



ORDER
OF THE
WEST BENGAL ELECTRICITY REGULATORY
COMMISSION

IN CASES NO.:
FPPCA – 86/ 17 – 18 AND
APR – 62 / 17 – 18

IN REGARD TO THE APPLICATIONS OF THE WEST
BENGAL POWER DEVELOPMENT CORPORATION
LIMITED FOR FUEL COST ADJUSTMENT (FCA)
AND ANNUAL PERFORMANCE REVIEW (APR) FOR
THE FINANCIAL YEAR 2016 – 2017

DATE: 13.07.2022



CHAPTER – 1 PREAMBLE

- 1.1 The regulation 2.6 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time (hereinafter referred to as the 'Tariff Regulations'), mandates that the generating companies are required to go through an Annual Performance Review (in short 'APR'). Accordingly, West Bengal Power Development Corporation Limited (hereinafter referred to as 'WBPDCCL') submitted their application for Annual Performance Review for 2016 – 2017 on 29.11.2017. Prior to submission of APR 2016 – 17, WBPDCCL has also submitted Fuel Cost Adjustment (hereinafter referred to as "FCA") application for 2016 – 17 on 16.10.2017 separately for each of the following generating stations for the financial year 2016 – 17. The Commission admitted the FCA and APR application and numbered them as FPPCA – 86 / 17 – 18 and APR – 62/17 – 18 respectively.
- A) Kolaghat Thermal Power Station (KTPS),
 - B) Bakreswar Thermal Power Station (BkTPS),
 - C) Bandel Thermal Power Station (BTPS),
 - D) Santaldih Thermal Power Station (STPS),
 - E) Sagardighi Thermal Power Station Stage I (SgTPS Stg I)
 - F) Sagardighi Thermal Power Station Stage II (SgTPS Stg II)
- 1.2 On admission of the APR and FCA applications, WBPDCCL was directed to publish the gist of the APR and FCA applications of 2016 – 2017, as submitted by WBPDCCL and approved by the Commission. Accordingly, the gist was published simultaneously on 15.09.2021 in the 'The Times of India', the 'Ei Samay', the 'Aajkal' and the 'Sanmarg'. The publication requested for submission of suggestions and objections from the members, if any, on the application to the Commission within 21 days from the date of publication of the gist. The approved gist along with the APR petition for 2016 – 2017 was also published on the website of WBPDCCL. Opportunities were also afforded to all to inspect the application and take copies thereof.
- 1.3 Against such gist publications of APR of WBPDCCL for the year 2016 – 2017, no objection and suggestions have been received from any person within last date of submission.



CHAPTER – 2

COMPUTATIONS OF THE ALLOWABLE FUEL COST

- 2.1 In this part of the order, the Commission takes up the determination of fuel cost allowable to WBPDCCL on the quantum of power sold by it to WBSEDCL during the financial year 2016 – 2017 along with any gain arises from the performance of different generating stations of WBPDCCL over the operating norms set by the Commission.
- 2.2 The Fuel and Power Purchase Cost Adjustments (in short “FPPCA”) during the referred adjustment period, i.e., financial year 2016 – 2017, are to be ascertained by following the formula as enunciated by the Commission in Part – B of Schedule – 7A to the Tariff Regulations.
- 2.3 Further, paragraph A of Schedule 9B to the Tariff Regulations, contains provisions for sharing the gains for coal fired thermal power stations, if any, on account of its better performances over the operating norms set by the Commission. The operational parameters which are to be considered for such sharing the gains accrued to the generating stations are:
- (i) Gain Sharing for Better Oil Consumption Rate;
 - (ii) Gain Sharing for Better Auxiliary Consumption Rate;
 - (iii) Gain Sharing for Better Gross Station Heat Rate

Further, in terms of paragraph D of Schedule 9B to the Tariff Regulations, the sharable gains shall be used first to compensate the deficit in fixed charge recovery of the concerned generating station of the generating company, in case the availability of the generating station falls below the availability norm and only thereafter the balance, if any, shall be passed on to the consumers/ beneficiaries.

- 2.4 Before ascertaining the amount of admissible fuel cost as well as the amount of gains to be shared with the beneficiary (WBSEDCL) under the provisions of the Tariff Regulations explained in paragraph 2.3 above, the actual performances of WBPDCCL in



Order on FCA and APR of WBPDCCL for the year 2016-17

comparison to the operational norms set by the Commission in the Tariff Order for the concerned year needs to be reviewed. Such comparisons are made hereunder:

Sl No	Generating Station	Particulars	Unit	As per Tariff Order / Norms	As per Actual
1	Kolaghat	Rate of Auxiliary Consumption	%	9.60	10.85
		Specific Consumption of Oil	ml/kWh	2.00	2.02
		Station Heat Rate	kCal/kWh	2700	2735
2	Bakreswar	Rate of Auxiliary Consumption	%	9.00	9.95
		Specific Consumption of Oil	ml/kWh	1.30	0.76
		Station Heat Rate	kCal/kWh	2470	2489
3	Bandel	Rate of Auxiliary Consumption	%	9.70	11.48
		Specific Consumption of Oil	ml/kWh	2.15	6.66
		Station Heat Rate	kCal/kWh	2725	3013
4	Santalidih	Rate of Auxiliary Consumption	%	9.00	8.26
		Specific Consumption of Oil	ml/kWh	1.00	0.26
		Station Heat Rate	kCal/kWh	2425	2496
6	Sagardighi Stg I	Rate of Auxiliary Consumption	%	9.00	12.77
		Specific Consumption of Oil	ml/kWh	1.00	1.01
		Station Heat Rate	kCal/kWh	2345	2375
7	Sagardighi Stg II post stabilization period #	Rate of Auxiliary Consumption	%	9.00	6.94
		Specific Consumption of Oil	ml/kWh	1.00	10.44
		Station Heat Rate	kCal/kWh	2424	2491

Note:

- 1) The Commission in the Tariff Order dated 07.07.017 of Sagardighi Stg II for 2016 – 17 has provisionally considered the Auxiliary Power Consumption rate as 5.25% as set by CERC for the same standard and capacity of generating station, since the necessary technical parameters for determination of APC rate have not been submitted by WBPDCCL. However, for computation of FCA, the Commission considered the APC rate as per the norms set in the Tariff Regulations.
- 2) The Commission in its Order dated 12.04.2022 in Case No. OA – 362/ 20 – 21 has directed that the Station Heat Rate of SgTPP Stg II will be considered as 2424 kCal/kWh instead of 2276 kCal/kWh as mentioned in Schedule 9A to the Tariff Regulations with effect from the date of COD of SgTPP II and the effect of the enhanced station heat rate will be given by the Commission at the time of determination of FCA for the years from 2016 – 17. Accordingly, the same has been considered for computation of FCA in this order.

The computations of actual Rate of Auxiliary Consumption, Specific Consumption of Oil and Station Heat Rate achieved are shown in Annexure – 2A.

- 2.4.1 As observed from above, actual performances of Bakreswar generating station relating to specific oil consumption, Santaldih generating station relating to the auxiliary energy consumption and specific oil consumption and Sagardighi Stage II generating station



Order on FCA and APR of WBPDCCL for the year 2016-17

relating to the auxiliary energy consumption qualify for deriving gains for sharing subject to the condition stipulated in paragraph D of Schedule 9B to the Tariff Regulations.

WBPDCCL in their APR application has submitted the actual availability vis-à-vis the normative availability of the following stations as tabulated below:

SI No	Generating Stations	Normative Availability	Actual Availability
1	Bakreswar TPS	85.00%	84.84%
2	Santaldih TPS	85.00%	91.95%
3	Sagardighi TPS Stg II	85.00%	22.10%

Therefore, from the above, it transpires that the gains on improved performance of Santaldih TPS will be shared with WBSEDCL. However, the sharable gains on improved performance of Bakreswar TPS and Sagardighi TPS Stage II shall be used to compensate the deficit in fixed charge recovery of the concerned generating stations as stipulated in paragraph D of Schedule 9B to the Tariff Regulations. The amount of gain and its share shall be determined in the subsequent paragraphs.

2.5 Determination of Allowable Fuel Cost:

2.5.1 The consumption of fuel and costs thereon submitted by WBPDCCL for its different generating stations in operation for the year 2016 – 2017 is tabulated below:

SI No	Particulars	Unit	Generating stations					
			Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi-I	Sagardighi-II
(i)	Station Heat Rate (Normative)	kCal/kWh	2700	2470	2725	2425	2345	2322
(ii)	Rate of Oil Consumption (Normative)	ml/kWh	2.00	1.30	2.15	1.00	1.00	1.00
(iii)	Weighted Average Actual Calorific Value of Oil	kCal/lit	9216.856	9317.867	9291.834	9553.563	9337.319	9337.319
(iv)	Weighted Average Actual Heat Value of Coal	kCal/kg	3193.70	3880.03	3802.13	3902.68	3889.89	4098.76
(v)	Weighted Average Actual Price of Oil	Rs/kl	38785.86	40861.99	38605.51	58892.21	39909.34	40829.24
(vi)	Weighted Average Actual Price of Coal	Rs/MT	3314.24	3658.76	4246.24	3378.19	4278.01	4408.47



Order on FCA and APR of WBPDCCL for the year 2016-17

2.5.2 The first two of the above factors, i.e., the station heat rate and the rate of consumption of oil will be considered based on the norms specified by the Commission. The weighted average calorific value of oil and the weighted average heat value of coal are the variable factors depending upon the actual mix of different grades of fuel used in operation. The declared heat value of each grade of coal varies within a range. The weighted average heat value of coal considered at the tariff fixation level was based on the minimum value of the range of each projected grade of coal and is subject to adjustments in terms of regulation 5.8.1(i) of the Tariff Regulations.

2.5.3 Generation:

Gross generation of each of the stations has been estimated by taking into consideration the ex-bus injection schedule and normative auxiliary consumption.

2.5.4 Auxiliary Consumption:

The quantum of auxiliary consumptions at the generating station as per the norms fixed by the Commission is as under:

Generating station	Scheduled Injection (MU)	Normative Rate (%)	Normative Auxiliary Consumption (MU)	Admissible Gross Generation (MU)
	(1)	(2)	$(3) = ((1) / (1 - (2))) - (1)$	$(4) = (1) + (3)$
Kolaghat	5347.950	9.60%	567.92	5915.870
Bakreswar	6366.469	9.00%	629.65	6996.119
Bandel	1670.630	9.70%	179.46	1850.090
Santalalih	3357.191	9.00%	332.03	3689.221
Sagardighi Stg I	3318.218	9.00%	328.18	3646.398
Sagardighi Stg II	940.028	9.00%	92.97	1032.998
Total	21000.486			23130.696

2.5.5 Weighted Average GCV of Oil:

WBPDCCL has presented their detailed audited computations of the weighted average calorific value of oil for each of the generating stations with reference to the month-wise supplies received by them. As this is a variable factor depending on the grades of oil used, the Commission has considered the same for working out the amount of allowable fuel cost.



2.5.6 Heat Value of Coal:

On basis of data submitted by WBPDCCL in their FCA application, the Commission has decided to determine and admit UHV of coal received in the process as outlined in Regulation 5.8.15 of the Tariff Regulations. However, conversion from GCV to UHV, in terms of regulation 5.8.15 of the Tariff Regulations, is not required for imported / washed coal. Such coals contain lesser ash and are of -50 mm in size and is not categorized under different grades of coal of Coal India Limited. The Commission proceeds to determine and admit the heat value of coal received in the process as per the provisions of Regulation 5.8.15 of the Tariff Regulation. Detailed computations are shown in Annexure – 2C1 to 2C6 to this chapter. The Heat Values so determined are 2935.18 kCal/kg, 3619.88 kCal/kg, 3592.48 kCal/kg, 3849.10 kCal/kg, 3686.06 kCal/kg and 3913.40 kCal/kg for Kolaghat, Bakreswar, Bandel, Santaldih, Sagardighi Stg I and Sagardighi Stg II respectively and those values are lower than the submitted heat values as mentioned in paragraph 2.5.1 above. Thus, the admitted heat values of coal for different generating stations considering regulation 5.8.1 (i) of the Tariff Regulations is given hereunder:

Generating station	Heat Value of Coal (kCal/kg)
Kolaghat	3193.70
Bakreswar	3880.03
Bandel	3802.13
Santaldih	3902.68
Sagardighi Stg I	3889.89
Sagardighi Stg II	4098.76

2.5.7 Permitted Transit & Handling Loss of Coal:

As specified in Part A of the Schedule 9A to the Tariff Regulations, transit and handling losses of coal allowable to WBPDCCL is 0.80% for Kolaghat, Bandel, Santaldih, Sagardighi Stg I and Sagardighi Stg II generating stations. The same is 0.50% for Bakreswar generating station. The allowable quantum of coal requirement at such provision of loss in different generating stations is shown in item no. 15 of the statement at Annexure – 2B.



2.5.8 Average Price of Oil and Coal:

The Commission observes that WBPDCCL has purchased coal from CIL Subsidiaries. The cost prices are as per the basic price of coal as notified by Coal India Limited along with royalty, taxes and duties. From the submission of WBPDCCL, the Commission observes that the coal is transported through rail mode only and thus only railway freight charges are applicable as per the freight rate of Indian Railways.

The prices of coal and oil as submitted in paragraph 2.5.1 above are inclusive of freight / transportation charges. The Commission admits the price of coal and oil as determined based on the figures as per Notes on Accounts under note 71 to the Annual Accounts for 2016 - 17.

