Approval of Capital Cost and determination of Tariff for the 4^{th} and 5^{th} Control Period from COD to FY 2028-29

for

220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) & LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3)

Himachal Pradesh Power Transmission Corporation Limited (HPPTCL)

Himachal Pradesh Electricity Regulatory Commission

23^{rd} June 2026

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

PETITION NO: 12/2026

Decided on: 23.06.2026

CORAM

Sh. YASHWANT SINGH CHOGAL

Sh. SHASHI KANT JOSHI

In the matter of:

Approval of Capital Cost and determination of Tariff for the 4th Control Period from COD to FY 2023-24 for 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3) under the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011, as amended from time to time, Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2023, and under Section 62, read with Section 86 of the Electricity Act, 2003.

AND

In the matter of:

Himachal Pradesh Power Transmission Corporation Ltd. (HPPTCL)……Petitioner

ORDER

The Himachal Pradesh Power Transmission Corporation Limited (hereinafter called the 'HPPTCL' or 'Petitioner' or 'Applicant') has filed the present Petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for the Approval of Capital Cost and Determination of Tariff for 4th Control Period from COD to FY 2023-24 for 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3) under the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011, as amended from time to time (herein after referred to as "HPERC Transmission Tariff Regulations, 2011"), Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2023 (herein after referred to as "HPERC Transmission Tariff Regulations, 2023"), and under Section 62, read with Section 86 of the Electricity Act, 2003.

On scrutiny and examination of the Petition, several deficiencies were noted, and the Petitioner was asked to file response to the deficiencies. However, the Petitioner took significant time in responding to the clarifications and queries raised by the Commission. On several occasions, the information provided was either incomplete or did not address the query of the Commission adequately. Even post written submissions, clarifications were sought verbally from the Petitioner. The Commission has heard the applicant, interveners, and representatives of Stakeholders. The Commission has also held formal interactions with the officers of the HPPTCL and has considered the documents available on record.

After considering the Petition filed by the Applicant, the facts presented in its subsequent submissions, the comments and suggestions of the stakeholders, the responses of the Applicant to the objections and documents available on record, the Commission in exercise of powers vested in it under Section 86 of the Electricity Act, 2003 read with Section 62 of the Electricity Act, 2003 and the HPERC Transmission Tariff Regulations, 2023, passes the following Order for determining the Capital cost and Transmission Tariff for 4th Control Periods from COD to FY 2023-24 for 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3). While determining the Capital cost and Aggregate Revenue Requirement (ARR) for above mentioned assets, the Commission has also taken into consideration the guidelines laid down in Section 61 of the Electricity Act, 2003, the National Electricity Policy, the National Tariff Policy, CERC (Terms and Conditions of the Tariff) Regulations, 2024, as amended from time to time, HPERC Transmission Tariff Regulations, 2023. Details of prudence check and approach adopted by the Commission with regard to approval of Capital cost and ARR for Sub-station, Transmission Line and the LILO are summarized in the detailed Order contained in Chapters 1 to 4.

-Sd-	-Sd-
(SHASHI KANT JOSHI)	**(YASHWANT SINGH CHOGAL)**
Member	**Member (Law) – Cum Chairman**

Place: Shimla
Dated: 23rd June 2026

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1. INTRODUCTION

1.1 Himachal Pradesh Electricity Regulatory Commission

1.1.1 The Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'HPERC' or 'the Commission') constituted under the Electricity Regulatory Commission Act, 1998 came into being in December, 2000 and started functioning with effect from 6th January, 2001. After the enactment of the Electricity Act, 2003 on 26th May, 2003, the HPERC has been functioning as a statutory body with a quasi-judicial and legislative role under Electricity Act, 2003 (hereinafter to be referred to as 'Act' for the short) .

Functions of the Commission

1.1.2 As per Section 86 of the Act, the State Commission shall discharge the following functions, namely

a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

   Provided that where open access has been permitted to a category of Consumers under Section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of Consumers;

b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

c) facilitate intra-state transmission and wheeling of electricity;

d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;

e) promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licence;

f) adjudicate upon the disputes between the licensees, and generating companies and to refer any dispute for arbitration;

g) levy fee for the purposes of this Act;

h) specify State Grid Code consistent with the Indian Electricity Grid Code specified with regard to grid standards;

i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;

j) fix the trading margin in the intra-state trading of electricity, if considered, necessary; and

k) Discharge such other functions as may be assigned to it under this Act.

