



ORDER

OF THE

WEST BENGAL ELECTRICITY REGULATORY COMMISSION

FOR THE YEAR

2023 – 24 to 2024 – 25

IN

CASE NO: TP - 101 / 22 - 23

IN REGARD TO THE MULTI YEAR TARIFF APPLICATION

UNDER EIGHTH CONTROL PERIOD OF HALDIA

ENERGY LIMITED FOR THE YEARS 2023 – 24, 2024 – 25

AND 2025 - 26 UNDER SECTION 64(3)(a) READ WITH

SECTION 62(1) OF THE ELECTRICITY ACT, 2003

DATE: 06.03.2024





# CHAPTER - 1 INTRODUCTION

- 1.1 The West Bengal Electricity Regulatory Commission (hereinafter referred to as the "Commission"), a statutory body under the first proviso to section 82(1) of the 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.
- 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. HEL has a 2 x 300 MW generating station at Haldia, West Bengal and an 89 km 400 kV double circuit dedicated transmission line emanating from its generating station switchyard to 400 kV Subhasgram substation of Power Grid Corporation of India Limited (PGCIL). Under a long-term power purchase agreement, power generated from the generating station of HEL is procured by CESC Limited, a distribution licensee within the State. Hence, the Commission determines the generation tariff of HEL along with the transmission tariff of dedicated transmission line.
- 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'), the Commission vide its order dated 31.08.2022 in case no. SM-31/22-23 decided that the eighth control period shall be for three years consisting of 2023 24, 2024 25 and 2025 26. In terms of regulation 2.7.1 of the Tariff Regulations, application for determination of tariff under Multiyear Tariff framework has to be submitted 120 days in advance from the effective date of the start of the control period. The Commission considering the request of HEL had extended the date of filing of tariff petition by 31.01.2023 as a special case.





- HEL has submitted MYT Petition for determination of Tariff, Aggregated Revenue Requirement and Expected Revenue for the eighth control period for its 2 x 300 MW generating station and 400 kV double circuit dedicated transmission line combinedly on 24.01.2023. The petition was admitted by the Commission on 20.02.2023 in Case No. TP 101/22 23. Subsequently, the Commission notified fourth Amendment of the Tariff Regulations on 13.03.2023 and allowed the utilities to submit supplementary petition if required by 13.04.2023. The Commission considering the request of HEL and extended the date of filing of the supplementary petition till 12.05.2023. Accordingly, HEL has submitted their supplementary petition on 11.05.2023. The supplementary petition was admitted on 17.05.2023. The MYT petition dated 24.01.2023 along with the supplementary petition dated 11.05.2023 are hereinafter referred to as 'Tariff Application' of HEL.
- The Commission directed HEL 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 26.06.2023 in the newspapers (i) the 'Bartaman' (Bengali), (ii) the 'Aajkaal' (Bengali), (iii) 'The Statesman' (English) and (iv) 'The Telegraph' (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 eighth control period and requested for submission of suggestions, objections and comments, if any, on the tariff application to the Commission latest by 16.07.2023.
- 1.6 No objection/suggestion/comment has been received from the stakeholders within the stipulated due date i.e. 16.07.2023.
- 1.7 The Commission now determines the tariff in accordance with the Electricity Act, 2003 and the Tariff Regulations framed thereunder. Any estimate made by the Commission in this order for 2022 23 (base year of the eighth control period) or any previous years, in order to arrive at the projected expenditure during the ensuing years of eighth control period (i.e., 2023 24, 2024 25 and 2025 26), shall not be construed as allowable expenditure for 2022 23.





# CHAPTER - 2 THE CASE OF HALDIA ENERGY LIMITED

- 2.1 HEL has submitted a composite Tariff Application in respect of its 2 x 300 MW generating station and 400 kV Double Circuit Dedicated Transmission Line for evacuation (herein after referred as 'Dedicated transmission line') for the years 2023 24, 2024 25 and 2025 26 under the eighth control period in compliance to the direction of the Commission vide order dated 01.09.2022 in Case No. B 89 / 1 / 21 22.
- 2.2 HEL in its petition has submitted that the energy sales has been considered on the basis of the demand projected by CESC to HEL for the years 2023 24, 2024 25 and 2025 26. HEL also submitted that it would explore for sale of un-requisitioned power, if any, based on market conditions and economics on actual basis. Projected gross generation by HEL for the eighth control period are as below:

Table 1: Gross Generation of 2 x 300 MW Generating Station of HEL (MU)

Generating station	2023 - 24	2024 - 25	2025 - 26
Haldia Energy Limited [ 2 x 300 MW]	4231.60	4209.80	4231.20

- 2.3 HEL has submitted that it had a Fuel Supply Agreement (FSA) with Mahanadi Coalfield Limited (MCL). It is also submitted that, the Annual Contracted Quantity (ACQ) with the coal company was fixed at the coal requirement for 85% Plant Load Factor and for any shortfall of supply, HEL procures coal through e-auction or imported coal. In this regard, HEL submitted that, it had entered into an agreement with CIL on 30.06.2022 for supply of imported coal, following the advice of Ministry of Power, Government of India for mixing imported coal. HEL further submitted that, MoP vide letter dated 09.01.2023 has directed the power plants to import coal for blending 6% by weight during the remaining 2022 23 and first half of the year 2023 24. Besides this, HEL had conducted trail runs in Unit -1 during the period from February, 2022 to March, 2022 to access the feasibility of co-firing of biomass pellets along with coal as per the revised guideline issued by MoP dated 8.10.2021.
- 2.4 In view of the above, HEL has considered to meet its coal requirement during the eighth control period from linkage and balance from e-auction, import and bio-mass pallets. Accordingly, HEL has projected the total fuel cost on the basis of normative





operating parameters as Rs. 164628.40 Lakh, Rs. 163146.10 Lakh and Rs. 164597.70 Lakh for the years 2023 – 24, 2024 – 25 and 2025 – 26 respectively.

- 2.5 HEL has projected employee expenses as Rs. 9489.90 Lakh, Rs. 10249.10 Lakh and Rs. 11069.10 Lakh for the years 2023 24, 2024 25 and 2025 26 respectively including own employees and contractual employees for it's generating station. For the dedicated transmission line, HEL has projected only for own employee expenses as Rs. 182.50 lakh, Rs. 197.10 lakh and Rs. 212.90 lakh for the years 2023 24, 2024 25 and 2025 26 respectively.
- 2.6 HEL has projected the Operation and Maintenance Expenses of its generating station as Rs. 8070.00 lakh, Rs. 8376.00 lakh and Rs. 8694.00 lakh for the years 2023 24, 2024 25 and 2025 26 respectively, as per the norms specified by the Commission in Tariff Regulation. HEL has also projected Rs. 1357.30 lakh, Rs. 1438.80 lakh and Rs. 1525.30 lakh for operation & maintenance of its dedicated transmission line. Besides this HEL has also proposed for onetime expenses for critical spares of power plant and special maintenance of its dedicated transmission line.
- 2.7 No water charges have been claimed by HEL for its generating station.
- 2.8 HEL submitted that, it has projected depreciation for the years 2023 24, 2024 25 and 2025 26 has been computed in terms of Tariff Regulations. HEL has further stated that only about 0.3% of the assets have been fully depreciated on 31.03.2023 and 99.70% of the assets has been depreciated to a level lower than 70%. HEL has also enunciated that only a marginal amount of asset has been depreciated more than 70% after considering accumulated depreciation and AAD.
- 2.9 HEL submitted that, it has projected the interest cost of the capital loan for the ensuing years on the basis of weighted average interest rate of outstanding loans as on April, 2023.
- 2.10 HEL has proposed the requirement of working capital for the years 2023 24, 2024
   25 and 2025 26 on normative basis in terms of the Tariff Regulations. HEL has projected the Statutory Charges giving 9.83% escalation on the figures of 2021 22.





It is submitted that projection of the Income tax during eighth control period is based on applicable statues.

- 2.11 HEL has projected carrying cost on the basis of realisable amounts as per the appeals preferred by them before the Hon'ble APTEL.
- 2.12 Based on the above projections, HEL has estimated the energy charges and capacity charges recoverable by them for its 2 x 300 MW generating station during the years 2023 24, 2024 25 and 2025 26 as given below:

Table 2: Capacity Charge and Energy Charge claimed by HEL for the Eighth Control Period

Haldia Thermal Power Station	Tariff for the Eighth Control Period				
(2 x 300 MW)	2023 - 24	2024 - 25	2025 - 26		
A A A A A A A A A A A A A A A A A A A	123507.10	122605.00	121529.10		
a) Annual Capacity Charge (in Rs. Lakhs)	At Targeted Plant Availability of 85%				
b) Energy Charge Ex-Bus at HEL boundary (in Rs. / kWh)	4.275	4.259	4.275		

2.13 HEL has also estimated the annual transmission charge recoverable by them for its 400 kV Double Circuit Dedicated Transmission Line during the years 2023 – 24, 2024 – 25 and 2025 – 26 as given below:

Table 3: Transmission Charge claimed by HEL for the Eighth Control Period

Haldia Thermal Power Station	Tariff for the Eighth Control Period					
(400 kV D/c Transmission Line)	2023 - 24	2024 - 25	2025 - 26			
Transmission Charge (Rs. /MW/month)	223822.00	216167.70	204428.70			

2.14 Submissions of HEL has been analysed by the Commission in subsequent chapters while determining the variable cost and fixed cost of the power plant and dedicated transmission line.





# CHAPTER – 3 VARIABLE COST & EXPENDITURE

3.1 Examination of fuel cost as claimed by HEL for the years 2023 – 24, 2024 – 25 and 2025 – 26 of the eighth control period for its generating station has been taken up in this chapter. For the purpose of calculation of fuel cost and determination of energy charge, the operating parameters of the generating station has been considered as per normative parameters of the generating station specified in the Tariff Regulations.

#### 3.2 Installed capacity:

HEL owns and operates a thermal power generating station situated at Haldia, Midnapore (East), West Bengal. The thermal power plant comprises of 2 units of 300 MW each with commercial operation of Unit 1 from 28.01.2015 and Unit 2 from 21.02.2015. The total installed capacity is 600 MW.

#### 3.3 Gross Generation:

HEL has proposed gross generation as 4231.600 MU, 4209.800 MU and 4231.200 MU during each of the years 2023 – 24, 2024 – 25 and 2025 – 26 on the basis of the demand projected by its procurer i.e., CESC Ltd. The Commission finds it suitable to admit the projected generation for the ensuing years of eighth control period based on the normative PLF of the generating station i.e., 80%. Accordingly, the admissible gross generation figures of HEL during the eighth control period stand as follows:

**Table 4: Total Gross Generation** 

(in MUs)

Year	Projected by HEL	Admitted by Commission		
2023 - 24	4231.600	4216.320		
2024 - 25	4209.800	4204.800		
2025 - 26	4231.200	4204.800		

#### 3.4 Normative parameters:

The Commission in terms of regulation 2.8.6.1 of the Tariff Regulations has to determine the revenue requirement of a generating station based on the operating





norms as specified in Schedule – 9A of the Tariff Regulations. The operating norms, thus specified for fuel cost computations in respect of HEL are as below:

Table 5: Normative operating Parameter

Name of the Generating Station	Unit Size	SHR	PLF	PAF	AEC	Secondary Fuel Oil consumption	Man/ MW ratio	Transit and handling loss of coal
Station		(Kcal/kwh)	(%)	(%)	(%)	(ml/kWh)		(%)
HEL	2x300 MW	2345	80	85	9.00	1.00	1.30	0.80

# 3.5 Auxiliary consumption and Sent-out Energy Generation:

HEL has projected the auxiliary consumption and sent-out generation during the years 2023 – 24, 2024 – 25 and 2025 – 26 considering the auxiliary consumption norms specified in the Tariff regulations. The Commission considered that same and the admissible gross generation, auxiliary consumption and sent-out energy generation based on normative values are given as below:

Table 6: Auxiliary Consumption and Sent-out Energy admitted by the Commission

(In MU)

Admitted Gross Generation			Auxiliary Consumption			Sent Out	Generation	(Ex-bus)
2023-24	2024-25	2025-26	2023-24	2024-25	2025-26	2023-24	2024-25	2025-26
4216.320	4204.800	4204.800	379.469	378.432	378.432	3836.851	3826.368	3826.368

#### 3.6 Fuel Cost determination:

#### 3.6.1 Coal Requirement during the eighth control period:

- 3.6.1.1 In the Tariff Application, HEL has projected that the coal requirement during the years 2023 24, 2024 25 and 2025 26 will be met from the coal linkage as per the Fuel Supply Agreement with Mahanadi Coalfields Limited (MCL). HEL has submitted that MCL is obligated to supply domestic coal only up to 75% of ACQ (2.57 MT) in line with the New Coal Distribution Policy (NCDP) and thus the balance coal will be sourced from E-Auction and Imports. HEL has also projected to co-fire bio-mass pellets during lean-demand and non-monsoon season for four months.
- 3.6.1.2 The Commission observes that, HEL has proposed the 'as received' GCV of coal based on the quality of coal received during the first half of the base year i.e., FY





2022 – 23. On detailed scrutiny it is observed that, HEL has even projected the GCV value less than the minimum GCV of the respective Grade as notified by Coal India Limited (CIL). The Commission is of considered opinion that, in case the 'as received' GCV of any coal grade is less than the notified values, then it is the responsibility of the generating station to take-up the issue of such grade slippage with the coal company. For the purpose of tariff determination, the Commission finds it reasonable to consider mid value of the GCV range of the respective coal grade as notified by CIL.

