



#### ORDER

OF

WEST BENGAL ELECTRICITY REGULATORY COMMISSION

**FOR THE YEAR 2017 - 2018** 

IN

CASE NO: TP - 67 / 16 - 17

IN REGARD TO THE MULTI YEAR TARIFF APPLICATION OF
HALDIA ENERGY LIMITED FOR DEDICATED

400 KV DOUBLE CIRCUIT LINE

UNDER FIFTH CONTROL PERIOD

FOR THE YEAR 2017 – 2018

UNDER SECTION 64(3)(a) READ WITH SECTION

62(1) AND SECTION 62(3) OF THE ELECTRICITY ACT, 2003

DATE: 20.04.2022





# CHAPTER - 1 INTRODUCTION

- The West Bengal Electricity Regulatory Commission (hereinafter referred to as the "Commission"), a statutory body under Electricity Act, 2003 (hereinafter referred to as the "Act"), has been authorized in terms of the section 86 and section 62(1) of the Act to determine the tariff for a) supply of electricity by a generating company to a distribution licensee, b) transmission of electricity, c) wheeling of electricity and d) retail sale of electricity, as the case may be, within the State of West Bengal.
- 1.2 Haldia Energy Limited (hereinafter referred to as HEL), constituted under the Companies Act, 1956, is a generating company in terms of section 2(28) of the Act and is engaged in the business of generation of electricity within the State of West Bengal. Hence, the generation tariff of HEL shall be determined by the Commission.
- HEL has a 600 MW generating station at Haldia, West Bengal and owns a 400KV double circuit Transmission line spanning about 89 Kilometers emanating from its generating station switchyard up to the 400 KV Subhasgram substation of Central Transmission Utility i.e., Power Grid Corporation Limited. The dedicated transmission line has been in commercial operation since 28.01.2015. Under a long-term power purchase agreement, power generated from the generating station is procured by CESC Limited, a distribution licensee.
- 1.4 In terms of definition contained in regulation 1.2.1 (xxx) 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'), each control period after third control period shall be normally for a period of five ensuing years or such other period of number of ensuing years as may be decided by the Commission from time to time. The Commission vide its order dated 14.12.2016 in Case No. SM-15/16-17 decided that the fifth control period shall be for one year and consist of 2017 2018 only.
- HEL submitted the petition for determination of tariff of its dedicated transmission line for the fifth control period consisting of the year 2017 - 2018 on 29<sup>th</sup> December,





2016. The tariff application submitted on 29.12.2016 along with additional information/ data submitted on 28.02.2017 (collectively called as "tariff application"), were admitted by the Commission in case No.TP-67/16-17, with the direction to publish the gist of their tariff application, as approved by the Commission, in the newspapers and also in their website as per provisions of the Tariff Regulations. The gist was, accordingly, published simultaneously on 06.04.2017 in the newspapers – (1) Bartaman (Bengali), (2) Ei Samay (Bengali), (3) Dainik Viswakarma (Hindi) and (4) The Times of India (English). The gist along with the tariff application was also posted in the website of HEL. The publication invited the attention of all interested parties, stakeholders and the members of the public to the application for determination of tariff of HEL for the fifth control period and requested for submission of suggestions, objections and comments, if any, on the tariff application to the Commission by 25.04.2017 at the latest. Opportunities were also afforded to all to inspect the tariff application and to take copies thereof.

No suggestions and objections on the aforementioned application of HEL for determination of tariff of its dedicated transmission line for the fifth control period were received from any interested party, stakeholder and the member of the public till the last date of submission as above.