1.1.3 The State Commission is also empowered under the Act to advise the State Government on all or any of the following matters, namely:-

l) promotion of competition, efficiency and economy in activities of the electricity industry;

m) promotion of investment in electricity industry;

n) reorganization and restructuring of electricity industry in the State;

o) Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by State Government.

1.2 Himachal Pradesh Power Transmission Corporation Ltd.

1.2.1 Himachal Pradesh Power Transmission Corporation Limited (hereinafter referred to as 'HPPTCL' or 'the Petitioner') is a deemed licensee under first, second and fifth proviso of Section 14 of the Act for Transmission of electricity in the State of Himachal Pradesh.

1.2.2 The Government of Himachal Pradesh (hereinafter referred to as 'GoHP' or the 'State Government') formed HPPTCL through notification vide Notification No. MPP-A-(1)-4/2006-Loose, dated 11th September, 2008.

1.2.3 HPPTCL was entrusted with the following work / business with immediate effect:

a) All new works of construction of Sub-Stations of 66 kV and above;

b) All new works of laying/ construction of transmission lines of 66 kV and above;

c) Formulation, updating, execution of Transmission Master Plan for the state for strengthening of Transmission network and evacuation of power including new works under schemes already submitted by the Himachal Pradesh State Electricity Board (HPSEB) under this plan to the Financial Institutions for funding and where loan agreements have not yet been signed;

d) All matters relating to planning and co-ordinations of the transmission related issues with CTU, CEA, Ministry of Power, State Government and HPSEBL;

e) Planning and co-ordination with the IPPs/ CPSUs/ State PSUs/ Other Departments or organizations or agencies of the Central Government and

State Government, HPSEBL and HPPCL with regard to all transmission related issues.

1.2.4 The HPPTCL was declared the State Transmission Utility (STU) by the GoHP vide Order dated 10th June, 2010 and as a result thereof, the Commission recognized HPPTCL as a deemed "Transmission Licensee" as per the Commission's Order dated 31st July, 2010 in Petition No. 32 of 2010 filed by HPPTCL under Sections 14 and 15 of the Act, for grant of Transmission Licensee in the State of Himachal Pradesh. Prior to FY 2010-11, the Transmission Tariff was being determined as a part of the Tariff Orders applicable to HPSEBL system.

1.3 Multi Year Tariff Framework

1.3.1 The Commission follows the principles of Multi Year Tariff (MYT) for determination of tariffs, in line with the provision of Section 61 of the Electricity Act, 2003.

1.3.2 The MYT framework is also designed to provide predictability and reduce regulatory risk. This can be achieved by approval of a detailed capital investment plan for the Petitioner, considering the expected network expansion and load growth during the Control Period. The longer time span enables the Petitioner to propose its investment plan with details on the possible sources of financing and the corresponding capitalization schedule for each investment.

1.3.3 The Commission had specified the terms and conditions for the determination of tariff in the year 2004, based on the principles as laid down under Section 61 of the Electricity Act 2003.

1.3.4 Thereafter, the Commission has notified the HPERC Transmission Tariff Regulations, 2011. The Transmission Regulations notified in the year 2011 were amended as (First Amendment) Regulations, 2013 on 1st November, 2013, (Second Amendment) Regulations, 2018 on 22nd November, 2018 and (Third Amendment) Regulations, 2023 on 2nd June, 2023. Thereafter, the Commission has notified the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2023 on 14th March, 2024 (The Regulations shall be hereinafter referred to as "HPERC Transmission Tariff Regulations, 2023").

1.4 Interaction with the Petitioner

1.4.1 The HPPTCL filed the present application for Approval of Capital Cost and Determination of Tariff for the period from COD to FY 2023-24 for 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3) with the Commission on 4th January, 2025. Based on various observations/deficiencies pointed out by the Commission, HPPTCL has submitted further details and clarifications subsequently.

1.4.2 The Commission admitted the Petition submitted by the HPPTCL vide Interim Order dated 06.02.2026. There have been a series of interactions between the HPPTCL and the Commission, both written and oral, wherein the Commission sought additional information/clarifications and justifications on various issues, critical for the analysis of the Petition. In addition, the Petitioner submitted the Interlocutory

Application (IA) along with the affidavit on 26.11.2025. Through the IA, the Petitioner has requested the Commission to approve the tariff for the 5th control period also. Pending adjudication, the HPPTCL has requested for grant of Interim tariff under Regulation 12(3) and Regulation 20(2) of HPERC Transmission Tariff Regulations, 2023.