2.5.9 Excess Cost of Oil claimed on account of forced backdown:

- 2.5.9.1 WBPDCCL submitted in its application that part of the consumption of oil (Light Diesel Oil) at Kolaghat, Bakreswar, Bandel, Santaldih and Sagardighi Stg I Generating Stations was due to forced back-down on several occasions when State Load Despatch Centre (in short "SLDC") issued instruction to de-synchronize the generating units. The re-synchronization of the units could be done only on obtaining clearance from SLDC.
- 2.5.9.2 As such, since the de-synchronization and re-synchronization involving additional quantity of oil consumption were beyond the control of the generating station, WBPDCCL prayed for allowing the recovery of an amount of Rs. 403.76 lakh, Rs. 122.09 lakh, Rs. 95.74 lakh, Rs. 71.26 lakh and Rs. 160.02 lakh against Kolaghat, Bakreswar, Bandel, Santaldih and Sagardighi Stg I Generating Stations respectively in this regard through energy charges for the year 2016 – 2017. In addition to the aggregate amount of Rs. 852.87 lakh (as mentioned above) for the year 2016 – 2017, WBPDCCL has further submitted an aggregate claim for Rs. 4134.90 lakh towards additional quantity of oil consumption for prior periods i.e., for the years 2010 – 11, 2011 – 12, 2012 – 13 and 2013 – 14. WBPDCCL has sought review of the relevant FCA Orders. The station-wise detailed claims for additional oil consumption for 2016-17 have been tabulated below:



Order on FCA and APR of WBPDCCL for the year 2016-17

SI No	Plant	No. of Instances where Units were desynchronized as per direction of SLDC	Oil Consumption (in Kl)	Cost of such Oil Consumption (in Rs Lakh)
1	Kolaghat TPS	23	1041.00	403.76
2	Bakreswar TPS	6	298.78	122.09
3	Bandel TPS	11	248.00	95.74
4	Santaldih TPS	2	121.00	71.26
5	Sagardighi TPS Stg I	6	400.95	160.02
Total Oil Consumption due to desynchronization of Unit				852.87

2.5.9.3 The Commission has observed from the documents submitted by WBPDCCL that the generating units of Kolaghat, Bakreswar, Bandel, Santaldih and Sagardighi TPS which had to be de-synchronized as per the instruction from SLDC are due to low system demand in normal condition which has already been taken into consideration during fixation of norms. Thus, the Commission does not consider the claim of expenses for excess consumption of oil for the generating stations for 2016 – 17. Further, WBPDCCL's claims for expenses for excess consumption of oil during 2010 – 11, 2011 – 12, 2012 – 13 and 2013 - 14 which have been disallowed by the Commission, are not required to be dealt with in the instant FCA application of 2016 – 17.

2.5.10 Gains on account of better performances over the operating norms:

2.5.10.1 As detailed in para 2.4.1 above, gain for Bakreswar TPS due to improved specific oil consumption is given below:

Particulars	Unit	Bakreswar TPS
Specific Consumption of Oil as per Norms	ml/kWh	1.30
Actual Oil Consumption	ml/kWh	0.76
Category		Category B
Sharing Ratio as per SI No. 3 of Category B		65% : 35%
Total Gross Generation	in MU	6996.119
Price of Oil	Rs/ KL	40861.99
GAIN	in Rs Lakh	1543.73
Share % of WBSEDCL	%	35
Share of WBSEDCL	in Rs Lakh	540.30



Order on FCA and APR of WBPDCCL for the year 2016-17

2.5.10.2 Similarly, the gain for Santaldih TPS due to improved specific oil consumption is given below:

Particulars	Unit	Santaldih TPS
Specific Consumption of Oil as per Norms	ml/kWh	1.00
Actual Oil Consumption	ml/kWh	0.26
Category		Category A
Sharing Ratio as per SI No. 3 of Category A		70% : 30%
Total Gross Generation	in MU	3689.221
Price of Oil	Rs/ KL	58892.21
GAIN	in Rs Lakh	1607.77
Share % of WBSEDCL	%	30
Share of WBSEDCL	in Rs Lakh	482.33

2.5.10.3 The gain for Santaldih TPS due to improved auxiliary energy consumption is given below:

Particulars	Unit	Santaldih TPS
Normative Auxiliary Consumption	%	9.00%
Actual Auxiliary Consumption	%	8.26%
Category		Category B
Sharing Ratio as per SI No. 2 of Category B		70% : 30%
Normative Auxiliary Consumption	in MU	332.03
Actual Auxiliary Consumption	in MU	302.90
Savings in Auxiliary Consumption	in MU	29.14
Cost of Generation	in Rs/kWh	2.38
GAIN	in Rs Lakh	693.68
Share % of WBSEDCL	%	30
Share of WBSEDCL	in Rs Lakh	208.10

2.5.10.4 Similarly, the gain for Sagardighi TPS Stg II due to improved auxiliary energy consumption is given below:

Particulars	Unit	Sagardighi TPS Stg II
Normative Auxiliary Consumption	%	9.00%
Actual Auxiliary Consumption	%	6.94%
Category		Category B
Sharing Ratio as per SI No. 5 of Category B		85% : 15%
Normative Auxiliary Consumption	in MU	92.97
Actual Auxiliary Consumption	in MU	70.09
Savings in Auxiliary Consumption	in MU	22.88
Cost of Generation	in Rs/kWh	2.92
GAIN	in Rs Lakh	668.50
Share % of WBSEDCL	%	15
Share of WBSEDCL	in Rs Lakh	100.28



2.5.10.5 The share of WBSEDCL out of total gain on account of improved specific oil consumption and auxiliary energy consumption of Santaldih TPS is Rs. 690.43 lakh (Rs. 482.33 lakh + Rs. 208.10 lakh). The treatment of sharing of gain shall be given in subsequent chapter.

2.5.10.6 The share of WBSEDCL on account of improved specific oil consumption of Bakreswar TPS is Rs. 540.30 lakhs and is to be compensated with the deficit in fixed charge recovery of the Bakreswar TPS in terms of paragraph D of Schedule 9B to the Tariff Regulations. The treatment of sharing of gain, if any, shall be given in subsequent chapter.

2.5.10.7 The share of WBSEDCL on account of improved auxiliary energy consumption of Sagardighi TPS Stg II is Rs. 100.28 lakhs and is to be compensated with the deficit in fixed charge recovery of the Sagardighi TPS Stg II in terms of paragraph D of Schedule 9B to the Tariff Regulations. The treatment of sharing of gain, if any shall be given in subsequent chapter.

2.5.11 Cost on account of Stabilization Period i.r.o Sagardighi TPS Stage II:

2.5.11.1 Sagardighi TPS Stage II consisting of Unit III and Unit IV achieved COD during 2016 – 17 on 01.07.2016 and 20.12.2016 respectively. WBPDCCL vide letter dated 03.09.2021 has submitted that the Stabilization Period of Unit III was till 27.12.2016 and that of Unit IV was till 17.06.2017. Therefore, Unit IV was under stabilization period for the entire 2016 – 17. From the submission of WBPDCCL, it is observed that the actual rate of oil consumption during the stabilization period was 18.80 ml/kWh and the actual Station Heat Rate achieved during the said period was 2671 kCal/kWh. Therefore, as per Note (iii) and (ix) to Paragraph A of the Schedule 9A of the Tariff Regulations, the additional gross Station Heat Rate of 50 kCal/kWh and oil consumption of 3.5 ml/kWh is allowable.

2.5.11.2 WBPDCCL vide letter dated 03.09.2021 submitted that the sent out scheduled generation during the stabilization period of Unit III and Unit IV is 468.85 MU. Now, considering the additional Station Heat Rate and Oil Consumption along with other generating parameters reflected above, the additional allowable Fuel Cost due to relaxed norms as computed in Annexure 2D is Rs. 833.02 lakhs.



2.5.12 Cost on account of Infirm Power i.r.o Sagardighi TPS Stage II:

2.5.12.1 WBPDCCL in their FCA application has claimed an amount of Rs. 6744.38 lakhs as Fuel Cost incurred for sale of infirm power i.r.o Sagardighi TPS Stage II. The same is provided with an Auditors Certificate.

2.5.12.2 The Commission considers the claim of WBPDCCL amounting to Rs. 6744.38 lakhs as fuel cost of infirm power i.r.o Sagardighi TPS Stage II.

2.5.12.3 The Commission in its Tariff Order dated 07.07.2017 i.r.o Sagardighi TPS Stage II for 2016 – 17 has approved the recovery of fuel cost for sale of infirm power from the power recipient (WBSEDCL) @ 217.23 p/kWh. Therefore, the amount recovered from WBSEDCL for sale of 90.642 MU of infirm power comes as Rs. 1969.02 lakhs.

2.5.12.4 The entire amount of the short recovery of fuel cost i.e., Rs. 4775.36 lakh will be added to the finally approved project cost of the generating station.

2.5.13 C_D: Cost Disallowable:

The factor C_D, as referred to in the formula, stands for cost as to be found disallowable by the Commission as having been incurred in breach of economic generation or of order / direction of the Commission, if any, or for any other reason considered sufficient by the Commission during the adjustment period and adjusted corresponding to actual level of sales. As the unit rates of energy charges from the generating stations have been worked out based on normative parameters, no further cost disallowance is required on this account.

2.5.14 On careful consideration of all the related facts and factors as stated above, the Commission worked out the amount of fuel cost that can be allowed to WBPDCCL for each of its referred generating stations in commercial operation for the actual level of sale of energy to WBSEDCL during 2016 – 2017 as shown hereunder:

Generating station	Admissible Cost of Fuel
	(Rs. in Lakh)
Kolaghat	170542.12
Bakreswar	166681.56



Order on FCA and APR of WBPDCCL for the year 2016-17

Generating station	Admissible Cost of Fuel
	(Rs. in Lakh)
Bandel	57877.27
Santaldih	79930.03
Sagardighi Stg I	95875.91
Sagardighi Stg II	27466.31
Total	598373.20

2.6 The Commission now views the actual performance of different generating stations of WBPDCCL with reference to admitted parameters and cost allowed in the tariff order for 2016 – 2017. Summarized details are given in the table below:

Generating Stations	Admissible Fuel Cost		Ex-bus Generation sold to Licensee		Average Fuel Cost per unit of sales to Licensee	
	As per Tariff Order (Rs. in lakh)	As allowed in FCA (Rs. in lakh)	As per Tariff Order (MU)	As allowed in FCA (MU)	As per Tariff Order (Paise/kWh)	As allowed in FCA (Paise/kWh)
Kolaghat	171452.70	170542.12	6984.59	5347.950	245.47	318.89
Bakreswar	144849.77	166681.56	6695.78	6366.469	216.33	261.81
Bandel	70042.95	57877.27	2591.61	1670.630	270.27	346.44
Santaldih	69209.91	79930.03	3188.64	3357.191	217.05	238.09
Sagardighi Stg I	83121.65	95875.91	3826.37	3318.218	217.23	288.94
Sagardighi Stg II	77066.25	27466.31	3420.10	940.028	225.33	292.19
Total	615743.23	598373.20	26707.09	21000.486	230.55	284.93

2.7 Summing up the findings as explained in the earlier paragraphs, the amount of admissible fuel cost for different generating station of WBPDCCL for the year 2016 – 2017 comes as under:

Particulars	Unit	Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi Stg I	Sagardighi Stg II	Overall
Total admissible fuel cost as per norms (FC as per Annexure 2B)	Rs. in lakh	170542.12	166681.56	57877.27	79930.03	95875.91	27466.31	598373.20
C _D (Cost disallowed)		0.00	0.00	0.00	0.00	0.00	0.00	0.00
A (±) Adjustment		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Add: Additional Fuel Cost on account of Stabilization Period of Sagardighi TPS Stage II (as per para 2.5.11)		0.00	0.00	0.00	0.00	0.00	833.02	833.02
Fuel Cost admitted		170542.12	166681.56	57877.27	79930.03	95875.91	28299.33	599206.22

2.8 As per the findings narrated in the preceding paragraphs, WBPDCCL is to recover Rs. 47724.71 lakh in respect of Kolaghat, Bakreswar, Bandel, Santaldih, Sagardighi Stg I



Order on FCA and APR of WBPDCCL for the year 2016-17

and Sagardighi Stg II thermal power stations towards Fuel Cost Adjustments (FCA) during the year 2016 – 2017 from its energy recipient i.e., WBSEDCL as per the generating station wise break-up given below:

Generating Station	Sales (MU)	Energy charges recovered as per Tariff Order (Rs. in lakh)	Amount of MFCA recovered in addition to energy charges recovered as per tariff order of 2016-17 (Rs. in lakh)	Amount of fuel cost recovered during 2016-17 (Rs. in lakh)	Amount of fuel cost admitted in FCA for 2016-17 (Rs. in lakh)	Balance amount recoverable for 2016-172 (Rs. in lakh)
(1)	(2)	(3)	(4)	(5) = (3) + (4)	(6)	(7) = (6) - (5)
Kolaghat	5347.95	131276.14	28821.83	160097.97	170542.12	10444.15
Bakreswar	6366.47	137725.82	23755.52	161481.34	166681.56	5200.22
Bandel	1670.63	45152.12	5314.02	50466.14	57877.27	7411.13
Santaldih	3357.19	72867.84	2986.64	75854.48	79930.03	4075.55
Sagardighi Stg I	3318.22	72081.65	10318.28	82399.93	95875.91	13475.98
Sagardighi Stg II	940.03	21181.65	0.00	21181.65	28299.33	7117.68
Total	21000.49	480285.22	71196.29	551481.51	599206.22	47724.71

- 2.9 The decision of the Commission regarding recovery of the amount of Rs. 47724.71 lakh by WBPDCCL from its energy recipients i.e., WBSEDCL will be given in subsequent chapter.