# CHAPTER – 2 THE CASE OF THE HALDIA ENERGY LIMITED (TRANSMISSION)

- 2.1 HEL has constructed 2 x 300 MW Thermal Power Plant (Haldia Generating Station) at BaneswarChak, Jhikurkhali, Haldia, Midnapore (East) along with the 400 KV Evacuation line for evacuation of power from Haldia Generating Station to the 400 KV Bus-bar of Power Grid Corporation Limited at Subhasgram substation. The length of the evacuation line is 89 kilometers out of which 3 km is river crossing. This line is a dedicated transmission line within the meaning of the Electricity Act, 2003. The whole power is proposed to be made available to the sole buyer, CESC Limited at the 400 KV Bus-bar of Power Grid's Subhasgram substation.
- 2.2 It has been stated that the instant application for Tariff for the financial year 2017 2018 under the fifth control period has been submitted for determination of transmission charges of the dedicated transmission system pursuant to the regulation 2.5.1 of the Tariff Regulations for determination of tariff to be made effective from 1st April, 2017.
- 2.3 HEL submitted that the Commission vide its order dated 29.01.2016 in Case No. TP 63/ 14 15 read with the order in Case No. OA 100/ 10 11 had determined the annual transmission charges recoverable by HEL for the fourth control period as Rs. 2052 Lakhs, Rs. 9413 Lakhs and Rs. 11401 Lakhs for the years 2014 15, 2015 16 and 2016 17 respectively considering the 95% of the revised project cost in terms of the Tariff Regulations. HEL also stated that during filing of the application for determination of transmission charges for the fifth control period that the final project cost has not been determined by the Commission and also the Tariff Order for 2016 17 allows for continuity of the annual transmission charges till further order. In view of the above, HEL has proposed that the annual transmission charge for 2017-18 be continued at Rs. 11401 lakhs as was allowed in the Tariff Order for 2016 17.
- 2.4 HEL has not submitted information/data required under regulation 2.5.2 of the Tariff Regulations as per the prescribed formats. HEL in their petition submitted that break-up of the allowed transmission charge into separate elements of revenue/ cost is not available with them.





# CHAPTER- 3 FIXED CHARGES

- 3.1 The Commission vide its order dated 08.01.2020 in Case No. OA-267/17 18 has approved the final project cost of construction of 400 kV Double Circuit (D/c) dedicated transmission line for evacuation of power from the generating station of HEL at Haldia to 400 kV Substation (\$/s) at Subhasgram (PGCIL) [hereinafter referred as 'HEL Transmission System'] as Rs. 540.36 Crores against the claim of HEL of Rs. 594.80 Crores in terms of regulation 2.8.5.1 of the Tariff Regulations.
- 3.2 In absence of any element-wise breakup of fixed charges submitted by HEL, the Commission decides to determine admissible expenses for different ARR elements of HEL Transmission system for the year 2017-18 based on the approved final project cost considering the provisions of Tariff Regulations and the actual expenditure submitted under the APR petition for the year 2016-17. HEL is directed to maintain break-up of expenditure as prescribed in the Tariff Regulations and submit such details along with their subsequent APR and Tariff petitions in accordance with the Tariff Regulations.

# 3.3 Employee Cost:

3.3.1 HEL has not submitted the number of employees they have engaged for transmission line. However, from the submission of HEL in APR application for 2016 – 17, it is observed that only 6 numbers of employees are engaged in the HEL Transmission system. The Commission observed that the employee number is well within the limit (0.35) of Man/ CKM specified in the Tariff Regulations. In absence of specific information, the Commission considers the same number of employees for 2017-18. Accordingly, the Commission determines the allowable employee cost for 2017 – 18 by giving inflation at Consumer Price Index rate as detailed in Annexure 3, over the employee cost given in the Auditors Certificate for 2016 – 17 submitted by HEL. Thus, the employee cost has been admitted as below:





	Table -2		
Particulars	Employee Cost as per Audited Accounts of 2016 – 17 (in Rs Lakhs)	Inflation Rate (CPI) (in %)	Admitted Employee Cost for 2017 – 18 (In Rs Lakhs)
<b>Employee Cost</b>	54.30	3.08	55.97

3.3.2 It is pertinent to mention that the employee costs are uncontrollable and therefore, are subject to adjustments in Annual Performance Review for the year 2017 – 18. HEL is also directed to intimate the total CKM of transmission line vis-à-vis number of employees in their APR application in order to ascertain the allowable man power for determination of employee cost as per schedule 9A of the Tariff Regulations.