1.4.3 Based on the detailed scrutiny of the Petition, various information and clarifications were sought by the Commission from time to time, the following submissions made by the Petitioner in response to the data gaps, have been taken on record:

Table 1: Communication with the Petitioner

Sl.	Letter from the Commission	Response from the Petitioner
1	HPERC-F(1)-84/2025-513 dated 13.05.2025	Filing No. 06 of 2025 dated 24.09.2025
2	HPERC-F(1)-84/2025-621 dated 28.05.2025	Filling No. 503 of 2025 dated 06.10.2025
3	HPERC-F(1)-84/2025-3464 dated 16.12.2025	Filling No. 16 of 2026 dated 28.01.2026

1.5 Public Hearing

1.5.1 The Interim Order, inter alia, included direction to the Petitioner to publish the application in an abridged form and manner as per the "disclosure format" attached with the Interim Order for the information of all the stakeholders in the State. As per the direction, the salient features of the Petition have been published by the HPPTCL in the following Newspapers:

Table 2: List of Newspapers for Publication of Salient features for Stakeholders Comments

Sl.	Name of News Paper	Date of Publication
1.	Divya Himachal (Hindi)	12.02.2026
2.	The Tribune (English)	12.02.2026

1.5.2 The Commission published a public notice inviting suggestions and objections from the public on the Tariff Petition filed by the Petitioner in accordance with Section 64(3) of the Electricity Act, 2003 which was published in the Newspapers as mentioned in the table:

Table 3: List of Newspapers for Public Notice by Commission

Sl.	Name of News Paper	Date of Publication
1.	Amar Ujala (Hindi)	18.02.2026
2.	Times of India (English)	18.02.2026

1.5.3 The stakeholders were requested to file their objections by 20.03.2026. The HPPTCL was required to submit replies to the suggestions/ objections to the Commission by 27.03.2026 with a copy to the objectors on which the objectors were required to submit rejoinder by 01.04.2026.

1.5.4 The Commission decided to conduct the Public Hearing and, therefore, issued a Public Notice informing the public about the scheduled date of Public Hearing as 06.04.2026. All the parties, who had filed their objections/ suggestions, were informed about the date, time and venue of the Public Hearing for presenting their case.

1.5.5 The Commission has undertaken detailed scrutiny of the submissions made by the Petitioner and the various objections raised by stakeholders for the purpose of issuance of this Order.

2. STAKEHOLDER OBJECTIONS

2.1 Introduction

2.1.1 As detailed out in Chapter-1 of this Order, the Commission through Public Notice in various newspapers informed the Public/Stakeholders about the dates of filing the comments/ objections and public hearing etc. for the Petition of approval of Capital cost and Determination of Tariff for 4th Control period from COD to FY 2023-24 for 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3).

2.1.2 Accordingly, as scheduled, the Public Hearing was conducted on 06.04.2026 in the Commission. The Commission has received Comments/Suggestions on the Petition from the Himachal Pradesh State Electricity Board Limited (herein referred to as HPSEBL or ''The HPSEBL" or HPSEBL Ltd). The Respondent-HPPTCL (Petitioner) has submitted replies through the Rejoinder to the Objections/Suggestions dated 27.03.2026 to the Petition No. 06 of 2025 filed by Petitioner. Issues raised by the Stakeholders in the written submissions, along with reply given by the Petitioner and views of the Commission on the issues raised are summarized in the following paragraphs:

Beneficiary of the Assets:

Stakeholders' Submissions

2.1.3 The Stakeholder HPSEBL in its submissions has mentioned that the Petitioner in the Petition has submitted that Asset-1 was planned for evacuation of power from upcoming generating stations, namely Chanju-I (36 MW), Surgani Sundla (48 MW), Devi Kothi-I (30 MW), Chanju-III (42 MW), and other small hydro power projects aggregating to about 176 MW, awarded to various IPPs by GoHP. Further, Asset-2 (220 kV Mazra–Karian D/C transmission line) was planned to evacuate power to the 220/132 kV Karian substation. Asset-3 involved LILO of both circuits of the 132 kV Kurthala–Bathari D/C line for evacuation of approximately 150 MW from upcoming HEPs in the Tissa area. Further, the HPSEBL has mentioned that HPSEBL is the beneficiary of Asset-1 and Asset-3 only.