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2A

COMPUTATION OF ACTUAL STATION HEAT RATES ACHIEVED IN 2016 – 17

SI No.	Particulars	Unit	Generating Stations					
			Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi Stg I	Sagardighi Stg II
1	Gross Generation (Actual)	MU	6037.973	7050.543	1885.030	3667.315	3772.942	1010.120
2	Consumption of Oil (Actual)	KL	12216.00	5350.09	12563.00	945.83	3802.66	10546.33
3	Consumption of coal (Actual)	MT	5247504.070	4604917.328	1503014.167	2376123.037	2357755.473	604325.270
4	GCV of Oil (Actual)	Kcal/Lit	9216.856	9317.867	9291.834	9553.563	9337.319	9337.319
5	Heat Value of Coal (Actual)	Kcal/Kg	3125.58	3799.63	3701.50	3849.10	3785.04	4001.21
6	Heat from Oil(2X4/1000)	M.Kcal	112593.11	49851.43	116733.31	9036.05	35506.65	98474.45
7	Heat from Coal(3X5/1000)	M.Kcal	16401493.77	17496982.03	5563406.94	9145931.64	8924198.78	2418032.31
8	Total Heat used (6+7)	M.Kcal	16514086.88	17546833.46	5680140.25	9154967.69	8959705.43	2516506.76
9	Station Heat rate achieved (8/1)	Kcal/Kwh	2735	2489	3013	2496	2375	2491
10	Normative Station Heat rate	Kcal/Kwh	2700	2470	2725	2425	2345	2424

COMPUTATION OF ACTUAL AUXILIARY CONSUMPTION ACHIEVED IN 2016 – 17

SI No.	Particulars	Actual Gross Generation (in MU)	Actual Sent Out Generation (in MU)	Auxiliary Consumption (in MU)	% of Actual Auxiliary Consumption	% of Normative Auxiliary Consumption
1	Kolaghat	6037.973	5382.692	655.28	10.85%	9.60%
2	Bakreswar	7050.543	6348.761	701.78	9.95%	9.00%
3	Bandel	1885.03	1668.548	216.48	11.48%	9.70%
4	Santaldih	3667.315	3364.42	302.90	8.26%	9.00%
5	Sagardighi Stg I	3772.942	3291.179	481.76	12.77%	9.00%
6	Sagardighi Stg II	1010.119	940.028	70.09	6.94%	9.00%

COMPUTATION OF SPECIFIC OIL CONSUMPTION ACHIEVED IN 2016 – 17

SI No.	Particulars	Actual Gross Generation (in MU)	Actual Oil Consumption (in KI)	Specific Oil Consumption (in ml/kWh)	Normative Oil Consumption (in ml/kWh)
1	Kolaghat	6037.973	12216.00	2.02	2.00
2	Bakreswar	7050.543	5350.09	0.76	1.30
3	Bandel	1885.03	12563.00	6.66	2.15
4	Santaldih	3667.315	945.83	0.26	1.00
5	Sagardighi Stg I	3772.942	3802.66	1.01	1.00
6	Sagardighi Stg II	1010.119	10546.33	10.44	1.00



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2B

COMPUTATION OF FUEL COST

Sl No.	Particulars	Unit	Stations					
			Kolaghat	Bakreswar	Bandel	Santalidih	Sagardighi Stg I	Sagardighi Stg II
1	Energy sold to licensee from Generating Station	MU	5347.95	6366.47	1670.63	3357.19	3318.22	940.03
2	Rate of Auxiliary consumption (Normative)	%	9.60	9.00	9.70	9.00	9.00	9.00
3	Aux. Consumption (Normative)	MU	567.92	629.65	179.46	332.03	328.18	92.97
4	Admissible Gross Generation (1+3)	MU	5915.870	6996.119	1850.090	3689.221	3646.398	1032.998
5	Station Heat Rate (Normative)	Kcal/kWh	2700.00	2470.00	2725.00	2425.00	2345.00	2424.00
6	Total Heat Required (4X5)	M.Kcal	15972849.00	17280413.93	5041495.25	8946360.93	8550803.31	2503987.15
7	Specific Oil Consumption (Normative)	ml/kWh	2.00	1.30	2.15	1.00	1.00	1.00
8	Oil Consumption (4X7)	KL	11831.74	9094.95	3977.69	3689.22	3646.40	1033.00
9	Average GCV of Oil (Actual)	Kcal/lit	9216.86	9317.87	9291.83	9553.56	9337.32	9337.32
10	Heat from Oil $\{(8) \times (9) / 1000\}$	M.Kcal	109051.44	84745.53	36960.04	35245.20	34047.60	9645.45
11	Heat from Coal (6-10)	M.Kcal/kg	15863797.56	17195668.40	5004535.21	8911115.73	8516755.71	2494341.70
12	Heat Value of Coal	Kcal/kg	3193.70	3880.03	3802.13	3902.68	3889.89	4098.76
13	Coal Consumption $\{(11) / (12) \times 1000\}$	MT	4967215.94	4431839.03	1316245.16	2283332.41	2189459.27	608560.08
14	Permissible Transit Loss	%	0.80	0.50	0.80	0.80	0.80	0.80
15	Coal Requirement with permissible transit loss	MT	5007274.13	4454109.58	1326860.04	2301746.38	2207116.20	613467.82
16	Average Price of Oil	Rs/KL	38785.86	40861.99	38605.51	58892.21	39909.34	40829.24
17	Average Price of Coal	Rs/MT	3314.24	3658.76	4246.24	3378.19	4278.01	4408.47
18	Cost of Oil $\{(8) \times (16) / 100000\}$	Rs.in Lakh	4589.04	3716.38	1535.61	2172.66	1455.25	421.77
19	Cost of Coal $\{(15) \times (17) / 100000\}$	Rs.in Lakh	165953.08	162965.18	56341.66	77757.37	94420.65	27044.54
20	Cost of Fuel (18+19)	Rs.in Lakh	170542.12	166681.56	57877.27	79930.03	95875.91	27466.31
21	Average fuel cost per unit sold to licensee	Paise/kWh	318.89	261.81	346.44	238.09	288.94	292.19



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2C1

Computation of UHV of Coal based on Minimum of declared Heat Value Kolaghat Thermal Power Station

Grade	Quantity (MT)	Minimum GCV of coal received (x)	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	Wtd Avg UHV
G3	6116.99	6401	6454	6049	6200	5600	6121	37445032	
G4	314737.49	6101	6454	6049	6200	5600	5677	1786777320	
G5	201210.91	5801	6049	5597	5600	4940	5238	1053918601	
G6	108699.33	5501	5597	5089	4940	4200	4800	521774176	
G7	175326.33	5201	5597	5089	4940	4200	4363	764975077	
G8	100054.50	4901	5089	4324	4200	3360	3994	399574650	
G9	552417.56	4601	5089	4324	4200	3360	3664	2024146327	
G10	118147.16	4301	4324	3865	3360	2400	3312	391291579	
G11	625301.33	4001	4324	3865	3360	2400	2684	1678583902	
G12	597813.30	3701	3865	3113	2400	1300	2160	1291342487	
G13	1378639.80	3401	3865	3113	2400	1300	1721	2373025115	
G14	129659.77	3101	3865	3113	2400	1300	1282	166282172	
G15	77335.34	2801					1170	90500254	
G16	102550.44	2501					1045	107154375	
G17	60867.55	2201					920	55971191	
W-III	169901.30	4247.13					4247.13	721592908	
W-IV	395079.00	3909.155					3909.155	1544425048	
AT-34	3503.82	3309.804					3309.804	11596957	
	5117361.92							15020377172	2935.18



Order on FCA and APR of WBPDC for the year 2016-17

ANNEXURE 2C2

Computation of UHV of Coal based on Minimum of declared Heat Value Bakreswar Thermal Power Station

Grade	Quantity (MT)	Minimum GCV of coal received (x)	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	Wtd Avg UHV
G3	5571.93	6401	6454	6049	6200	5600	6121	34108458	
G4	672708.34	6101	6454	6049	6200	5600	5677	3818992155	
G5	583359.45	5801	6049	5597	5600	4940	5238	3055566796	
G6	258832.41	5501	5597	5089	4940	4200	4800	1242436981	
G7	225434.33	5201	5597	5089	4940	4200	4363	983603797	
G8	85850.12	4901	5089	4324	4200	3360	3994	342848464	
G9	104308.29	4601	5089	4324	4200	3360	3664	382202264	
G10	20516.47	4301	4324	3865	3360	2400	3312	67948497	
G11	383176.35	4001	4324	3865	3360	2400	2684	1028613921	
G12	196596.41	3701	3865	3113	2400	1300	2160	424669871	
G13	910085.83	3401	3865	3113	2400	1300	1721	1566512537	
G14	108493.28	3101	3865	3113	2400	1300	1282	139137207	
G15	41761.58	2801					1170	48870718	
G16	57954.08	2501					1045	60555891	
G17	23466.47	2201					920	21578761	
W-II	6806.65	4762.02					4361.69	29688497	
W-III	167902.14	4271.62					3993.09	670448356	
W-IV	617729.69	3931.57					3666.80	2265091227	
	4470553.82							16182874398	3619.88



Order on FCA and APR of WBPDC for the year 2016-17

ANNEXURE 2C3

Computation of UHV of Coal based on Minimum of declared Heat Value Bandel Thermal Power Station

Grade	Quantity (MT)	Minimum GCV of coal received (x)	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	Wtd Avg UHV
G3	0.00	6401	6454	6049	6200	5600	6121	0	
G4	138972.03	6101	6454	6049	6200	5600	5677	788949773	
G5	94595.52	5801	6049	5597	5600	4940	5238	495479982	
G6	170178.05	5501	5597	5089	4940	4200	4800	816881868	
G7	174796.59	5201	5597	5089	4940	4200	4363	762663742	
G8	170588.61	4901	5089	4324	4200	3360	3994	681257555	
G9	104570.93	4601	5089	4324	4200	3360	3664	383164619	
G10	88674.51	4301	4324	3865	3360	2400	3312	293681110	
G11	250774.35	4001	4324	3865	3360	2400	2684	673188696	
G12	47967.30	3701	3865	3113	2400	1300	2160	103614644	
G13	99806.77	3401	3865	3113	2400	1300	1721	171795397	
G14	107881.43	3101	3865	3113	2400	1300	1282	138352540	
G15	19070.25	2801					1170	22316608	
G16	22775.81	2501					1045	23798315	
	1490652.15							5355144850	3592.48



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2C4

Computation of UHV of Coal based on Minimum of declared Heat Value Santalidih Thermal Power Station

Grade	Quantity (MT)	Minimum GCV of coal received (x)	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	Wtd Avg UHV
G3	1659.73	6401	6454	6049	6200	5600	6121	10160004	
G4	75729.46	6101	6454	6049	6200	5600	5677	429919174	
G5	42479.42	5801	6049	5597	5600	4940	5238	222502104	
G6	93975.58	5501	5597	5089	4940	4200	4800	451097820	
G7	0.00	5201	5597	5089	4940	4200	4363	0	
G8	35935.30	4901	5089	4324	4200	3360	3994	143510136	
G9	166986.96	4601	5089	4324	4200	3360	3664	611866939	
G10	59263.20	4301	4324	3865	3360	2400	3312	196273792	
G11	43529.10	4001	4324	3865	3360	2400	2684	116851257	
G12	15239.57	3701	3865	3113	2400	1300	2160	32919148	
G13	164187.46	3401	3865	3113	2400	1300	1721	282612591	
G14	8423.79	3101	3865	3113	2400	1300	1282	10803089	
G15	5926.68	2801					1170	6935588	
G16	8115.66	2501					1045	8480007	
W-II	3505.62	6084.07					6084.07	21328437	
W-III	328834.32	4361.146					4361.146	1434094479	
W-IV	973196.12	3992.9					3992.9	3885874788	
WP / AT34	339460.04	3663.059					3663.059	1243462155	
	2366448.01							9108691509	3849.10



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2C5

Computation of UHV of Coal based on Minimum of declared Heat Value Sagardighi Thermal Power Station Stage I

Grade	Quantity (MT)	Minimum GCV of coal received (x)	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	Wtd Avg UHV
G2	3426.78	6701					6437	22059280	
G3	7239.75	6401	6454	6049	6200	5600	6121	44317985	
G4	84389.84	6101	6454	6049	6200	5600	5677	479084497	
G5	231405.41	5801	6049	5597	5600	4940	5238	1212073769	
G6	289924.47	5501	5597	5089	4940	4200	4800	1391683844	
G7	216492.59	5201	5597	5089	4940	4200	4363	944589644	
G8	348432.75	4901	5089	4324	4200	3360	3994	1391490577	
G9	368695.14	4601	5089	4324	4200	3360	3664	1350957984	
G10	81373.00	4301	4324	3865	3360	2400	3312	269499239	
G11	130230.40	4001	4324	3865	3360	2400	2684	349595695	
G12	458388.78	3701	3865	3113	2400	1300	2160	990170188	
G13	86045.71	3401	3865	3113	2400	1300	1721	148108760	
G14	20113.27	3101	3865	3113	2400	1300	1282	25794263	
G15	17909.41	2801					1170	20958156	
	2344067.30							8640383881	3686.06



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2C6

Computation of UHV of Coal based on Minimum of declared Heat Value Sagardighi Thermal Power Station Stage II

Grade	Quantity (MT)	Minimum GCV of coal received (x)	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	Wtd Avg UHV
G2	0	6701					6437	0	
G3	3319.65	6401	6454	6049	6200	5600	6121	20321171	
G4	6342.47	6101	6454	6049	6200	5600	5677	36006456	
G5	58770.78	5801	6049	5597	5600	4940	5238	307834293	
G6	171928.33	5501	5597	5089	4940	4200	4800	825283493	
G7	115264.84	5201	5597	5089	4940	4200	4363	502917787	
G8	112647.92	4901	5089	4324	4200	3360	3994	449867354	
G9	137352.16	4601	5089	4324	4200	3360	3664	503280291	
G10	24438.76	4301	4324	3865	3360	2400	3312	80938729	
G11	28180.99	4001	4324	3865	3360	2400	2684	75650177	
G12	87709.27	3701	3865	3113	2400	1300	2160	189461671	
G13	24529.45	3401	3865	3113	2400	1300	1721	42222052	
G14	3582.71	3101	3865	3113	2400	1300	1282	4594646	
G15	3332.87	2801					1170	3900230	
	777400.20							3042278349	3913.40



