentives to generating companies and the licensees, as the case may be, for their improved performances. Since ARR for the concerned year was determined on prospective basis, no amounts towards such incentives were provided therein. Now that the actual performances of CESC Limited on different criteria came out from submissions, it is found eligible for incentives on following three factors:



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- (i) For generation higher than annual norms;
- (ii) For Oil consumption less than the norms;
- (iii) For gross station heat rate better than the norms.

4.18.2 CESC Limited provided detailed computations separately for each of the above three factors, following the methodologies and rates as specified in paragraphs 1, 3 and 4 of the schedule 10 to the Tariff Regulations in respect of above three factors. The calculations in this regard are presented in following table:

- (i) Incentive for generation higher than annual norms:

CESC Limited has achieved generation at Budge Budge, Titagarh and Southern generating stations higher than the generation as per annual norms of PLF for the year 2013 – 2014. The computation of incentive is given below:

Sl. No.	Factors	Unit	Budge Budge	Southern	Titagarh
1	Sent out units of generation	MU	5493.367	949.048	1629.458
	PLF Actual	%	91.2	87.9	84.5
	PLF Target	%	80	80	80
	PLF Additional	%	11.2	7.9	4.5
2	Normative sent out units of generation (6570 x 80% x 91% for Budge Budge)	MU	4782.960	-	-
	(1182.6 x 80% x 91% for Southern)	MU	-	860.933	-
	(2102.4 x 80% x 91% for Titagarh)	MU	-	-	1530.547
3	Additional Units (1-2)	MU	710.407	88.115	98.911
4	Units sold along with permissible losses to persons other than consumers and WBSEDCL	MU	102.526	-	-
5	Additional Units net off above (3-4)	MU	607.881	88.115	98.911
6	PLF achieved	%	91.16	87.90	84.48
7	Normative PLF	%	80	80	80
8	Additional PLF (6-7)	%	11.16	7.90	4.48
9	Applicable category		B	C	D
10	Applicable rate	Paise/kWh	30	32	34
11	Amount eligible (5x10/10)	Rs. in Lakh	1823.64	281.97	336.30



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(ii) Incentive for less oil consumption than the norms:

CESC Limited has consumed less oil than the normative value at Budge Budge, Titagarh and Southern generating stations during the year 2013 – 2014. The computation of incentive for less oil consumption than the norms are given below:

Sl. No.	Factors	Unit	Budge Budge	Titagarh	Southern
1	Gross generation for sales to consumers & WBSEDCL (As per Annexure – 2A of FPPCA order dated 04.03.2014)	MU	5924.001	1790.613	1042.910
2	Applicable rate of incentive	Paise/Unit	0.40	0.40	0.40
3	Amount eligible (1)x(2)/10	Rs. in Lakh	236.96	71.62	41.72

(iii) Incentive for better gross station heat rate than norms:

CESC Limited has achieved better gross station heat rate to attain incentive at Budge Budge, Titagarh and Southern generating stations during the year 2013 – 2014. The computation of incentive for better station heat rate than the norms are given below:

Sl. No.	Factors	Unit	Budge Budge	Titagarh	Southern
1	Applicable rate of incentive	Paise/Unit	0.50	1.00	0.75
2	Actual gross generation (As per Annexure – 2A of FPPCA order dated 04.03.2014)	MU	5924.001	1790.613	1042.910
3	Amount eligible (1)x(2)/10	Rs. in Lakh	296.20	179.06	78.22

4.18.3 The total amount of incentives thus arrive as under:

Sl No	Factors	Budge Budge	Titagarh	Southern	Total
1	Incentive for higher generation than norms	1823.64	336.30	281.97	2441.91
2	Savings in oil consumption	236.96	71.62	41.72	350.30
3	Better station heat rate	296.20	179.06	78.22	553.48
	Total	2356.80	586.98	401.91	3345.69





4.19 Cost of Outsourcing:

4.19.1 In terms of regulation 5.22 of the Tariff Regulations, as amended, the licensee or generating company shall furnish activity wise separately in Form 1.17(k) the outsourcing expenditure. They shall also have to specifically state the head of accounts under which such expenditure was previously booked. If any outsourcing is introduced as new activity then they shall have to mention it clearly. Cost of outsourcing shall be considered for ARR determination prospectively subject to prudent check by the Commission. CESC Limited had been allowed Rs. 932 lakh in the tariff order for 2013 – 2014. CESC Limited in their application for APR 2013 – 2014 has claimed Rs. 950 lakh as actual audited expenditure submitted in form 1.17(k) duly filled in and explained that the amount was incurred towards consumers' call handling mainly with regard to faults/pilferage reporting. It is also stated that this state-of-the-art call centre has been established and apart from dealing with consumers' complaints on supply interruptions, it is also equipped to handle pilferage complaints as well. The Commission decides to admit the amount of Rs. 932 lakh on this score in the APR for 2013 – 2014 since the item of expense is controllable in nature and the same is allocated to distribution function.

