



#### **ORDER**

#### OF THE

### WEST BENGAL ELECTRICITY REGULATORY COMMISSION

IN CASES NO.: FPPCA – 89/ 17–18 AND APR – 64 / 17–18

IN REGARD TO THE APPLICATION SUBMITTED BY THE DURGAPUR PROJECTS LIMITED FOR FUEL AND POWER PURCHASE COST ADJUSTMENT AND ANNUAL PERFORMANCE REVIEW FOR THE FINANCIAL YEAR 2016-17

SRI MALLELA VEKATESWARA RAO, CHAIRPERSON SRI PULAK KUMAR TEWARI, MEMBER

DATE: 14.11.2022





#### CHAPTER - 1 PREAMBLE

- 1.1 In terms of the provisions contained in regulation 2.6 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended from time to time (hereinafter referred to as the 'Tariff Regulations'), the generating companies or the licensees, as the case may be, are subject to an Annual Performance Review (in short 'APR'). The Durgapur Projects Limited (hereinafter referred to as 'DPL')) submitted their application for Fuel and Power Purchase Cost Adjustment (in short 'FPPCA') and Annual Performance Review for 2016 2017 on 29.11.2017 in terms of the provision contained in Tariff Regulations. The applications were registered as APR 64 / 17 18.
- 1.2 The review application on the basis of the audited annual report and accounts of DPL for 2016–2017 with reference to the Commission's tariff order dated 04.03.2015 and 28.10.2016 in Case No. TP-55/13-14 will resultant into adjustment on different heads. The net adjustment arises out of such review on different heads will be considered for giving effect to while determining the amount of revenue adjustable through tariff order for further ensuing year or through separate order as specified in regulation 2.6.6 of the Tariff Regulations.
- 1.3 The APR covers the areas of permissible annual fixed charges determination to the applicant, permissible incentives and the effect of gain sharing as per Schedule-9B and Schedule 10 to the Tariff Regulations respectively. In the APR for the year 2016 2017, therefore, the review of the different elements of fixed charges, categorized as controllable and uncontrollable has been done to find out the amounts to be permitted to DPL against each head of elements vis-à-vis the amount allowed under tariff order for 2016 2017.
- 1.4 The Commission has raised certain queries through letter no WBERC/APR-64/17-18/995 dated 18.08.2021. In response DPL has given two letters vide REG/TARIFF/1-GM(Tech)/334 dated 24.09.2021 and REG/TARIFF/1-480 dated 07-12-2021.
- 1.5 In the application of APR and FPPCA for 2016 2017, DPL submitted the required data and information and also a copy of its audited Annual Report and Accounts for 2016 2017. The application of APR and FPPCA for 2016 17 of DPL had been admitted by the Commission on 10.09.2021 and numbered as APR-64/ 17-18. On admission of the





FPPCA and APR applications, DPL was directed to publish the gist of the APR application 2016 – 2017, as approved by the Commission. Accordingly, the gist was published in 'Aajkal', 'Sangbad Pratidin', 'Bartaman' and 'The Times of India' on 29.09.2021. The said gist was also hosted in the website of the DPL. The publication requested for submission of suggestions and objections on the application to the Commission within twenty one (21) days (inclusive the day of publication) from date of publication.

- 1.6 No comment, suggestion, objection on applications for APR for the year 2016 17 of DPL has been received during the stipulated time.
- 1.7 On the basis of APR and FPPCA petitions for 2016-17 and the above replies dated 24-09-2021, the Commission proceed to finalized the order on APR and FPPCA petitions for 2016-17.





## CHAPTER – 2 COMPUTATIONS OF THE ALLOWABLE FUEL AND POWER PURCHASE COST

- 2.1 In this part of the order, the Commission takes up the determination of fuel and power purchase cost allowable to DPL on the quantum of power sold by it to the consumers and other licensees during the financial year 2016-17.
- 2.2 The Fuel and Power Purchase Cost (FPPC) during the refrerred adjustment period, i.e., financial year 2016-17, is to be admitted in terms of the formula as specified by the Commission in schedule 7A to the Tariff Regulations.
- 2.3 DPL is a multi-unit company fully owned by the Government of West Bengal. Besides functioning as a distribution licensee, it runs a thermal generating station, a coke oven plant and water work. Part of the generation of electricity at the generating station is being utilized by other sister units. The energy balance for the year 2016-17 is as follows:

Table 2.1

Particulars	Energy in MU
Y SIDE	
	2143.39
	193.33
	1950.06
	233.28
	2183.34
Sale of power to WBSFDCL at 220/132/33 kV	201.32
	108.22
	1873.80
	11.88
	15
Sale to Consumers including sale to WBSEDCL at 11 kV	1765.93
Distribution Loss (8-9-10-11)	80.99
	4.32%
	2183.34
	Gross Generation Auxiliary consumption Net Ex-Bus Generation (1-2) Purchase during the year including UI Total energy available (3 + 4) Sale of power to WBSEDCL at 220/132/33 kV Sale of power to others (IEX) Total Energy Available (5-6-7) ATION SIDE Inter Plant Transfer Consumption at own premises

2.4 The schedule – 9B to the Tariff Regulations, contains provisions for sharing the gains derived by the licensee, if any, on account of its better performances over the operating and fuel consumption norms set by the Commission for the concerned year. The operational parameters which are to be considered for such sharing gains are:





- i) Oil consumption rate,
- ii) Rate of Auxiliary Consumption,
- iii) Gross Station Heat Rate.
- 2.5 The referred schedule 9B to the Tariff Regulations also provides that in case availability of a generating station of licensee falls below the availability norm, then the total gains meant to be passed on to the consumers under the items (i) to (iii) above, is first to be used to compensate the deficit in the recovery of the fixed charges, if any, by the licensee.
- 2.6 Before ascertaining the amount of admissible fuel and power purchase cost as well as the amount of gains to be shared with the consumers and other licensees under the provisions of the Tariff Regulations explained in earlier paragraphs, the actual performances of DPL is required to be viewed in comparison to the operational and fuel efficiency norms set by the Commission in the Tariff Order for the concerned year. Such comparisons are made in the subsequent paragraphs.
- 2.7 Actual quantum of oil consumption as per the audited accounts during the year 2016-17 came to 1977.97 KL for generation of 2143.39 MU. Oil consumption for unit VII was 1356.69 kL and energy generated from Unit VII was 993.50 MU. Oil consumption for unit VIII was 621.281 kL and energy generated from unit VIII was 1149.89 MU. The rate of oil consumption, thus, came to 1.37 ml/kWh and 0.58 ml/ kWh for unit VII and VIII respectively. Thus, oil consumption for unit VIII had been lower than the normative oil rate of 1 ml/kWh. Gain sharing needs to be computed for better oil rate for unit VIII.

The actual rate of auxiliary consumption came to 9.02% for both unit VII and VIII which are higher than normative auxiliary consumption of 8.5% and 9.0% for unit VII and unit VIII respectively. Therefore, no gain needs to be shared for auxiliary consumption.

As per the computations shown in the Annexure 2A, actual station heat rate of Unit VII and Unit VIII achieved during the year came to be 2714.75 kCal/kWh and 2409.39 kCal/kWh respectively against norm of 2345 kCal/kWh and 2425 kCal/kWh. Thus, gain sharing is required for unit VIII for better heat rate as well.

2.8 The norm for distribution loss of DPL for the year 2016-17 was considered 5.20%. As it comes out from the energy balance drawn under paragraph 2.3 above, the actual rate of distribution loss experienced by it on the quanta of sales to consumers works out to





- 4.32%. Thus, there is need to compute gain to be shared with consumers and distribution licensees.
- 2.9 FPPCA formula provides for adjustment of allowable fuel and power purchase cost for the gain sharing, if any, in accordance with Schedule – 9B to the Tariff Regulations.
- 2.10 The values of different factors in the FPPCA formula referred to are worked out and admitted as under:

#### 2.10.1 FC (FUEL COST):

Fuel cost of own generation is to be allowed as per normative parameters fixed by the Commission, or on actual basis in absence of any norms, and heat value of coal as may be allowed under regulation 5.8.1 of the Tariff Regulations, commensurate with actual level of energy sales to own consumers and / or licensees during the adjustment period. The fuel costs allowed to DPL for the year 2016-17 for its generating stations were based on the norms in respect of Units VII and Unit VIII as under. Unit No. VI of DPL remained inoperative during the year 2016-17.

Table 2.2

		Norms	
Particulars	Unit	Unit VII	Unit VIII
Station Heat Rate	Kcal/Kwh	2345.00	2425.00
Specific Oil Consumption	MI/Kwh	1.00	1.00
Auxiliary Consumption	%	8.50	9.00
Transit and handling loss of Coal	%	0.50	0.50

The weighted average calorific values of coal and oil are variable factors for assessing the quantity of coal and oil requirements and depend on the actual grade mix of their use in the power stations. Moreover, the declared Heat Value of each grade of coal varies between ranges. The weighted average heat value of coal for generating station consisting of three units of DPL, as considered in the tariff order for the year 2016-17, was based on declared minimum heat value of the proposed grade mix of use. As per submission of DPL, the minimum average heat value of coal computed in terms of regulation 5.8.1 of the Tariff Regulations with actual grade mix of coal consumed as per audited data comes at 3724.64 Kcal/Kg. The Commission noted that DPL has determined weighted average UHV of different grades of coal consumed, certified by auditor, considering minimum UHV of the respective coal band with reference to specific 'GCV' of the respective grades of coal. The Commission goes by the provisions of the





regulation 5.18.15 of the Tariff Regulations for determination of UHV by the process of interpolation. The weighted average useful heat value of the coal consumed, determined as per Regulation 5.8.15, is 3778.80 Kcal/Kg. The computations shown in Annexure – 2B in this regard may be referred to. The Gross Calorific Value (in short "GCV") of oil, as claimed by DPL based on actual consumption as per auditor's certificate in audited statement of accounts of power plant, is 9000.00 Kcal/lit and the same is admitted.

The weighted average price of coal and oil, as per summary of technical and financial parameters of audited annual accounts 2016-17 of DPL, came to Rs. 3448.41 per M.T. and Rs. 43374.58 per K.L. respectively. The above prices are inclusive of transportation charges.