Order on FCA and APR of WBPDCCL for the year 2016-17

ANNEXURE 2D

COMPUTATION OF FUEL COST DURING STABLIZATION OF SAGARDIGHI TPS STAGE II

SI No.	Particulars	Unit	Sagardighi Stg II - Stabilization
1	Energy sold to licensee from Generating Station	MU	468.85
2	Rate of Auxiliary consumption (Normative)	%	9.00
3	Aux. Consumption (Normative)	MU	46.37
4	Admissible Gross Generation (1+3)	MU	515.222
5	Station Heat Rate (Normative)	Kcal/kWh	50.00
6	Total Heat Required (4X5)	M.Kcal	25761.10
7	Specific Oil Consumption (Normative)	ml/kWh	3.50
8	Oil Consumption (4X7)	KL	1803.28
9	Average GCV of Oil (Actual)	Kcal/lit	9337.32
10	Heat from Oil {(8)X(9)/1000}	M.Kcal	16837.80
11	Heat from Coal (6-10)	M.Kcal/kg	8923.30
12	Heat Value of Coal	Kcal/kg	4098.76
13	Coal Consumption {(11)/ (12)X1000}	MT	2177.07
14	Permissible Transit Loss	%	0.80
15	Coal Requirement with permissible transit loss	MT	2194.63
16	Average Price of Oil	Rs/KL	40829.24
17	Average Price of Coal	Rs/MT	4408.47
18	Cost of Oil {(8)X(16)/100000}	Rs.in Lakh	736.27
19	Cost of Coal {(15)X(17)/100000}	Rs.in Lakh	96.75
20	Cost of Fuel (18+19)	Rs.in Lakh	833.02



CHAPTER – 3

FIXED COST DETERMINATION UNDER APR

3.1 The fixed cost elements are analyzed as below:

3.2 Treatment of implications of introduction of Ind AS:

3.2.1 It is observed that due to adoption of new accounting standard IND-AS, the following heads of expenditure in APR are mainly impacted:

- (i) Depreciation;
- (ii) Employee cost;
- (iii) Income from non-tariff sources

3.2.2 The Commission's observations on each of the above heads of expenditure are as follows:

3.2.2.1 Depreciation is an uncontrollable head of expenditure in ARR for any base year of the control period and the related ensuing years. Impact of adoption of IND-AS on depreciation head is mainly due to treatment of the depreciation on assets created out of consumers contribution and Government grant which were earlier accounted as deduction from current year's depreciation and net depreciation was considered in ARR. In the Ind-AS account depreciation is shown at gross value and the related grant / consumer contribution is amortised in account through other income head. Under this head, for determination of current years admissibility, the Commission will consider the net depreciation after adjustment of the corresponding amount shown as income on assets created out of consumer's contribution and Government grant as shown in Annual Accounts 2016-17. Past adjustment for 2014-15 and 2015-16 on depreciation will also be considered in current year's APR, as the total depreciation booked in accounts throughout life of the assets has to be kept in line with the total depreciation admitted through tariff WBPDCCL shall submit its claim in Form B in future APR Petitions accordingly and submit a reconciliation statement of the values with those appearing in its Statement of Accounts along with the APR Petition.



3.2.2.2 For the uncontrollable head on account of employee cost, the change is with regard to presentation only, similar to depreciation. As per earlier GAAP, gains or losses on account of remeasurements of post-employment benefit obligations was adjusted in employee cost and net amount was claimed under employee cost. In the Ind-AS compliant accounts, the amounts have been disclosed separately. The Commission considers the employee cost net off the corresponding amount shown as other comprehensive income related to remeasurements of post-employment benefit obligations shown separately in Annual Accounts of 2016-17. WBPDCCL shall submit their claim in future APR Petitions accordingly for maintaining parity and comparability with the ARR admitted.

3.2.2.3 Impact of adoption of Ind-AS on Income from non-tariff sources is mainly due to change in presentation due to depreciation and employee cost as noted in 3.2.2.1 and 3.2.2.2 above. Since it is decided in 4.2.4.1, above depreciation will be allowed at net value thus the portion of income that is adjusted in depreciation will not be considered under this head. Similarly, Other comprehensive income, adjusted with employee cost, as per para 3.2.2.3 above, will also not be considered under this head.

3.3 Project Cost of Units III and IV of Sagardighi Generating Station:

The Commission vide paragraph 5.2 of the Tariff Order dated 07.07.2017 had decided to reduce the submitted project cost of Rs. 6029.50 Crores by 5% for the purpose of tariff determination and accordingly had considered the effect of such reduction on fixed cost components viz. Depreciation and Return on Equity (RoE) by determining the ARR for the year 2016 – 17. As WBPDCCL, has not submitted the required report as per regulation 2.8.1.4.13 of the Tariff Regulations, the Commission decides to continue with the principle of Tariff Order and admit Depreciation and RoE by reducing 5% from the admissible amount.

3.4 Employee Cost:

3.4.1 Employee cost include mainly salary and wages, expenditure on account of terminal benefits to the employees and welfare expenses viz. medical expenses and centrally maintained employee cost apportioned to the generating stations. The total employee



Order on FCA and APR of WBPDCCL for the year 2016-17

cost considered in the said Multi Year Tariff Order relating to 2016-17 for each of the generating stations and the same as per the audited accounts for 2016-17 with reason thereof based upon the data submitted by WBPDCCL are found as under:

Sl. No.	Generating Station	Amount in Rs. Lakh	
		As per Tariff Order of 2016-17	Actual 2016-17
1	Kolaghat	17161.55	16178.89
2	Bakreswar	12084.05	12845.51
3	Bandel	7762.43	7289.31
4	Santalidih	8050.87	9726.45
5	Sagardighi -I	6926.14	7608.67
6	Sagardighi -II	1014.06	1845.37
Total		52999.10	55494.20

3.4.2 From the documents submitted by WBPDCCL and written submission, the Commission's findings are as follows:

- The total number of employees in each operating generating station under review is as per the specified norms of Man/MW ratio.
- There is no cost on the account of employees on contract in regular establishment.
- The Employee Cost as per Form 1.17(h) in APR 2016-2017 is Rs. 55494.20 lakh (inclusive of Director's Sitting Fees of Rs. 4.59 lakh). This is in line with the Tariff Regulations where Director's fee and remuneration are part of employee cost.
- WBPDCCL has submitted that the claim of employees' terminal benefits of Rs. 14250.80 lakhs consisting of gratuity, pension, leave encashment and actuarial loss is in line with the mandatory requirement under provision of AS – 15. Further in compliance to Section 417 of the Companies Act, 1956, aggregate of General Provident Fund, Pension Fund, Gratuity (GPF) Fund and Leave Encashment Fund balances are invested in term deposits with scheduled banks. The amount of Rs. 104658.42 lakhs submitted to have been invested in term deposits are stated to include an amount of Rs. 83158.29 lakhs pertaining to GPF, Pension, Gratuity and Leave Encashment Fund Balances as on 31.03.2017. However, these are not part of actuarial valuation considerations. Further, it is noted from Note 56 of the annual



Order on FCA and APR of WBPDCCL for the year 2016-17

accounts 2016 – 17 of WBPDCCL that, the Company does not have separate funds for General Provident Fund, Pension Fund, Gratuity Fund-(GPF) and Leave Encashment Fund. Interests on term deposits with scheduled banks are credited to Statement of Profit & Loss of the Company in absence of separate Trust Fund. The same fact is reiterated in audit certificate provided in Appendix C of Annexure 9 of Volume II of application.

- e) In absence of any specific funds, it could not be ascertained from the submitted documents as to whether the amount admitted through tariff under the heads of terminal benefit expenses have been utilized for the sole purpose for which they had been admitted. The utilization of interest earned on the equivalent amount parked in Fixed Deposits is also not available from the submission.

3.4.3 The employee cost, however, includes Rs. 14250.80 lakh claimed as mandatory requirement under AS – 15 on account of terminal benefit. The details of amount actually disbursed vis-à-vis the amount provided in respect of terminal benefit is as below:

Particulars for Terminal Benefits	Audit Certificate Vol 2 Appendix C of Annexure IX		
	Disbursed	AS 15	Total
Gratuity	1029.96	-589.97	439.99
Pension	4016.08	8758.53	12774.61
Leave encashment	715.87	320.33	1036.20
Total	5761.91	8488.89	14250.80

3.4.4 Employee cost being uncontrollable in nature, the Commission decides to admit the actual expenditure of employee cost of Rs. 55494.20 lakh in APR 2016 – 2017. The station wise allocation of the employee cost is as below:

Table-3B-2
Employee Cost Admitted (in Rs. Lakhs)

Sl. No.	Generating Station	Total employee cost as per application (Table 3 Para 5.1 of Volume 1)	Salaries and wages other than terminal benefit expenses admitted	Terminal benefit expenses admitted	Total Employee cost admitted
1	Kolaghat	16178.89	11921.66	4257.23	16178.89
2	Bakreswar	12845.51	9948.40	2897.11	12845.51
3	Bandel	7289.31	4970.98	2318.33	7289.31
4	Santaldih	9726.45	7507.80	2218.65	9726.45
5	Sagardighi Stg I	7608.67	5615.10	1993.57	7608.67



Order on FCA and APR of WBPDCCL for the year 2016-17

Sl. No.	Generating Station	Total employee cost as per application (Table 3 Para 5.1 of Volume 1)	Salaries and wages other than terminal benefit expenses admitted	Terminal benefit expenses admitted	Total Employee cost admitted
6	Sagardighi Stg II	1845.37	1279.45	565.92	1845.37
Total		55494.20	41243.39	14250.81	55494.20

3.4.5 WBPDCCL is directed to comply with the directions given in paragraph 3.1.7 of the APR Order for 2015 – 16 dated 30.05.2022.

3.5 Coal and Ash Handling Charges:

3.5.1 WBPDCCL has claimed a sum of Rs 4982.14 lakh on the account of Coal and Ash handling Charges which is also booked in their Annual Accounts for 2016 - 2017. The amounts of Coal, Ash Handling and fuel related costs for different generating stations, as claimed by WBPDCCL in 2016 - 2017, are furnished below in Table -3C-1.

Table-3C-1

Sl. No.	Generating Station	Amount in Rs. Lakh
1	Kolaghat	757.17
2	Bakreswar	1739.24
3	Bandel	484.92
4	Santaldih	1894.50
5	Sagardighi – I	94.36
6	Sagardighi – II	11.95
	Total	4982.14

In the claim of WBPDCCL they have considered railway staff cost posted at generating stations as part of the Coal and ash handling expenses.

3.5.2 The actual expenditure of Bakreswar and Santaldih generating stations, in respect of all generating stations is much higher than what has been provided in the tariff order. It is noted that the generation of all generating stations, except Santaldih, has gone down from targeted generation as per tariff order. The reasons for increase in coal and ash handling charges, as stated by WBPDCCL are deterioration in coal quality arising out of high ash content. Thus, while projecting the cost for fourth control period in its tariff petition, WBPDCCL is supposed to consider these problems. In tariff petition, they have not indicated anything that their projection has been done considering improved situation



Order on FCA and APR of WBPDCCL for the year 2016-17

based on certain changed scenario. Moreover, in four power stations WBPDCCL has succeeded in containing the cost within the approved amount in tariff order for 2016-17. Thus, the Commission is not convinced of the argument put forward by WBPDCCL.

- 3.5.3 After careful analysis of these aspects, the Commission considers the actual generation with respect to target generation to determine the admissible amount for the actual generation based on the reference to the target set for generation. The quantum of actual generation achieved during 2016 – 2017 at the stated generating stations of WBPDCCL is compared with the target generation based on normative PLF specified in the Tariff Regulations to arrive at proportionate expenses allowable. The admitted amount for different generating stations is shown in the Table-3C-2.

Table-3C-2
Admitted Coal & Ash Handling Expenses

Generating Station	Target Generation (MU)	Approved amount in Tariff Order (Rs Lakhs)	Actual Generation (MU)	Expenses Proportionate to Actual Generation (Rs Lakhs)	Actual Expenses (Rs Lakhs)	Expenses admitted in APR for 2016 – 17 (Rs Lakhs)
Kolaghat	7726.320	3340.17	6037.973	2610.28	757.17	757.17
Bakreswar	7358.000	1032.03	7050.543	988.91	1739.24	988.91
Bandel	2870.000	845.91	1885.030	555.60	484.92	484.92
Santaldih	3504.000	379.87	3667.315	397.58	1894.50	397.58
Sagardighi - I	4204.800	295.51	3772.942	265.16	94.36	94.36
Sagardighi – II	3609.600	246.26	1010.119	68.91	11.95	11.95
Total	29272.720	6139.75	23423.922	4886.44	4982.14	2734.89

- 3.5.4 The Commission admits the actual expenses incurred in respect of all Kolaghat, Bandel, Sagardighi Stage I and Sagardighi Stage II generating stations since their actual expenses are lower than the proportionate expenditure with reference to the actual generation. For Bakreswar and Santaldih Generating Stations, proportionate expenditure is allowed. The power station wise admitted amount is thus being provided in the last column of the Table-3C-2, i.e., Rs. 2734.89 lakhs.



3.6 Water Charges:

- 3.6.1 The actual amount of total expenditure incurred by WBPDCCL under this uncontrollable head of water charges in 2016-17 is Rs. 723.05 lakh against Rs. 1888.81 lakh allowed in the tariff for the concerned year. The annual audited accounts for 2016 - 2017 of WBPDCCL also show this figure.
- 3.6.2 The Commission admits an amount of Rs. 723.05 lakhs related to the water charges inclusive of water cess paid to statutory authorities and water charges paid to DVC in respect of Santaldih TPS by WBPDCCL. The admitted amount for different generating stations is shown in the Table-3D.

Table-3D
Admitted Water Charges

Generating Station	Actual Expenses Claimed in Rs Lakhs	Admitted in APR for 2016 - 17 in Rs Lakhs
Kolaghat	15.58	15.58
Bakreswar	24.88	24.88
Bandel	158.33	158.33
Santaldih	519.11	519.11
Sagardighi Stg I	4.01	4.01
Sagardighi Stg II	1.14	1.14
Total	723.05	723.05

3.7 Operation & Maintenance (O&M) Expenses:

- 3.7.1 The operation and maintenance (O&M) expenses, viz. repairs and maintenance including cost of consumables, legal and professional charges, audit fees, administrative and general expenses are categorized as controllable items in terms of the Tariff Regulations.
- 3.7.2 The O&M expenses are normative basis as per the norms set out in paragraph B of Schedule-9A of Tariff Regulations. Accordingly in Tariff order for 2016-17 the O&M expenses has been provided on the normative basis. Since O&M expenses is controllable item, the principles of Tariff Order have been followed in APR Order also. Under table 22 in paragraph 17 of the written submission in Volume-1 of APR application, WBPDCCL has shown actual O&M expenses against the approved O&M



Order on FCA and APR of WBPDCCL for the year 2016-17

expenses of the Tariff Order. This is identified on reconciliation of such value with the submitted Form E(B) for each of the power stations where it is observed that other administrative and general expenses, legal charges and audit charges have been duly considered. For Bandel TPS, the normative O&M expenses has been considered at 90% of the norm of Rs. 16.38 lakh/ MW as per clause (v) of paragraph B of Schedule 9A of the Tariff Regulations. For Sagardighi Stage-II, O&M expenses has been considered as approved under Tariff Order.