## 3.4 Operation and Maintenance (O&M) Expenses:

- 3.4.1 In their application, HEL has submitted that the operation and maintenance of 89 Kms line including the river crossing segment of 3 kms, at significant height, poses several challenges and require advanced technology and deployment of skilled workforce for ensuring proper maintenance activities. However, HEL has not proposed any amount of Operation and Maintenance expenses for the year 2017 18.
- 3.4.2 To determine the admissible Operation and Maintenance for HEL Transmission system for the first time, the Commission considers it prudent to analyze the actual expenditure incurred in previous years vis-à-vis the amount admitted to transmission licensee of the State and prevailing norms.
- 3.4.3 Prima facie it is observed that, the Operation and Maintenance expenses submitted in the APR petition of HEL Transmission system appears to be on higher side. The Commission has already determined the O&M expense of WBSETCL for the year 2017-18, but the mix of WBSETCL network is quite different and comprises of transmission elements of different voltage levels ranging from 66 kV to 400 kV with different asset ages. Thus, it is difficult to relate the O&M expenditure allowed for WBSETCL with that of HEL Transmission System. Further, no norms of transmission O&M has been specified in the Tariff Regulations. Under the above circumstances, the Commission finds it prudent to consider the O&M norms specified by CERC for





transmission lines and sub-stations operated at 400 kV for the year 2017-18 as below:

Table -3

Particulars	2017 – 18
Norms for 400 kV Bays [in Rs Lakh per Bay]	66.51
Norms for Double Circuit AC (Twin and Triple Conductor) [in Rs Lakh per KM]	0.78

3.4.4 The normative O&M expenses specified in the CERC Tariff Regulations includes the expenditure on manpower, repairs, maintenance spares, consumables, insurance and overheads. On the contrary, the employee cost is treated separately in the WBERC Tariff Regulations and 'rates &taxes' and 'insurance' are considered as uncontrollable items in WBERC Tariff Regulations. To arrive at an apple-to-apple comparison, the Commission considers it prudent to compute the admissible O&M expense of HEL Transmission system for 2017-18 after deducting the admitted employee cost from the value derived after applying CERC norms (Table - 4.a). Thereafter, the admissible Operation and Maintenance expenses is allocated to the broad sub-heads considering the same ratio as per the submission made by HEL in its APR petition 2016-17 (Table – 4.b).

Table -4 a

SI No	Particulars	Number of Bays/ Length of Line	Norms as per CERC Tariff Regulations [in Rs Lakhs per bay or per Km]	O&M Expenses for 2017 – 18 [in Rs Lakhs]
Α	Substation Part (400 kV Bays)	4	66.51	266.04
В	Transmission Line Part	89 KM	0.78	69.42
C	Total as per CERC Norms (C= A+ B)			335.46
D				55.97
E	Admissible O&M expenses for HEL T	r line (F = C -	וח	
	The state of the experience for FIEL 1	Time (L - C -	D)	279.49

Table – 4.b		
Particulars	Amount [In Rs Lakhs]	
Repair and Maintenance Expenses	128.01	
Administrative and General Expenses	115.37	
Insurance Expense	33.09	
Rates & taxes	3.02	
Total admitted Operation and Maintenance Expenses	279.49	





3.4.5 The admitted Operation and Maintenance Expenses consists of Repair and Maintenance Expenses including consumables, Administrative and General Expenses which includes rent and lease charges, legal charges, auditors' expenses, consultancy charges, other expenses and insurance cost. The Insurance and rates & taxes being uncontrollable elements, are subject to truing up during Annual Performance Review following the provisions of WBERC Tariff Regulations.