The unit wise and overall admissible amount of fuel cost for generation has been computed and shown in Annexure – 2C. The computations therein are based on normative rate of auxiliary consumption, station heat rate, oil consumption rate and transit loss of coal. The weighted average heat value of coal and GCV of oil are considered on the basis as stated above. The average price of Coal and that of Oil are considered on the basis of actuals. The computed overall fuel cost for generation of electricity for sales to own consumers, WBSEDCL and others including inter plant transfer works out to Rs. 44926.35 lakh.

#### 2.10.2 PPC (POWER PURCHASE COST):

The actual quanta of power purchase and the cost incurred as per data submitted by DPL and as also seen from the audited accounts for the year 2016-17 are 227.67 MU and Rs. 9820.24 Lakh respectively with an average rate of purchase of 431.34 paise / kWh. The power purchases were made from WBSEDCL, IEX and SIIPL. The breakup of such purchase is given below:

Table 2.3

Source	Quantity (in MU)	Amount (Rs. in lakh)
WBSEDCL	146.65	6865.51
SIIPL (Solar Power)	6.49	1019.06
	74.53	1915.84
PTC through IEX	7 1100	19.83
Reactive energy charge	227.67	9820.24
Total	221.01	

#### 2.10.3 TREATMENT OF SURPLUS SALE:



regulation 5.18.15 of the Tariff Regulations for determination of UHV by the process of interpolation. The weighted average useful heat value of the coal consumed, determined as per Regulation 5.8.15, is 3778.80 Kcal/Kg. The computations shown in Annexure – 2B in this regard may be referred to. The Gross Calorific Value (in short "GCV") of oil, as claimed by DPL based on actual consumption as per auditor's certificate in audited statement of accounts of power plant, is 9000.00 Kcal/lit and the same is admitted.

The weighted average price of coal and oil, as per summary of technical and financial parameters of audited annual accounts 2016-17 of DPL, came to Rs. 3448.41 per M.T. and Rs. 43374.58 per K.L. respectively. The above prices are inclusive of transportation charges.

The unit wise and overall admissible amount of fuel cost for generation has been computed and shown in Annexure – 2C. The computations therein are based on normative rate of auxiliary consumption, station heat rate, oil consumption rate and transit loss of coal. The weighted average heat value of coal and GCV of oil are considered on the basis as stated above. The average price of Coal and that of Oil are considered on the basis of actuals. The computed overall fuel cost for generation of electricity for sales to own consumers, WBSEDCL and others including inter plant transfer works out to Rs. 44926.35 lakh.

#### 2.10.2 PPC (POWER PURCHASE COST):

The actual quanta of power purchase and the cost incurred as per data submitted by DPL and as also seen from the audited accounts for the year 2016-17 are 227.67 MU and Rs. 9820.24 Lakh respectively with an average rate of purchase of 431.34 paise / kWh. The power purchases were made from WBSEDCL, IEX and SIIPL. The breakup of such purchase is given below:

Table 2.3

10010 2.0				
Source	Quantity (in MU)	Amount (Rs. in lakh)		
WBSEDCL	146.65	6865.51		
SIIPL (Solar Power)	6.49	1019.06		
PTC through IEX	74.53	1915.84		
Reactive energy charge		19.83		
Total	227.67	9820.24		

#### 2.10.3 TREATMENT OF SURPLUS SALE:



DPL has sold 108.22 MU of surplus power to IEX during 2016 – 17. It is observed that the consumer demand of DPL is mainly catered from its own generation along with occasional purchase from WBSEDCL and short-term power purchase as and when required. Thus, it becomes evident that DPL sold the surplus power from its generating stations during surplus condition. Accordingly, the Commission finds it prudent to adjust the cost of such surplus power with the fuel cost of the generating units at the variable cost of generation as given in tabulated form below:

SI No.	Particulars	Unit	Value
1	Variable cost of generating station (As per Annexure 2C)	Paisa/kwh	243.90
2	Surplus energy sold to person other than consumer & licensee	MU	108.22
3	Cost of Surplus power sold	Rs. Lakh	2639.49

Thus, the fuel cost attributable to the consumers and licensees comes to Rs. 44926.35 lakh (Rs. 47565.84 lakh as per Annexure- 2C minus Rs. 2639.49 lakh cost of surplus power sold).

#### 2.10.4 FUEL AND POWER PURCHASE COST:

In terms of the FPPCA formula as referred to in paragraph 2.3, the admissible fuel and power purchase cost of DPL works out as under. This admissible amount is subject to further scrutiny on account of excess auxiliary consumption in the power plant.

Table 2.4

SI No	Factor Notation	Nomenclature	Unit	Value
1	t	Norms of Transmission and Distribution loss considered for sale of power to licensee and for interplant transfer	%	0
2	D	Norms of distribution loss for sale to consumers	%	5.20%
3	Eo	Energy for own consumption	MU	15
4	E <sub>SL</sub>	Energy sale to licensee and interplant transfer [refer table in paragraph 2.3]	MU	213.20
5	Esc	Energy sale to consumer	MU	1765.93
6	Fuel Cost	Fuel cost for generation on normative parameters (Refer Annexure – 2C)	Rs. in Lakh	44926.35
7	FC <sub>IUC</sub>	Per unit Fuel Cost at distribution input for sale to consumers (Refer A(v) below)	Paise/kWh	217.09
8	FC <sub>Adm_d</sub>	Admissible Fuel Cost for sale to WBSEDCL and inter plant transfer (Refer B(ii) below)	Rs. in Lakh	4628.36
9	FC <sub>Adm_C</sub>	Admissible Fuel Cost for sale to consumer and for own consumption [Refer B(i) below]	Rs. in Lakh	40782.92
10	FC	Admissible fuel cost [(8) + (9)]	Rs. in Lakh	45411.28
11	PPC	Power Purchase Cost including net UI charges (vide para 2.9.2)	Rs. in Lakh	9820.24
12	FC + PPC	Admissible Fuel and Power Purchase Cost [(10) + (11)]	Rs. in Lakh	55231.52



#### Order on FPPCA and APR of DPL for the year 2016-17

Table 2.5

	1 4.010 = 10		
Α.	Fuel Cost per Unit (kWh) at Distribution Input		
(i)	Fuel Cost for sale to consumers (As per Annexure – 1C)	Rs. in Lakh	44926.35
(ii)	Energy sent out from own generation for the consumers and licensee (1950.06 – 108.22)	MU	1841.84
(iii)	Power Purchase (vide paragraph 2.9.2)	MU	227.67
(iv)	Total energy available for sale [(ii)+(iii)]	MU	2069.51
(v)	FC <sub>IUC</sub> [(i)/(iv)]	Paise/kWh	217.09

Table 2.6

B. A	dmissible Fuel Cost fo	or sale to Consumers and Licensee	Unit	Amount
(i)	Esc+Eo x FCiuc	= (1765.93+15) x 217.09	Rs. In Lakh	40782.92
.,	(1-d x 0.01)	(1052)	NS. III Lakii	40702.32
(ii)	E <sub>SL</sub> x FC <sub>IUC</sub>	= 213.20 X 217.09	Rs. In Lakh	4628.36
	(1-t x 0.01)	- 213.20 X 217.09	1 to. III Lakii	1020.00

#### 2.10.5 Cp: Cost Disallowable:

Factor  $C_D$ , as referred to in the FPPCA formula mentioned in paragraph 2.2 in the earlier chapter, stands for cost as to be found disallowable by the Commission as per methodology specified in the FPPCA formula. In accordance with methodologies, as specified in FPPCA formula, the amount of cost disallowable works out as under:

Table 2.7

SI. No.	Factor Notation	Nomenclature	Unit	Value
1	Esc	Quanta of energy sold to consumers	MU	1765.93
2	Eo	Energy allowable for own consumption	MU	15
3	d	Normative distribution loss	%	5.20%
		E <sub>SC</sub> + E <sub>O</sub> 1765.16+15.000	MU	1878.62
4	-	(1 – d X 0.01) 0.948	IVIO	1070.02
5	E <sub>SL</sub>	Quanta of energy sold to licensee and interplant transfer	MU	213.20
6	t	Normative T&D loss for E <sub>SL</sub>	%	0
7	-	E <sub>SL</sub> (1 – t X 0.01)	MU	213.20
8	E	Auxiliary consumption in excess of norms \$	MU	0
9		Energy sent out from own generating station excluding export [refer Table 2.5, Sl. No. (ii)]	MU	1841.84
10	E <sub>Adm</sub>	Purchase of energy admitted [(4)+(7)-(8)-(9)]	MU	249.98
11	EP	Total energy purchased including UI	MU	227.67
12	EE	Excess energy purchased (E <sub>P</sub> – E <sub>Adm</sub> – Grid Loss)	MU	(22.31)
13	EPAvg	Average power purchase cost (refer paragraph 2.9.2)	Paise/kWh	431.34
14	C <sub>D</sub>	Cost disallowed (E <sub>E</sub> x EP <sub>Avg</sub> )	Rs. in Lakh	

<sup>\$ -</sup> Since the excess auxiliary energy consumption over the norms has already been disallowed while determining fuel cost on the basis of normative generation based on sent out generation thus further disallowance for excess auxiliary consumption has not been considered here.



The cost disallowable thus derived above is nil and thus no further adjustment is required with power purchase cost/Fuel cost.

#### 2.10.6 A (PRIOR PERIOD ADJUSTMENTS):

Factor A in the referred FPPCA formula signifies the adjustment, if any, to be made in the current period to account for any excess / shortfall in the recovery of fuel and power purchase cost for the past period. As per the financial statements for the year ended 31st March, 2017, it is observed that no income / expenditure has been accrued to DPL on account of purchase of power relating to prior period purchase.