Petitioner's Response

2.1.4 In reply to the averments made by the Respondent, the Petitioner has submitted that the Respondent's contention that HPSEBL is a beneficiary only of Asset-1 and Asset-3 is misconceived, which is contrary to the DPR, NRPC planning records, and the Supplementary TSA dated 18.07.2024 executed between HPPTCL and HPSEBL, and therefore, the suggestions are liable to be rejected. It has further been submitted that Asset-1 (220/132 kV Mazra GIS Substation), Asset-2 (220 kV D/C

Mazra–Karian Transmission Line), and Asset-3 (LILO of 132 kV Kurthala–Bathri D/C line at Mazra Substation) were conceived, approved, and developed as a single integrated evacuation and system strengthening scheme for evacuation of power from multiple hydro-electric projects in the Ravi Basin, wherein each asset is functionally interdependent. Asset-1 performs the pooling function, Asset-3 facilitates injection/drawl at the pooling node, and Asset-2 forms the essential evacuation corridor connecting the system to the grid, without which the entire scheme would become non-functional.

2.1.5 The Petitioner has submitted that the DPR and NRPC planning records clearly establish that Asset-2 forms part of a continuous evacuation pathway linked with Rajera/Chamera pooling stations and plays a critical role in evacuation/drawl, load flow management, congestion relief, and enhancement of grid reliability. The deliberations in the 3rd NRPC Meeting dated 19.02.2021 further demonstrate that the proposed system, including the Mazra–Karian corridor, was intended to provide relief in loading of ICTs at Chamera Pooling Station and strengthen overall system reliability. It has also been submitted that the scheme was specifically designed to interface with and strengthen HPSEBL's existing network, thereby establishing HPSEBL as beneficiary of the complete integrated system.

2.1.6 The Petitioner has further submitted that the Supplementary TSA contractually recognizes HPSEBL as beneficiary of the transmission system and imposes corresponding usage and payment obligations in respect of the entire scheme, including Asset-2. It has been contended that mere variation in the description of Asset-2 in the TSA does not alter its functional role as the evacuation link from Mazra to the grid. Accordingly, the Respondent cannot selectively accept Asset-1 and Asset-3 while disclaiming Asset-2, since all assets form part of one integrated transmission network. Therefore, HPSEBL is liable to bear the corresponding transmission charges for the complete integrated transmission system upon determination of Annual Transmission Charges by the Commission in Petition No. 06 of 2025.

Commission's Observations

2.1.7 The Commission has considered the submissions of the Respondent(s) and the Petitioner and examined the DPR, NRPC records, and the Supplementary TSA dated 18.07.2024. The Commission has observed that, Asset-1, Asset-2, and Asset-3 were planned and developed as an integrated transmission scheme for evacuation of power from hydroelectric projects in the Ravi Basin, with each asset being functionally interdependent as per Petitioner's submissions. Asset-1 serves as the pooling station, Asset-3 enables injection/drawl at Mazra, and Asset-2 provides the essential evacuation corridor to the grid.

2.1.8 The Commission further notes that the Petitioner has not taken any prior investment approval for these transmission assets. Regarding the beneficiaries of the above Asset-2. The Commission is of the view that this issue can not be decided in this Petition. The current Petition is for determination of the capital cost and the tariff and not to adjudicate the issue of beneficiaries of the transmission system. Therefore, we can not come to any conclusion regarding beneficiary of the system without hearing for all the stakeholders involved.

2.1.9 Therefore, the Petitioner is directed to recover the transmission charges from the identified long-term beneficiary(ies) of the Transmission Asset as per terms and conditions of the TSA/ Open Access Agreements and the Regulation 45 of the HPERC Transmission Tariff Regulations, 2023.

Asset-1: 220/132 kV, 2x80/100 MVA Sub-Station at Mazra

Stakeholder's Submissions

2.1.10 The HPSEBL has submitted that the actual capital cost of the project as on COD (27.03.2024) is Rs. 75.50 Cr., including IDC and departmental charges, as against the DPR cost of Rs. 87.16 Cr. The project was scheduled for completion within 24 months from the effective date of 15.08.2019 (i.e., by 14.08.2021) but was commissioned with a time overrun of approximately 31 months and 14 days.