#### 3.5 Return on Equity:

3.5.1 The Commission in its order dated 08.01.2020 in Case No. OA-267/17 – 18 approved the final project of HEL Transmission system as Rs. 540.36 Crores against the claim of Rs. 594.80 Crores. The actual amount of equity invested by HEL is Rs. 15017 lakh as per submission made in APR petition for 2016-17. The actual equity employed is 27.79% of the approved project cost, which is within the limit of 30% as per first proviso of regulation 5.4.2 of the Tariff Regulations. Admitted debt and equity vis-àvis the claimed actuals are as below:

Table – 5					
SI No	Particulars	Unit	From APR petition 2016-17	Approved	
1	Project Cost	Rs. Lakh	59480.00	54036.00	
2	Equity contribution	Rs. Lakh	15017.00	15017.00	
3	Capital borrowings	Rs. Lakh	44463.00	39019.00	

3.5.2 In view of the above, the admitted return on equity as per the provisions of the Tariff Regulations comes out as Rs. 15017 x 15.50% = Rs. 2327.64 Lakhs.

# 3.6 Interest on Borrowed Capital:

3.6.1 HEL has not proposed any specific claim on interest on Borrowed Capital in the tariff petition for the year 2017-18. However, HEL in its APR applications for 2014 – 15, 2015 – 16 and 2016 – 17 submitted the actual loan and interest details under Form C. The Commission finds it prudent to allow the interest on capital borrowing limited to the admissible loan amount as per table-5 above. To determine the admissible interest payable, the Commission considers the average interest rate and repayment made in 2016-17 as below:





	Table – 6.a				
	(as per Form C of APR 2016-17)				
SI No	Particulars	Unit	Amount		
1	Opening balance for the year 2016-17	Rs. lakh	43536.50		
2	Effective repayment of loan after netting off the refinancing of loan during 2016-17	Rs. lakh	2127.60		
3	Closing balance for the year 2016-17	Rs. lakh	41408.90		
4	Interest paid during the year 2016-17	Rs. lakh	4625.60		
5	Average Interest rate ['4' / Avg('1', '3') ]	%	10.89%		

fe ith se	Table – 6.b				
	(Projections for 2017-18)				
SI No	Particulars	Unit	Amount		
1	Opening balance for the year 2017-18	Rs. lakh	41408.90		
2	Loan repayment during 2017-18 [ same as 16-17]	Rs. lakh	2127.60		
3	Closing balance for the year 2017-18	Rs. lakh	39281.30		
4	Average Interest rate [same as 16-17]	%	10.89%		
5	Interest payable for the year 2017-18	Rs. lakh	4393.58		

	Table – 6.c		
	(Admissible interest on loan for 2017-18)		
SI No	Particulars	Unit	Amount
1	Projected interest payable for 2017-18	Rs. Lakh	4393.58
2	Actual capital borrowing considered in table -5 above	Rs. Lakh	44463.00
3	Admitted capital borrowing in table -5 above	Rs. Lakh	39019.00
4	Admissible interest on loan [ '1' x '3' / '2']	Rs. Lakh	3855.63

3.6.2 The admissible interest payable on capital borrowing for the year 2017-18 is subject to truing up in view of actual interest rate and repayments during APR subject to refinancing of loan.

# 3.7 Depreciation:

3.7.1 HEL has not submitted any specific claim on Depreciation for 2017 – 18. HEL in its APR petition for 2016-17 has claimed an average depreciation rate of 2.59%, which is within the range of rates specified in Annexure -A of the Tariff Regulations. For determination of depreciation of 2017-18, the Commission considers the average depreciation rate of 2.59% over the approved project cost as below:





Table – 7					
SI No	Particulars		Unit	Amount	
1	Approved project cost		Rs. lakh	54036.00	
2	Average depreciation rate		%	2.59	
3	Admissible deprecation for the year	2017-18	Rs. lakh	1399.53	

### 3.8 Advance Against Depreciation:

3.8.1 In terms of regulation 5.2.2 of the Tariff Regulations Advance Against Depreciation is payable where the allowable depreciation falls short of admissible loan repayment. Accordingly, the Commission determines the admissible Advance Against Depreciation for the year 2017-18 as Rs. 467.57 lakh.