- 3.6.1.3 The Commission decides to determine the requirement and price of coal based on the following principles:
  - (i) The quantum and price of coal from linkage sources as proposed by HEL are found within the FSA terms and rates notified by CIL, and the same is considered. However, the GCV of coal is considered as mid value of the rage notified by CIL for respective coal grade.
  - (ii) Uses of bio-mass pallet at 5% for 2023 24 and 7% for 2024 25 and 2025 26 following the revised guideline of Ministry of Power, Government of India. HEL has projected the heat value and price of biomass pellets based on their experience during trial run. The Commission decides to consider the same.
  - (iii) The Commission observes that the balance coal is required to be met either through e-auction or through import. In this regard, the Commission has observed that HEL has already entered into an agreement with CIL dated 30.06.2022 for purchase of import coal. Thus, during the tariff determination stage, the Commission considers the balance quantum of coal requirement for the years 2023 24, 2024 25 and 2025 26 to be met from the imported coal. HEL has proposed GCV and price of imported coal as 5000 kCal/kg and Rs. 15561.20 per MT during the eighth control period, based on the fuel supply agreement. The Commission noted that HEL has projected the price of imported coal considering the rate for computation of advance payment in terms of their agreement with CIL. From the agreement it transpires that, the actual payable rate varies with quality and the price indices and in terms of clause 13.4 of the agreement CIL has to notify such base rate for payments



(Cost & Freight) from time to time. As HEL has not submitted any document regarding the latest notified price of imported coal by CIL as per clause 13.4 of the agreement, the Commission decides to apply the escalation rate of imported coal as notified by CERC vide its notification No. Eco-1/2023-CERC dated 05.04.2023, i.e. (-) 34.19%, over and above the standard advance payment rate mentioned in agreement. Thus, the admissible price of imported coal comes to Rs. 10240.83 per MT {=15561.20 x (1-34.19%)}.

- (iv) Regarding transportation cost of coal, HEL has claimed railway freight for linkage coal and imported coal from loading points as per the railway notified tariff. The Commission observes that, the projected rates are within the actual payments made by HEL in previous years. Thus, the proposed railway freight is considered.
- (v) The Commission observes that, the handling and sampling charge proposed for linkage coal has been proposed as Rs. 95.20 per MT and for imported coal as Rs. 511.10 per MT for the eighth control period. HEL was directed to provide the actual sampling & handling charges paid during last five years. From the additional submission made by HEL dated 06.10.2023, it is observed that the actual handling & sampling charge paid for import coal for 22-23 was Rs. 13 per MT. Further the average of handling & sampling charge paid to linkage coal was Rs. 35.31 per MT as below:

Table 7: Handling and Sampling Charge admitted by the Commission

Handling and Sampling Charge	FSA - Rail (In Rs. /MT)				
2018 – 19	22.70 *				
2019 – 20	30.90				
2020 – 21	39.66				
2021 – 22	35.38				
2022 -23	79.50 *				
AVERAGE (2018 - 19 to 2022 - 23)	35.31				
* Figure is not considered for arriving at a	verage				

In absence of specific justification, the Commission decides to admit the handling & sampling charges for linkage coal as Rs. 35.31 lakh /MT for linkage coal and Rs. 13/MT for imported coal for eight control period.





3.6.1.4 In view of the above considerations, the quantum, price and heat value of 'as received' coal has been admitted by the Commission for the eighth control period consisting of the years 2023 – 24, 2024 – 25 and 2025 – 26 is given below:

Table 8: Quantum, Price and GCV of 'As received' coal during eighth control period

		Proj	ected		Admitted			
Particulars	FSA coal	Biomass pellets	Imported coal	E- auction	FSA coal	Biomass	Imported coal	E- auction
		Fort	he year 20	23 - 24				
As received GCV (in kCal/kg)	2888.48	3455.00	5000.00	2990.97	3775.00	3455.00	5000.00	
Quantum (in MT)	2443590	42000	110057	739403	2443590	134532	112513	0.00
Coal price (Rs. / MT)	1772.75	11760.00	15561.20	5851.02	1772.76	11760.00	10240.83	
Transportation cost (Rs. / MT)	1349.75	0.00	226.80	2083.81	1349.75	0.00	226.80	
Handling and Sampling (Rs. / MT)	95.20	0.00	511.10	204.02	35.31	0.00	13.00	Res. Par
Landed price of coal (Rs. / MT)	3217.70	11760.00	16299.10	8138.85	3157.82	11760.00	10480.63	
Wt. avg GCV (in KCal/kg)		2988.00 3810.						
Wt. avg price (Rs. / MT)		484	48.00			389	4.14	
		Fort	the year 20	124 - 25				
As received GCV (in kCal/kg)	2888.44	3455.00	5000.00	2993.66	3775.00	3455.00	5000.00	
Quantum (in MT)	2443590	42000	109482	722563	2443590	189166	69617	0.00
Coal price (Rs. / MT)	1772.76	11760.00	15561.22	5852.69	1772.76	11760.00	10240.83	0.00
Transportation cost (Rs. / MT)	1349.75	0.00	226.80	2081.49	1349.75	0.00	226.80	
Handling and Sampling (Rs. / MT)	95.20	0.00	511.15	204.42	35.31	0.00	13.00	
Landed price of coal (Rs. / MT)	3217.71	11760.00	16299.17	8138.61	3157.82	11760.00	10480.63	
Wt. avg GCV (in KCal/kg)		298	38.20			378	4.16	
Wt. avg price (Rs. / MT)		482	29.30				8.62	THE STATE OF
		Fort	he year 20	125 _ 26				
As received GCV (in kCal/kg)	2888.48	3455.00	5000.00	2991.03	3775.00	3455.00	5000.00	
Quantum (in MT)	2443590	42000	110045	739045	2443590	189166	69617	0.00
Coal price (Rs. / MT)	1772.75	11760.00	15561.22	5851.05	1772.76	11760.00	10240.83	0.00
Transportation cost (Rs. / MT)	1349.75	0.00	226.80	2083.77	1349.75	0.00	226.80	
Handling and Sampling (Rs. / MT)	95.20	0.00	511.10	204.03	35.31	0.00	13.00	
Landed price of coal (Rs. / MT)	3217.70	11760.00	16299.12	8138.85	3157.82	11760.00	10480.63	
Wt. avg GCV (in KCal/kg)		298	88.00			3784	4.16	
Wt. avg price (Rs. / MT)			7.60			3948		





3.6.1.5 However, HEL shall have the liberty to purchase e-auction coal or imported coal on the basis of the actual coal requirement during the years 2023 – 24, 2024 – 25 and 2025 – 26 as per the provisions of the Tariff Regulations. The Commission directs HEL to purchase coal to meet their balance coal requirement considering the economical sources of e-auction or imported coal and submit a report along with their APR petition that the economical sources has been duly explored while purchasing such coal.

## 3.6.2 Price and heat value of oil during the eighth control period:

3.6.2.1 HEL has stated that Light Diesel Oil (LDO) is used as the secondary fuel in the power station. HEL has projected the cost of oil considering the price of LDO from the recent invoice. The heat value of LDO has been considered from the certificate for heat value of LDO procured for that month.

Table 9: Price and Heat Value of Secondary Fuel during the eighth control period

Average Heat Value of Oil in kCal/ L			Average Oil Price in Rs. / KL			
2023 - 24	2024 - 25	2025 - 26	2023 - 24	2024 - 25	2025 - 26	
8929.90	8929.90	8929.90	69575.10	69575.10	69575.10	

The Commission considers the same and admits the price and heat value of secondary fuel as claimed by HEL during the eighth control period.

3.6.3 No hike in price of coal or oil has been projected by HEL for the years, 2024 – 25 and 2025 – 26. Accordingly, the Commission does not consider any hike in price of coal or oil during the tariff determination stage. The Commission, however, views that if there is any variation in fuel price in future from the fuel price considered in this order for ensuing years or any change in fuel mix, HEL shall have liberty to take recourse of Monthly Fuel Cost Adjustment (MFCA) in terms of regulation 5.8.9 and 5.8.10 of the Tariff Regulations.

#### **Fuel Cost**

3.6.4 On the basis of above average price and heat values of primary and secondary fuel and the normative parameters as specified in Schedule 9A of the Tariff Regulations, and after allowing a margin of 120 kCal/kg in heat value in terms of regulation 5.8.4 (1) of the Tariff Regulations, the detailed computation of allowable fuel cost for the





years 2023 - 24, 2024 - 25 and 2025 - 26 has been shown in the table at Annexure -3 to this chapter.

3.6.5 The summarized statement of admitted fuel cost for the power station of HEL for the eighth control period vis-à-vis the cost claimed by HEL is given hereunder.

Table 10: Total Fuel Cost claimed by HEL and admitted by the Commission

				Fig	ures in Rs. Lakh
Total Fuel	Cost as claim	ed by HEL	Fuel Cost as	admitted by th	e Commission
2023-24	2024-25	2025-26	2023 - 24	2024 - 25	2025 - 26
164628.40	163146.10	164597.70	107710.62	109631.95	109631.95

3.6.6 Considering the sent-out generation of HEL, the energy charge rates are computed as below:

Table 11: Admitted Energy Charge of HEL

Particulars	Unit	2023 - 24	2024 - 25	2025 - 26
Admitted Fuel Cost (As per Table 10)	Rs. in Lakh	107710.62	109631.95	109631.95
Sent Out Energy (As per Table 6)	MU	3836.851	3826.368	3826.368
Admitted Energy Charge	Rs. kWh	2.807	2.865	2.865