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

Based on the analyses done in the foregoing paragraphs, the amount of allowable fuel and power purchase cost for DPL for the year 2016-17 works out as under:

Table 2.8

Rs Lakhs

SI No	Particulars/Factors	As admitted
1	FC: Fuel cost (SI No. 10 in Table in para 2.9.4)	45411.28
2	PPC: Power purchase cost (SI No. 11 of table in para 2.9.4)	9820.24
3	C <sub>D</sub> : Cost disallowable (para 2.9.5)	0
4	±A: Prior period adjustment	0
5	Allowable fuel and purchase cost = $FC+(PPC - C_D)+(\pm A)$	55231.52

#### 2.12 Benefits due to savings in oil rate:

As mentioned in paragraph 2.7, oil rate achieved in unit VIII was better than norm. Savings due to better oil rate is Rs. 209.43 lakhs of which 35%, i.e., Rs. 73.30 lakhs is to be compensated with the deficit in fixed charge recovery of DPL in terms of paragraph D of Schedule 9B to the Tariff Regulations before sharing with consumers and distribution licensees as per the Tariff Regulations. Relevant computations are placed below.

Table-2.9

Particulars	Unit	Unit VIII
Specific Consumption of Oil as per Norms	ml/kWh	1.00
Actual Oil Consumption	ml/kWh	0.58
Category		Category A
Sharing Ratio as per SI No. 3 of Category A		65% : 35%
Total Gross Generation	in MU	1149.64
Price of Oil	Rs/ KL	43374.58
GAIN	in Rs Lakh	209.43





#### Order on FPPCA and APR of DPL for the year 2016-17

Particulars	Unit	Unit VIII
Share % of Consumers and Licensees	%	35
Share of Consumers and Licensees	in Rs Lakh	73.30

#### 2.13 Benefits due to savings in heat rate:

As mentioned in paragraph 2.7, heat rate achieved in unit VIII was better than norm. Savings due to better heat rate is Rs. 168.64 lakhs of which 40% i.e., Rs. 67.46 lakhs is to be compensated with the deficit in fixed charge recovery of DPL in terms of paragraph D of Schedule 9B to the Tariff Regulations before sharing with consumers and distribution licensees as per the Tariff Regulations. Relevant computations are placed below.

Table-2.10

Normative Heat Rate	kCal/kWh	2425
Actual Heat Rate	kCal/kWh	2409
Normative Coal Cost	Rs. Lakhs	25474.15
Actual Coal Cost	Rs. Lakhs	25305.51
Savings	Rs. Lakhs	168.64
To be shared with consumers and licensees	%	40%
Gain Sharing for Heat Rate	Rs. Lakhs	67.46

#### 2.14 Benefits for savings in Distribution Loss:

As referred in paragraph 2.8, DPL could achieve gains from distribution loss. As against normative distribution loss of 5.2%, DPL could achieve distribution loss of 4.32%. The allowable quantum of distribution loss (5.20%) on actual quanta of sales to consumers as well as the actual own consumption comes to 119.76 MU [{2183.34/ (1-0.052)}-2183.34] as against actual distribution loss of 80.99 MU. The savings in this regard comes to 38.77 MU (119.76 MU – 80.99 MU). As provided in paragraph C of Schedule – 9B to the Tariff Regulations, 2011 IPCL is entitled to retain the gains accruing to it in this regard.

Particulars	Quantum (MU)	Cost (Rs. Lakhs)
Sent out from Generation	1841.84	44926.35
Power Purchase	227.67	9820.24
Total	2069.51	54746.59
Average Rate per Unit (Paise per unit)		264.54
Savings in cost	38.77	1025.66
Savings shared with Consumers@ 25%		256.42
Savings for DPL		769.24





- 2.15 Out of amount of Rs. 769.24 lakh, computed above, a total amount of Rs. 484.93 lakh (Rs. 45411.28 lakh Rs. 44926.35 lakh) has already been passed on by way of adopting normative rate of distribution loss as denominator in computing admissible fuel cost for sale to Licensee and consumers. The balance amount of Rs. 284.31 lakh (Rs. 769.24 lakh Rs. 484.93 lakh) is now being allowed.
- 2.16 Summing up the findings stated above, the amount of fuel and power purchase cost allowed to DPL for the year 2016-17 is as under.

**Table 2.11** 

Particulars	As Admitted
Fuel Cost For Generation Function	45411.28
Power Purchase Cost For Distribution Function	9820.24
Additional amount on account of savings in the rate of Distribution loss net off consumer share	284.31
Total	55515.83





#### **Annexure 2A**

#### COMPUTATION OF ACTUAL AVERAGE STATION HEAT RATES ACHIEVED IN 2016 -2017

SI No	Particulars	Unit	Unit VII
1	Generation (Actual) (Form 1.11 of APR Petition)	MU	993.50
2	Consumption of Oil (As per Form 1.11 of APR Petition)	KL	1356.69
3	Consumption of Coal (As per audited accounts)	MT	710516
4	GCV of Oil (See Audited Statement of Accounts of Power Plant)	Kcal/Lit	9000.00
5	Heat value of Coal (As per audited figure)	Kcal/Kg	3778.80
6	Heat from Oil (2X4/1000)	M.Kcal	12210.21
7	Heat from Coal (3X5/1000)	M.Kcal	2684897.86
8	Total Heat used (6+7)	M.Kcal	2697108.07
9	Station Heat Rate achieved (8/1)	Kcal/kWh	2714.75





## Order on FPPCA and APR of DPL for the year 2016-17

## Annexure 2B

# COMPUTATION OF HEAT VALUE OF COAL BASED ON MINIMUM OF DECLARED HEAT VALUE

Wt. Ave. UHV admitted by the Commission	11= 10 / 3	48.43	493.96	181.18	187.15	153.39	16.72	28.38	0.00	193.39	145.83	0.00	0.00	0.00	1178.04	729.68	0.00	39.72	7.24	118.97	256.74	3778.80
AHN	10=3 X 9	69844989.60	712391703.69	261300139.62	269909164.10	221221269.89	24107295.98	40926771.64	00.00	278906152.23	210314900.38	00.00	00.00	00.00	1698989191.40	1052355883.63	00.00	57281320.16	10445028.71	171586177.48	370276605.48	5449856594.00
Interpolated UHV	6	6120.00	5675.56	5236.42	4798.70	4361.69	3992.47	5675.56	5236.42	4798.70	4361.69	3992.47	3663.06	5455.44	3992.47	3663.06	3663.06	3309.80	2682.35	2158.64	1719.81	
UHV min	8	2600	5600.00	4940.00	4200.00	4200.00	3360.00	5600.00	4940.00	4200.00	4200.00	3360.00	3360.00	4940.00	3360.00	3360.00	3360.00	2400.00	2400.00	1300.00	1300.00	
UHV max	7	6200	6200.00	5600.00	4940.00	4940.00	4200.00	6200.00	2600.00	4940.00	4940.00	4200.00	4200.00	2600.00	4200.00	4200.00	4200.00	3360.00	3360.00	2400.00	2400.00	
GCV min	9	6049	6049.00	5597.00	5089.00	5089.00	4324.00	6049.00	5597.00	5089.00	5089.00	4324.00	4324.00	5597.00	4324.00	4324.00	4324.00	3865.00	3865.00	3113.00	3113.00	
GCV max	2	6454.00	6454.00	6049.00	5597.00	5597.00	5089.00	6454.00	6049.00	5597.00	5597.00	5089.00	5089.00	6049.00	5089.00	5089.00	5089.00	4324.00	4324.00	3865.00	3865.00	
ACO.	4	6401.00	6101.00	5801.00	5501.00	5201.00	4901.00	6101.00	5801.00	5501.00	5201.00	4901.00	4601.00	5951.00	4901.00	4601.00	4601.00	4301.00	4001.00	3701.00	3401.00	
Quantity consumed	3	11412.58	125519.29	49900.57	56246.30	50719.13	6038.19	7211.06		58121.18	48218.64	00.00	0.00	0.00	425548.33	287288.83	00.00	17306.56	3893.98	79487.96	215300.40	1442213.00
Grade of Coal	2	63	G4	G5	95	67	89	64	G5	99	67	68	69	II-M	III-M	VI-W	69	G10	G11	G12	G13	TOTAL
Source	-				ECL							BCCL							MCL			





#### Annexure 2C COMPUTATION OF FUEL COST OF GENERATING STATIONS

			Unit	Unit	
SI No	Particulars	Unit	VII	VIII	
1	Ex-Bus Generation	MU	903.89	1046.17	
2	Rate of Auxiliary Consumption	% .	8.50%	9.00%	
3	Auxiliary consumption on ex-bus generation [(1)/(1Aux consumption)-(1)]	MU	83.97	103.47	
4	Admissible Generation for sale [(1)+(3)]	MU	987.86	1149.64	
5	Station Heat Rate	Kcal/kWh	2345	2425.00	
6	Total Heat Required (4×5)	M.Kcal	2316526.83	2787870.60	
7	Heat value of Oil	Kcal/lit	9000	9000.00	
8	Specific Oil consumption	ml/kWh	1	1.00	
9	Oil consumption (4×8)	KL	987.86	1149.64	
10	Heat from oil (7×9)/1000	M.Kcal	8890.72	10346.74	
11	Heat from coal (6-10)	M.Kcal	2307636.11	2777523.86	
12	Average UHV of coal	K.cal/Kg	3778.80	3778.80	
13	Coal consumption (11/12) ×1000	MT	610679.61	735028.02	
14	Coal requirement at 0.50% transit loss on 13	MT	613748.35	738721.62	
15	Average price of oil	Rs/KL	43374.580	43374.580	
16	Average price of coal	Rs/MT	3448.41	3448.41	
17	Cost of oil (9×15)/100000	Rs in lakh	428.48	498.65	
18	Cost of coal (14×16)/100000	Rs in lakh	21164.56	25474.15	
19	Cost of Fuel (17+18)	Rs in lakh	21593.04	25972.80	
20	Cost of fuel per unit [{19/1}*10]	Paise/kWh	238.89	248.27	
21	Average Cost of Fuel per unit for DPL	Paise/kWh	24	13.90	





#### CHAPTER – 3 FIXED COST DETERMINATION UNDER APR

- 3.1 The Tariff Regulations specifies the classification of different fixed charge elements under controllable and uncontrollable head and also deals with the treatment of variation between projected expenditure and actual expenditure of such fixed charge elements during reconsideration of ARR at APR stage. In its order dated 04.03.2015 in respect of the tariff application of DPL for the years 2016-17, the Commission considered some specific principle of calculation for determination of some elements of fixed charge during projection of ARR. The basic premises of such principles of calculation are:
  - (i) Wholesale price Index (WPI) and consumer price Index (CPI),
  - (ii) Business volume change namely Distribution line length and number of consumers, and
  - (iii) Sensitivity of expenditure elements to business volume change.