- 3.7.3 The admitted amount for each generating station is provided in the last column of the Table-3E along with the actual expenses for the year.

**Table-3E
Admitted O&M Expenses**

Generating Stations	Installed Capacity in MW	Norms of O&M in Rs Lakh/ MW	Normative O&M Expenses	Actual Expenses in Rs Lakhs in 2016-17	Admitted Expenses in Rs Lakhs for 2016-17
Kolaghat	1260	14.94	18824.40	17611.85	17611.85
Bakreswar	1050	12.03	12631.50	12358.16	12358.16
Bandel	455	14.74	6706.70	7225.81	6706.70
Santaldih	500	9.31	4655.00	5328.56	4655.00
Sagardighi Stg I	600	7.92	4752.00	4750.77	4750.77
Sagardighi Stg II #	1000	5.85	3013.15	1059.39	1059.39
Total	3865		50582.75	48334.54	47141.87

Note: O&M Expenses of Sagardighi Stg II is considered based on COD of the Units.

3.8 Interest on Borrowed Capital:

- 3.8.1 WBPDCCL claimed an amount of Rs 60942.67 Lakh as interest on borrowed capital. For Kolaghat generating station there was no capital borrowing. WBPDCCL submitted the computations in prescribed Form C of Annexure-I of the APR petition for the amounts of interest actually paid for Bakreswar, Bandel, Santaldih and Sagardighi-I and Sagardighi-II generating stations in 2016-17, which stands at Rs 16274.60 Lakhs, Rs 382.62 Lakhs, Rs 11476.95 Lakhs, Rs 8477.60 Lakhs and Rs 24330.90 Lakhs respectively.

- 3.8.2 As per Note 42 to the audited annual accounts 2016-17, a total amount of Rs. 83024.01 lakh has been charged in P&L account towards interest expenses on term loans and interest on working capital loans. It has been mentioned in the APR application that the



Order on FCA and APR of WBPDCCL for the year 2016-17

interest charges on capital account, for Rs. 60942.67 Lakhs, excludes the interest on working capital (Rs. 11547.95 Lakhs) and the interest on temporary accommodation (Rs. 10533.38 Lakhs). It is however noted from the Audited Annual Accounts (Note 42) that Rs. 17404.84 lakhs have been actually booked as interest on working capital.

- 3.8.3 The interest amount of Rs 16274.60 lakh on borrowed capital for Bakreswar (Units I to V), includes an amount of Rs. 168.85 lakh pertaining to the construction of associated transmission system of Bakreswar Thermal Power Stations as shown in Appendix to Form E. The said amounts of Rs 168.85 lakhs is required to be recovered from WBSETCL by WBPDCCL as the transmission system is being operated by West Bengal State Electricity Transmission Company Limited (in short "WBSETCL").
- 3.8.4 Regarding Sagardighi transmission system, WBPDCCL has stated in their supplementary petition for APR 2012-13 that the Sagardighi – Gokarna 220 kV Double Circuit transmission line asset, a part of the transmission systems, has already been handed over to WBSETCL on 02.06.2009. For the other two parts i.e., Farakka – Subhasgram 400 kV Single Circuit line LILO at Sagardighi and Sagardighi – Parulia 400 kV Double Circuit line, WBPDCCL has entered into an agreement with PGCIL on 18.02.2013 for operation and maintenance of Farakka – Subhasgram 400 kV Single Circuit line LILO at Sagardighi and Sagardighi – Parulia 400 kV Double Circuit line and associated bays at Parulia (Durgapur) for the period from 28.04.2011 to 31.03.2014. Revised agreements were executed on 07.05.2014, 14.05.2015 and 17.09.2015 for 400 kV sub-station bay and double circuit line for validity period covering 2016-17.
- 3.8.5 As per direction of the Commission in APR order of 2012-13, WBPDCCL has submitted the interest component of Rs 741.93 lakh in Appendix to Form E of APR petition of 2016-17 related to transmission systems for Units V and VI of Santaldih generating station. As the transmission system has not been handed over to WBSETCL and the system is not put into commercial operation, the said amount is neither to be recovered from WBSETCL by WBPDCCL nor to be admitted as interest cost for 2016-17. Interest on capital borrowing for Santaldih generating station is thus admitted to the extent of Rs. 10735.02 lakh (Rs. 11476.95 lakh – Rs. 741.93 lakh).



Order on FCA and APR of WBPDCCL for the year 2016-17

3.8.6 It is observed that the Commission in Paragraph 5.11.1 of its Tariff Order dated 07.07.2017 in Case No. TP – 73/ 16 – 17 had considered the loan amount of Rs. 420902 lakhs for Sagardighi Stage II submitted by WBPDCCL as total drawal of loans for that project in their relevant petition. It is noted that, WBPDCCL in its present petition (Form C), has bifurcated the closing balance of loan of Sagardighi Stage I as per their APR Petition for 2015 – 16 amounting to Rs. 459881.03 lakhs and shown the opening balance of loan for Sagardighi Stage I and II as Rs. 86054.03 lakhs and Rs. 373827 lakhs respectively. WBPDCCL has further shown as amount of Rs. 30197.45 lakhs as fresh drawal for Sagardighi Stage II during the year and considered the closing balance as Rs. 404024.45 lakhs. The Commission, however, considers this amount as claimed in Form C as the same is within 70% of the provisional project cost considered in the Tariff Order of Sagardighi Stage II dated 07.07.2017.

3.8.7 In view of above, the admitted amount for interest on borrowed capital of the said three generating stations for APR of 2016 – 17 are thus as per Table- 3F:

Table-3F
Admitted interest on Capital

Sl. No.	Generating Station	Amount Claimed in APR for 2016 – 17 in Rs Lakhs	Disallowed Portion in Rs Lakhs	Amount admitted in APR for 2016 – 17 in Rs Lakhs	Allocated Interest on Transmission Project in Rs Lakhs (2016-17)
1	Bakreswar	16274.60		16274.60	168.85
2	Bandel	382.62		382.62	
3	Santaldih	11476.95	741.93	10735.02	
4	Sagardighi – I	8477.60		8477.60	87.50
5	Sagardighi – II	24330.90		24330.90	
	Total	60942.67	741.93	60200.74	256.35

The interest expense on associated transmission system of each generating station has been derived in proportion to the asset value as reflected in Appendix to Form E for each generating station under the petition.

3.8.8 It is observed from Note 28.2 of the Audited Accounts of 2016 – 17 that the principal repayment of Capital loans amounting to Rs. 25134.23 lakhs which was due for repayment during 2016 – 17 has not been paid. Further an amount of Rs. 30722.18 lakhs pertaining to Interest accrued and due for BKTPS as on 31.03.2017 (Rs. 30400.15



Order on FCA and APR of WBPDCCL for the year 2016-17

lakhs) and balance Rs. 322.03 lakhs for others has been disclosed in the Accounts as not to have been paid. The summary of disclosure in the Audited Accounts is given below:

Particulars		Figures in Rs Lakh
		2016 – 17
1. Principal Repayment due not paid for BkTPS Unit I, II & III		25134.23
2. Interest Accrued & Due		
	BkTPS I, II & III	8389.69
	BkTPS IV & V	22010.46
	Others	322.03
	Sub-Total	30722.18

In view of the above, WBPDCCL is directed to submit a detail of utilization of the amount of Depreciation and Interest on borrowed Capital admitted through various MYT/APR orders year wise from 2006-07 to 2019-20 duly certified by an auditor as directed in paragraph 3.5.7 of the APR Order of 2015 - 16.

3.9 Interest on Normative Loan:

WBPDCCL has claimed interest on normative loan for the year 2016-17 only for Bakreswar and Sagardighi generating stations to an amounting to Rs. 266.71 lakh, and Rs. 112.58 lakh respectively. WBPDCCL has also mentioned that in the APR for 2010 – 2011, 2011 – 2012, 2012 – 2013, 2013-14, 2014-15 and 2015-16. The Commission had also not considered the interest on normative debt though the same was admitted in tariff order. As per Tariff Regulations, the equity contribution considered in the APR for any year is based on the actual addition to original cost of fixed asset. Accordingly, it is found that the actual addition of equity to original cost of fixed asset is less than the actual equity contributed. Therefore, difference of equity contributed and actual addition of equity to original cost of fixed asset cannot be considered as normative loan. Thus, the Commission has decided to not allow interest on normative loan as claimed by WBPDCCL in APR for 2016-17. In future if such excess equity is utilized for addition to original cost of fixed assets, WBPDCCL may claim for the same.



3.10 Interest on Temporary Accommodation:

3.10.1 WBPDCCL claimed interest on temporary accommodation for an amount of Rs. 10533.38 lakh on the ground of liability of carrying the burden of additional fuel cost of 2012-13 which was ultimately determined in Fuel Cost Adjustment (FCA) order for the Year 2012-13 dated 06.06.2014. They had further submitted that, in pursuance of the order dated 11.12.2014 for recovery of the amount of Rs. 95288.57 (as determined in the above mentioned FCA order) being spread over a period of 47 months, WBPDCCL had to avail fund by way of Temporary Accommodation to cover for the unrealized amounts. WBPDCCL has also submitted that requirement of temporary accommodation arose also due to non-receipt of fuel cost and fixed cost adjustment orders for 2014-15 and onwards. As per regulation no. 5.6.5.4 of the Tariff Regulations, WBPDCCL may be allowed interest on temporary accommodation for the period 2016 – 2017.

3.10.2 Regulation 5.6.5.4 states *"The Commission may allow, if considered necessary, interest on temporary financial accommodation taken by the generating company / licensee from any source to a reasonable extent of unrealized arrears from consumers / beneficiaries."*

3.10.3 The Loan balance as per audited accounts as on 31.03.2017 vis-à-vis their claim for total interest is as below:

Particulars	Balance as per Audited A/cs	Balance as shown in Form C	Interest Claimed
Capital Borrowings	Rs in lakh	Rs in lakh	Rs in lakh
Long Term Borrowings	673145.16	738773.16	60942.67
Current Maturities of Long-Term Loans	74358.66		
Total	747503.82	738773.16	60942.67
Short Term Borrowings			
Working Capital Loan	266631.65	137099.95	11547.95
Short Term Loan		110653.85	10533.38
Total	266631.65	247753.80	22081.33

Since, figures in Form C varies with that of Accounts, in absence of clarificatory evidence with respect to the amount of loan drawn for the purpose of Temporary accommodation, the amount of loan claimed in Form C (Rs. 110653.85 lakhs) as availed for Temporary



Order on FCA and APR of WBPDCCL for the year 2016-17

Accommodation being less than the total of short-term borrowings shown in Accounts, is considered as loan availed for temporary accommodation.

3.10.4 It is observed that out of the total realizable amount of Rs 95288.57 lakhs as per order dated 11.12.2014, six installments @ Rs 2507.59 lakhs p.m. were realizable till March 2016. On realization of monthly instalments, the average of the month wise balances of unrealized arrear during the year from April 2016 to March 2017 comes to Rs 65197.44 lakhs as shown below:

Figures in Rs lakh		
Month	Instalment recovered	Balance after recovery
Mar-16	2507.59	80243.01
Apr-16	2507.59	77735.41
May-16	2507.59	75227.82
Jun-16	2507.59	72720.22
Jul-16	2507.59	70212.63
Aug-16	2507.59	67705.04
Sep-16	2507.59	65197.44
Oct-16	2507.59	62689.85
Nov-16	2507.59	60182.25
Dec-16	2507.59	57674.66
Jan-17	2507.59	55167.07
Feb-17	2507.59	52659.47
Mar-17	2507.59	50151.88
Average outstanding Balance at the end of FY 2016-17		65197.44

3.10.5 In the Form 1.17 (a) submitted for respective Power Stations, WBPDCCL has provided detail of loan balance and interest on temporary accommodation for each station. Based on the submitted information the weighted average rate of interest comes to 9.25% as computed below:

Interest rate computation for Temporary Accommodation

Particulars	KTPS	BkTPS	BTPS	STPS	SgTPS-I	SgTPS-II
OP Balance	32131.49	37632.56	6069.08	21160.31	14909.35	-
Closing Balance	28178.93	33545.62	8802.73	17689.41	17484.05	4953.12
Average	30155.21	35589.09	7435.91	19424.86	16196.7	2476.56
Interest Paid	2682.41	3193.28	837.95	1683.89	1664.35	471.50
Weighted average Rate of Interest	8.90%	8.97%	11.27%	8.67%	10.28%	9.25%

Note: Interest rate Sagardighi Stage II has been considered as the weighted average of all other stations taken together



Order on FCA and APR of WBPDCCL for the year 2016-17

3.10.6 Accordingly, the Commission admits Rs. 6030.76 lakhs as interest on temporary accommodation considering interest at the weighted average rate of their claim for temporary accommodation (9.25%) on Rs 65197.44 lakhs.