#### Annexure - 3

# Fuel cost of Haldia Energy Limited

SL No	Particulars	Units	Derivation	2023 - 24	2024 - 25	2025 - 26
Α	Installed Capacity	MW		600	600	600
В	PLF	%		80.00%	80.00%	80.00%
C	PAF	%		85.00%	85.00%	85.00%
1	Gross Generation	MU	1	4216.320	4204.800	4204.800
2	Auxiliary Consumption	MU	2	379.469	378.432	378.432
3	Sent Out Energy	MU	3 = 1 - 2	3836.851	3826.368	3826.368
4	Station Heat Rate	kCal/ kWh	4	2345.00	2345.00	2345.00
5	Total Heat Required	GCal	5 = 1 x 4	9887270.40	9860256.00	9860256.00
6	Specific Oil Consumption	ml/ kWh	6	1.00	1.00	1.00
7	Oil Consumption	KL	7 = 6 x 1	4216.32	4204.80	4204.80
8	Heat Value of Oil	kCal/ Litre	8	8929.90	8929.90	8929.90
9	Heat from Oil	GCal	9 = 7 x 8 /1000	37651.32	37548.44	37548.44
10	Permitted Heat from Blended Primary Fuel (Coal, Biomass Pellet)	GCal	10 = 5 - 9	9849619.08	9822707.56	9822707.56
11	Heat Value of Blended Primary Fuel (Coal, Biomass Pellet)	kCal/ kg	11	3690.23	3664.16	3664.16
12	Permitted Blended Primary Fuel (Coal, Biomass Pellet) Consumption	Tonne	12 = 10 / 11 x 1000	2669110.40	2680754.45	2680754.45
13	Permitted Blended Primary Fuel (Coal, Biomass Pellet) Consumption considering Transit Loss	Tonne	13 = 12 / (1 - 0.80%)	2690635.48	2702373.44	2702373.44
14	Average Price of Oil	Rs./ KL	14	69575.10	69575.10	69575.10
15	Average Price of Blended Primary Fuel (Coal, Biomass Pellet) per Tonne	Rs./ Tonne	15	3894.14	3948.62	3948.62
16	Cost of Oil	Rs. Lakh	16 = 7 x 14/ 10^5	2933.51	2925.49	2925.49
17	Cost of Blended Primary Fuel (Coal, Biomass Pellet)	Rs. Lakh	17 = 13 x 15/ 10^5	104777.11	106706.46	106706.46
18	Total Fuel Cost	Rs. Lakh	18 = 16 + 17	107710.62	109631.95	109631.95

# Weighted average rate determination of coal & biomass:

		2023-24			2024-25			2025-26	
Source	GCV	Quantity	Landed price	GCV	Quantity	Landed price	GCV	Quantity	Landed price
	kCal/kg	MT	Rs./MT	kCal/kg	MT	Rs./MT	kCal/kg	MT	Rs./MT
FSA Coal	3775.00	2443590	3157.82	3775.00	2443590	3157.82	3775.00	2443590	3157.82
Bio Mass Pallets	3455.00	134532	11760.00	3455.00	189166	11760.00	3455.00	189166	11760.00
Imported Coal	5000.00	112513	10480.63	5000.00	69617	10480.63	5000.00	69617	10480.63
Total / Weighted Average	3810.23	2690635	3894.14	3784.16	2702373	3948.62	3784.16	2702373	3948.62
GCV as received less 120 kCal/ Kg	3690.23			3664.16			3664.16		



#### CHAPTER - 4

# FIXED COST FOR GENERATING STATION AND DEDICATED TRANSMISSION LINE

- 4.1 An examination of the projected fixed charges claimed by HEL for the years 2023 24, 2024 25 and 2025 26 under different heads for its 2 X 300 MW generating station and dedicated transmission line has been taken up in this chapter.
- 4.2 HEL has projected the expenses under different heads of fixed charge on the basis of actual expenditure of previous years and estimated expenditure of the base year i.e. 2022 23 and applying escalation factor based on inflation rates. HEL has considered a normative 70:30 debt equity ratio for the projected asset addition during the ensuing years (2023 24, 2024 25 and 2025 26) to compute the interest on capital loan and return on equity. HEL vide letter dated 14.09.2023 submitted details of asset as on 01.04.2023 showing Gross value of asset and additions thereof along with cumulative depreciation and depreciation for the year.

#### 4.3 Project cost:

4.3.1 HEL in its petition submitted the opening value of the Gross Fixed Assets (GFA) of both generating station and dedicated transmission line along with proposed asset addition and depreciation during the year in the forms specified in the amended Tariff Regulations. Detailed analysis of the admissible project costs has been done in subsequent paragraphs while determining the depreciation, return on equity and normative interest on capital loan.

#### 4.4 Inflation index:

4.4.1 HEL has cited to the enhanced activities and continuous inflationary pressure while projecting of expenditures of different heads during the eighth control period without referring to any index. The Commission decides to consider the CPI (industrial labour) of 6.10% and WPI of 9.40% from the Annual Report 2022 – 23 of RBI, as and when required to estimate the expenditure escalation, if any for the ensuing years.



## 4.5 Employee Cost

4.5.1 HEL has projected its own employee cost which includes salaries and wages, statutory retirement benefits, leave encashment for the years 2023 – 24, 2024 – 25 and 2025 – 26 respectively based on actuals of the year 2021 – 22. HEL submitted that, while projecting the employee cost it has considered the effect of enhanced activity level, inflationary push and market corrections.

The proposed number and cost of own employee and contractual manpower of HEL during the eighth control period are as follows:

Table 12: Activity wise number of Employees projected by HEL for the 8th control period

Figures in Nos.

		2023 - 24			2024 - 25						
Activity	Own Employees	Employees on Contract	Total Employees	Own Employees	Employees on Contract	Total Employees	Own Employees	Employees on Contract	Total Employees		
Generation	205	563	768	205	563	768	205	563	768		
Transmission	7	0	7	7	0	7	7	0	7		
Total	212	563	775	212	563	775	212	563	775		

Table 13: Activity wise Employee cost claimed by HEL for the 8th control period

Figures in Rs. Lakh

		2023 - 24			2024 - 25			2025 - 26	
Activity	Own Employee Cost	Employees on Contract Cost	Total Employee Cost	Own Employee Cost	Employees on Contract Cost	Total Employee Cost	Own Employee Cost	Employees on Contract Cost	Total Employee Cost
Generation	6245.20	3244.70	9489.90	6744.80	3504.30	10249.10	7284.40	3784.70	11069.10
Transmission	182.50	-	182.50	197.10		197.10	212.90		212.90
Total	6427.70	3244.70	9672.40	6941.90	3504.30	10446.20	7497.30	3784.70	11282.00

4.5.2 Employee cost has been recognized as an uncontrollable element in the Tariff Regulations subject to normative Man/ MW ratio. Normative Man/MW ratio for HEL has been specified as 1.30 in Schedule 9A of the Tariff Regulations. Accordingly, normative employee admissible for HEL is 780. The Commission finds that, the number of employees as projected by HEL for 8<sup>th</sup> control period is within the admissible limit.





- 4.5.3 From the submitted audited Ind AS Financial Statement of HEL for the year 2022-23, it is observed that only own employee costs are reflected in the financial statement under the head "Employee benefit expenses". Prima facia, it appears that, expenses on contractual manpower has been considered under the Other Expenses in note 33 of the financial statement. Further, while analyzing the audited financial statement of HEL for FY 2021 22 and FY 2022 23, it is noted that the employee cost has been reduced from Rs. 5582 lakhs in FY 2021 22 to Rs. 5000 lakhs in FY 2022 23. In view of above, the Commission decides to compute the admissible employee cost for 8<sup>th</sup> control period based on the following principles and directs HEL to provide specific disclosure in its audited financial statement regarding expenses incurred in respect of contractual manpower engaged in regular establishment.
  - (i) The employee benefit expenses as per note 30 of the audited financial statement for 2022 - 23 is shown as Rs. 5012 lakhs considering transfer to/from other comprehensive income, whereas in the cost audit report for 2022 - 23, direct employee cost for 2022 - 23 is shown as Rs. 5011.49 Lakh. The Commission decides to consider the employee expenses as reflected in the cost audit report for the base year.
  - (ii) The Commission acknowledges employee cost for generating station and dedicated transmission line as Rs. 4789.15 lakh and Rs. 222.34 lakh respectively for the year 2022 – 23, considering the same ratio as provided by HEL in Form 1.17 (h) in its petition.
  - (iii) From the cost auditor's certificate submitted in its APR petition, the Commission considers Rs. 2850.40 lakh as cost towards contractual manpower for FY 2022 – 23 for its generating station against 565 numbers of contractual manpower. No cost for contractual manpower has been shown against its dedicated transmission line.
  - (iv) The Commission determines the cost towards own employee and contractual manpower for HEL generating station and its dedicated transmission line considering annual escalation to the extent of CPI rate of 6.10 % over the actual figures of 2022 – 23 with due impact of proposed manpower vis-à-vis actual manpower in FY 2022 – 23.





Table 14: Activity wise number of employees admitted for 8th Control period

Figures in Nos.

		2023 - 24			2024 - 25		ING KIN	2025 - 26	
Activity	Own Employees	Employees on Contract	Total Employees	Own Employees	Employees on Contract	Total Employees	Own Employees	Employees on Contract	Total Employees
Generation	205	563	768	205	563	768	205	563	768
Transmission	7	0	7	7	0	7	7	0	7
Total	212	563	775	212	563	775	212	563	775

Table 15: Activity wise admitted employee cost for 8th Control period

Figures in Rs. Lakh

		2023 - 24			2024 - 25			2025 - 26	
Activity	Own Employee Cost	Employees on Contract Cost	Total Employee Cost	Own Employee Cost	Employees on Contract Cost	Total Employee Cost	Own Employee Cost	Employees on Contract Cost	Total Employee Cost
Generation	5453.74	3013.57	8467.31	5786.42	3197.40	8983.82	6139.39	3392.44	9531.83
Transmission	150.12		150.12	159.28	-	159.28	169.00		169.00
Total	5603.86	3013.57	8617.43	5945.70	3197.40	9143.10	6308.39	3392.44	9700.83

#### 4.6 Operation and Maintenance:

- 4.6.1 As per regulation 5.7 of the Tariff Regulation, as amended from time to time, the Operation and Maintenance (O&M) expenses includes Repair & Maintenance (R&M) Expenses and Administrative & General (A&G) Expenses. Further the A&G expenses includes rent, lease charges, legal charges, auditor's fees, consultancy charges, insurance expenses, outsourced expenses, if any, and any other expenses necessary and rising from ancillary or incidental to business.
- 4.6.2 HEL has projected O&M Expenses in respect of generating station for the years 2023 24, 2024 25 and 2025 26 based on the norms specified in fourth amendment of Tariff Regulations. The Commission allows the O&M Expenses as submitted by HEL for generating station as per the details given below:

Table 16: O&M Expenses admitted by Commission for generating station

Activity	Capacity (MW)		of O&M Exp Rs. Lakh/MW	Account of the control of the contro	Admitted by Commission based on Norms (Rs. Lakh)		
		2023 - 24	2024 - 25	2025 - 26	2023 - 24	2024 - 25	2025 - 26
	(a)	(b)	(c)	(d)	(a) X (b)	(a) X (c)	(a) X (d)
Generation	600	13.45	13.96	14.49	8070.00	8376.00	8694.00





4.6.3 HEL has projected O&M Expenses in respect of dedicated transmission line for the year 2023 - 24, 2024 - 25 and 2025 – 26 as follows:

Table 17: O& M Expenses for dedicated transmission line claimed by HEL

Figures in Rs. Lakh

Particulars		Claimed	
Particulars	2023 - 24	2024 - 25	2025 - 26
Operation & Maintenance Expenses	1357.30	1438.80	1525.30

4.6.4 In terms of clause (b) of paragraph C4 of Schedule-9A of the Tariff Regulations, composite O&M expenses for dedicated transmission lines and bays of any generating station for any ensuing years shall be determined based on trued up expenses of the last five years. It is also specified that, O&M expenses for base year shall be computed considering the average of last 5 years', preceding to base year, trued up figures duly normalized after applying hybrid inflation index (HI) considering 60% wholesale price index (WPI) and 40% consumer price index (CPI) notified by the Government of India. As the truing up of 2020 – 21 and 2021 – 22 i.r.o dedicated transmission line of HEL is yet to be finalized, the Commission decides to compute the admissible O&M expenses for base year (2022 - 23) after normalizing the admitted values (excluding contingency expenses, if any) in the APR orders of 2017 - 18, 2018 - 19 and 2019 - 20 by applying hybrid index (WPI: CPI:: 60:40) for the respective years as available from the Annual Report 2022 - 23 of RBI. Thereafter, the O&M expenses for 2023 - 24, 2024 - 25 and 2025 - 26 are determined by applying average hybrid inflation index of last 5 years over the admissible expenses for the base year i.e. 2022 - 23.