#### 3.2 Growth rate issues:

3.2.1 The values considered during projection and business volume data provided by DPL in their MYT application, are now compared with actual inflation indices as available from websites of Economic Advisor Govt. of India and Labour Bureau, in Table 3.1 below.

Table 3.1

to estate to	Inflatio	n %	Business volume		
СРІ	WPI	Combined (40:60)	Line length increase %	Consumer increase %	
9.15	6.62	7.63	4.02	4.02	
4.15	3.70	3.88	0.23	7.93	
	9.15	<b>CPI WPI</b> 9.15 6.62	9.15 6.62 7.63	CPI WPI Combined length increase %  9.15 6.62 7.63 4.02	

3.2.2 It may be seen from Table 3.1 above that all the parameters except rate of increase in consumer number shows a downward trend. Now the Commission proceeds to review each of such fixed charge elements claimed by DPL in line with Tariff Regulations with specific reference to Regulation 2.5.5, 2.5.5.1, 2.6.10 and 2.8.9.5 and principles, terms and conditions for determination of tariff for retail sale of electricity as per schedule-5 of the Tariff Regulations.





3.3 Now, the Commission proceeds to review each of such fixed charge elements claimed by DPL in line with Tariff Regulations.

#### 3.4 Project Cost of Unit VII and VIII

- 3.4.1 In the tariff order for the fourth control period the Commission withheld 5% of the provisional project cost of units VII and VIII of DPL amounting to Rs 6750.00 lakh and Rs 8498.00 lakh respectively. Such amount was withheld due to the reason that the report as per regulation 2.8.1.4.13 of the Tariff Regulations has not yet been submitted by DPL. In their application in volume 1 para 21 (1) & (2) Page 23-24 of the APR application, DPL has reported that the issues are still not finalized.
- 3.4.2 The Commission decided to continue with the principle of withholding such amount in the present APR considering submission of DPL as stated in para (3.4.1) above. Such withholding would affect the admitted amount under Depreciation, return on equity and reserve for unforeseen exigency heads only as decided by Commission in the MYT order. In case of any disallowance in the project cost of Unit VII and VIII by the Commission after submission of the final project cost, the amount withheld above shall be adjusted with the reduction in project cost, if any, and corresponding impact on tariff shall accordingly be adjusted in subsequent APR / truing up exercise.
- 3.4.3 The Commission in paragraph 8.9 of the MYT Order dated 04.03.2015 had directed DPL to provide all the expenditure or cost element separately for Generation and Distribution function in their Annual Accounts or through auditors' certificate from 2014 15 onwards for regulatory requirements. However, DPL has neither submitted auditors' certificate nor properly segregated the elements of expenditure in their claim between generation and distribution functions. It is further observed that in form E(B), no separate claim for distribution function is shown. Accordingly, the Commission proceeds to determine the admissibility of elements of cost to Distribution and Generation function based on the characteristics of the expenditure and details to the extent available in the specified forms and annexures submitted with their petition.





#### 3.5 Expense Allocation of Service Department and Central Workshop

3.5.1 The Commission observes that the figures given in Page 10 & 11 of volume – I of the petitions (Rs 7090.29 lakhs for service department and Rs 65.13 lakhs for CWS) are different from the figures of audited accounts (Rs 6609.56 lakhs for service department and Rs 63.48 lakhs for CWS). In absence of proper justification of such difference, the Commission decides to proceed with the figures of audited accounts and allocates the same in proportion to their claim.

Table: 3.2
Expense Allocation of Service Department and Central Workshop

Head of expenditure	Claimed service Dept Amount	Claimed CWS Amount
R&M	58.52	0.55
A&G	2470.53	6.11
Audit	2.59	0.00
Legal	25.09	0.00
Insurance	27.36	0.00
Employee	3205.92	56.82
Depreciation	22.71	0.00
Interest	262.67	0.00
IPT water	489.13	0.00
IPT power	24.27	0.00
Rates & Taxes	20.77	0.00
Total	6609.56	63.48

#### 3.6 Employee Cost:

- 3.6.1 In the Tariff order for 2016-17 DPL was allowed a total amount of Rs. 10881.22 lakh towards employee cost which included
  - Employee cost for Generation business Rs 7458.47 lakhs and Distribution business Rs 2546.78 lakhs.
  - ii. 8.33% on Employee cost for Generation business i.e., Rs 621.29 lakh and 10% of Employee cost for Distribution business i.e. Rs 254.68 lakh had been allowed as





proportionate expenses to centrally maintained expenses viz. expenses of Service Department and Central Work Shop in respect of salaries, wages, bonus, contribution to PF etc. as well as staff welfare expenses.

3.6.2 In paragraph 5.3.3.(iii)) of the MYT order of fourth control period Commission has observed that the surplus manpower of unit III, IV & V, already decommissioned, shall be deployed in unit VIII first and the balance in other units VI, VII and distribution. The Commission directed that DPL shall give details of the manpower employed / engaged in the units from the surplus employees arising out of decommissioning of unit III to V in their APR applications. DPL was also directed to submit break-up of the employees engaged both in regular services and contractual services for their different generating units as per the format 1.17(h) of the Tariff Regulations and the basis of apportionment of employee cost of centralized services in order to justify their claim under this head. The Commission considers proportionate allocation based on revised amount of service department and central workshop amount.

#### 3.6.3 In their APR Application DPL has submitted that

- DPL has taken action towards compliance of directive of the Commission regarding redeployment of the manpower from the surplus employees arising out of decommissioning of unit III to V and no new recruitment has been made.
- ii. DPL had already taken action to minimize the size of the service department like Finance and Accounts, Personnel and Administration, Materials Management etc.
- iii. The employees cost of service departments viz Traffic, Loco Workshop, Chemical Laboratory, Central workshop, Hospital, Corporate Office, personnel & Administration which provide service to the power station and other business segments viz coke oven and waterworks is allocated in a proportionate manner in a predetermined ratio of 63.04% of total expenses based on the report of cost accounting firm submitted with their APR Petition of previous year.
- iv. DPL's overall claim for employee cost head as per form E (B) and form 1.17 (h) is Rs 11751.62 lakhs. However total of form 1.12, 1.15 and 1.17 is Rs 11780.98 lakhs which is inclusive of director's fee of Rs. 29.36 lakhs.





- 3.6.4 The Commission noted that the action taken by DPL towards redeployment of employees is corroborated by the fact that the employee cost shows a declining trend over the years. Also, DPL has furnished a copy of the report of cost accounting firm for 2013-14 with their APR application indicating the allocation logic which the Commission has already concurred in the APR order 2013-14. In absence of current year report, Commission relies on the past years report of cost accounting firm for allocation of expenses.
- 3.6.5 As against the amount allowed in Tariff order, DPL has claimed the actual expenditure as per audited accounts (and also as per form 1.17(h) of the petition) for a total amount of Rs. 11780.98 lakh including cost for service departments, centrally maintained workshops and Directors' fees. The Commission admits an amount of Rs. 11546.34 lakhs considering the allocation to service department as given in Table 3.3. The break-up is as under:

Table 3.3

(Rs in Lakh)

		Claimed in APR		Admitted in APR				
Head of expense	Generation Total	Distribution	Total	Generation Total	Distribution	Total		
Employee Cost (Direct)	5531.86	2722.39	8254.25	5531.86	2722.39	8254.25		
Employee Cost (Centrally maintained)	3497.38		3497.38	3262.74		3262.74		
Directors Fee	19.67	9.68	29.35	19.66	9.69	29.35		
Total	9048.91	2732.07	11780.98	8814.26	2732.08	11546.34		

The Employee Cost for Generation has been apportioned based on DPL's claim and is tabulated below:

Unit	Amount (in Rs Lakh)
Unit VI	790.97
Unit VII	4255.70
Unit VIII	3767.59
Total	8814.26

Centrally maintained includes Rs 3205.92 lakhs allocation from service department added with Rs 56.82 lakhs allocation from Central Workshop as mentioned in Table 3.2.

#### 3.7 Water Charge



- 3.7.1 In the MYT order of fourth control period Commission admitted Rs 2913.73 lakhs for the year 2016-17 considering rate of inter-plant transfer @ Rs. 6.50 per KL for the projected generation level in respect of Units VI, VII & VIII and directed DPL to submit details of calculation of interplant transfer rate of water at Rs. 15.00 per KL, along with the APR petition of 2014 2015.
- 3.7.2 The Commission has already decided on this issue in the APR order of 2014-15 and proceeded with determination of water charges based on the value as considered from past i.e. the rate is continued as Rs 6.50 per KL. In APR order 2016-17 also the rate for water charges have been continued with Rs 6.50 per KL.
- 3.7.3 The water charges are categorized as uncontrollable. The Commission observed that during 2016-17, the actual generation fell short of targeted generation projected by DPL. The Commission decides to disallow the proportionate cost of water charges based on actual generation and the targeted generation in the Tariff Order 2016-17 as highlighted hereunder in Table 3.4:

Table 3.4
Admitted Water charges for 2016-17

DPL Unit No	Gross Generation projected in Tariff Order 2016-17	Actual Gross Generation	Water Charges admitted in Tariff Order 2016-17	Proportionate Water charges for actual generation (Lakh Rs) \$	Water Charges claimed (Lakh Rs)	Water Charges admitted in APR
	(MU)	(MU)	Lakh Rs	Lakh Rs	Lakh Rs	Lakh Rs
VI	578.160	0.0	533.64	0.00	0.00	0.00
VII	2102.400	993.50	1298.23	613.49	973.66	613.49
VIII	1752.000	1149.89	1081.86	710.06	749.48	710.06
Total	4432.560	2143.39	2913.73	1323.55	1723.14	1323.55
	nate with respe	ect to admitted	amount of 201	6-17 Tariff Order		

3.6.6 The amount as above is admitted under Generation function.

#### 3.8 Coal and Ash Handling Expenses

3.8.1 An amount of Rs. 2214.31 lakh was allowed in the tariff order for 2016-17 towards coal and ash handling expenses. DPL claimed an amount of Rs. 387 lakh on this account. In the annexure A Page 5 of the audited annual accounts of the power plant, expense on account of ash disposal is shown as Rs 387.01 lakhs.