4.20 Income from Non-Tariff Sources:

4.20.1 A total amount of Rs. 7738 lakh was considered in the tariff for 2013 - 2014 towards the estimated earnings of CESC Limited from other non-tariff sources. In actual, such total income related to the core business came to Rs. 8560 lakh as per audited annual report and accounts 2013 – 2014 read with submissions in Form 1.26 to Annex – 1 of the application with the following accounts head-wise breakup:

Sl. No.	Particulars	Amount (Rs. in Lakh)
1	Rental of meters and other apparatus hired out	4401
2	Sale and repair of lamp and other apparatus	208





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3	Transfer / service connection fees	0
4	Income from investments and bank balances	1115
5	Surcharge for late payments	1346
6	Other general receipts arising from and ancillary or incidental to the business of electricity	1490
7	Net income from non-tariff sources	8560

4.20.2 The Commission admits Rs. 8560 lakh as income from non-tariff sources in APR for 2013 – 2014. The function and cost center-wise allocation of such incomes from non-tariff sources are as under:

Rs. in Lakh

Particulars	As considered in the Tariff Order	As admitted in APR for 2013 – 2014
Generation Function		
Budge Budge	740	870
Titagarh	64	73
Southern	57	68
New Cossipore	10	14
Distribution Function	6867	7535
Total	7738	8560

4.21 Income from Unscheduled Interchange (UI) of Power:

4.21.1 CESC Limited earned an amount of Rs. 397 lakh during the year from the unscheduled interchange charges. In terms of regulation 5.17.3 of the Tariff Regulations, CESC Limited being a distribution licensee is to share the amount of net income from U.I. charges with its consumers. The extent of such sharing shall be as decided by the Commission. The Commission decides that CESC Limited share the entire amount of UI charge with its consumers, including WBSEDCL.

4.22 Benefits to be passed on to Consumers & West Bengal State Electricity Distribution Company Limited (WBSEDCL):

4.22.1 The admissible gross amount of fixed charges is also to be reduced by the amount of gains derived by CESC Limited from other business and by providing





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auxiliary services. The details of such benefits provided by CESC Limited in its application for APR for 2013 – 2014 are as under:

Rs. in Lakh

Sl. No.	Sources	Revenue Received	Related Cost	Gains derived	Share to Consumers & WBSEDCL
1	2	3	4	5 (3-4)	6
1	Auxiliary services	233	132	101	40 (40%)
2	Other business	705	627	78	31 (40%)
3	User Fee	1100	0	1100	440 (40%)

4.22.2 The cost related to auxiliary services and other business has not been claimed by CESC Limited in their gross fixed charge and thus no further deduction from gross fixed charge is necessary.

4.22.3 Summing up the analysis and findings in preceding sub-paragraphs, the benefits passed on to the consumers and other licensees allocated to the distribution system are as below:

Rs. in Lakh

Particulars	Other Aux. Service	Other Business	User fee	Total
Generation Function				
Budge Budge	-	-	-	0
Distribution Function	40	31	440	511
Total	40	31	440.00	511

4.23 Admissibility of recovery of full Capacity Charges as per provisions of regulation 6.4.2 of the Tariff Regulations:

4.23.1 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, since all the generating stations of CESC Limited have achieved availability more than the targeted availability, CESC Limited is entitled to recover full capacity charges during 2013 – 2014.