Table 18: O & M Expenses for dedicated transmission line admissible for base year

Doublesslave	Halta			Adm	nitted		
Particulars	Units	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
WPI (in %)		2.90	4.30	1.70	1.30	13.00	9.40
CPI (in %)	%	3.10	5.40	7.50	5.00	5.10	6.10
Hybrid Index (in %)		2.98	4.74	4.02	2.78	9.84	8.08
O&M expense admitted in APR order 2017 – 18		375.68	393.49	409.31	420.68	462.08	499.42
O&M expense admitted in APR order 2018 – 19	In Rs.		379.97	395.24	406.23	446.21	482.26
O&M expense admitted in APR order 2019 – 20	Lakh		THE WE	419.82	431.49	473.95	512.24
Admissible O&M for 2022 – 23 (Average)							497.97





Table 19: O & M Expenses for dedicated transmission line of 8th control period as admitted

Particulars	Unito	Admitted			
ranticulais	Units	2023 - 24	2024 - 25	2025 - 26	
Admissible O&M for base year (2022 – 23)	In Rs. Lakh		497.97		
Average hybrid inflation of last five year	%		5.89		
Admissible Operation & Maintenance Expenses	In Rs. Lakh	527.31	558.38	591.28	

## 4.7 Statutory Charges:

4.7.1 In terms of regulation 5.7.2.2 of the Tariff Regulations the statutory fees and charges, excluding any penal charges, are to be allowed separately. HEL has claimed statutory charges based on the applicable taxes, licence fees to statutory authorities, etc paid in 2021 – 22 and applying escalated @ 9.83% based on escalation rate WPI and CPI in 60: 40 ratio with respect to 2021-22. As the statutory charges are notified by specific authorities, the commission does not find it prudent to allow escalation at this tariff determination stage. The Commission, admits the cost of Licence fees and Municipal Panchayat Tax for the 8<sup>th</sup> control period as per the actuals of 2021 – 22 and the amount of filing fees as proposed by the petitioner. The 'other expenses' as proposed by HEL in absence of reasonable disclosure is not considered by the Commission in this stage. HEL is required to submit the actual expenses incurred under statutory charges along with reasons during filing the petition of respective APR. The claim of HEL and to the extent of same admitted by the commission under statutory head appears hereunder:

Table 20: Statutory Charges claimed by HEL and admitted by the Commission for generating station

					1 19410	o iii i to. Laki	
Particulars		Claimed	Ser Ferre	Admitted			
Faiticulais	2023 - 24	2024 - 25	2025 - 26	2023 - 24	2024 - 25	2025 - 26	
Licence Fee	15.60	17.10	18.80	0.80	0.80	0.80	
Filing Fees	19.30	21.20	23.30	19.30	21.20	23.30	
Electricity Duty							
Water Cess							
Municipal/ Panchayat Tax	70.00	76.90	84.50	60.20	60.20	60.20	
Others	18.30	20.10	22.10	0.00	0.00	0.00	
Total	123.20	135.30	148.70	80.30	82.20	84.30	





Table 21: Statutory Charges claimed by HEL and admitted by commission for dedicated transmission line

Figures in Rs. Lakh

Particulars		Claimed		Admitted			
Faiticulais	2023 - 24	2024 - 25	2025 - 26	2023 - 24	2024 - 25	2025 - 26	
Licence Fee							
Filing Fees	8.00	8.80	9.70	8.00	8.80	9.70	
Electricity Duty				-		THE PL	
Water Cess	-		-	-			
Municipal/ Panchayat Tax	9.30	10.30	11.30	7.70	7.70	7.70	
Others							
Total	17.30	19.10	21.00	15.70	16.50	17.40	

#### 4.8 Assets and Depreciations:

4.8.1 The Commission in case no. OA-270/17-18 dated 20.07.2022 after considering all the facts and the project report submitted by HEL along with the submissions, clarifications and documents in terms of regulations approved the final Project Cost of Rs. 3832.60 crore in respect of the generating station against the claim of HEL as detailed below:

Table 22: Capital Cost approved by the Commission (Rs. Crore) against the claim of HEL for generating station

Particulars	Claimed	Approved
BTG	1687.80	1680.30
ВоР	1302.90	1262.30
Railway Infrastructure	154.00	154.00
Intake Water System	71.00	65.30
Other Enabling Works	104.90	53.50
Land and Site Development	70.60	70.60
Consultancy	22.50	21.00
Overhead	112.00	67.90
Contingencies		
Total Hard Cost	3525.70	3374.90
IDC and FC	541.50	457.70
Total	4067.20	3832.60

The apportionment of the hard cost as computed by the Commission against the claim of HEL appears hereunder:





Table 23: Break up of Hard Cost (Rs. Crore)

Particulars	Claimed	Computed by the Commission
Hard Cost as on COD	3285.70	3145.20
Additional Capitalisation		
FY 2015-16	50.30	48.10
FY 2016-17	37.60	36.00
FY 2017-18	98.80	94.60
FY 2018-19	39.20	37.50
FY 2019-20	0.70	0.70
Balance Additional Capitalisation	13.40	12.80
Total Additional Capitalisation	240.00	229.70
Total Hard Cost	3525.70	3374.90

4.8.2 The Commission in case no. OA-267/17-18 dated 08.01.2020 after considering all the facts and the project report submitted by HEL along with the submissions, clarifications and documents in terms of regulations approved the final Project Cost of Rs. 540.36 crore in respect of the dedicated transmission line against the claim of HEL as detailed below:

Table 24: Capital Cost approved by the Commission (Rs. Crore) against the claim of HEL for dedicated transmission line

SI No.	Particulars	Claimed	Admitted
1	River Crossing:		
a)	Foundations	146.82	133.45
b)	Tower and Conductors	141.29	140.34
		288.11	273.79
2	Transmission Line		
a)	Tower package and ROW	152.03	120.02
b)	Conductor package	36.29	36.06
		188.32	156.08
3	Consultancy/ Drawing/ Design		J. S. B. W.
	Survey & Soil Investigation, Consultancy, Studies etc. (including Power Grid), Drawing, Design & Foundation	19.06	19.06
4	400 KV Bays (2 nos.)	7.90	7.90
5	Overheads	5.34	5.34
6	Contingencies	0.00	0.00
7	Total before IDC	508.73	462.17
8	IDC	86.07	78.19
9	Total after IDC	594.80	540.36





4.8.3 HEL in the petition and supplementary petition has claimed addition to the assets for generating station and dedicated transmission line for the years 2020 – 21 to 2025 – 26. Inconsistencies have been noticed between the figures of 2023 – 24 to 2025 – 26 mentioned in Form 1.18 and the same submitted in the summary of asset register of the petitioner regarding dedicated transmission line. The Commission decides to consider the figures of asset addition as submitted in the asset register summary by HEL, as follows:

Table 25: Fixed Asset and Depreciation claimed by HEL for generating station

Figures in Rs. Lakh

Particulars		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Generation							
Opening GFA	Α	405399.00	406193.60	.407442.00	408333.90	410279.90	412550.90
Asset Addition	В	794.60	1248.40	891.90	1946.00	2271.00	1555.00
Asset decommissioned	С	0.00	0.00	0.00	0.00	0.00	0.00
Closing GFA	D =A+B-C	406193.60	407442.00	408333.90	410279.90	412550.90	414105.90
Depreciation during the year	Е	14401.00	14446.80	14495.10	21099.30	21297.00	21435.40

Table 26: Fixed Asset and Depreciation claimed by HEL for dedicated transmission line

Figures in Rs. Lakh

Particulars		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Transmission							
Opening GFA	Α	58604.00	58604.00	58609.10	61636.30	61636.30	61636.30
Asset Addition	В	0.00	5.10	2151.10	0.00	0.00	0.00
Asset decommissioned	С			0.00	0.00	0.00	0.00
Closing GFA	D =A+B-C	58604.00	58609.10	60760.20	61636.30	61636.30	61636.30
Depreciation during the year	E	1538.60	1538.70	1551.20	3208.10	3208.10	3208.10

4.8.4 The Commission in its order dated 20.07.2022 in Case No. OA-270/17-18 has specified the final project cost for HEL generating station has mentioned that, the additional capitalization post COD considered as part of Capital Cost shall not be construed as final approval of the Commission. The year wise additional capitalization shall be dealt with in the APR order of respective years based on prudence check of the Commission in accordance with the provisions of Tariff Regulations. The Commission observes that, APR of HEL dedicated transmission line has been issued for the years 2014 – 15 to 2019 – 20 whereas APR of HEL generating station has been issued for the years 2014 – 15 to 2016 – 17. Under these circumstances, the Commission decides to consider the project cost and





additional capitalization admitted in the order of final project cost and APR orders to arrive at Gross Fixed Asset up to 31.03.2023. However, this is subject to adjustment based on the admission of asset addition during the respective APR.

Table 27: Admissible Gross Fixed Asset for HEL Generating station

Figures in Rs. Lakh

Financial	Generat	ing Station	of HEL	Dedicated to	ransmission I	ine of HEL
Year	Opening GFA	GFA addition	Closing GFA	Opening GFA	GFA addition	Closing GFA
2014-15	360284.94	0.00	360284.94	54036.00	0.00	54036.00
2015-16	360284.94	4810.00	365094.94	54036.00	0.00	54036.00
2016-17	365094.94	3600.00	368694.94	54036.00	0.00	54036.00
2017-18	368694.94	9460.00	378154.94	54036.00	0.00	54036.00
2018-19	378154.94	3750.00	381904.94	54036.00	0.00	54036.00
2019-20	381904.94	70.00	381974.94	54036.00	0.00	54036.00
2020-21	381974.94	426.67*	382401.61	54036.00	0.00	54036.00
2021-22	382401.61	426.67*	382828.28	54036.00	0.00	54036.00
2022-23	382828.28	426.66*	383254.94	54036.00	0.00	54036.00

Note: \* the balance addition capitalization of Rs. 12.80 crore admitted in the order of final project cost is equally divided into three years.

Actual addition to fixed asset, in variation to above, if any, shall be adjusted during APR of the respective year.

4.8.5 HEL in its petition has also submitted break-up of its capitalization plan for the 8<sup>th</sup> control period, where it has projected asset addition of Rs. 1946 Lakh, Rs. 2271 Lakh and Rs. 1555 Lakh for the years 2023 – 24, 2024 – 25 and 2025 – 26 respectively. While analysing the CAPEX proposal for 2023 – 24, 2024 – 25 and 2025 – 26 in respect of the generating station, it is observed that the plan includes (i) proposals for asset replacement, (ii) procurement of spares, (iii) capital expenditure to improve the operating performance and (iv) some repair & maintenance nature of jobs. The Commission observes that the project life is even less than 10 years, hence major modifications/ replacement should not ideally arise at this stage. Thus, the Commission decides to allow Capital expenditure proposals related to environment and other urgent augmentations only for smooth operation of the plant. For any capital expenditure regarding improvement of the operating performance, petitioner has to submit specific proposal with cost benefit analysis specifying the improvements of respective operating norms. The Commission also observes that





any Capital replacement shall be considered only after giving due adjustment to the replaced asset value and no repair & maintenance nature of jobs shall be considered as Capital asset addition. Accordingly, the Commission directs HEL to submit details of asset addition along with date of put in use of such assets supported with cost benefit analysis and the adjustments of replaced assets, if any during APR stage for consideration of the Commission. In view of the above, the admissible asset addition for generation and transmission activities of HEL during 8<sup>th</sup> control period as considered is given in the table below:

Table 28: Additional Assets for generating station and dedicated transmission line claimed by HEL and admitted by Commission

Figures in Rs. Lakh

Claimed by HEL		L	Adı			
Particulars	2023-24	2024-25	2025-26	2023-24	2024-25	2025-26
Generation	1946.00	2271.00	1555.00	690.00	500.00	0.00
Transmission	0.00	0.00	0.00	0.00	0.00	0.00

4.8.6 In view of above, the Commission finds it reasonable to consider the Gross Fixed asset for each year of ensuing year as below:

Table 29: Gross Fixed Asset claimed by HEL and admitted by Commission

	Cla	imed by HE	L			
Year	Opening GFA	GFA addition	Closing GFA	Opening GFA	GFA addition	Closing GFA
			Generating St	ation of HEL		
2023-24	408333.90	1946.00	410279.90	383254.94	690.00	383944.94
2024-25	410279.90	2271.00	412550.90	383944.94	500.00	384444.94
2025-26	412550.90	1555.00	414105.90	384444.94	0.00	384444.94
		Dedi	cated transmi	ssion line of h	HEL	
2023-24	61636.30	0.00	61636.30	54036.00	0.00	54036.00
2024-25	61636.30	0.00	61636.30	54036.00	0.00	54036.00
2025-26	61636.30	0.00	61636.30	54036.00	0.00	54036.00

- 4.8.7 The Commission, in the context of arriving to cumulative depreciation and Advance Against Depreciation (AAD) referred to the previous orders, as below:
  - (i) Generating station of HEL: The Commission decides to consider the depreciation admitted in the APR orders for the years 2014 – 15 to 2016 – 17. Depreciation for the year 2017 – 18 has been arrived at Rs. 13259.57 lakh





considering the same rate of 3.57% as admitted in 2016 – 17 after giving due adjustment to the asset addition considered in table 27 above. For the years 2018 – 19 to 2022 – 23, depreciation and AAD as admitted in respective tariff orders have been considered.