3.10.7 The total amount of Rs. 6030.76 lakhs admitted under the head interest on temporary accommodation has been allocated in proportion to their claim against the respective generating stations as below:

Table-3G
Admitted Interest on Temporary Accommodation

Generating Station	Interest on Temporary Accommodation claimed In Rs lakhs	Interest on Temporary Accommodation admitted in Rs lakhs
Kolaghat	2682.41	1535.78
Bakreswar	3193.28	1828.27
Bandel	837.95	479.77
Santaldih	1683.89	964.09
Sagardighi – I	1664.35	952.90
Sagardighi – II	471.50	269.95
Total	10533.38	6030.76

3.11 Other Finance Charges:

In their APR application for 2016 – 2017 for all the generating stations, WBPDCCL has claimed a total amount of Rs. 738.40 lakh on the head of other finance charges. As per the audited annual accounts of WBPDCCL for the year 2016 -17, an amount of Rs. 721.45 lakh was booked in the accounts under 'other borrowing cost' towards loan processing charges. This difference of Rs 16.95 lakh is the bank charges under 'Other Expenses' in note 43 to Annual Accounts 2016-17. Generating station wise breakup of the same has been taken from annual accounts. According to submission of WBPDCCL the finance charges include bank charge, loan processing charges, LC commission charges, etc. In accordance with 5.6.4.2 of the Tariff Regulations, bank charges related to capital borrowing are only admissible. The Commission decides to admit the total amount of Rs. 721.45 lakh towards other finance charges in line with the annual accounts for 2016-17. The admitted amount of other finance charges is as under in Table-3H.



Order on FCA and APR of WBPDCCL for the year 2016-17

Table-3H
Admitted Other Finance Charges

Generating Station	Admitted in APR for 2016 – 17 in Rs Lakhs
Kolaghat	122.65
Bakreswar	147.97
Bandel	41.47
Santaldih	311.09
Sagardighi – I	76.55
Sagardighi – II	21.72
Total	721.45

3.12 Depreciation:

3.12.1 The amounts of depreciation for the different generating stations as claimed by WBPDCCL are as under:

Table - 3 I-1 (in Rs. Lakhs)

Generating Station	Actual amount charged unit wise P&L A/C
Kolaghat	748.33
Bakreswar	18983.65
Bandel	854.56
Santaldih	10728.99
Sagardighi	11665.50
Total	42981.03

3.12.2 The Commission decides to go by the amounts of depreciation as charged in the books of accounts of WBPDCCL in respect of all the generating stations for the year 2016-17 as shown in the unit wise audited accounts for 2016 - 2017.

3.12.3 The amount of depreciation so claimed for the Bakreswar generating station includes an amount of Rs. 1158.16 lakh pertaining to the transmission system associated to that station. As that system is being operated by WBSETCL, the amount of depreciation was ordered to be recovered from that company.

3.12.4 The depreciation claimed for Santaldih generating station includes an amount of Rs. 966.60 lakh pertaining to transmission system related to Santaldih generating station (Units V & VI) as per Appendix to Form E in Annexure-1 of the petition. As the transmission system has not been handed over to West Bengal State Electricity Transmission Company Limited (in short "WBSETCL") and the system is not put into commercial operation, the said amount is neither to be recovered from WBSETCL by



Order on FCA and APR of WBPDC for the year 2016-17

WBPDC nor to be admitted as depreciation for 2016-17. The Commission will deal with the recovery of charges from WBSETCL in subsequent paragraph.

3.12.5 The depreciation amount of Rs 11634.52 lakhs claimed for Sagardighi generating station – I, includes an amount of Rs. 120.09 lakh pertaining to transmission system related to Sagardighi generating station. A part of the transmission system has been handed over to WBSETCL and the remaining part is lying with WBPDC as WBSETCL does not maintain that portion. Paragraph 2.6.5 of the order dated 05.09.2013 on APR for 2011 – 2012 in case no. APR-31/12-13 may be referred to in this context and according to that order relevant information has been submitted in Appendix of Form E of the petition.

3.12.6 The Commission admits the total depreciation amount reduced by amortization value on Capital Grant and Subsidies amounting to Rs. 604.87 lakhs (122.30 + 126.02 + 356.55) under the uncontrollable head of depreciation as decided in paragraph 3.2.2.1 above. Further, prior period depreciation amounting to Rs. 230.44 lakhs is also disallowed in absence of details. The amount so reduced/ disallowed have been allocated to the Generating Stations in proportion to the claim.

3.12.7 As per above discussion the station wise depreciation as allowed by the Commission are as follows in Table -3I-2:

Table: -3I-2
Admitted Amount of Depreciation (in Rs. Lakhs)

Generating Station	Actual amount of Depreciation Claimed in APR of 2016-17	Proportionate Reduction for Ind AS as per Para 3.11.6	Proportionate Reduction for Prior Period Depreciation as per Para 3.11.6	Admissible Depreciation	Disallowed amount in Rs Lakhs	Admitted Amount of depreciation in 2016-17
	1	2	3	4 = 1 - 2 - 3	5	6 = 4 - 5
Kolaghat	1103.33	11.96	4.56	1086.81		1086.81
Bakreswar	18398.49	199.47	75.99	18123.03		18123.03
Bandel	2669.47	28.94	11.03	2629.5		2629.50
Santaldih	10856.99	117.71	44.84	10694.44	966.60	9727.84
Sagardighi – I	11634.52	126.14	48.06	11460.32		11460.32
Sagardighi – II	11128.44	120.65	45.96	10961.83		10961.83
Total	55791.24	604.87	230.44	54955.93	966.60	53989.33



As decided in Paragraph 3.3 above, the Commission decides to admit Rs. 10413.74 Lakh as chargeable Depreciation for Sagardighi Stg II. Thus, the final admitted Depreciation comes to Rs. 53441.24 lakhs.

Out of the above admitted depreciation amount the depreciation amount considered for associated transmission system of Bakreswar, and 220 KV transmission system of Sagardighi generating stations are Rs 1158.16 lakhs and Rs 120.09 lakhs respectively.

3.13 Advance against Depreciation (AAD):

In tariff petition WBPDCCL did not project any requirement of advance against depreciation. The Commission did not allow any amount towards advance against depreciation while determining tariff for the year 2016-17. WBPDCCL has not claimed any AAD in the APR petition and accordingly, the Commission does not consider any amount under this head.

3.14 Reserve for Unforeseen Exigencies:

The Commission did not allow any amount on account of reserve for unforeseen exigencies in the tariff order for the year 2016-17 to avoid future hike in tariff which will ultimately affect the end users of electricity. Thus, no amount on account of reserve for unforeseen exigencies has been allowed in the APR for 2016-17 also.

3.15 O&M Charges paid to PGCIL for Sagardighi Transmission System:

WBPDCCL has entered into an agreement with PGCIL on 18.02.2013 for operation and maintenance of Farakka – Subhasgram 400 kV Single Circuit line LILO at Sagardighi and Sagardighi – Parulia 400 kV Double Circuit line and associated bays at Parulia (Durgapur) for the period from 28.04.2011 to 31.03.2014. According to WBPDCCL's submission a revised agreement has been executed on 07-05-2014 which was valid till 31.03.2015. Such agreement was further extended for another two occasions such as 01.04.2015 to 30.06.2015 and 01.07.2015 to 30.06.2016. WBPDCCL has claimed a sum of Rs. 111.24 lakh in their APR petition for 2016-17. The Commission admits the amount in 2016-17 for Sagardighi transmission system.



3.16 Taxes payable under Income Tax Act:

3.16.1 WBPDCCL has claimed for Rs. 1114.57 lakhs in their APR petition. The Commission did not allow any amount under this head in tariff order. WBPDCCL has also submitted documentary evidence of taxes paid for 2016-17 (returns submitted and challan) through Annexure IV of Volume-II of the petition. As per the Income Tax return, tax applicable for 2016-17 is Rs. 1114.59 lakhs. The Commission therefore, admits the taxes claimed by WBPDCCL for 2016-17.

Table-3J
Admitted Amount of Income Tax

Generating Station	Incidence of Tax for 2016-17	Tax allowed
Kolaghat	20.53	20.53
Bakreswar	568.99	568.99
Bandel	0	0
Santaldih	380.63	380.63
Sagardighi-I	144.42	144.42
Sagardighi-II	0	0
Total	1114.57	1114.57

3.17 Performance Incentives:

3.17.1 In terms of regulation 2.6.1 of the Tariff Regulations, the annual performance review of WBPDCCL shall cover annual fixed charges and cost, incentives as per Schedule 10 and effects of gain sharing on the parameters under Schedule 9B which are not covered under the process of FPPCA.

3.17.2 Accordingly, it is observed from Table under paragraph 2.4 that Bakreswar and Santaldih has achieved oil rate lower than the normative oil rate. Therefore, the amount of incentive applicable for less oil consumption than norms as per Paragraph 3 of Schedule 10 of the Tariff Regulations is detailed below:



Order on FCA and APR of WBPDCCL for the year 2016-17

Table 3K
Performance Incentive for Oil

Incentive	Normative Oil Rate (ml/kwh)	Actual Oil Rate (ml/kwh)	X (Difference) (ml/kwh)	Admissible Gross Generation (MU)	Applicable Incentive Rate (Paise/Unit)	Applicable Incentive (Rs. Lakhs)
Bakreswar	1.30	0.76	0.54	6996.119	0.25	174.90
Santaldih	1.00	0.26	0.74	3689.221	0.25	92.23

3.17.3 The Commission admits Incentive for Improved Performance amounting to Rs. 174.90 lakhs for Bakreswar TPS and Rs. 92.23 lakhs for Santaldih TPS on account of less oil consumption than norms.

3.18 Insurance Premium:

3.18.1 The actual expenditures on this account as per note 43 to the annual reports of WBPDCCL for the year 2016-17 totaling to Rs. 554.29 lakh has been admitted by the Commission. The generating station wise allocation of the admitted amount is given below in Table-3L on the basis of submitted data in form E(B).

Table-3L
Admitted Amount of Insurance Premium

Generating Station	Amount as admitted for 2016 – 17 in Rs Lakhs
Kolaghat	116.96
Bakreswar	148.51
Bandel	10.06
Santaldih	35.45
Sagardighi – I	189.6
Sagardighi – II	53.71
Total	554.29

3.19 Rent, Rates and Taxes:

3.19.1 In terms of Tariff Regulations, rates and taxes are recognized as separate items and categorized the same as uncontrollable. As per note 43 to the annual report for the year 2016 – 20167, the actual expenditure under the head was Rs. 179.25 lakh and the same is admitted by the Commission. WBPDCCL has also claimed an amount of Rs. 61.95 lakh as 'Filing fees' and Rs. 89.42 lakh as 'License and registration fee'. This has been depicted in Note 43 on 'other expenses' of the audited accounts. The same is also



Order on FCA and APR of WBPDC for the year 2016-17

admitted by the Commission Allocation of the expenditure for different generating stations as per unit wise accounts are as under in Table 3N:

Table -3M (all values in Rs Lakhs)

Generating station	Rates & Taxes	Filing Fees	License and Registration Fee	Total Amount Admitted in APR
Kolaghat	37.30	15.78	19.96	73.04
Bakreswar	42.68	18.78	8.11	69.57
Bandel	48.79	4.93	3.91	57.63
Santaldih	34.36	9.90	38.48	82.74
Sagardighi Stg I	12.56	9.79	14.77	37.12
Sagardighi Stg II	3.56	2.77	4.19	10.52
Total	179.25	61.95	89.42	330.62

3.20 Eastern Regional Power Committee (ERPC) Charges:

3.20.1 WBPDC has claimed a sum of Rs 16 lakh as below towards ERPC charges and have under other expenses in note 43 of Annual Accounts 2016-17. WBPDC have stated these expenses to be as statutory charges in their petition. The Commission admits the same as per allocation given in the unit wise accounts submitted by WBPDC. Such admitted amount is given in Table-3N.

Table-3N
Admitted ERPC Charges (in Rs. Lakhs)

Particulars	Generating Station						Total
	Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi I	Sagardighi II	
ERPC Charges	4.07	4.85	1.27	2.56	2.53	0.72	16.00

3.21 Return on Equity:

3.21.1 The return on Equity for different operating generating stations of WBPDC, as were considered in the tariff order for the year 2016 – 2017 and as now being claimed by them are as under:

Table-3O-1
Return on Equity (in Rs. Lakhs)

Sl. No.	Generating Station	As per Tariff Order	As claimed
1	Kolaghat	13249.52	17310.89
2	Bakreswar	19863.75	21635.04
3	Bandel	878.08	3571.05
4	Santaldih	9893.14	11183.61
5	Sagardighi-I	11164.91	13182.01
6	Sagardighi-II	13317.76	14119.33
	Total	68367.16	81001.93



Order on FCA and APR of WBPDCCL for the year 2016-17

3.21.2 The Commission decides to proceed with the ROE determination of 2016-17 on the basis of base figures of APR of 2015-16 by following the principles adopted in 2013-14.

3.21.3 Accordingly, the Return on Equity for each generating station has been calculated in the Table-3O-2:

Table-3O-2
Return on Equity Calculation (in Rs. Lakhs)

Sl. No.	Particulars	Link	Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi Stg I	Sagardighi Stg II
1	Actual Equity base at the beginning (Govt. sanction)		87329.40	139910.14	11760.45	72900.00	214428.00	0.00
2	Addition to EB during the year (Govt. sanction)		0.00	0.00	0.00	0.00	0.00	180885.00
3	Deletion of Equity base during the year		0.00	0.00	0.00	0.00	0.00	0.00
4	Actual equity base at the end of the year (Govt. sanction)	(1+2+3)	87329.40	139910.14	11760.45	72900.00	214428.00	180885.00
5	Admissible equity base at the beginning of the year 2016-17 as per APR order of 2015-16		87381.45	138293.70	21859.11	68725.18	84993.00	0.00
6	Available Free Reserve at the beginning of the Year as per APR petition of 2016-17 (Form 1.20(a))		27814.59	1940.43	381.55	3817.56	4825.51	0.00
7	Net addition to the original cost of fixed assets as per Form 1.20(a) for each generating station under the petition		3594.42	1331.59	236.60	2401.12	344.82	602950.00
8	Normative addition of Fixed Assets @ 30% on (7)		1078.33	399.48	70.98	720.34	103.45	180885.00
9	Addition to equity base considered from addition to actual equity (Govt. sanction)	Lower of 2 & 8	0.00	0.00	0.00	0.00	0.00	180885.00
10	Addition to equity base considered from available free reserve	Lower of 6 & 8	1078.33	399.48	70.98	720.34	103.45	0.00
11	Admissible equity base at the closing of the year	(3+5+9+10)	88459.78	138693.18	21930.09	69445.52	85096.45	180885.00
12	Average Equity Base	(5+11)/2	87920.62	138493.44	21894.60	69085.35	85044.73	90442.50
13	Return on equity @15.5%		13627.70	21466.48	3393.66	10708.23	13181.93	14018.59
14	ROE disallowed on head of transmission project		0.00	0.00	0.00	722.97	0.00	0.00
15	Recoverable ROE	15=13-14	13627.70	21466.48	3393.66	9985.26	13181.93	14018.59

Note: For Sagardighi Stage II, the actual addition to Fixed Assets has been limited to provisional amount approved in Tariff Order.