3.8.2 Considering the above claimed amount of Rs 387 lakhs as the total amount for actual generation, the proportionate allocation to Unit VII and Unit VIII is made as per the unit wise generation based on actual generation for the year and admissible amount for APR of 2016-17 on head of coal & ash handling expenses are given in the Table 3.5 below:

Table 3.5
Admitted Ash charges for 2016-17

DPL Unit No	Gross Generation projected in Tariff Order 2016-17	Actual Gross Generation	Ash Charges admitted in Tariff Order 2016-17	Proportionate Ash charges for actual generation (Lakh Rs) \$	Ash Charges claimed (Lakh Rs)	Ash Charges admitted in APR
	(MU)	(MU)	Lakh Rs	Lakh Rs	Lakh Rs	Lakh Rs
VI	578.160	0.00	433.78	0.00	0.00	0.00
VII	2102.400	993.50	956.31	459.91	190.66	190.66
VIII	1752.000	1149.89	824.22	540.96	196.34	196.34
Total	4432.560	2143.39	2214.31	992.87	387.00	387.00
	ionate with respect to add	mitted amount of 20	16-17 Tariff Order			

3.8.3 The Commission admits the claim of DPL for Rs 387 lakh under this head under generation function.

#### 3.9 O&M Expenses for Distribution:

3.9.1 Operation & Maintenance (O&M) expenses comprise of repairs and maintenance including cost of consumables for that purpose and other administrative and general expenses. A total amount of Rs. 1973.00 lakh was allowed to DPL in MYT order in this regard for the year 2016-17 with following break up:

Table 3.6
O&M Expenses for Distribution

Expense Item	Admitted in MYT Order of 2016-17 (Rs Lakh)
R&M Distribution	1259.00
Other A&G Distribution + Audit fees	714.00
Total	1973.00

3.9.2 In their APR application DPL has submitted statements showing breakup of A&G expense in their APR application. DPL in their application has claimed Repair and Maintenance





Expenses (R&M Expenses) and different element of Administrative and General (A&G Expenses) separately but as a composite amount for both Generation and Distribution function.

3.9.3 As per form E(B) total claim of DPL under the head "O&M expenses", inclusive of generation and distribution, is Rs 10285.72 lakh (R&M 4870.76 + A&G 5414.46 + Audit 0.5) whereas Rs. 9555.91 lakh is shown in Audited Annual Accounts of power business (as detailed in Annexure 3A). In absence of justification for such difference (Rs. 729.81 lakh), the Commission considers the Audited Figures as the claimed amount. Accordingly, the claimed amount has been tabulated as below:

Table 3.7

	Tatal	As per Form 1.12				
Particulars	Total claim	Unit VI	Unit VII	Unit VIII	Total Generation	Distribution
	1	2	3	4	(5) = (2) + (3) + (4)	(6) = (1) - (5)
Repair & Maintenance including Stores	4870.76	0	3108.69	1237.62	4346.31	524.45
Administrative and General Expenses	5414.46	245.17	1641.11	1725.78	3612.06	1802.40
Audit	0.50	0	0	0	0	0.50
Less: Difference from Audited Statement (Rs 10285.72 lakh - Rs 9555.91 lakh)	729.81	18.72	362.75	226.32	607.79	122.02
Total	9555.91	226.45	4387.05	2737.08	7350.58	2205.33

3.9.4 Now the claimed and admitted value for R&M Expenses, Audit Fee and Other Administrative & General Expenses are as per Table 3.8 below:

Table 3.8
Admitted Amount for R&M Expenses and A&G Expenses in Distribution

SI No	Expense Item	Amount Admitted in MYT Order in Rs Lakhs	Claimed Amount in Rs Lakhs as given in Table 3.7	Admitted amount in APR in Rs Lakhs
1)	Distribution R&M	1259	524.45	524.45
2)	Other A&G Distribution	713	1802.40	713.00
3)	Audit Distribution	1	0.50	0.50
4)	Less: Difference from Audited Statement		122.02	





SI No	Expense Item	Amount Admitted in MYT Order in Rs Lakhs	Claimed Amount in Rs Lakhs as given in Table 3.7	Admitted amount in APR in Rs Lakhs
5)	Distribution A&G Expenses (2+3-4)	714.00	1680.88	713.50
6)	Adjustment in terms of Regulation 2.5.5 (iv) of Tariff Regulations			0.50
7)	Total O&M Expenses (1+6)	1973.00	2205.33	1238.45

#### 3.10 O&M Expenses for Generation.

3.10.1 O&M expenses of generation for Rs. 3838.50 lakh was allowed in the tariff in accordance with the norms specified in Schedule 9A of the Tariff Regulations.:

Table: 3.9
O&M Expenses Computation for Generation Function

Unit No	Unit Size	O&M Expenses Rs Lakh Per MW	Normative O&M Expenses	Claim (As per para 3.9.3)	Admitted O&M Expenses
VI	110	19.71	2168.10	245.17	0.00
VII	300	7.92	2376.00	4749.80	2376.00
VIII	250	5.85	1462.50	2963.40	1462.50
		Total	6006.60	7958.37	3838.50

#### 3.11 Insurance:

As per MYT order for 2014-15 to 2016-17 insurance premium approved for 2016-17 was Rs 106 Lakhs on the head of generation function. In APR petition for 2016-17 DPL has claimed an amount of Rs 24.81 Lakhs on generation only as per Form 1.12. The Insurance claim of Unit 7 and Unit 8 has been admitted amounting to Rs. 10.06 lakh and Rs. 13.95 lakh. Unit 6 being inoperative during the year, expenses related to it is not admitted following regulation 5.25 of the Tariff Regulation.

#### 3.12 Rates & Taxes:

As per MYT order for 2016-17 rates and taxes approved was Rs 5 Lakhs on the head of generation function. In APR petition for 2016-17 DPL have claimed an amount of Rs 78.15 Lakhs on head of generation function for Unit 7 and Unit 8 only This item being uncontrollable



and statutory in nature, the Commission admits such expenses of Rs 78.15 Lakhs on generation function for APR of 2016-17.

#### 3.13 Depreciation:

3.13.1 Total depreciation admitted in the MYT order of the Commission for the year 2016-17 is Rs 14642.44 lakhs after considering a 5% reduction of provisional project cost of unit VII and Unit VIII on the ground as explained in paragraph 3.4 above. Against such amount DPL has claimed an amount of Rs 21787.92 lakhs towards depreciation in their application as below:

SI No	Particulars	Amount in Rs Lakhs
1	Generating Assets (As per Form B)	12067.11
2	Distribution Assets (As per Form B)	889.29
3	Other Assets (As per Form B)	338.44
4	Written Down Value of Unit III, IV, V (As per Para 6 of APR submission)	8493.08
5	Total Depreciation Claimed (Sum 1 to 4)	21787.92

- 3.13.2 It is seen from the audited power plant account of DPL for the year 2016-17, the depreciation amount shown in Statement V in page 47 of vol III is Rs 21806.92 lakh which includes Rs 19 lakh towards 50% allocation from service section. Excluding such amount, the depreciation amount as per audited statement comes to Rs 21787.92 lakh which tallies with the claimed amount.
- 3.13.3 In absence of details regarding the claim of DPL amounting to Rs. 8493.08 lakhs stated to be pertaining to the written down value of Unit III, Unit IV and Unit V of power stations held for disposal, the Commission decides to withhold such amount and directs DPL to submit the relevant details and justification pertaining to their claim for considering admissibility and release of such amount.
- 3.13.4 The Commission observed that the claim of Depreciation against the inoperative Unit VI has increased substantially to Rs. 8840.43 lakhs from the previous year (2015 16) of Rs. 847.50 lakhs which is not practical considering the prudent accounting practice. In absence of any details or justification for such increase, the Commission reduces the entire amount of Rs. 8493.08 lakhs from the claim of depreciation of Unit VI and proceeds to determine the allowable Depreciation. Further, in line with the principle decided by the Commission in





paragraph 5.2.1 (iii) of the MYT Order for the fourth control period, 5% of the admissible amount of depreciation is withheld.

Table 3.10

			Table 3.10			
Head	Depreciation as per Form B	Depreciation claimed in Form 1.12 and Form 1.15	Depreciation of Unit III, IV and V reduced as per para 3.13.4	Allowable Depreciation	Withheld as per para 3.13.4	Admitted Depreciation
	(1)	(2)	(3)	(4) = (2) – (3)	(5)	(6) = (4) – (5)
Unit VI		8840.43	8493.08	347.35		347.35
Unit VII	12067.11	4521.14		4521.14	226.06	4295.08
Unit VIII		6242.63		6242.63	312.13	5930.50
Generation Total	12067.11	19604.20	8493.08	11111.12	538.19	10572.93
Distribution	1227.73	2183.72		2183.72		2183.72
Total	13294.84	21787.92	8493.08	13294.84	538.19	12756.65

3.13.5 Thus Rs 12756.65 lakh is admitted towards depreciation for 2016-17 and the function wise allocation of the admitted depreciation is as under:

Generation: Rs 10572.93 lakh

Distribution: Rs 2183.72 lakh

Total: Rs 12756.65 lakh

#### 3.14 Interest on Borrowed Capital:

3.14.1 In the MYT order of fourth control period, the Commission allowed Rs 20105.67 in the ARR of DPL for 2016-17 towards Interest on borrowed capital, of which Rs 18890.27 lakh was allocated for Generation function and Rs 1215.4 lakh was for distribution function. DPL in their APR application (Vol I - page 12) has submitted that the total interest charged in annual accounts for power business is Rs 32723.33 lakh out of which Rs 493.79 lakh is on account of working capital interest. It is observed that interest expense shown in Volume III statement IV Page 47 of the audited annual accounts of power plant is Rs 32723.33 lakhs, which tallies with the total interest amount stated by DPL in application. DPL has claimed Rs 32229.54 lakh as Interest on Borrowed Capital in Form E(B) excluding the interest on working capital of Rs 493.79 lakh.