(ii) Dedicated transmission line of HEL: The Commission decides to consider the depreciation and AAD as admitted in the APR orders for the years 2014 – 15 to 2019 – 20. For the years 2020 – 21 to 2022 – 23, depreciation and AAD as admitted in respective tariff orders have been considered.

Table 30: Admissible depreciation and Advance Against Depreciation

	Generat	ing Station	of HEL	Dedicated tra	nsmissio	n line of HEL
Financial Year	Depreciation	AAD	Cumulative Depreciation & AAD	Depreciation	AAD	Cumulative Depreciation & AAD
2014-15	1880.71	0.00	1880.71	241.20	0.00	241.20
2015-16	12920.69	0.00	14801.40	1397.80	0.00	1639.00
2016-17	13090.80	0.00	27892.20	1397.80	0.00	3036.80
2017-18	13259.57	0.00	41151.77	1397.78	0.00	4434.58
2018-19	13213.67	0.00	54365.44	1397.78	25.94	5858.30
2019-20	13296.78	0.00	67662.22	1397.78	199.65	7455.73
2020-21	13172.83	9298.99	90134.04	1399.53	224.22	9079.48
2021-22	13172.83	0.00	103306.87	1399.53	224.22	10703.23
2022-23	13172.83	0.00	116479.70	1399.53	664.67	12767.43

- 4.8.8 In view of the above and considering the admissible asset addition during each ensuing year, the admissible depreciation is determined with the following principles:
  - (i) opening Gross Fixed Asset (GFA) and cumulative depreciation as per the admitted value in tables 29 and 30 above;
  - (ii) assets to be depreciated during the year = Opening GFA GFA of assets fully depreciated + admissible asset addition during the year;
  - (iii) closing GFA = Opening GFA + admissible asset addition for the year asset retired if any;





- (iv) break-up of asset category as proposed by HEL for fully depreciated assets, assets depreciated between 70% to 90% and assets depreciated less than 70%, has been referred to and thereafter adjustment on account of variation in capital cost addition and prorated depreciation is allowed;
- 4.8.9 Accordingly, the admissible depreciation for generating station of HEL becomes Rs. 19381.19 lakh, Rs.19480.79 Lakh and Rs. 19533.55 Lakh for the years 2023 24, 2024 25 and 2025 26 respectively, as detailed below:

Table 31: Admissible Depreciation of generating station for the year 2023-24

Particulars	Cla	imed	Ad	mitted
	GFA	Depreciation	GFA	Depreciation
Opening Value for the year	408333.90	123268.00	383254.94	116479.70
Land	12.50	0.00	7060.00	0.00
Assets fully depreciated	1294.70	1165.20	1215.18	1093.66
Assets depreciated 70% to 90%	22.10	17.80	20.74	16.71
Assets depreciated less than 70%	407004.60	122084.90	374959.01	115369.33
Addition of asset during the year	1946.00		690.00	
Retirement of asset during the year	0.00	0.00	0.00	
Assets to be depreciated during the year	408985.20	21099.30	382729.76	19381.19
Land – free hold	12.50	0.00	7060.00	0.00
Assets depreciated 70% to 90%	22.10	2.10	20.74	1.97
Assets depreciated less than 70%	408950.60	21097.20	375649.01	19379.22
Less: depreciation of funded assets	0.00	0.00		0.00
Net depreciation		21099.30		19381.19
Closing Value for the year	410279.90	144367.20	383944.94	135860.89
Land	12.50	0.00	7060.00	0.00
Assets fully depreciated	1325.30	1188.40	1240.23	1116.21
Assets depreciated 70% to 90%	31.90	23.70	29.85	22.18
Assets depreciated less than 70%	408910.20	143155.10	375614.86	134722.50





## Table 32: Admissible Depreciation of generating station for the year 2024-25

Figures in Rs. Lakh

Particulars	Cla	aimed	Adı	nitted
	GFA	Depreciation	GFA	Depreciation
Opening Value for the year	410279.90	144367.20	383944.94	135860.89
Land	12.50		7060.00	0.00
Assets fully depreciated	1325.30	1188.40	1240.23	1116.21
Assets depreciated 70% to 90%	31.90	23.70	29.85	22.18
Assets depreciated less than 70%	408910.20	143155.10	375614.86	134722.50
Addition of asset during the year	2271.00		500.00	
Retirement of asset during the year	0.00		0.00	
Assets to be depreciated during the year	411225.60	21297.00	383204.71	19480.79
Land – free hold	12.50	0.00	7060.00	0.00
Assets depreciated 70% to 90%	31.90	2.00	29.85	1.87
Assets depreciated less than 70%	411181.20	21295.00	376114.86	19478.92
Less: depreciation of funded assets	0.00	0.00		0.00
Net depreciation		21297.00		19480.79
Closing Value for the year	412550.90	165664.20	384444.94	155341.68
Land	12.50	0.00	7060.00	0.00
Assets fully depreciated	1327.30	1190.10	1242.10	1117.89
Assets depreciated 70% to 90%	114.90	90.10	107.07	83.96
Assets depreciated less than 70%	411096.20	164384.00	376035.77	154139.83

Table 33: Admissible Depreciation of generating station for the year 2025-26

Particulars	Cla	nimed	Admitted	
	GFA	Depreciation	GFA	Depreciation
Opening Value for the year	412550.90	165664.20	384444.94	155341.68
Land	12.50	0.00	7060.00	0.00
Assets fully depreciated	1327.30	1190.10	1242.10	1117.89
Assets depreciated 70% to 90%	114.90	90.10	107.07	83.96
Assets depreciated less than 70%	411096.20	164384.00	376035.77	154139.83
Addition of asset during the year	1555.00	63.50	0.00	
Retirement of asset during the year	0.00			
Assets to be depreciated during the year	412778.60	21435.40	383202.84	19533.55
Land – free hold	12.50	0.00	7060.00	0.00
Assets depreciated 70% to 90%	114.90	7.70	107.07	7.18





Figures in Rs. Lakh

Particulars	Cla	imed	Adm	nitted
	GFA	Depreciation	GFA	Depreciation
Assets depreciated less than 70%	412651.20	21427.70	376035.77	19526.37
Less: depreciation of funded assets		0.00		0.00
Net depreciation		21435.40		19533.55
Closing Value for the year	414105.90	187099.60	384444.94	174875.23
Land	12.50	0.00	7060.00	0.00
Assets fully depreciated	1327.30	1190.10	1242.10	1117.89
Assets depreciated 70% to 90%	114.90	97.80	107.07	91.14
Assets depreciated less than 70%	412651.20	185811.70	376035.77	173666.20

4.8.10 Accordingly, the admissible depreciation for dedicated transmission line of HEL becomes Rs. 2853.10 lakh for all the years 2023 – 24, 2024 – 25 and 2025 – 26 as detailed below:

Table 34: Admissible Depreciation of dedicated transmission line for the year 2023-24

Particulars	Cla	aimed	Adm	nitted
	GFA	Depreciation	GFA	Depreciation
Opening Value for the year	61636.30	19015.00	54036.00	12767.43
Assets fully depreciated	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	19015.00	54036.00	12767.43
Addition of asset during the year	0.00		0.00	
Retirement of asset during the year	0.00		0.00	
Assets to be depreciated during the year	61636.30	3254.40	54036.00	2853.10
Land – free hold	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90% Assets depreciated less than 70%	0.00 61636.30	0.00 3254.40	0.00 54036.00	0.00 2853.10
Net depreciation		3254.40		2853.10
Closing Value for the year	61636.30	22269.40	54036.00	15620.53
Assets fully depreciated	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	22269.40	54036.00	15620.53





Table 35: Admissible Depreciation of dedicated transmission line for the year 2024-25

Figures in Rs. Lakh

Particulars	Cla	aimed	Adm	nitted
	GFA	Depreciation	GFA	Depreciation
Opening Value for the year	61636.30	22269.40	54036.00	15620.53
Assets fully depreciated	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	22269.40	54036.00	15620.53
Addition of asset during the year	0.00	0.00	0.00	0.00
Retirement of asset during the year	0.00	0.00	0.00	0.00
Assets to be depreciated during the year	61636.30	3254.40	54036.00	2853.10
Land – free hold	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	3254.40	54036.00	2853.10
Less: depreciation of funded assets		0.00		0.00
Net depreciation		3254.40		2853.10
Closing Value for the year	61636.30	25523.80	54036.00	18473.63
Assets fully depreciated	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	25523.80	54036.00	18473.63

Table 36: Admissible Depreciation of dedicated transmission line for the year 2025-26

Particulars	Cla	aimed	Adm	nitted
	GFA	Depreciation	GFA	Depreciation
Opening Value for the year	61636.30	25523.80	54036.00	18473.63
Assets fully depreciated	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	25523.80	54036.00	18473.63
Addition of asset during the year	0.00	0.00	0.00	0.00
Retirement of asset during the year	0.00	0.00	0.00	0.00
Assets to be depreciated during the year	61636.30	3254.40	54036.00	2853.10
Land – free hold	0.00	0.00	0.00	0.00
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00
Assets depreciated less than 70%	61636.30	3254.40	54036.00	2853.10
Less: depreciation of funded assets		0.00		0.00
Net depreciation		3254.40		2853.10





Figures in Rs. Lakh

Particulars	Cla	aimed	Admitted		
	GFA	Depreciation	GFA	Depreciation	
Closing Value for the year	61636.30	28778.20	54036.00	21326.73	
Assets fully depreciated	0.00	0.00	0.00	0.00	
Assets depreciated 70% to 90%	0.00	0.00	0.00	0.00	
Assets depreciated less than 70%	61636.30	28778.20	54036.00	21326.73	

#### 4.9 Return on Equity:

- 4.9.1 In terms of regulation 5.6.1 of the Tariff Regulations, return on equity for a generating station of a Generating Company shall be computed on the admissible equity capital at the rate of 14.00% per annum on the post-tax basis for all assets commissioned on and from 01.04.2024 and for assets commissioned prior to 01.04.2024 rate of return on equity shall be at 15.50%. In terms of regulation 5.4.2 of the Tariff Regulations, where equity employed is more than 30%, the amount of equity shall be limited to 30% and the balance amount shall be considered under normative loan. However, where actual equity employed is less than 30%, the actual equity shall be considered for determination of return on equity. Equity capital may include paid-up equity, preference share, free reserve, etc but shall not include any grant, revaluation reserve, development reserve, contingency reserve and contribution from consumers.
- 4.9.2 HEL in its petition has claimed Rs. 16025.00 lakh, Rs. 16117.90 lakh and Rs. 16150.60 Lakh as Return on Equity for generating station for the years 2023 24, 2024 25 and 2025 26 respectively. For the dedicated transmission line, HEL has claimed Rs. 2427.90 Lakh as Return on Equity for all the ensuing years of 8<sup>th</sup> control period. The Commission based on admissible asset addition as discussed in previous paragraph and the equity addition admitted in the APR orders, decides to determine the admissible Return on Equity in subsequent paragraphs.
- 4.9.3 **Generating Station of HEL:** HEL has proposed to consider admissible opening equity base for generating station as Rs. 103095.20 lakh for the year 2023 24. The Commission decides to consider admissible opening equity base for the year 2023 24 as Rs. 102615.60 lakh, as shown in Annexure 4A arrived on the basis of outlined facts at paragraph 4.8.1 and orders issued in the related context. The opening equity





base is limited to 30% of the opening GFA determined in paragraph 4.8.6. Now considering the annual capitalization for each ensuing year as admitted in paragraph 4.8.6 above and equity addition limited to 30% of such asset value for the respective years, the admissible return on equity is determined as below:

Table 37: Return on Equity for generating station admitted by the Commission

Figures in Rs. Lakh

Particulars	Derivation	2023-24	2024-25	2025-26
Actual Equity base at the beginning of the year (as claimed)	А	307632.30	323657.30	339775.2
Net Addition/ adjustment of equity base during year (as claimed)	В	16025.00	16117.90	16117.90
Actual Equity base at the end of the year (as claimed)	C=A+B	323657.30	339775.20	355893.10
Admissible equity base at the beginning of the year	D	102615.60	102822.60	102972.60
Net addition of Fixed asset during the year	E	690.00	500.00	0.00
Normative equity Addition	F =Ex0.3	207.00	150.00	0.00
Admissible equity addition (min of actual and normative)	G =Min (B, F)	207.00	150.00	0.00
Less: Adjustment for decommissioned units	Н	0.00	0.00	0.00
Admissible equity base at the end of the year	I = D+G-H	102822.60	102972.60	102972.60
Average admissible equity base for Return	J =(D+I)/2	102719.10	102897.60	102972.60
Average admissible equity (assets prior to 01.04.2024)	K1	102719.10	102822.60	102822.60
Rate of return (assets prior to 01.04.2024) @ 15.50%	L1 =K1x0.155	15921.46	15937.50	15937.50
Average admissible equity (assets on / after 01.04.2024)	K2	0.00	75.00	150.00
Rate of return (assets on / after 01.04.2024) @ 14.00%	L2 =K2x0.14	0.00	10.50	21.00
Total Return on Equity	L =L1+L2	15921.46	15948.00	15958.50

4.9.4 **Dedicated transmission line of HEL:** HEL has proposed to consider admissible opening equity base for dedicated transmission line as Rs. 15663.90 lakh for the year 2023 – 24. The Commission in the APR order for 2019-20 has admitted Rs. 15017.00 lakh as admissible equity base. In view of no asset addition considered during 2020 – 21 to 2022 – 23, as in table 27 above, no addition of equity has been considered. Thus, the admissible opening equity base for the year 2023 – 24 remains Rs. 15017.00 lakh, as shown in Annexure 4B. In view of no proposal of asset addition during the 8<sup>th</sup> control period the equity remain same. Accordingly, the admissible return on equity is determined.





Table 38: Return on Equity for dedicated transmission line admitted by the Commission

Figures in Rs. Lakh

Particulars	Derivation	2023-24	2024-25	2025-26
Actual Equity base at the beginning of the year (as claimed)	А	46638.20	49066.10	51494.00
Net Addition/ adjustment of equity base during year (as claimed)	В	2427.90	2427.90	0.00
Actual Equity base at the end of the year (as claimed)	C=A+B	49066.10	51494.00	51494.00
Admissible equity base at the beginning of the year	D	15017.00	15017.00	15017.00
Net addition of Fixed asset during the year	Е	0.00	0.00	0.00
Normative equity Addition	F=Ex0.3	0.00	0.00	0.00
Admissible equity addition (min of actual and normative)	G =Min (B, F)	0.00	0.00	0.00
Less: Adjustment for decommissioned units	Н	0.00	0.00	0.00
Admissible equity base at the end of the year	I = D+G-H	15017.00	15017.00	15017.00
Average admissible equity base for Return	J =(D+I)/2	15017.00	15017.00	15017.00
Average admissible equity (assets prior to 01.04.2024)	K1	15017.00	15017.00	15017.00
Rate of return (assets prior to 01.04.2024) @ 15.50%	L1 =K1x0.155	2327.64	2327.64	2327.64
Average admissible equity (assets on / after 01.04.2024)	K2	0.00	0.00	0.00
Rate of return (assets on / after 01.04.2024) @ 14.00%	L2 =K2x0.14	0.00	0.00	0.00
Total Return on Equity	L =L1+L2	2327.64	2327.64	2327.64

#### 4.10 Interest on Normative Loan:

- 4.10.1 In terms of regulation 5.6.4.2 of the Tariff Regulations, as amended from time to time, actual loan and/or normative loan, if any, for the asset put to use shall be considered as gross normative loan for calculation of interest on loan. Normative loan outstanding shall be considered as admitted loan corresponding to the asset capitalised deducted by cumulative depreciation and Advanced Against Depreciation approved by the Commission. It is further stated that, repayment during each year of the control period shall be deemed to be equal to the depreciation allowed for that year. The rate of interest shall be the weighted average rate of interest computed on the basis of actual capital loan portfolio.
- 4.10.2 HEL in its petition has claimed interest on loan capital for its generating station as Rs. 14577.00 Lakh, Rs. 12912.60 Lakh and Rs. 11235.00 Lakh for the years 2023 – 24, 2024 – 25 and 2025 – 26 respectively. On the other hand, HEL in its petition has claimed interest on loan capital for its dedicated transmission line as Rs. 2071.20





Lakh, Rs. 1795.40 Lakh and Rs. 1519.60 Lakh for the years 2023 - 24, 2024 - 25 and 2025 - 26 respectively. Now, considering the admissible asset addition in Table 29 and the depreciation admitted for the years, the Commission computes the admissible interest on loan capital in subsequent paragraphs.

4.10.3 **Generating Station of HEL:** HEL in respect of generation station has already recovered cumulative depreciation including AAD to the extent of Rs. 116479.70 lakh as on 31.03.2023, i.e. 30.39% of GFA. From the loan details submitted in Form-C of the petition for generating station, the weighted average rate of interest comes to 8.47 % for all the years 2023 – 24, 2024 – 25 and 2025 – 26. Applying the effective rate of interest of 8.47%, the interest on capital loan during 2023 – 24, 2024 – 25 and 2025 – 26 comes to Rs. 13103.98 lakh, Rs. 11493.46 lakh and 9856.02 lakh respectively as determined below:

Table 39: Interest on loan for generating station admitted by the Commission

Figures in Rs. Lakh

Particulars	Derivation	2023-24	2024-25	2025-26
GFA at the beginning of the year	A	383254.94	383944.94	384444.94
Less: Govt Grant, etc	В	0.00	0.00	0.00
Approved GFA at the beginning	C = A-B	383254.94	383944.94	384444.94
Admissible equity at the beginning	D	102615.60	102822.60	102972.60
Opening Gross Normative Loan	E = C - D	280639.34	281122.34	281472.34
Cumulative depreciation and AAD	F	116479.70	135860.89	155341.68
Opening Balance of Normative Loan	G=E-F	164159.64	145261.45	126130.6500
Net addition of asset during the year	Н	690.00	500.00	0.00
Admissible addition to equity considered	1	207.00	150.00	0.00
Normative addition to capital loan	J = H- I	483.00	350.00	0.00
Depreciation during the year	К	19381.19	19480.79	19533.55
Closing balance of Normative Loan	L=G+J-K	145261.45	126130.66	106597.10
Average Normative Loan during the year	M = (G + L)/2	154710.54	135696.05	116363.88
Weighted average rate of interest (%)	N	8.47%	8.47%	8.47%
Interest on Normative Loan	O = M x N	13103.98	11493.46	9856.02

4.10.4 **Dedicated transmission line of HEL:** HEL in respect of dedicated transmission line has already recovered cumulative depreciation including AAD of Rs. 12767.43 lakh i.e. to the extent of 23.63% as on 31.03.2023. From the loan details submitted in Form-C of the petition the weighted average rate of interest comes to 8.46 %, 8.44% and 8.41% for the years 2023 – 24, 2024 – 25 and 2025 – 26 respectively.





Considering the above, the interest on capital loan during 2023 – 24, 2024 – 25 and 2025 – 26 comes to Rs. 2100.20 lakh, Rs. 1854.43 lakh and Rs. 1607.89 lakh respectively.

Table 40: Interest on loan for dedicated transmission line admitted by the Commission

Figures in Rs. Lakh

Particulars	Derivation	2023-24	2024-25	2025-26
GFA at the beginning of the year	Α	54036.00	54036.00	54036.00
Less: Govt Grant, etc	В	0.00	0.00	0.00
Approved GFA at the beginning	C = A-B	54036.00	54036.00	54036.00
Admissible equity at the beginning	D	15017.00	15017.00	15017.00
Opening Gross Normative Loan	E = C - D	39019.00	39019.00	39019.00
Cumulative depreciation and AAD	F	12767.43	15620.53	18473.63
Opening Balance of Normative Loan	G=E-F	26251.57	23398.47	20545.37
Net addition of asset during the year	Н	0.00	0.00	0.00
Normative addition to equity considered	1	0.00	0.00	0.00
Normative addition to capital loan	J = H- I	0.00	0.00	0.00
Depreciation during the year	K	2853.10	2853.10	2853.10
Closing balance of Normative Loan	L=G+J-K	23398.47	20545.37	17692.27
Average Normative Loan during the year	M = (G + L)/2	24825.02	21971.92	19118.82
Weighted average rate of interest (%)	N	8.46%	8.44%	8.41%
Interest on Normative Loan	O = M x N	2100.20	1854.43	1607.89

#### 4.11 Other Finance Charges:

- 4.11.1 HEL in its petition has claimed Rs. 1902.00 Lakh, Rs. 1942.00 lakh and 1983.00 lakh for 2023 24, 2024 25 and 2025 26 respectively as other finance charges for each year of the 8<sup>th</sup> control period against its generating station. For dedicated transmission line, HEL in its petition has claimed Rs. 248.00 Lakh, Rs. 255.44 lakh and 262.49 lakh for 2023 24, 2024 25 and 2025 26 respectively as other finance charges for each year of the 8<sup>th</sup> control period. The escalation rate as stated in the petition is 2% on 2021 22 figure.
- 4.11.2 HEL submitted that the projected finance charge for both generating and transmission activities under distinct heads. The Commission decides to allow the Guarantee Commission and Front-End fees as proposed in 2023 24, 2024 25 & 2025 26 restricted to the extent of proportion of asset addition admitted by the Commission as proposed by HEL. The rest of the expenses like Other Bank charges





for interest rate reduction and LC opening charges shall have to be claimed by HEL during respective APR on the basis of actuals regarding capital costs, if any. The Finance Charges as claimed by HEL for generating station and dedicated transmission line and as admitted by the Commission stands as follows:

Table 41: Other Finance charge for generating station claimed by HEL and admitted by the Commission

Figures in Rs. Lakh

Generation	Claimed			Admitted		
Generation	2023-24	2024-25	2025-26	2023-24	2024-25	2025-26
Guarantee Commission	72.00	74.00	76.00	25.53	16.29	0.00
Front End Fees	232.00	237.00	242.00	82.26	52.18	0.00
Others- Bank Charges For rate reduction	1592.00	1624.00	1657.00	0.00	0.00	0.00
Other- LC opening Charges	6.00	7.00	8.00	0.00	0.00	0.00
Total	1902.00	1942.00	1983.00	107.79	68.47	0.00

Table 42: Other Finance charge for dedicated transmission line claimed HEL and admitted by Commission

Figures in Rs. Lakh

Tunnamiasian	Claimed				Admitted	
Transmission	2023-24	2024-25	2025-26	2023-24	2024-25	2025-26
Guarantee Commission	10.00	11.00	12.00	0.00	0.00	0.00
Front End Fees	31.00	32.00	33.00	0.00	0.00	0.00
Others- Bank Charges For rate reduction	205.95	210.97	215.99	0.00	0.00	0.00
Other- LC opening Charges	1.05	1.47	1.50	0.00	0.00	0.00
Total	248.00	255.44	262.49	0.00	0.00	0.00