As decided in Paragraph 3.3 above, the Commission decides to admit Rs. 13317.66 Lakh as Return on Equity for Sagardighi Stg II.

As the associated transmission system of Santaldih generating station has not been handed over to West Bengal State Electricity Transmission Company Limited (in short "WBSETCL") and the system is not put into commercial operation, the said amount is



Order on FCA and APR of WBPDCCL for the year 2016-17

neither to be recovered from WBSETCL by WBPDCCL nor to be admitted as return on equity for 2016 – 17.

3.21.4 Such return after adjustment of ROE stands as follows in Table-3O-3:
Table-3O-3

Return on Equity (in Rs. Lakhs)

Thermal Power Station	Return on Equity @15.5%	ROE for Transmission Assets for	Return on Equity @15.5% after adjustment to be recovered from beneficiaries
		2016 -2017/ Disallowance	
	1	2	3
Kolaghat	13627.70	0.00	13627.70
Bakreswar	21466.48	928.65	20537.83
Bandel	3393.66	0.00	3393.66
Santalalih	10708.23	722.97	9985.26
Sagardighi Stg I	13181.93	136.06	13045.87
Sagardighi Stg II	13317.66	0.00	13317.66

3.22 Interest on Working Capital:

3.22.1 On the basis regulation 5.6.5.1 and 5.6.5.2 of the Tariff Regulations Commission allowed interest on working capital for each generating stations in its tariff order for the year 2016-17. WBPDCCL had taken working capital loans from the nationalized banks on payment of interest. The Commission vide Paragraph 7 of its order dated April 6, 2022 in Case No SM-30/21-22 has ordered that “ The interest on working capital which has already been determined for the period effective on and from 01.04.2016 in the tariff orders issued by the Commission considering the SBI PLR/MCLR without any float will be trued up based on actual working capital interest paid, subject to the ceiling of the interest on working capital assessed on normative basis at the rate of one-year MCLR of SBI, as on 1st April of the concerned year, plus 350 basis points.” The one year Marginal Cost of Lending Rates (MCLR of the State Bank of India as on 1st April, 2016 was 9.20%. The Commission thus has considered normative Interest on working capital at the rate of 12.70 % (9.20 % + 3.50 %) for interest calculation

Now, in terms of regulation 5.6.5.1 of the Tariff Regulations, the Commission proceeds to determine the normative amount of interest on working capital as in Table-3P below:



Order on FCA and APR of WBPDCCL for the year 2016-17

Table-3P
Admitted Working Capital Interest Computation (in Rs. Lakhs)

Sl No	Particulars	Kolaghat	Bakreswar	Bandel	Santalidih	Sagardighi Stg I	Sagardighi Stg II	Total
1	Annual Fixed Charges for 2016-17 (excluding WC)	47069.68	79091.27	19008.05	42900.69	44490.12	49868.29	282428.10
2	Fuel Cost for 2016 - 2017	170542.12	166681.56	57877.27	79930.03	95875.91	28299.33	599206.22
3	Total (3) = (1) + (2)	217611.80	245772.83	76885.32	122830.72	140366.03	78167.62	881634.32
4	Less:							0.00
5	Depreciation	1086.81	18123.03	2629.50	9727.84	11460.32	10961.83	53989.33
6	Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Return on Equity	13627.70	21466.48	3393.66	9985.26	13181.93	13317.66	74972.69
8	Total of (5) to (7)	14714.51	39589.51	6023.16	19713.10	24642.25	24279.49	128962.02
9	Expenses for Working Capital: (9) = (3)-(8)	202897.29	206183.32	70862.16	103117.62	115723.78	53888.13	752672.30
10	Working Capital requirement @10% on (9)	20289.73	20618.33	7086.22	10311.76	11572.38	5388.81	75267.23
11	Normative Interest on WC requirement at (10) at SBI MCLR rate plus 350 bp @ 12.70%	2576.80	2618.53	899.95	1309.59	1469.69	684.38	9558.94
12	Actual interest paid	2940.78	3500.86	918.66	1846.09	1824.65	516.91	11547.95
13	Admitted Interest on WC (lower of 11 & 12)	2576.80	2618.53	899.95	1309.59	1469.69	516.91	9391.47

Note: The Actual Interest Paid has been considered as the submission of WBPDCCL in Paragraph 11 of their APR Petition

Thus, the total admitted amount under the Interest on Working Capital is Rs. 9391.47 lakhs.

3.23 Interest Credit:

3.23.1 In terms of regulation 5.5.3 of the Tariff Regulations, the actual amount of loan repayment during 2015 – 2016 being less than the amount allowed as depreciation, an interest credit at the rate of weighted average cost of capital loan as computed from Form C is provided on such excess depreciation charged in respect of each generating stations. The interest in respect of each of the generating station deductible from the gross amount of fixed charges are provided in Table 3Q below:



Order on FCA and APR of WBPDCCL for the year 2016-17

Table-3Q
Interest Credit Computation (in Rs. Lakhs)

Sl No	Particulars	Admitted amount in APR of 2016-17					
		Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi I	Sagardighi II
1	Amount of Depreciation	1086.81	18123.03	2629.5	9727.84	11460.32	10413.74
2	Loan repayment	0	83834.5	0	7500.25	11473.87	0
3	Excess of depreciation over loan repayment	1086.81	-	2629.5	2227.59	-	10413.74
4	Weighted average rate of interest on capital loan #	10.32%	9.86%	10.32%	10.86%	10.56%	10.32%
5	Interest credit	112.2	-	271.46	241.92	-	1075.06

Note: Interest rate Kolaghat, Bandel and Sagardighi Stage II has been considered as the weighted average of other stations taken together, in absence of details in Form C.

3.24 Income from Other Sources / Non-Tariff Income:

3.24.1 Income generated by WBPDCCL from the sources other than sale of electricity during the year 2016 – 2017 are being shown in Schedule 10 of Unit wise Audited Accounts for 2016 – 2017. Accordingly, the income from such sources is as shown in Table-3R. It is noted that an amount of Rs. 3395.58 lakhs have been earned from sale of dry fly ash. The Commission considers it as income from other sources. However, the interest income of fixed deposits relating to reserve for unforeseen exigencies which is required to be invested in the fund itself in accordance with the Tariff regulation, is being deducted from gross non-tariff income to find out the admitted non-tariff income in Table-3R as shown below:

Table-3R
Admitted Income from Non-Tariff Income (in Rs. Lakhs)

Sl No	Particulars	Generating Stations						Total
		Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi - I	Sagardighi - II	
1	Interest from Employees	14.09	8.03	16.09	5.95	4.24	1.2	49.60
2	Sale of Scrap	240.26	-19.49	462.02	0.00	0		682.79
3	Miscellaneous Income	432.62	188.43	262.75	166.89	161.83	45.85	1258.37
4	Interest on Sh. Term Deposit	1832.41	2181.39	572.42	1150.3	1136.95	322.09	7195.56
5	Interest on SD	0.70	0.83	0.22	0.44	0.43	0.12	2.74
6	Foreign Exchange Gain	0	0	393.72	0	0	306.71	700.43
7	Provision Written Back	611.83	574.63	150.79	3254.61	803.09		5394.95
7	Sale of Fly Ash	1093.23	1048.63	577.69	54.95	310.54	310.54	3395.58
8	Gross non-tariff income	4225.14	3982.45	2435.7	4633.14	2417.08	986.51	18680.02



Order on FCA and APR of WBPDCCL for the year 2016-17

Sl No	Particulars	Generating Stations						Total
		Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi - I	Sagardighi - II	
9	Less: Interest from Unforeseen Exigencies Reserve Investment	255.99	304.75	79.97	160.7	158.83	45	1005.24
10	Net non-tariff income (8-9)	3969.15	3677.7	2355.73	4472.44	2258.25	941.51	17674.78

3.24.2 WBPDCCL in para 23.1 of their petition has stated that they have not included certain amounts considering them as abnormal in nature and not relevant to ARR for the purpose of 'Other Income'. No details of such amount or justification have been provided in the petition. The Commission, therefore consider the total amount as booked in Note 39 of the Audited Accounts as 'Other Income'.

3.25 Cost of for associated transmission system recoverable from West Bengal State Electricity Transmission Company Limited (WBSETCL):

3.25.1 The transmission systems constructed by WBPDCCL for Bakreswar generating station is an integral part of the transmission system being operated by WBSETCL. The 220 KV transmission systems constructed by WBPDCCL for Sagardighi generating Station is an integral part of the transmission system being operated by WBSETCL. For both the above associated transmission systems of Bakreswar and Sagardighi generating station operated by WBSETCL, WBPDCCL has submitted the details of ROE, interest on loan and depreciation in appendix to Form E of the submitted petition of the respective generating stations. For Santaldih generating station no cost is, however, recoverable from WBSETCL for the reasons stated under paragraphs above. Thus, the annual transmission charges of the associated transmission assets of Bakreswar, and Sagardighi generating stations are found in the Table-3S below:

Table-3S
Annual Transmission Charges



Order on FCA and APR of WBPDCCL for the year 2016-17

Sl. No.	Particulars	Amount in Rs. Lakh	
		Bakreswar	Sagardighi
(i)	Interest on loan (refer paragraph 3.7.6)	168.85	87.50
(ii)	Depreciation (refer paragraphs 3.11.7)	1158.16	120.09
(iii)	Return on equity (refer paragraph 3.21)	928.65	136.06
	Total:	2255.66	343.65

3.25.2 Thus Rs. 2255.66 lakh is being deducted from Net ARR of Bakreswar generating station to find out the Net ARR to be recoverable from sale of electricity. Similarly, for Sagardighi Generating station Rs 343.65 lakh is being deducted from Net ARR to find out the Net ARR to be recoverable from sale of electricity.

3.25.3 In the tariff order for 2016-17 WBPDCCL was allowed to recover the cost of Bakreswar transmission system from WBSETCL. Any difference in realization of cost of Bakreswar transmission system and the amount admitted in this APR order for 2016-17 shall be recoverable from WBSETCL by WBPDCCL. The amount of Rs. 2255.66 lakh and Rs. 343.65 lakhs are now admitted for recovery from WBSETCL being the charges for Bakreswar and Sagardighi transmission systems.

3.25.4 In the Tariff order dated 22.06.2015 under fourth control period in respect of WBSETCL in case no. TP-60/13-14, amounts of Rs. 4676.26 lakh was reimbursable by WBSETCL to WBPDCCL on account of Bakreswar transmission system for the year 2016-17. In the said order for Santaldih and Sagardighi generating station no such reimbursable amount has been provided.

3.25.5 It is seen from the note 38.2 of Audited Accounts of WBPDCCL for the year 2016-17 that WBPDCCL received Rs. 2907.11 lakh during the year 2016-17 from WBSETCL on account of Bakreswar transmission system. However, it is also seen from the note 23 of annual accounts of WBSETCL for the year 2016-17 that WBSETCL paid WBPDCCL Rs. 4676.26 lakh during the year 2016-17 on account of Bakreswar transmission system.

3.25.6 In view of the discrepancies above, the recoverable amount has been considered as per WBPDCCL Accounts at present. The Commission hereby directs WBPDCCL to take up the matter with WBSETCL and make proper reconciled statement by both parties and submitted a report in the next APR application with due adjustment.

3.26 Fixed Charges:



3.26.1 Based on the foregoing analyses, the amount of fixed charges allowable under different heads in respect of the concerned generating stations have been shown in Annexure-3A. As shown in the referred annexure, the total amount of fixed charges for the concerned generating stations are given in Table-3T below:

Table – 3T
Fixed Charges Admitted (in Rs. Lakhs)

Generating Station	As admitted in APR for 2016 – 2017
Kolaghat	49646.48
Bakreswar	81709.80
Bandel	19908.00
Santaldih	44210.28
Sagardighi Stg I	45959.81
Sagardighi Stg II	50385.20
Total	291819.57

The above capacity charge is, however, recoverable at the level of Plant Availability Factor (PAF) achieved by the respective generating stations.

3.27 PAF Achieved

As it comes out from the submission of WBPDCCL, the actual PAF achieved during 2015 – 2016 at different generating stations was lower in comparison to norms set for the year, except for the Santaldih generating station, as shown in Table-3U below, resulting in over-recovery of capacity charges:

Table-3U

Sl. No.	Generating Station	Normative PAF (%)	PAF achieved (%)
1	Kolaghat	75	59.10
2	Bakreswar	85	84.84
3	Bandel	77	59.23
4	Santaldih	85	91.95
5	Sagardighi Stg I	85	78.98
6	Sagardighi Stg II	85	22.10

3.28 Capacity Charge Admitted

The re-determined capacity charges of each generating station are now required to be adjusted as per PAF achieved during the year 2015– 2016 following the provisions of the Tariff Regulations. The computations in this regard are given in Table-3V below:



Order on FCA and APR of WBPDCCL for the year 2016-17

**Table-3V
Capacity Charge Admitted Under APR for 2016-17**

Sl. No.	Particulars	Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi Stg I	Sagardighi Stg II
1	Target PAF (%)	75.00	85.00	77.00	85.00	85.00	85.00
2	PAF achieved (%)	59.10	84.84	59.23	91.95	78.98	22.10
3	Fixed Charge	49646.48	81709.80	19908.00	44210.28	45959.81	50385.20
4	Coal and Ash Handling charges (Rs. lakh)	757.17	988.91	484.92	397.58	94.36	11.95
5	Water Charges (Rs. lakh)	15.58	24.88	158.33	519.11	4.01	1.14
6	Capacity charge to be considered for disallowance (6 = 3- 4- 5) (Rs. lakh)	48873.73	80696.01	19264.75	43293.59	45861.44	50372.11
7	Proportionate capacity charge of item 6 excluding 4 & 5 (Rs. lakh)	38512.50	80574.49	14818.85	45063.53	44237.41	14499.97
8	Capacity charge admitted on the basis of PAF achieved (Rs. lakh) (8 = 7 + 4 + 5)	39285.25	81588.28	15462.10	45980.22	44335.78	14513.06

3.29 Sharing of Gains with WBSEDCL:

3.29.1 The Commission in paragraph 2.5.10 has already decided to pass the shareable amount of Rs. 690.43 lakh derived for gains on account of improved specific oil consumption and auxiliary energy consumption of Santaldih TPS to WBSEDCL. Thus, the amount of Rs. 690.43 lakh shall be shared with WBSEDCL from the Aggregate Revenue Requirement of Santaldih TPS.