3.14.2 The breakup of claim of DPL on account of Interest on Borrowed Capital as submitted in Audited Accounts is as follows:

Table 3.11
Detail of Interest claimed by DPL

Interest on Loan from	Claim			
CEA	184.06			
GoWB	1638.76			
PFCL	30406.72			
Total	32229.54			

DPL in paragraph 11 of their APR submission has stated that an amount of Rs. 22179.23 lakhs pertain to FITL. On scrutiny of the claim in Form C of 2016-17, it is observed that interest on FITL loans as well as penal interest has been included in their total claim of Rs. 32229.54 lakhs. The Commission decides not to admit any amount of penal interest. Further, in absence of details of the actual interest paid, an amount of Rs. 2857.09 lakhs being the interest for the year 2016-17 considering the rate of interest on FITL as submitted in computation sheet is also not admitted. The details of FITL are as below:

Table 3.12

Computation of FITL Interest

SI No	PFC Loan No	Amount of FITL	Rate of Interest	FITL Interest
1	50403001	810.13	12.75%	103.29
2	50401001	4545.05	13.00%	590.86
3	50401004	3511.19	12.88%	452.24
4	50401003	13312.86	12.85%	1710.70
Total		22179.23		2857.09

- 3.15.4 In the paragraph 5.12.2 of the MYT order of the fourth control period, the Commission had disallowed the interest on loan from CEA and directed DPL not to claim the interest on loan from CEA in future. DPL has claimed an amount of Rs. 184.06 lakhs on this head. However, in line with the directives, the Commission does not consider such claim of DPL.
- 3.14.4 Accordingly, the admitted amount comes to Rs. 29111.17 lakhs as tabulated below:





Table 3.13
Interest Payable for DPL in 2016-17

SI No	PFC Loan Claim	Normal	Penal (+) /Rebate (-)	Total	FITL Interest from Table 3.12	Amount Admitted
		Α	В	C = A + B	D	E = C - D
1	50403001	1489.21		1489.21	103.29	1385.92
2	50401001	6161.25		6161.25	590.86	5570.39
3	50401004	8144.81		8144.81	452.24	7692.57
4	50401D04	69.1	-1.39	67.71		67.71
5	50401003	14466.52		14466.52	1710.70	12755.82
6	50424001	78.82	-1.6	77.22		77.22
7	GoWB	1638.76	-	1638.76	-	1638.76
8	CEA	102.73	81.33	184.06		0.00
	Total	eta le la company		32229.54	2857.09	29111.17

3.14.5 Function wise admitted amount towards interest on borrowed capital of DPL for 2016-17 is allocated in proportion to their claimed amount as follows in the Table 3.14.

Table 3.14 Interest Payable for DPL in 2016-17

	In Rs Lakh
Generation function	
Unit VI	0.00
Unit VII	6979.99
Unit VIII	20484.70
Distribution function	1646.45
Total Interest on Borrowed Capital	29111.17

3.14.6 DPL is being directed to submit necessary details, justification and documentary evidence through future APR petition with respect to the actual interest paid along with the details of interest on FITL for examination of the Commission and further necessary action, if any.

#### 3.15 Other Finance Charges:

3.15.1 The actual amount of other finance charge claimed by DPL as per form 1.17(c) of the APR application is Rs 1735.23 lakhs which includes Guarantee fees of Rs. 1734.19 lakhs and Rs. 1.04 lakhs as Bank Charges which is shown under Generation Function. The Commission



accordingly admits Rs. 1735.23 lakhs and allocates the same to generation and distribution function as per their claim as tabulated below

Table 3.15
Admitted Amount for Other Finance Charges

Unit	Claimed	Admitted
VI	0	0
VII	463.59	463.59
VIII	1271.64	1271.64
Total Generation	1735.23	1735.23
Distribution	0	0
Licensee Total	1735.23	1735.23

#### 3.16 Advance against Depreciation:

3.16.1 DPL in their APR application has not claimed any amount under this head as per calculation shown in form 1.17 (e). The admitted amounts under depreciation for 2016-17 is Rs 12756.65 lakhs and the loan repayment made by DPL as per form C and form 1.17 (e) is Rs 41.42 lakh. Thus, the loan repayment being lower than depreciation amount thus no amount is being admitted as advance against depreciation.

#### 3.17 Reserve for Unforeseen Exigencies:

- 3.17.1 In the MYT order of fourth control period, Commission has allowed an amount of Rs 954.80 towards Reserve for unforeseen exigencies in response to the prayer of DPL for providing such reserve. DPL through paragraph 15 of their APR submission has claimed an amount of Rs. 925.05 lakhs being 0.25% of the value of their gross fixed asset in 2016-17. DPL further stated that they have failed to invest the amount admitted in the MYT Order as required in terms of the Tariff Regulations.
- 3.17.2 The Commission finds that regulation 5.11.1 read with 5.24.1 of the Tariff Regulations have not been complied with by DPL. Accordingly, the Commission in line with the regulation 5.11.2 of the Tariff Regulations decides to withhold double the amount allowed in the Tariff Order, i.e., Rs. 1909.60 lakhs (954.80 x 2).





#### 3.18 Interest on Consumer's Security Deposit:

- 3.18.1 DPL has claimed Rs 123.50 lakh under the head Interest on Consumers' Security Deposit for the year 2016-17 against the admitted expenditure of Rs 71.03 lakhs in MYT.
- 3.18.2 DPL further communicated that at present they are only providing for the interest in accounts and there is no actual pay out. Therefore, in line with the directive in MYT order for the year 2014-15-to 2016-17, the Commission does not allow any amount under this head for 2016-17.

#### 3.19 Income Tax:

3.19.1 DPL has claimed an amount of Rs. 3534.09 lakh in their application under form E (B) towards income tax. The Commission observes from the statement of 'Profit and Loss for the Year ended on 31st March, 2017' and from the 'Cash Flow Statement' of the Audited Annual Accounts that no amount has been either provided for or actually paid on account of Income Tax. Accordingly, no amount has been considered by the Commission.

#### 3.20 Return on Equity:

- 3.20.1 In terms of regulations 5.6.1.1 and 5.6.1.2 of the Tariff Regulations, DPL is entitled to have returns on equity base deployed in its generation and distribution functions @ 15.5% and 16.5% respectively.
- 3.20.2 In the APR order of 2013-14, the Commission had given certain direction as follows:

"It is observed from the Balance Sheet of the power plant unit of DPL, as submitted with the APR application for the year 2013 – 2014 that the shareholders' fund in liability side has not been shown separately. In order to justify different element of fixed charge components including return on equity, DPL is directed to submit duly audited balance sheet and profit and loss account year-wise for the years 2007 – 2008 to 2011 – 2012 and 2012 – 2013 onwards in respect of the power plant unit as a whole separately incorporating therein shareholders' funds viz., (i) authorized capital, (ii) paid up capital, (iii) capital reserve, (iv) reserves & surplus and (v) reserve for the unforeseen exigencies along with respective schedules under the major head 'sources of fund' including the Auditor's comments instead of present practice of reflecting inter-unit current accounts under shareholder's fund. The amount under reserves & surplus schedule should include amounts of surplus separately brought forward from profit & loss account of the respective year / previous year besides capital reserves, etc. It is also





directed to forward the respective Government orders issued from time to time towards equity infusion / participation by the Government in the power plant business of DPL unit-wise. "

In response to such direction DPL has mentioned that State Government is in the process of restructuring of the organization where all the business segment will be separated. As the process has not been completed thus the separation of power business could not be completed. Considering the above fact WBERC has undertaken the ROE computation on the following basis.

- 3.21.3 No return on equity for Unit VI has been considered on the admissible equity base calculated in Table 3.16 below in terms of regulation 5.6.1.6 and 5.25 of the Tariff Regulations.
- 3.21.4 The computations of the amount of such capital base, following the methods prescribed above amount of total allowable return come as under:

**Table 3.16** 

Return On Equity for FY 2016-17

SI	B-ti-d	Generation	n Unit		Total	Distribution	
No	Particulars	VI	VI VII VIII		Generation	Distribution	
1	Actual equity base at the beginning of the year	21284.70	36256.00	34000.00	91540.70	18517.77	
2	Admissible Opening Balance of the year(	13808	36256.00	29659.04	82602.50	15936.92	
3	Actual addition/withdrawal/deleted to Equity Base for the year #	-4531.39	0.00	0.00	-4531.39	0.50.00	
4	Actual Equity Base at the end of the year (1+3)	16753.31	36256.00	34000.00	87009.31	18517.77	
5	Amount transferred to Fixed Assets	0.00	144.35	1834.74	1979.09	0.00	
6	Normative Equity % on (5)	30.00%	30.00%	30.00%		30.00%	
7	Normative addition to Equity Base	0.00	43.31	550.42	593.73	0.00	
8	Addition to Equity base considered for the year in ARR (Minimum of 3 & 7)	-4531.39	0.00	0.00	-4531.99	0.00	
9	Admissible Equity Base at the year end	9277,56	36256.00	29659.04	75192.60	15936.92	
10	Average Equity Base for the year (2+9) ÷2	11543.26	36256.00	29659.04	77458.30	15936.92	



Order on EDDCA	and APR of DPI	for the year 2016-17
Older on FFFCA	allu Al IX OI DI L	TOT LITE YEAR ZOTO IT

# Ar	nount Deleted for Unit VI has been cald	culated in	line with regula	ation 5.6.1.6	(a) of the Tarif	f Regulations
14	Return allowed in ARR (12-13)	0.00	5338.70	4367.29	9705.99	2629.59
13	Withheld for non-submission of project cost detail as per para 3.4	0.00	280.98	229.86	510.84	0.00
12	Allowable return	0.00	5619.68	4597.15	10216.83	2629.59
11	Rate of Return in %	0.00	15.50%	15.50%		16.50%

3.20.6 Thus, the amount of ROE admitted for generation function comes to Rs 9705.99 lakh and for Distribution function it is Rs 2629.59 lakh. The overall computed ROE thus stands to Rs 12335.58 lakh.