#### 4.12 Interest on Working Capital:

- 4.12.1 HEL has claimed interest on working capital at normative basis as Rs. 6719.10 Lakh, Rs. 6698.20 Lakh and Rs. 6742.60 Lakh for its generating station and Rs. 234.80 lakh, Rs. 230.30 lakh and Rs. 222.30 lakh for dedicated transmission line for the years 2023 – 24, 2024 – 25 and 2025 – 26 respectively.
- 4.12.2 The Commission, now determines the Working Capital requirement based on the provisions of regulation 5.6.5 of the Tariff Regulations. In terms of the Tariff Regulations, interest on Working Capital shall be at the rate equal to the MCLR or any redefined term thereof by SBI from time to time being in effect and applicable for





one-year period, as prevalent on 1<sup>st</sup> April of the financial year in which the Petition is filed plus 250 basis points. The Commission observes that, petitioner has filed the petition on 24.01.2023, thus the working capital interest rate will be SBI MCLR as on 01.04.2022 i.e. 7.00% plus 250 basis points. Accordingly, the Commission determines the interest on working capital of generating station and dedicated transmission line of HEL as below:

Table 43: Interest on working capital admitted by the Commission for generating station

Figures in Rs. Lakh

Generation	Davissation	Admitted				
Particulars	Derivation	2023-24	2024-25	2025-26		
Cost of Coal stock (non-pit-head 20 days)	Α	5885.83	6007.23	6007.23		
Advance payment of coal (30 days)	В	8588.29	8770.39	8770.39		
Cost of secondary fuel oil for 2 months	С	488.92	487.58	487.58		
O&M expense for 1 month	D	672.50	698.00	724.50		
Employee Cost for 1 month	Е	705.61	748.65	794.32		
Water Charge for 1 month	F	0.00	0.00	0.00		
Maintenance spare- 20% of O&M	G	1614.00	1675.20	1738.80		
Receivables equivalent to 45 days	Н	21708.61	21927.15	21832.52		
Working Capital Requirement	I = Sum (A : H)	39663.76	40314.20	40355.34		
Interest rate at SBI MCLR+250 basis points	J	9.50%	9.50%	9.50%		
Interest on working Capital	K=IxJ	3768.06	3829.85	3833.76		

Table 44: Interest on working capital admitted by the Commission for dedicated transmission line

4.13

Figures in Rs. Lakh

n	Transmission	Davisation	Admitted			
"	Particulars	Derivation	2023-24	2024-25	2025-26	
С	O&M expense for 1 month	Α	43.94	46.53	49.27	
0	Employee Cost for 1 month	В	12.51	13.27	14.08	
m	Maintenance spare- 15% of O&M	С	105.46	111.68	118.26	
e	Receivables equivalent to 45 days	D	1061.31	1038.83	1013.62	
-	Working Capital Requirement	E = Sum (A : D)	1223.22	1210.31	1195.23	
Inte	erest rate at SBI MCLR+250 basis points	F	9.50%	9.50%	9.50%	
t	Interest on working Capital	G=ExF	116.21	114.98	113.55	

ax:

4.13.1 HEL in the petition has stated that tax for the years 2018 – 19 to 2021 – 22 has been furnished as actually paid in terms of Regulation 5.13 of the Tariff Regulations. HEL



has further added that figures for the base year and ensuing years has been estimated based on applicable statutes. HEL at Form E(A) has estimated income tax liability of Rs. 8607.60 lakh, Rs. 8660.30 lakh and Rs. 8708.10 lakh for 2023-24, 2024-25 and 2025-26 respectively for the generating station. Correspondingly, HEL at Form E(T) has estimated income tax liability of Rs. 1304.10 lakh for each of the years 2023-24, 2024-25 and 2025-26 for the dedicated transmission line.

- 4.13.2 The regulation 5.13 of the Tariff Regulations in the related context provide for such tax as to passed through tariff subject to submission of assessment order of the concerned year or other valid documents laid down in Regulation 5.13.1 of the Tariff Regulation.
- 4.13.3 The regulation 5.13.1 of the Tariff Regulations, provides for allowing Minimum Alternate Tax (MAT) and self-assessed income tax as deposited for the concerned year without any submission of assessment Order.
- 4.13.4 Since, the income-tax as projected as a liability for future years by HEL, as such, the Commission decided to allow MAT subject to submission of the requirement laid out at regulation 5.13 of the Tariff Regulations in the respective petitions for APR for actual pass through of the income tax deposited by HEL. The MAT as admitted by the Commission appears hereunder:

Table 45: Income Tax admitted by the Commission

Figures in Rs. Lakh

Station and System	2023-24	2024-25	2025-26
Generating Station	2781.48	2786.12	2787.95
Dedicated transmission line	406.64	406.64	406.64

#### 4.14 Reserve for Unforeseen Expenses:

4.14.1 HEL in its petition has claimed for appropriation to reserve for unforeseen exigencies as special allocations during the years 2023 – 24, 2024 – 25 and 2025 – 26 to the extent of Rs. 1020.80 lakh, 1025.70 lakh and Rs. 1031.40 lakh respectively for its generating station and Rs.151.90 lakh for dedicated transmission line in each year. The Commission observes that in terms of regulation 5.11.1, generating companies may provide and maintain a reserve for dealing with unforeseen exigencies up to





0.25% of the value of gross fixed assets (GFA) at the beginning of year annually and the provision made for the year will be allowed in their ARR. The fund shall not exceed the overall ceiling of 5% of the value of GFA. The sum apportioned to such reserve for Unforeseen Exigencies shall be invested separately in terms of regulations 5.24.1 of the Tariff Regulations. In view of the above, the Commission admits reserve for unforeseen exigencies during the eighth control period to the extent of 0.25% of admitted GFA at the beginning of the years 2023 – 24, 2024 – 25 and 2025 – 26 for both the generating station and dedicated transmission line as follows:

Table 46: Admissible Reserve for unforeseen expense

Figures in Rs. Lakh

		1 1941	oo iii i to. Laki
Particulars	2023-24	2024-25	2025-26
Generating Stat	ion of HEL		1
Admitted GFA at the beginning of the year	383254.94	383944.94	384444.94
Admissible Reserve for Unforeseen Exigencies (@ 0.25% of GFA)	958.14	959.86	961.11
Dedicated transmiss	sion line of HEL		
Admitted GFA at the beginning of the year	54036.00	54036.00	54036.00
Admissible Reserve for Unforeseen Exigencies (@ 0.25% of GFA)	135.09	135.09	135.09

4.14.2 HEL is directed to submit details of its year-wise investments made against reserve for unforeseen exigencies and interest accrued thereon, duly certified by the statutory auditor along with its petitions of APR for the years 2023 – 24 onwards.

#### 4.15 One-time exceptional expense:

4.15.1 HEL has claimed to allow one-time exception expense for generating station for 2023 – 24, 2024 – 25 and 2025 – 26 to the extent of Rs. 250 lakh, Rs. 300 lakh and Rs. 350 lakh respectively for critical spares. HEL in respect of dedicated transmission line has claimed to allow one-time exception expense of Rs 200 lakh for 2024 – 25 and 2025 – 26 for special maintenance of River Crossing Tower. In absence of specific provisions in the Tariff Regulations, the Commission at this stage does not admit any one-time exception expense for generating station and dedicated transmission line.

#### 4.16 Income from 'Other Sources' / 'Non-Tariff Income':





4.16.1 HEL in the submitted petition has claimed non-tariff income / other income during the years 2023 – 24, 2024 – 25 and 2025 – 26 as nil. However, on referring the audited financial statement for 2022 – 23, it is observed that a sum of Rs. 1620 lakh, Rs. 416 lakh and Rs. 1751 appears to be earned as Interest income from bank, Interest on inter-corporate deposit and others respectively, totalling to Rs. 3787 lakh. In absence of specific projections by the petitioner, the Commission decides to consider the same amount as non-tariff income for the years 2022 – 23, 2023 – 24, 2024 – 25 under the head of generating station.

Table 47: Non-tariff income admitted by commission

Figures in Rs. Lakh

Partia da va	Admitted				
Particulars	2023-24	2024-25	2025-26		
Generating Station	3787.00	3787.00	3787.00		
Dedicated Transmission line	0	0	0		
Total	3787.00	3787.00	3787.00		

#### 4.17 Carrying Cost:

- 4.17.1 HEL has claimed carrying cost of Rs. 35623.10 lakh, Rs. 34890.80 lakh and Rs. 33981.30 for 2023 24, 2024 25 and 2025 26 respectively for its generating station. For the dedicated transmission line, HEL has claimed carrying cost of Rs. 3461.50 lakh, Rs. 2935.00 lakh and Rs. 2338.60 for 2023 24, 2024 25 and 2025 26 respectively.
- 4.17.2 Clause (iv) of the regulation 2.6.6 of the Tariff Regulations, specifies that carrying cost shall be allowed on the amount of Revenue Gap or Revenue Surplus, as determined in APR and FPPCA order, for the period from the middle of the financial year in which such revenue gap/ surplus had occurred upto the middle of the financial year in which the recovery has been allowed.
- 4.17.3 In this regard, the Commission observes that revenue gap or revenue surplus, as the case may be, is subject to determination based on the petitions submitted by HEL for APR and FPPCA of the previous years. In view of the above, the Commission shall deal the issue of carrying cost as per the provisions of the Tariff Regulations.
- 4.17.4 Therefore, no carrying cost is admissible at the tariff determination stage.





#### 4.18 Transmission Loss of Dedicated Transmission Line:

- 4.18.1 In terms of clause C2 of Schedule 9A of the Tariff Regulation, the Commission is required to determine the loss for the dedicated transmission line during the tariff order of the first ensuing years. However, such loss for the dedicated transmission line shall not be more than the norms specified for WBSETCL.
- 4.18.2 The Commission observes that HEL in Form 1.7 of the Tariff Application has submitted that the loss for its dedicated transmission line during 2018 19 to 2022 23 is 0.25% and has projected the same loss for the ensuing years from 2023 24 to 2025 26.
- 4.18.3 Accordingly, the Commission admits the loss for the dedicated transmission line for the years 2023 24, 2024 25 and 2025 26 as 0.25%.





#### Annexure - 4A

# Admissible Equity in respect of generating Station for computing admissible equity

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Admissible Opening Equity	102683	102683.00	102231.60	102231.60	102231.60	102231.60	102231.60	102359.60	102487.60
Proposed Equity addition		-451.40	0.00	0.00	0.00	0.00	31651.00	29608.00	15959.00
GFA addition as considered in Table 27		4810.00	3600.00	9460.00	3750.00	70.00	426.67	426.67	426.66
Admissible Equity addition		-451.40	0.00	0.00	0.00	0.00	128.00	128.00	128.00
Admissible Closing Equity	102683.00	102231.60	102231.60	102231.60	102231.60	102231.60	102359.60	102487.60	102615.60

#### Note:

- 1) In the 2015-16 and 2016-17 entire asset addition were from loan and there is an adjustment of Rs. 451.40 lakh in 2015-16 in the equity due to asset replacement.
- 2) For the years 2017-18, 2018-19 and 2019-20, no equity addition has been proposed in form 1.20(a) by the petitioner, hence no equity addition is considered.
- 3) For the years 2020-21, 2021-22 and 2022-23 equity addition is considered @ 30% of asset addition.