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4.24 Based on the foregoing analyses, the total amount of fixed charges allowable separately for each of the generating stations and distribution functions of CESC Limited have been shown in Annexure 2A. As may be seen there-from, the allowable fixed charges come as under:

Sl. No.	Particulars	Amount (Rs. in Lakh)
		As admitted on APR for 2013 - 2014
1	Generation Function	
	Budge Budge	66198.80
	Titagarh	15109.98
	Southern	9583.91
	New Cossipore	6689.00
2	Distribution Function	174503.00
	Total	272084.69



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Annexure – 4A

Sl. No.	Head of Accounts	As admitted in APR (Amount in Rs. in lakh)					Total
		Budge Budget	Titagarh	Southern	New Cossipore	Distribution & Selling Activity	
1(a)	Employee Cost	4551.00	5602.00	3788.00	3001.00	49806.00	66748.00
1(b)	Arrear payment due to wage revision	470.00	579.00	391.00	310.00	5145.00	6895.00
1(c)	Contracted manpower in regular establishment in generating stations	2016.00	587.00	0.00	905.00	0.00	3508.00
2	Water Charges/Cess	6.00	136.00	66.00	10.00	0.00	218.00
3	Coal & Ash Handling Charges	542.00	534.00	131.00	13.00	0.00	1220.00
4	Operation & Maintenance Expenses including employee cost on contract in regular establishment	8265.00	3074.00	1760.00	1720.00	26062.00	40881.00
5	Rent	0.00	0.00	32.00	0.00	0.00	32.00
6	Rates & Taxes (other than Income Tax)	252.00	84.00	18.00	13.00	269.00	636.00
7	Insurance	390.00	83.00	48.00	12.00	244.00	777.00
8	Lease Rental	0.00	0.00	130.00	0.00	983.00	1113.00
9	Cost of Outsourcing	0.00	0.00	0.00	0.00	932.00	932.00
10	Interest on Capital Borrowings including interest on normative borrowings	7873.00	442.00	328.00	12.00	20458.00	29113.00
11	Interest on Working Capital	0.00	0.00	0.00	0.00	0.00	0.00
12	Interest on Temporary Accommodation	2510.00	911.00	510.00	228.00	3153.00	7312.00
13	Interest on Consumer's Security Deposit	0.00	0.00	0.00	0.00	7889.00	7889.00
14	Foreign Exchange Rate Variations (FERV)	0.00	0.00	0.00	0.00	0.00	0.00
15	Other Finance Charges	326.00	118.00	66.00	30.00	408.00	948.00
16	Bad Debt	0.00	0.00	0.00	0.00	2651.00	2651.00
17	Depreciation	12320.00	469.00	242.00	110.00	19784.00	32925.00
18	Advance against Depreciation	3481.00	133.00	68.00	31.00	5590.00	9303.00
19	Written off Intangible Assets	27.00	1.00	1.00	0.00	43.00	72.00
20	Returns on Equity	15660.00	1334.00	1208.00	222.00	28634.00	47058.00
21	Reserve for Unforeseen Exigencies	871.00	70.00	66.00	13.00	1475.00	2495.00
22	Income Tax	5152.00	439.00	397.00	73.00	9420.00	15481.00
23	Performance Incentive	2356.80	586.98	401.91	0.00	0.00	3345.69
24	Gross Fixed Charges (1 to 23)	67068.80	15182.98	9651.91	6703.00	182946.00	281552.69
	Less: Adjustment						
25	Income from Non-Tariff Sources	870.00	73.00	68.00	14.00	7535.00	8560.00
26	Income from UI Charge	0.00	0.00	0.00	0.00	397.00	397.00
27	Benefits passed on for Auxiliary Service	0.00	0.00	0.00	0.00	40.00	40.00
28	Benefit attributable to consumers for other business	0.00	0.00	0.00	0.00	31.00	31.00
29	Benefit passed on for User fee	0.00	0.00	0.00	0.00	440.00	440.00
30	Total (25 to 29)	870.00	73.00	68.00	14.00	8443.00	9468.00
31	Net Fixed Charge for 2013 - 14 (24-30)	66198.80	15109.98	9583.91	6689.00	174503.00	272084.69



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CHAPTER – 5 AMOUNT ADJUSTABLE ON ANNUAL PERFORMANCE REVIEW

- 5.1 Based on the forgoing analyses and admissions of the adjustments under different uncontrollable factors / elements of fixed charges and fuel and power purchase cost, the re-determined allowable fixed charges for generation and distribution functions as well as fuel and power purchase cost of CESC Limited during the year 2013 – 2014 came as under:

Particulars	Amount (Rs. in Lakh)					Total
	Budge Budge	Generation			Distribution	
		Titagarh	Southern	New Cossipore		
Admitted Fuel Cost excluding gain on improved distribution loss as per paragraph 3.27 of Chapter 3	130734.53	45820.09	24978.18	10932.67	0.00	212465.47
Admitted Power Purchase Cost excluding gain on improved distribution loss	0.00	0.00	0.00	0.00	89104.49	89104.49
Additional amount on account of savings in the rate of Distribution loss	0.00	0.00	0.00	0.00	2626.06	2626.06
Total Fuel and Power Purchase Cost including gain on improved distribution loss	130734.53	45820.09	24978.18	10932.67	91730.55	304196.02
Fixed charge	66198.80	15109.98	9583.91	6689.00	174503.00	272084.69
Total	196933.33	60930.07	34562.09	17621.67	266233.55	576280.71

- 5.2 Gains through better performance in Distribution Loss than the Norms:
- 5.2.1 In terms of paragraph D of Schedule 9B of the Tariff Regulations, gains accruing to a distribution licensee due to its performance in distribution loss being better than the norms of distribution loss in any year may be retained by that distribution licensee in that year subject to gain sharing applicable separately for fuel cost of own generation as specified in paragraph A of Schedule 7A of the Tariff



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Regulations during Fuel and Power Purchase Cost (FPPC) determination. In terms of paragraph 3.21.1 of this order, CESC Limited saved 287.720 MU for better performance in distribution loss than the norms and they have been allowed to retain the benefit for such savings amounting to Rs. 8841.06 lakh during FPPC determination in chapter 3 of this order.

5.2.2 In terms of paragraph 5.1 above, the total admitted variable and fixed cost including gain in improved distribution loss in APR for 2013 – 2014 of CESC Limited for sale of energy to consumers and WBSEDCL comes to Rs. 576280.71 lakh for 8632.832 MU of energy @ 667.54 paise / kWh. Units saved through reduction of distribution loss in 2013 – 2014 is 287.720 MU and therefore CESC Limited is allowed to retain the revenue earned i.e., Rs. 19206.46 lakh (287.720 MU x 667.54 paise/kWh) subject to adjustment of gain sharing accruing to them amounting to Rs. 8841.06 lakh as specified in paragraph 5.2 above. The net adjustment with the actual revenue realized from such savings in sale of energy to own consumers and WBSEDCL comes to Rs. 10365.40 lakh (Rs. 19206.46 lakh – Rs. 8841.06 lakh).

5.3 The Commission is now to see how much sales revenue had been earned by CESC Limited by way of sale of power to the consumers and WBSEDCL with reference to its audited accounts. The figure comes as under vide form 1.25:

Sl. No.	Particulars	Amount (Rs. in Lakh)
1	Earnings from sale of electricity (Net of the amount of Advance Depreciation) as per Note 23(a) of Notes on audited accounts of CESC Limited	544516.00
2	Add: Advance against depreciation (As per note 23(c) of Notes on Accounts under Note 13)	6267.00
3	Add: Adjustment effects of previous orders	-95.00
4	Gross earnings from sale of energy	550688.00
5	Less: Earnings from sale of energy to persons other than own consumers and WBSEDCL	2316.00
	Actual revenue realized from sale of Energy to own consumers and WBSEDCL	548372.00

5.4 In terms of paragraph 5.3 above, Rs. 10365.40 lakh is to be adjusted against actual revenue realized from sale of energy for 2013 – 2014 amounting to Rs.





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548372.00 lakh. Accordingly, the actual revenue realized by CESC Limited from sale of energy to own consumers and WBSEDCL comes to Rs. 538006.60 lakh (Rs. 548372.00 lakh – Rs. 10365.40 lakh) and the same is allocated to different generating stations and distribution function as below:

Rs. in Lakh

Particulars	Amount
Generation Function	
Budge Budge	184157.94
Titagarh	58230.70
Southern	33453.06
New Cossipore	15106.60
Distribution Function	247058.30
Total	538006.60

5.5 As it comes out from the findings in paragraphs 5.1 and 5.5 above, CESC Limited is to realize an amount of Rs. 37755.08 lakh (Rs. 576280.71 Lakh – Rs. 538525.63 Lakh) with cost centre-wise breakup as given below:

Rs. in Lakh

Particulars	Amount Recovered from sale of power	Fuel & Power Purchase Cost	Fixed Charges	Total Recoverable	Balance recoverable
1	2	3	4	5 (3)+(4)	6 [(5)-(2)]
Generation Function					
Budge Budge	184157.94	130734.53	66198.80	196933.33	12775.39
Titagarh	58230.70	45820.09	15109.98	60930.07	2699.37
Southern	33453.06	24978.18	9583.91	34562.09	1109.03
New Cossipore	15106.60	10932.67	6689.00	17621.67	2515.07
Distribution Function	247058.30	91730.55	174503.00	266233.55	19175.25
Total	538006.60	304196.02	272084.69	576280.71	38274.11