	Table – 8				
SI No	Particulars	Unit	Amount		
1	Repayment based on actual loan [sl '2' of table 6.b]	Rs. lakh	2127.60		
2	Allowable repayment on admitted loan (prorated with admissible vis-à-vis actual loan considered in table -5) [2127.60 x 39019.00 ÷44463.00]	Rs. lakh	1867.10		
3	1/10th of admitted loan in table-5	Rs. lakh	3901.90		
4	Permissible loan repayment [min of '2' and '3']	Rs. lakh	1867.10		
5	Admitted depreciation for 2017-18 [sl no 3 of table -7]	Rs. lakh	1399.53		
6	Advance against Depreciation [ '4' - '5']	Rs. lakh	467.57		

#### 3.9 Income Tax:

3.9.1 HEL has not submitted any specific claim on Income Tax for 2017 – 18. The Commission finds it prudent to compute the income tax payable on pre-tax basis over the admitted Return on Equity. For this purpose, the applicable Minimum Alternative Tax (MAT) rate is considered, subject to adjustment on assessment of tax and payments made on the basis of actual tax liability in the APR for 2017 – 18. Accordingly, the Commission admits Rs. 501.58 Lakhs as admissible income tax for the year 2017-18.

Table -9

Particulars	Unit	2017 - 18
Allowable Returns	Rs. Lakh	2327.64
MAT (including Surcharge + Cess) @ 21.5488%	%	21.5488
Admissible Income Tax payable	Rs. lakh	501.58





3.9.2 HEL is directed to submit a comprehensive statement incorporating the amounts of (i) income tax provided in the annual reports and accounts, (ii) income tax assessed, (iii) income tax paid and (iv) income tax refunded, if any, supported by documentary evidences vide assessment orders, copies of challans, copies of refund orders year wise from the year 2014-2015 till date with their APR application for the years 2017-2018. In this respect, the provisions in the regulations 5.13.1 and 5.13.2 may be referred to.

## 3.10 Interest on Working Capital:

3.10.1 In terms of regulations 5.6.5.1 of the Tariff Regulations, as amended, working capital requirement of HEL shall be assessed on normative basis @ 18% on the base amount derived from the annual fixed charges reduced by the elements viz., depreciation, return on equity etc. as determined in the ARR. In line with the observation made by this Commission in Case No SM-30/21-22, the rate of interest is considered as the one-year Marginal Cost of Fund based Lending Rate (MCLR) of the State Bank of India as on 1st April of the year, preceding the year for which the tariff is proposed to be determined plus 350 basis point. Accordingly, the rate of interest comes to 12.70% (MCLR @ 9.20% as on 01.04. 2016 plus 350 basis points). The amount of admissible interest on working capital for the year 2017-18 is worked on normative basis as below:

SI No	Particulars	2017 – 18
	Working Capital:	Rs in lakh
Α	Annual Fixed charges (excluding Interest on Working Capital)	8887.41
B1	Less: Depreciation and AAD	1867.10
B2	Less: Deferred Revenue Expenditure	1007.10
В3	Less: Return on Equity	2327.64
B4	Less: Reserve for Unforeseen Exigencies	2027.01
В	Total deductions: (sum B1:B4)	4194.74
С	Allowable Gross Sales for Working Capital (A-B)	4692.67
D	Allowable Working Capital @18% on C	844.68
E	Interest at SBI MCLR as on 1st April, 2016 plus 350 basis points	12.70%
F	Interest on Working Capital (D*E)	107.27

3.10.2 The Commission admits Rs 107.27 lakh as interest on working capital.

#### 3.11 Other Income:





HEL has not submitted any amount for other income and therefore, the Commission has not considered any amount in this regard. It is to mention that Other Incomes arising during the period are subject to truing up in Annual Performance Review for the year 2017 – 18.