#### Annexure - 4B

Admissible Equity in respect of dedicated transmission line for computing admissible equity

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Admissible Opening Equity		15017.00	15017.00	15017.00	15017.00	15017.00	15017.00	15017.00	15017.00
Proposed Equity addition		0.00	0.00	0.00	4201.60	4269.80	4897.50	4581.40	2377.90
Admissible Equity addition		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Admissible Closing Equity	15017.00	15017.00	15017.00	15017.00	15017.00	15017.00	15017.00	15017.00	15017.00





#### CHAPTER - 5

# SUMMARISED STATEMENT OF AGGREGATE REVENUE REQUIREMENT FOR 2023 – 24, 2024 – 25 AND 2025 – 26 AND REVENUE RECOVERABLE THROUGH TARIFF FOR 2023 – 24 AND 2024 – 25

5.1 Based on analysis and findings recorded in the foregoing chapters, the Commission is now drawing the statement of Aggregate Revenue Requirement (ARR) separately for the 2 x 300 MW generating stations of HEL and 400 kV Double Circuit Dedicated Transmission Line. Such summarized statement is given in Annexure 5A and Annexure 5B to this chapter. The ARR of the generating station and dedicated transmission line are as follows:

Table 48: ARR admitted by Commission

Figures in Rs. Lakh

SI No	Particulars		Admitted		
		2023-24	2024-25	2025-26	
Α	Generating Station	176563.33	177853.52	177085.97	
В	Dedicated transmission line	8632.01	8426.04	8221.59	

5.2 Accordingly, the capacity charges and fuel cost to be recovered through tariff for the years 2023 – 24 and 2024 – 25 for the generating station of HEL works out as under:

Table 49: Revenue Required for Generating Station admitted by the Commission

Figures in Rs. Lakh

SI No	Particulars	2023 – 24	2024 – 25
1	Aggregated Revenue Requirement [As per SI No. A of Table 48]	176563.33	177853.52
2	Assessed Fuel cost [As per Table 10]	107710.62	109631.95
3	Capacity charge [1 – 2]	68852.71	68221.57





5.3 The capacity charge recoverable through tariff for the dedicated transmission system for the years 2023 – 24 and 2024 – 25 are as below:

Table 50: Revenue Required for Dedicated Transmission Line admitted by the Commission

		Figure	s in Rs. Lakh
SI No	Particulars	2023 – 24	2024 – 25
1	Capacity charge [As per SI No. B of Table 48]	8632.01	8426.04

5.4 The Commission is now to determine the rates for recovery of energy charges, capacity charges and transmission charges from beneficiary(ies) of HEL for the years 2023 – 24 and 2024 – 25 in the next chapter.





#### Annexure 5A

# Aggregate Revenue Requirement (ARR) of 2 x 300 MW Generation Station of HEL

SI	Particulars		Claimed		Admitted			
No	Farticulars	2023-24	2024-25	2025-26	2023-24	2024-25	2025-26	
1	Fuel Cost	164628.40	163146.10	164597.70	107710.62	109631.95	109631.95	
2	Employee cost	9489.90	10249.10	11069.10	8467.31	8983.82	9531.83	
3	Operation and Maintenance Expenses	8070.00	8376.00	8694.00	8070.00	8376.00	8694.00	
4	Statutory Charges	123.20	135.30	148.60	80.30	82.20	84.30	
5	Depreciation	21099.30	21297.00	21435.40	19381.19	19480.79	19533.55	
6	Return on Equity	16025.00	16117.90	16150.60	15921.46	15948.00	15958.50	
7	Interest on Loan	14577.00	12912.60	11235.00	13103.98	11493.46	9856.02	
8	Interest on WC	6719.10	6698.20	6742.60	3768.06	3829.85	3833.76	
9	Other Finance charge	1902.00	1942.00	1983.00	107.79	68.47	0.00	
10	Income Tax	8607.60	8660.30	8708.10	2781.48	2786.12	2787.95	
11	Reserve for Unforeseen Exigencies	1020.80	1025.70	1031.40	958.14	959.86	961.11	
12	One-time expense for critical spares	250.00	300.00	350.00	0	0	0	
13	Carrying Cost	35623.10	34890.80	33981.30	0	0	0	
14	Gross Revenue Required (Sum 1:13)	288135.40	285751.00	286126.80	180350.33	181640.52	180872.97	
15	Less: Non-Tariff Income	0	0	0	3787.00	3787.00	3787.00	
16	Aggregated Revenue Required (14 – 15)	288135.40	285751.00	286126.80	176563.33	177853.52	177085.97	





#### Annexure 5B

# Aggregate Revenue Requirement (ARR) of 400 kV D/c Dedicated Transmission Line of HEL

SI	Particulars	Claimed			Admitted			
No	Particulars	2023-24	2024-25	2025-26	2023-24	2024-25	2025-26	
1	Employee cost	182.50	197.10	212.90	150.12	159.28	169.00	
2	O&M Expenses	1357.30	1438.80	1525.30	527.31	558.38	591.28	
3	Statutory Charges	17.30	19.10	21.00	15.70	16.50	17.40	
4	Depreciation	3254.40	3254.40	3254.40	2853.10	2853.10	2853.10	
5	Return on Equity	2427.90	2427.90	2427.90	2327.64	2327.64	2327.64	
6	Interest on Loan	2071.20	1795.40	1519.60	2100.20	1854.43	1607.89	
7	Interest on WC	234.80	230.30	222.30	116.21	114.98	113.55	
8	Other Finance charge	248.00	255.40	262.50	0.00	0.00	0.00	
9	Income Tax	1304.10	1304.10	1304.10	406.64	406.64	406.64	
10	One-time exceptional expenses	0.00	200.00	200.00	0.00	0.00	0.00	
11	Reserve for Unforeseen exigencies	151.90	151.90	151.90	135.09	135.09	135.09	
12	Carrying cost	3461.50	2935.00	2338.60	0	. 0	0	
13	Gross Revenue Required (Sum 1:12)	14710.90	14209.40	13440.50	8632.01	8426.04	8221.59	
14	Less: Non-Tariff Income	0	0	0	0	0	0	
15	Aggregated Revenue Required (13 – 14)	14710.90	14209.40	13440.50	8632.01	8426.04	8221.59	





#### CHAPTER - 6

# TARIFF ORDER FOR THE YEARS 2023 - 24 AND 2024 - 25

- In the previous chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for the years 2023 24, 2024 25 and 2025 26 for the generating station and dedicated transmission line of HEL. The Commission is now to fix the rate for recovery of the energy charge, capacity charge and transmission charge during the years 2023 24 and 2024 25 in accordance with the provisions of regulation 6.11, 6.12 and 6.16 of the Tariff Regulations. It is, pertinent to mention here that HEL Dedicated transmission line has no variable cost to recover. Only fixed charges, as admitted by the Commission in the Statement of Aggregate Revenue Requirement in Chapter 5 is recoverable. The Commission now specifies the Tariff Order including conditions for recovery of the charges in the subsequent paragraphs.
- 6.2 The annual capacity charge recoverable by HEL for its generating station from its beneficiary i.e. CESC shall be on the following basis:
  - a) The annual capacity charge recoverable by HEL from CESC shall be on monthly basis depending on actual availability during the month certified by SLDC with reference to the target normative annual availability subject to the conditions as laid down in regulation 6.11.4 of the Tariff regulations, as amended from time to time.
  - b) The annual capacity charge determined on the basis of submission of HEL and on prudence check for 2023 24 and 2024 25 are provided in the following table.

Table 51: Annual capacity charge recoverable by HEL from CESC

	2023-24		2024-25	
No av	Target ormative vailability factor	Determined Annual capacity charge in Rs. Lakh	Target Normative availability factor	Determined Annual capacity charge in Rs. Lakh
	85%	68852.71	85%	68221.57





6.3 The energy charges recoverable shall be on monthly basis against the implemented schedule, as certified by SLDC for each unit energy injected from the respective generating stations of HEL as determined in Chapter – 3 of this order is given below:

Table 52: Admitted Energy charges recoverable in 2023-24 and 2024-25

Energy Char	rge (Rs. / kWh)
2023 – 24	2024 - 25
2.807	2.865

- 6.4 HEL's dedicated Transmission line 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. Considering the normative auxiliary consumption of 9% for HEL generating station, the ex-bus generation contracted for dispatch by the dedicated transmission line comes to 546 MW.
- 6.5 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 546 MW for 2023 24 and 2024 25 as below:

Table 53: Admitted Transmission Charges for 2023 - 24

Trans	mission Charges for 2023 - 24	
i)	Recoverable ARR	Rs. 8632.01 lakh
ii)	Total contracted capacity	546 MW
iii)	Rate in Rs. /MW/month	Rs. 8632.01 lakh * 10^5 / (546 MW x 12) = Rs. 131746/ MW/ month subject adjustment as per regulation 6.16.5 of Tariff Regulations.

Table 54: Admitted Transmission Charges for 2024 - 25

Transmission Charges for 2024 – 25					
i)	Recoverable ARR	Rs. 8426.04 lakh			
ii)	Total contracted capacity	546 MW			
iii)	Rate in Rs. /MW/month	Rs. lakh 8426.04 * 10^5 / (546 MW x 12) = Rs. 128603/ MW/ month subject 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. In case of sale of power under short-term open access, transmission charge in terms of paisa/kwh is to be recovered from such short-term buyer as per the provisions of clause (d) of regulation 18.2.1 of the West Bengal Electricity Regulatory Commission (Open Access) Regulations, 2022.

- 6.6 In terms of clause C2 of Schedule 9A of the Tariff Regulation, the transmission loss of the dedicated transmission line of HEL for the years 2023 24 and 2024 25 shall be 0.25%.
- 6.7 The tariff admitted for 2023 24 is applicable for the period from 1<sup>st</sup> April, 2023 to 31<sup>st</sup> March 2024. HEL shall start recovering its energy charge, capacity charge, transmission charge based on this order from 1<sup>st</sup> day of the succeeding month of issue of this order. Adjustment, if any, for over recovery or under recovery by HEL (including MFCA, if any) since 01.04.2023 as per this order shall be made in the monthly bills in 11 (eleven) equal installments commencing from the month succeeding to the month of issue of this order.
- 6.8 The tariff admitted for 2024 25 will be effective from 1<sup>st</sup> April, 2024 and shall also continue till further order of the Commission.
- 6.9 In addition to the energy charge mentioned in paragraph 6.3 above, HEL shall be further entitled to additional sums towards enhanced cost of fuel after the date of this order, if any, following the Monthly Fuel Cost Adjustment (MFCA) formula specified in the Tariff Regulations, as amended from time to time.
- 6.10 Any matter, which has not been explicitly mentioned in this order, shall be guided by regulations 2.9 8 and 2.9.9 of the Tariff Regulations.
- 6.11 For merit order despatch SLDC/ALDC shall consider the energy charge of the generating stations of HEL as determined in this tariff order in paragraph 6.3 above prospectively, from the next day of issue of this order. However, the MFCA applicable in terms of paragraph 6.6 above will be added to the energy charge for consideration of merit order despatch from the date of issue of the MFCA notification respectively.





#### CHAPTER - 7

#### DIRECTIONS

- 7.1 In the tariff order of HEL for the years 2020-21, 2021-22 and 2022-23 issued on 07.07.2022 and 28.07.2022, the Commission had given certain directions to HEL. Some of those directions are of continuous nature and HEL has to continue with compliance of those directions. The Commission has also given some directions in Chapter 3 and Chapter 4 in this order. HEL shall also comply with those directions in addition to the directions mentioned herein below:
  - (i) HEL is directed to purchase coal to meet their balance coal requirement considering the economical sources of e-auction or imported coal and submit a report along with their APR petition that the economical sources has been duly explored while purchasing such coal. HEL shall abide by the provisions of regulation 5.8.7.A of the Tariff Regulations while sourcing coal from alternative sources, if any.
  - (ii) HEL is directed to provide specific disclosure in its audited Ind AS Financial Statement regarding recognition of expenses incurred in respect of contractual manpower engaged in regular establishment.
  - (iii) HEL is directed to submit details of asset addition along with date of put in use of such asset as well as the adjustments in case of replaced asset during APR stage.
  - (iv) HEL is directed to submit details of its year-wise investments made against reserve for unforeseen exigencies and interest accrued thereon, duly certified by the statutory auditor along with its petitions of APR for the years 2023 – 24 onwards.
  - (v) HEL is directed to submit a reconciliation statement duly certified by statutory auditor along with its APR petition showing the claims made in the APR application under different heads vis-à-vis the amount reelected in the audited financial statement





7.2 HEL shall present to the Commission a gist of this order in accordance with regulation 2.9.6 of the Tariff Regulations within five 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 aforesaid regulations within four (4) working days from the date of receipt of the approval of the Commission.

Sd/-(PULAK KUMAR TEWARI) MEMBER

Sd/-(MALLELA VENKATESWARA RAO) CHAIRPERSON

Dated: 06.03.2024

Sd/-SECRETARY