#### 3.21 Unscheduled Interchange (UI)/DSM Charges:

The Commission observed that DPL has claimed an amount of Rs. 209.19 lakhs for drawal of 5.61 MU of power as net UI charges. In terms of regulation 5.17.2 of the Tariff Regulations, the net UI/ DSM charges payable by a distribution licensee will be considered as an expenditure limited to 5% of the total power purchase cost. The net UI charge payable by DPL during 2016 – 17 is only 2.13% of its total power purchase cost during the year. Hence, the net UI charge of Rs. 209.19 lakh is admitted under the distribution function.

#### 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 DPL in its tariff order for the year 2016-17. 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.





3.22.2 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-3.17 below:

Table 3.17
Interest on Working Capital

		Am	ount in Rs. in la	kh
SI. No.	Particulars	Generation	Distribution	Total
1	Annual Fixed charges now arrived excluding interest on working capital	62214.98	9427.73	71642.71
2	Fuel Cost / power purchase cost as admitted	45411.28	10104.55	55515.83
3	Sub Total (1+2)	107626.26	19532.28	127158.54
	Less:			
4	Depreciation	10572.93	2183.72	12756.65
5	Advance against depreciation	0.00	0.00	0.00
6	Deferred revenue expenditure	0.00	0.00	0.00
7	Return on Equity	9705.99	2629.59	12335.58
8	Bad and doubtful Debt	0.00	0.00	0.0
9	Reserve for Unforeseen Exigencies	0.00	0.00	0.0
10	Sub Total (4 to 9)	20278.92	4813.31	25092.2
11	Allowable Charges for working capital (3-10)	87347.34	14718.97	102066.3
12	Normative requirement of Working Capital (10% of 11)	8734.73	1471.90	10206.6
13	Security deposit held as on 31.03.2017		1892.58	1892.5
14	Peguirement of working capital after utilizing		0.00	8734.7
15	Interest allowable @12.70%% on 14	1109.31	0.00	1109.3
16	Interest on Working Capital Actually Paid (As per Form C - excluding Cash credit for Coke Oven plant)			524.9
16 Interest on working capital allowed (Minimum of 15 and 16)		524.93	0.00	524.9

The Commission admits Rs. 524.93 lakh as Interest on Working Capital.

#### 3.23 Interest Credit:

3.23.1 In terms regulation 5.5.3 of the Tariff Regulations, where the actual amount of loan repayment in any year falls short of the depreciation allowable during the year, then interest credit of such excess depreciation charges at the rate of weighted average cost of debt is admissible.



3.23.2 The Commission did not consider any interest credit during determination of ARR for tariff order of 2016-17. DPL has claimed interest credit of Rs 2229.02 lakh in the APR application in Form 1.17 g. Based on the admitted depreciation and repayment of loans considered for admitting borrowing cost interest credit is worked out as follows:

Table 3.18

Details	Unit VI	Unit VII	Unit VIII	Distribution	Total
Depreciation	347.35	4295.08	5930.50	2183.72	12756.65
Actual Repayment	0	0	41.42	0	41.42
Additional fund created	347.35	4295.08	5889.08	2183.72	12715.23
Rate of interest	12.52%	12.52%	12.52%	12.52%	
interest credit	43.49	537.74	737.31	273.40	1591.94

- 3.23.3 The amount of Rs. 1591.94 Lakh is admitted as interest credit in APR 2016-17 of DPL with breakup of Rs 1318.54 lakh for generation function and Rs 273.40 lakh for distribution as shown in the Table 3.18 above.
- 3.23.4 In terms of the Tariff Regulations, depreciation is primarily used for repayment of capital loan. Where, the amount of depreciation falls short of amount of loan repayment such shortfall is allowed under Advance against Depreciation (AAD) limited to 1/10 of original amount of allowable loan. Similarly, when amount of loan repayment in a year is more than allowed depreciation, an interest credit at the rate of weighted average cost of debt for the corresponding year needs to be adjusted on such excess depreciation charged. Further, in terms of the Tariff Regulations, it is required to be ensured that the depreciation allowed should not go beyond 90% of the original cost of Asset and after repayment of entire loan the resulting depreciable amount shall be spread over the balance useful life of the fixed asset. Thus, the Commission directs DPL to provide an audited statement specifying the details of cumulative depreciation and/ or advance against depreciation allowed in all previous APR Orders vis-à-vis the actual repayment of loan by them in those years within one month from the date of issuance of this order.

#### 3.24 Income from other Sources / Non-Tariff income:





The income from other non-tariff sources, as per Form 1.26 submitted by DPL is Rs 1349.14 lakh against admitted amount of Rs 833.14 lakh in MYT. The same is accordingly considered for determination of ARR in the APR order for 2016-17. The income from Rental of meters and other apparatus and wheeling charge is attributed to distribution function and the rest income of Rs. 477.25 lakh is allocated to Generation and Distribution function in the ratio of Gross ARR. The total admitted income from other / non-tariff sources is Rs. 1349.14 lakh with functional segregation of Rs. 938.35 lakh for Distribution and Rs. 410.79 lakh for Generation.

#### 3.25 Interest On Electricity duty:

DPL has claimed Rs 3673.43 lakhs as interest on electricity duty in form E(B) without any justification. The Commission does not consider the same in terms of regulation 4.16 of the Tariff Regulations.

#### 3.26 Benefits to be passed on to consumers and other licensees:

- 3.26.1 DPL in their APR application for 2016 17 (Form 1.24) has showed no benefits to be passed on to consumers and licensees.
- 3.26.2 It is noted from the FPPCA petition that DPL has sold 108.28 MU of power to persons other than consumers and licensees. From Form 3.1 the income from sale to IEX comes to Rs 2368.92 lakhs. Based on the submissions, provisions of regulation 5.15.2 (iv) of the Tariff Regulations and variable cost of generating station at 243.90 paise/ kWh as arrived in FPPCA computation, the Benefits to be passed on to consumers and other licensees is found to be nil as calculated below:

1	Share of benefit from sale to others	50%
	a) Sale of power to person other than consumer and licensee (MU)	108.22
2	b) Notional sale of power against Swap Out (MU)	0
	c) Total Sale (MU): A=a+b	108.22
	a) Sale of power to person other than consumer and licensee (Rs. Lakhs)	2368.92
3	b) Notional sale of power against Swap Out (Rs. Lakhs)	0
	Total Sale (Rs. Lakhs): B=a+b	2368.92
	a) Variable Cost of Generation (Paise/ unit)	243.90
	b) Cost of power of sale in 2 (a) above (Rs Lakhs)	2639.49
4	c) Cost of power of sale in 2 (b) above (Rs Lakhs)	0.00
	d) other charges for such sale (Rs Lakhs) **	0





	Total cost of sale (Rs in lakhs) (b+c+d)	2639.49
5	Amount of gain (+) / loss (-) derived from such sale (Rs in Lakhs) (3-4)	-270.57
6	Share of benefit from sale to others (50% of 5)	0

#### 3.27 Admissibility of Capacity Charges based on Availability:

- 3.27.1 In terms of regulation 6.4.2 of the Tariff Regulations, the recovery of capacity charge for the generating station of DPL shall be against the normative availability.
- 3.27.2 DPL submitted that Unit VI was not available for generation and was inoperative the whole year. Therefore, recovery of fixed charge on elements of Employee Cost, Interest on Capital Loan, Depreciation and Advance Against Depreciation is applicable following regulation 5.25 of the Tariff Regulations. Thus, the allowable fixed charge for Unit VI as per Annexure 3B comes to Rs. 1107.61 lakhs.
- 3.27.3 Further, the capacity charges of Unit 7 and Unit 8 of DPL are now required to be computed as per PAF achieved during the year 2016– 2017 following the provisions of the Tariff Regulations.

SI No	Particulars	Unit 7	Unit 8
1	Allowable Fixed Charges for generating station at normative PAF level	24095.69	37536.61
2	Cost admitted under the head 'Water charges'	613.49	710.06
3	Cost admitted under the head 'Coal & Ash Handling Expenses'	190.66	196.34
4	Fixed Charge to be considered for disallowance (4=1-2-3)	23291.54	36630.21
5	Normative PAF	85	85
6	PAF Achieved (for Unit VII and Unit VIII)	66.57	67.27
7	Proportionate capacity charge of item 6 (For Unit 7 and 8)	20195.82	32095.61
8	Capacity Charge admitted on the basis of PAF achieved (8=2+3+7)	20999.97	33002.01

3.27.4 Therefore, the allowable Capacity Charge on the basis of actual PAF for Unit 7 and Unit 8 comes to Rs. 20999.97 lakh and Rs. 33002.01 lakh respectively.

#### 3.28 Sharing of Gains with Consumers and Licensees:

The Commission in paragraph 2.12 has already decided to pass the shareable amount of Rs. 140.76 lakh derived for gains on account of improved specific oil consumption and station heat rate of Unit 8 subject to the condition that the gain is first to be compensated with the deficit in fixed charge recovery of the Unit 8 in terms of paragraph D of Schedule 9B to the Tariff Regulations. From the table in para 3.27 above, it is seen that the deficit in fixed charge





recovery is Rs. 4534.60 lakh. Thus, the amount of Rs. 140.76 lakh is compensated with the fixed charge recovery of Unit 8 and no amount is shared with the consumers and licensees.

#### 3.29 Reliability Incentive:

DPL has claimed that it has achieved system reliability of 99.54% as against 98%, as specified in Paragraph 11 of Schedule 10 of the Tariff Regulations and prayed for allowing Incentive. DPL has submitted 'Monthly Feeder and Cumulative Reliability Index' in support of their claim. However, it is observed that the details submitted by DPL is not as per the format specified in regulation 9.7 of West Bengal Electricity Regulatory Commission (Standards of Performance of Licensees Relating to Consumer Services) Regulations, 2010, as amended from time to time. In absence of such details, the Commission does not allow any incentive as claimed by DPL during 2016 – 17.