3.29.2 The Commission in paragraph 2.5.10 has already decided to pass the shareable amount of Rs. 540.30 lakh derived for gains on account of improved specific oil consumption of Bakreswar TPS to WBSEDCL subject to the condition that the gain is first to be compensated with the deficit in fixed charge recovery of the Bakreswar TPS in terms of paragraph D of Schedule 9B to the Tariff Regulations. From Table 3V above, it is seen that the deficit in fixed charge recovery is Rs. 121.52 lakh. Thus, the amount of Rs. 418.78 lakh (Rs. 540.30 lakh – Rs. 121.52 lakh) shall be shared with WBSEDCL from Aggregate Revenue Requirement of Bakreswar TPS.

3.29.3 The Commission in paragraph 2.5.10 has already decided to pass the shareable amount of Rs. 100.28 lakh derived for gains on account of improved auxiliary energy consumption of Sagardighi TPS Stage II to WBSEDCL subject to the condition that the gain is first to be compensated with the deficit in fixed charge recovery of the Sagardighi

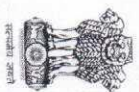


TPS Stage II in terms of paragraph D of Schedule 9B to the Tariff Regulations. From Table 3V above, it is seen that the deficit in fixed charge recovery is Rs. 35872.14 lakh. Thus, the amount of Rs. 100.28 lakh is compensated with the fixed charge recovery of Sagardighi TPS Stage II and no amount is shared with WBSEDCL.

3.30 Demurrage Charges:

3.30.1 WBPDCCL in Table A of their FCA Application has shown a Demurrage Charge amounting to Rs. 1853 lakhs which have been settled with the Railways on payment basis. WBPDCCL stated that they could not recover the Demurrage Charge from MFCA since the required information was not available during MFCA claims. However, WBPDCCL has not claimed any Demurrage Charge in Form E(B) of their APR Petition for the respective generating stations.

3.30.2 The Commission observes that Demurrage Charges is allowable for generating stations commissioned before publication of Tariff Regulations, 2011 to the extent it satisfies regulation 5.8.1 (vi) of the Tariff Regulations. However, in absence of any details, the Commission decides to withhold the amount of Rs. 1853 lakhs paid to Railways from the total revenue recoverable of WBPDCCL.



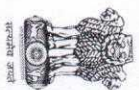
Order on FCA and APR of WBPDL for the year 2016-17



ANNEXURE 3A

SUMMARY OF FIXED CHARGES [in Rs Lakhs]

Sl. No.	HEAD OF FIXED CHARGES	Claimed in APR						Admitted in APR					
		Kolaghat	Bakreswar	Bandel	Santalidih	Sagardighi Stg I	Sagardighi Stg II	Kolaghat	Bakreswar	Bandel	Santalidih	Sagardighi Stg I	Sagardighi Stg II
1	Employee Cost	16178.90	12845.51	7289.32	9726.44	7608.67	1845.37	16178.89	12845.51	7289.31	9726.45	7608.67	1845.37
2	Coal & Ash handling Expenses	757.17	1739.24	484.92	1894.50	94.36	11.95	757.17	988.91	484.92	397.58	94.36	11.95
3	Water Charges	15.58	24.88	158.33	519.11	4.01	1.14	15.58	24.88	158.33	519.11	4.01	1.14
4	Operation & Maintenance Expenses	17611.86	12358.16	7225.81	5328.56	4750.77	1059.39	17611.85	12358.16	6706.70	4655.00	4750.77	1059.39
5	O&M Charges for Sagardighi Associated 400 KV Transmission System	0.00	0.00	0.00	0.00	111.24	0.00	0.00	0.00	0.00	0.00	111.24	0.00
6	Rates & Taxes, License & Registration Fee, Filing Fees	73.04	69.57	57.63	82.74	37.12	10.52	73.04	69.57	57.63	82.74	37.12	10.52
7	Insurance Premium	116.96	148.51	10.06	35.45	189.60	53.71	116.96	148.51	10.06	35.45	189.60	53.71
8	Interest on Capital borrowings	0.00	16274.60	382.62	11476.95	8477.60	24330.90	0.00	16274.60	382.62	10735.02	8477.60	24330.90
9	Interest on normative loan	0.00	266.71	0.00	0.00	112.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Interest on Temporary Accommodation	2682.41	3193.28	837.95	1683.89	1664.35	471.50	1535.78	1828.27	479.77	964.09	952.90	269.95
11	Interest on Working Capital	2940.78	3500.86	918.66	1846.09	1824.65	516.91	2576.80	2618.53	899.95	1309.59	1469.69	516.91
12	Other Finance Charges	125.50	151.46	42.50	318.41	78.34	22.19	122.65	147.97	41.47	311.09	76.55	21.72
13	Depreciation	1103.33	18398.49	2669.47	10856.99	11634.52	11128.44	1086.81	18123.03	2629.50	9727.84	11460.32	10961.83



Order on FCA and APR of WBPDC for the year 2016-17

Sl. No.	HEAD OF FIXED CHARGES	Claimed in APR						Admitted in APR					
		Kolaghat	Bakreswar	Bandel	Santalidih	Sagardighi Stg I	Sagardighi Stg II	Kolaghat	Bakreswar	Bandel	Santalidih	Sagardighi Stg I	Sagardighi Stg II
14	Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	Taxes under Income Tax Act	20.53	568.99	0.00	380.63	144.42	0.00	20.53	568.99	0.00	380.63	144.42	0.00
16	Reserve for Unforeseen Exigencies	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00
17	Returns on Equity	17310.89	21635.04	3571.05	11183.61	13182.01	14119.33	13627.70	21466.48	3393.66	9985.26	13181.93	13317.66
18	Incentive	0.00	0.00	0.00	0.00	0.00	0.00	0.00	174.90	0.00	92.23	0.00	0.00
19	Charges payable to ERPC	4.07	4.85	1.27	2.56	2.53	0.72	4.07	4.85	1.27	2.56	2.53	0.72
20	Gross Fixed Charges (Sum of 1 to 19)	58941.02	91180.15	23649.59	55335.93	49916.77	53572.07	53727.83	87643.16	22535.19	48924.64	48561.71	52401.77
21	Less: Income from non-tariff sources	2393.22	2054.45	1983.81	1164.47	1274.12	630.97	3969.15	3677.70	2355.73	4472.44	2258.25	941.51
22	Less: Credit Interest	0.00	0.00	0.00	0.00	0.00	0.00	112.20	0.00	271.46	241.92	0.00	1075.06
23	Less: Fixed Charge Recoverable from WBSETCL	0.00	2255.66	0.00	2431.50	343.65	0.00	0.00	2255.66	0.00	0.00	343.65	0.00
24	Net Fixed Charges (24 = 20 - 21 - 22 - 23)	56547.80	86870.04	21665.78	51739.96	48299.00	52941.10	49646.48	81709.80	19908.00	44210.28	45959.81	50385.20



CHAPTER – 4

AMOUNT ADJUSTABLE ON ANNUAL PERFORMANCE REVIEW

- 4.1 Based on the forgoing analysis and admissions of the adjustments under different uncontrollable factors / elements of fixed charges and fuel and power purchase cost, the re-determined admitted fixed charges as well as fuel cost of WBPDCCL during the year 2016 – 2017 came as under:

Table-4A
Admitted Net ARR for 2016-17

In Rs Lakhs

Sl No	Particulars	Generating Stations					
		Kolaghat	Bakreswar	Bandel	Santaldih	Sagardighi Stg I	Sagardighi Stg II
1	Admitted Fuel Cost [From para 2.7]	170542.12	166681.56	57877.27	79930.03	95875.91	28299.33
2	Fixed / capacity charge [From para 3.25]	39285.25	81588.28	15462.10	45980.22	44335.78	14513.06
3	Less: Sharing of Gain with WBSEDCL	0.00	418.78	0.00	690.43	0.00	0.00
4	Admitted Net ARR for recovery (1+2-3)	209827.37	247851.06	73339.37	125219.82	140211.69	42812.39

- 4.2 The Commission observes that there is inconsistency in submission of data relating to recovery of Capacity Charges in Form 1.25 and in Annexure VII of Volume II of APR Petition as shown below:

Generating Station	Capacity Charges shown in Form 1.25	Capacity Charges shown in Annexure VII of Volume II	Figures in Rs Lakh	
			Difference	
Kolaghat	41612.21	41612.21	0.00	
Bakreswar	74059.79	74059.79	0.00	
Bandel	13370.46	13370.46	0.00	
Santaldih	46644.95	46486.06	158.89	
Sagardighi Stg I	42227.95	34730.58	7497.37	
Sagardighi Stg II	24184.40	15326.70	8857.70	

In absence of any clarification in their submission of APR Petition, the Commission decides to consider the authenticated figure of Form 1.25.



Order on FCA and APR of WBPDCCL for the year 2016-17

4.3 In view of the admitted net ARR in Table – 4A above, WBPDCCL has to recover an amount of Rs. 44631.61 lakhs with cost centre-wise break-up analysis as given below:

Table-4B
Amount Adjustable on Annual Performance Review

Sl No	Generating station	Amount Recovered in Rs Lakhs			Total Recoverable in Rs Lakhs				Adjustable amount in Rs Lakhs
		Energy charges	Capacity charges	Total	Fuel Cost as per Table- 4A	Capacity Charges as per para-Table-4A	Sharing of Gain with WBSEDCL	Total	
	1	2	3	4 = 2 + 3	5	6	7	8 = 5 + 6 - 7	9 = 8 - 4
1	Kolaghat	160097.97	41612.21	201710.18	170542.12	39285.25	0.00	209827.37	8117.19
2	Bakreswar	161481.34	74059.79	235541.13	166681.56	81588.28	418.78	247851.06	12309.93
3	Bandel	50466.14	13370.46	63836.60	57877.27	15462.10	0.00	73339.37	9502.77
4	Santalidih	75854.48	46644.95	122499.43	79930.03	45980.22	690.43	125219.82	2720.39
5	Sagardighi Stg I	82399.93	42227.95	124627.88	95875.91	44335.78	0.00	140211.69	15583.81
6	Sagardighi Stg II	21181.65	24184.40	45366.05	28299.33	14513.06	0.00	42812.39	-2553.66
7	Total (Sum 1 to 6)	551481.51	242099.76	793581.27	599206.22	241164.69	1109.21	839261.70	45680.43
8	Less: Withheld Amount on account of Demurrage (As per Para 3.30 above)								1853.00
9	Total Recoverable Amount (9 = 7 – 8)								43827.43

4.4 The Additional Secretary to the Government of West Bengal in the Department of Power & NES vide letter no. 148-PO/O/VS/55-30/2016 dated 05.09.2016 has communicated that in exercise of the power conferred by Section 108 read with Section 65 of the Electricity Act, 2003, the State Government has agreed for extension of grant equivalent to outstanding loan and interest for an amount of Rs. 456316.00 lakh to WBSEDCL and WBPDCCL in the following manner:

WBSEDCL
WBPDCCL

Rs. 264709.00 lakh
Rs. 191607.00 lakh

It is also mentioned in the aforesaid letter of Additional Secretary to the Government of West Bengal, Department of Power & NES that the grant may be adjusted with the balance regulatory assets up to 2012 – 2013 and realizable amount through APR and FCA / FPPCA claim of the two utilities from 2013 – 2014 onwards.

4.5 For 2015-16, the Commission has determined a recoverable amount of Rs. 54717.85 lakhs as per Corrigendum Order dated 29.06.2022 and adjusted it with the remaining



Order on FCA and APR of WBPDCCL for the year 2016-17

grant of Rs. 177599.21 lakhs and the balance amount of grant was determined at Rs. 122881.36 lakhs (Rs. 177599.21 lakhs – Rs. 54717.85 lakhs). The FCA and APR of WBPDCCL for the year 2016 – 2017 has now been finalized and total recoverable amount comes at Rs. 43827.43 lakh. The Commission decides to adjust the entire recoverable amount of Rs. 43827.43 lakh against the remaining grant of Rs. 122881.36 lakhs. After adjustment, an amount of Rs. 79053.93 lakh (Rs. 122881.36 lakh – Rs. 43827.43 lakh) further remains as balance which will be considered for adjustment subsequently against any recoverable amount through APR and FCA claim of WBPDCCL for the year 2017 – 2018 onwards.

- 4.6 This order is subject to the outcome of the APR petition 2013-2014 pending before the Commission for review receiving on remand from Hon'ble APTEL, since any affirmative decision in disposing off the APR petition for the year 2013-14 shall have impact on the determination of ARR of the present APR petition for 2016-17.
- 4.7 WBPDCCL is to take a note of this order.
- 4.8 A copy of the order shall be posted in the website of the Commission.
- 4.9 WBPDCCL shall download the copy of the order from the website of the Commission and act on it. Certified copy of the order, if applied for, be given to the parties on completion of formalities laid down in the West Bengal Electricity Regulatory Commission (Conduct of Business) Regulations, 2013, as amended and on submission of necessary fees.

Sd/-
(PULAK KUMAR TEWARI)
MEMBER

Sd/-
(SUTIRTHA BHATTACHARYA)
CHAIRPERSON

DATED: 13.07.2022

Sd/-
SECRETARY