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5.6 In the tariff order for the year 2017 – 2018 in respect of CESC Limited, the Commission, inter-alia directed CESC in paragraph 8.23 of the order as follows:

“8.23 CESC is further directed to submit the following sets of information, in absence of which the Commission is seriously constrained to deal with the APR petitions for the year 2013-14 onwards filed by CESC. In this connection, it is pertinent to mention that CESC was asked to furnish these documents on several occasions, but complete details are yet to be made available by them to this Commission. The particulars required to be furnished are given below:

- A) For arriving at the price of washed coal:
- i) Input cost of raw coal.
 - ii) Yield % of raw to washed coal with relevant documents.
 - iii) Washing charge based on Capital invested in washery and relevant supporting documents.
 - iv) Other charges relevant for pricing of the washed coal upto the end consumption point i.e. CESC Budge Budge plant.
 - v) Quality of washed coal in terms of GCV, ash content (%) and total moisture.
- B) Copy of Power Purchase Agreement between Crescent Power and other generator/traders from whom CESC has been procuring power for their licensed areas.
- C) Balance Sheet, Profit & Loss account with necessary schedules for the areas pertaining to mining & washery for last 5 years (2012-13) onwards.
- D) Documents on quality of coal of their captive mine located at Sarisatoli and GCV of such coal raised by them, duly certified by the appropriate/competent authority.



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- E) A declaration to the effect that quantity of coal consumed in Metric Ton is not less than procurement, with relevant document after adjusting and taking care of opening and closing stock.

All such inputs shall be furnished by CESC within 30 days of issuing this order, failing which the Commission will have no other alternative but to follow:

- a) The bench mark cost/price followed in respect of similar activities for washed coal;
- b) The GCV as has been documented in the mining plan/other documents earlier furnished by CESC to this Commission; and/or impose penalty/take further appropriate action, at the time of disposal of APR petitions of CESC for 2013-14 onwards.”

CESC Limited submitted the documents as sought for in paragraphs (B), (C), (D) and (E) above. CESC Limited also submitted the information / data regarding washed coal as sought for in (A) above. It is found from the information / data furnished by CESC Limited regarding washed coal that the washing of coal from their captive mines at Sarishatoli is a mandatory requirement as per directions of the Pollution Control Board and this Commission has no jurisdiction to take any other decision regarding washing of coal. The cost of washing by CESC Limited and its consequent impact on the cost of power has been compared with similar activities of other utilities and found to be economic. Moreover, the tariff impact is insignificant. However, a special order directing CESC Limited regarding procurement of power from Crescent Power Limited has been issued separately.

- 5.7 In terms of regulation 2.6.6 of the Tariff Regulations, the entire recoverable amount of Rs. 38274.11 lakh or a part thereof shall be adjusted with the amount of Aggregate Revenue Requirement for the year 2018-2019 or that for any other ensuing year or through a separate order, as may be decided by the Commission. The decision of the Commission in this regard will be given in the



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- tariff order of CESC Limited for the year 2018-19 or any ensuing year or in a separate order.
- 5.8 CESC Limited is directed to provide actual audited figure for each head of expenditure whether controllable or uncontrollable properly allocating between generation and distribution functions in their APR petition for the ensuing years and to comply with the directions given in different chapters in this order. CESC Limited may, however, submit reconciliation statement for each head of expenses necessitating any adjustment separately.
- 5.9 CESC Ltd. is to consider for arranging of purchase of power from different source(s) (including from exchanges) other than the existing sources having supply pattern and cost involvement/economics more favourable for consumers of CESC Ltd. Also CESC Ltd. shall reduce its dependency on costlier thermal sources, in order to contain the rise in retail price of the consumers in future vis-à-vis supply of quality power in a better way.
- 5.10 CESC Limited is to take a note of this order.

Sd/-
(PULAK KUMAR TEWARI)
MEMBER

Sd/-
(DURGADAS GOSWAMI)
MEMBER

Sd/-
(SUTIRTHA BHATTACHARYA)
CHAIRPERSON

DATED: 02.03.2020

(T. K. MUKHERJEE)
SECRETARY



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