#### 3.30 Fixed Charges:

Based on the foregoing analyses, the amounts of fixed charges/ capacity charges allowable under different heads in respect of DPL is shown below:

Particulars	Amount in Rs Lakh
Unit VI	1107.61
Unit VII	20999.97
Unit VIII	33002.01
Total Generation	55109.59
Distribution	9427.73
Total Fixed Charges	64537.32





#### Annexure-3A

O&M and other small expn		Application Vol III			
	Form E(B)	Statement IV Direct (Gen+Dist)	Allocation as per Table 3.4-1 (Gen+Dist)	Total audited account	
1	2	3	4	5=3+4	
Stores		1446.54		1446.54	
R&M	4870.76	3424.24	59.07	3483.31	
Sub Total R&M	4870.76	4870.78	59.07	4929.85	
Travelling Expense				0	
Vehicle Maintenance				0	
Postage				0	
Other Management & Administrative Expenses				0	
Advertisement				0	
Computer maintenance				0	
Gen Estb Charges	5414.46	2146.33	2476.64	4622.97	
Sub Total Other A&G	5414.46	2146.33	2476.64	4622.97	
Audit	0.5	0.5	2.59	3.09	
Sub Total O&M	10285.72	7017.61	2538.3	9555.91	





#### Annexure-3B SUMMARY OF FIXED CHARGE

SI		Claimed by		ED CHAR	Admi	tted		
No	Head of expense	DPL	Unit VI	Unit VII	Unit VIII	Generation	Distribution	Total
1	Employee Cost (Direct)	8254.25				5531.86	2722.39	8254.25
2	Employee Cost (Centrally maintained)	3497.38	790.97	4255.70	3767.59	3282.40	9.69	3292.09
3	Coal and Ash Handling Expenses	387.00	0.00	190.66	196.34	387.00	0.00	387.00
4	Water charges	1723.14	0	613.49	710.06	1323.55	0.00	1323.55
5	O&M Expenses for Generation		0	2376	1462.5	3838.50	0.00	3838.50
6	A&G for Distribution	10285.72	0	0	0	0.00	714.00	714.00
7	R&M for Distribution	10203.72	0	0	0	0.00	524.45	524.45
8	Insurance		0.00	10.06	13.95	24.01	0.00	24.01
9	Rates & taxes	78.15	0.00	36.22	41.93	78.15	0.00	78.15
10	Reserve for Unforeseen exigencies	925.25	0.00	0.00	0.00	0.00	0.00	0.00
11	Depreciation	21787.92	347.35	4295.08	5930.5	10572.93	2183.72	12756.65
12	Advance against Depreciation	0	0	0	0	0.00	0.00	0.00
13	Interest on Borrowed Capital	32229.54	0	6979.99	20484.7	27464.69	1646.45	29111.14
14	Other Finance Charges	1735.23	0	463.59	1271.64	1735.23	0.00	1735.23
15	Bad Debts	0	0	0	0	0.00	0.00	0.00
16	Income Tax	3534.09	0.00	0.00	0.00	0.00	0.00	0.00
17	Interest on Consumers' Security Deposits	123.50	0.00	0.00	0.00	0.00	0.00	0.00
18	Return on Equity	18546.78	0	5338.7	4367.29	9705.99	2629.59	12335.58
19	Interest on Working Capital	1903.68	12.78	239.29	272.86	524.93	0.00	524.93
20	Net UI Charge		0	0	0	0.00	209.19	209.19
21	Interest on Electricity Duty	3673.43	0	0	0	0.00	0.00	0.00
22	Gross Fixed Cost (Sum 1 to 21)	108685.06	1151.10	24798.78	38519.36	64469.24	10639.48	74899.53
23	Less: Income from other sources	1349.14	0.00	165.35	245.44	410.79	938.35	1349.14
24	Less: Interest Credit	2229.02	43.49	537.74	737.31	1318.54	273.40	1591.94
25	Less: Expenses attributable to sale to person other than consumers and licensees	0	0	0	0	0.00	0.00	0.00
26	Net Fixed Charge (26 = 22 - 21 - 22 - 23 - 25)	105106.90	1107.61	24095.69	37536.61	62739.91	9427.73	71958.45





#### Annexure-3C

#### Distribution O&M parameters:

Inflation

Particulars	Tariff Order	APR Order	
WPI	6.62%	3.70%	
CPI	9.15%	4.15%	
WPI: CPI (60:40)	7.63%	3.88%	

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

IVIOLITING I	tate of iiii	iation in	OI I HUHIN	or ioi iiid	aotiiai ii	111010 100	4100 1 =41	, o a . D a . o .	, /	1000		
Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2015-16	256	258	261	263	264	266	269	270	269	269	267	268
2016-17	271	275	277	280	278	277	278	277	275	274	274	275

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

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Averag
2016-17	5.86	6.59	6.13	6.46	5.30	4.14	3.35	2.59	2.23	1.86	2.62	2.61	4.15

Average value is computed

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

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
2015-16	176.4	178.0	179.1	177.6	176.5	176.5	176.9	177.5	176.8	175.4	174.1	175.3
2016-17	177.8	180.2	182.9	184.2	183.3	183.2	183.6	183.5	183.3	185.1	185.5	185.8

Monthly Inflation Rate based on WPI

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
2016-17	0.79	1.24	2.12	3.72	3.85	3.80	3.79	3.38	3.68	5.53	6.55	5.99	3.70

Average value is computed





#### CHAPTER – 4 AMOUNT ADJUSTABLE ON APR & FPPCA

4.1 Based on the forgoing analyses and admissions of the adjustments under different uncontrollable factors / elements of fixed charges and fuel and power purchase cost, the redetermined allowable fixed charges for generation and distribution functions as well as fuel and power purchase cost of DPL during the year 2016-17 came as under Table 4.1 below:

Table 4.1

Particulars	Amount(Rs. Lakh)						
	Generation	Distribution	Total				
Recoverable Fixed Charge	55109.59	9427.73	64537.32				
Total fuel and power purchase cost	45411.28	10104.55	55515.83				
Less: Withheld for reserve for unforeseen exigencies		1909.60	1909.60				
Total	100520.87	17622.68	118143.55				

4.2 In terms of paragraph C of Schedule 9B of the Tariff Regulations, 25% of the gains accruing to a distribution licensee due to its performance in distribution loss being better than the norms of distribution loss has to be shared with the consumers. Adjustment of benefits on power purchase has been admitted in paragraph 2.14 above. Now the benefits of better distribution loss in terms of revenue earned is analyzed below:

SI No	Particulars	Unit	Derivation	Value
1	Net Recoverable Amount	Lakh	Α	118143.55
2	Sale to consumer and licensee	MU	В	1765.93
3	Per Unit Price	Paise/kWh	$C = A \times 10/B$	669.02
4	Energy save on less distribution loss	MU	D	38.77
5	Additional earning from sale of excess energy	Lakh	$E = C \times D/10$	2593.79
6	75% of such gain share of licensee	Lakh	$F = E \times 75\%$	1945.34
7	Less: Gain share already allowed under FPPCA	Lakh	G	769.24
8	Balance Gain Share	Lakh	H = F - G	1176.10

4.3 The Commission is now to see how much revenue had been earned by DPL from sale of power to its consumers and licensees including inter-plant transfer with reference to its audited accounts and the submission dated 28.07.2022. The amount of total sales revenue comes as under Table 4.2 below:

Table 4.2

SI. No.	Particulars	Amount (Rs. Lakh)
	Sales of power as per Note 11(a) to annual accounts 2016 – 2017	98584.68





SI. No.	Particulars	Amount (Rs. Lakh)
2	Add: Inter-plant transfer of Energy as per Note 11 (a)	570.90
3	Total (1+2)	99155.58
4	Less: Income from sale of power other than consumers and licensees	2368.92
5	Sales revenue during 2016-17	96786.66

- 4.4 In terms of paragraph 4.2 above, Rs. 1176.10 lakhs is to be adjusted against actual revenue realized from sale of energy for 2016-17 amounting to Rs. 96786.66 lakhs. Accordingly, the actual revenue realized by DPL from sale of energy to own consumers and licensees comes to Rs. 95610.56 lakhs (Rs. 96786.66 lakhs Rs. 1176.10 lakhs).
- 4.5 Based on the analysis as done in the foregoing paragraphs, the amount adjustable on the instant case of APR for the year 2016-17 works out as under Table 4.3 below:

Table 4.3

SI. No.	Particulars	Total (Rs. Lakh)
1	Total sales revenue realizable in 2016 – 2017 (Table 4.)	118143.55
2	Sales Revenue for 2016 – 2017 (As per Para 4.4)	95610.56
3	Net amount (+) recoverable / (-) refundable [(3) = (1)-(2)	22532.99

- 4.6 The recoverable amount of DPL for 2016 17 comes to Rs. 22532.99 lakh.
- 4.7 DPL is directed to file separate petition before the Commission regarding the treatment of over/ under recovery, if any, as directed by the Commission in para 4.6 of the order dated 30.05.2022.
- 4.8 DPL is to take a note of this order.
- 4.9 A copy of the order shall be posted in the website of the Commission.
- 4.10 DPL 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.





#### CHAPTER - 5 DIRECTIONS

- 5.1 The Commission has given certain directions in the previous chapters which have been consolidated below:
- 5.2 DPL is directed to submit the copy of the Government order regarding Inter Plant Transfer rate for industrial water.
- 5.3 DPL has claimed an amount of Rs. 8493.08 lakhs pertaining to the written down value of Unit III, Unit IV and Unit V of power stations held for disposal without any details or submission. DPL is directed to submit the relevant details and justification pertaining to their claim.
- 5.4 DPL is directed to submit necessary details, justification and documentary evidence through future APR petitions with respect to the actual interest paid along with the details of interest on FITL for examination of the Commission.
- 5.5 DPL is directed to provide an audited statement specifying the details of cumulative depreciation and/ or advance against depreciation allowed in all previous APR Orders vis-à-vis the actual repayment of loan by them in those years within one month from the date of issuance of this order.
- 5.6 DPL is directed to file separate petition before the Commission regarding the treatment of over/ under recovery, if any, as directed by the Commission in para 4.6 of the order dated 30.05.2022.

Sd/-(PULAK KUMAR TEWARI) MEMBER Sd/-(MALLELA VENKATESWARA RAO) CHAIRPERSON

DATED: 14.11.2022

Sd/-SECRETARY