Annexure -3

# Consumer Price Index

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

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Ma
2016-17	271	275	277	280	278	277	278	277		274	274	275
2017-18	277	278	280	285	285	285	287	288	286	288	287	287

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

Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Ma
2017-18	2.21	1.09	1.08	1.79	2.52	2.89	3.24	3.97	4.00	5.11	4.74	4.36

Average value is computed as 3.08%



#### CHAPTER - 4

# SUMMARISED STATEMENT OF AGGREGATE REVENUE REQUIREMENT AND REVENUE RECOVERABLE THROUGH TARIFF

4.1 Based on the analysis and findings recorded in the foregoing chapters, the statements of Aggregate Revenue Requirements are drawn separately for the year 2017 – 18. Such summarized statements are given in the table below.

SI no	Particulars	Admitted
OI IIO	raiticulais	2017 - 18
		Rs Lakh
1	Employee Cost	55.97
2	Repair & Maintenance incl. Consumables	128.01
3	Administrative & General Charges	115.37
4	Insurance	33.09
5	Rates & Taxes	3.02
6	Interest on Capital Borrowings	3855.63
7	Depreciation	1399.53
8	Advance Against Depreciation	467.57
9	Return on Equity	2327.64
10	Income tax	501.58
11	Interest on working capital	107.27
12	Gross Revenue Required (sum 1 to 11)	8994.68
13	Less: Other Income	0.00
14	Aggregate Revenue Required (12 – 13)	8994.68

4.2 The Commission is now to determine the rates for recovery of transmission charges from beneficiary(ies) of HEL Transmission system for the year 2017 - 18 in the next chapter.



# CHAPTER - 5 TARIFF ORDER

# DETERMINATION OF THE RATE FOR RECOVERY OF TRANSMISSION CHARGES FOR THE YEAR 2017 – 18

- In the previous chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the year 2017 18 for HEL Transmission System. The Commission is now to fix the rate for recovery of the same during the year 2017 18 in accordance with the provisions of regulation 6.16 of the Tariff Regulations. It is, pertinent to mention here that HEL Transmission System has no variable cost to recover. Only fixed charges of Rs. 8994.68 lakh, as admitted by the Commission in the Statement of Aggregate Revenue Requirement in chapter -4 is recoverable.
- 5.2 HEL Transmission system comprises 400 kV D/C transmission lines between HEL generating station and PGCIL Subhasgram 400 kV sub-station and associated bays, etc. The above lines are dedicated transmission lines to evacuate generation of HEL 2 x 300 MW power plant. Therefore, the contracted capacity for the purpose of recovery of transmission charge is considered as 600 MW.
- 5.3 The Commission now determines the unit rate of recovery of transmission charges in Rs./MW/ month from the beneficiary (ies) considering the contracted capacity of 600 MW for 2017 18 as below:

Transmission Charges for 2017 – 18						
i)	Recoverable ARR	Rs.8994.68lakh				
ii)	Total contracted capacity	600 MW				
iii)	Rate in Rs./MW/month	Rs. 8994.68 lakh * 10^5 / (600 MW x 12) = Rs. 124926.11 / MW/ month subject to adjustment as per regulation 6.16.5 of the Tariff Regulations.				

HEL shall recover the transmission charges at the above rates from its beneficiary(ies) at the ratio of their contracted capacity (in MW) with the power plant.

5.4 The tariff for 2017 – 18 shall be applicable from the billing month pertaining to April, 2017 respectively and shall continue till further tariff order is issued. Adjustments, if





any, for over recovery / under recovery for the period from 01.04.2017 to the month of issuance of this order from the system users shall be made in twelve (12) equal monthly installments. Such adjustment shall start from next month of issuance of this order.

5.5 HEL shall present to the Commission a gist of this order in accordance with the regulation 2.9.6 of the Tariff Regulations within three (3) working days from the date of receipt of this order for approval of the Commission and on receipt of the approval shall publish the approved gist in terms of the aforesaid regulation within four (4) working days from the date of receipt of the approval of the Commission.

Sd/-

Sd/-

Sd/-

(PULAK KUMAR TEWARI) MEMBER (DURGADAS GOSWAMI) MEMBER

(SUTIRTHA BHATTACHARYA) CHAIRPERSON

Dated: 20.04.2022

Sd/-

(SECRETARY)