2.1.11 Further, the IDC has increased from Rs. 2.82 Cr. as per the DPR to Rs. 4.34 Cr. at COD due to the said delay. The additional IDC on account of the time overrun is not attributable to beneficiaries and, therefore, should not be allowed to be passed on to them.

2.1.12 The HPSEBL has submitted that as per Regulation 18 of the HPERC Transmission Tariff Regulations, 2011 and amendments thereof, a normative debt-equity ratio of 70:30 is to be applied for tariff determination, with equity capped at 30% and any excess treated as a loan.

2.1.13 The HPSEBL has submitted that, actual equity infused by the Petitioner as on COD is Rs. 27.50 Cr., constituting 36.41% of the total project cost. However, the Petitioner has restricted the claimed equity to Rs. 22.65 Cr., i.e., 30% of the project cost, in accordance with the applicable regulations.

2.1.14 The debt funding for the project has been sourced from the ADB loan extended to the Government of Himachal Pradesh and subsequently to the HPPTCL. The Commission, after prudence check, may consider the debt-equity ratio accordingly, in line with its earlier decisions wherein restructuring of funding—specifically, conversion of 90% GoI grant to 80% loan by GoHP for a Special Category State—has not been allowed, as observed in cases such as the Panchkula–Kunihar line, Urni, and Nirmand–Kotla assets.

2.1.15 The HPSEBL has submitted that, in accordance with Regulation 20 of the HPERC Transmission Tariff Regulations, 2011 and amendments thereof, the Interest on Loan should be computed on the actual loan component only. However, only 10% of the total funds received from ADB constitutes a loan, while 90% is in the nature of a grant from GoI to GoHP. Accordingly, the Interest on Loan should be allowed based on the actual loan portion and not on the funding structure as claimed by the Petitioner in the present petition.

2.1.16 The stakeholder has submitted that the Return on Equity (RoE) shall be computed in accordance with Regulation 19 of the HPERC Transmission Tariff Regulations, 2011, and amendments thereof, based on the actual admissible equity as considered by the Commission.

Petitioner's Response

2.1.17 In reply to the Respondent's averments under Asset-1 regarding IDC, the Petitioner has submitted that detailed reasons for the delay have been provided, which were uncontrollable in nature and resulted in an increase in IDC. It has been further submitted that the said reasons, being beyond the control of the Petitioner and having remained uncontroverted by the Respondent, justify allowance of the IDC claimed, subject to prudence check by the Commission.

2.1.18 The Petitioner has submitted that Regulation 18 of the HPERC Transmission Tariff Regulations, 2011 mandates consideration of the actual debt and equity deployed for execution of the project, subject to the equity ceiling of 30%, and does not contemplate adoption of any proposed Debt-Equity ratio indicated in the DPR for tariff determination.

2.1.19 The Petitioner has further submitted that the Respondent has erred in treating the ADB-funded loan as a "grant", which is contrary to the facts and applicable Regulations. As per the binding On-lending Agreement dated 04.07.2024 with GoHP, 80% of the funding is an interest-free but repayable loan, 10% carries interest @10%, and 10% is convertible into equity, thereby establishing that the entire funding, except equity, constitutes repayable debt.

2.1.20 Accordingly, the Petitioner has submitted that such funding cannot be treated as a grant and must be considered appropriately for computation of Interest on Loan and Return on Equity, in line with the HPERC Transmission Tariff Regulations, 2011 and the governing agreements.

Commission's Observations

2.1.21 The Commission has considered the submissions of the Respondent and the Petitioner and has examined the material on record in respect of Asset-1.

2.1.22 The Commission notes that the project was commissioned with a time overrun of about 31 months. The Petitioner has attributed the delay to factors beyond its control and has sought allowance of the consequential increase in IDC. The same has been examined in detail, and IDC has been allowed only to the extent where the delay has been found justified and not attributable to the Petitioner.

2.1.23 The Petitioner has considered the Commercial Operation Date (COD) as 27.03.2024 and has accordingly claimed ARR for the period from 27.03.2024 to 31.03.2024 under FY 2023–24, falling within the 4th MYT Control Period (FY 2019–20 to FY 2023–24), governed by the HPERC Transmission Tariff Regulations, 2011.

2.1.24 However, based on the analysis, the Commission has determined the COD as 20.11.2024, which falls in FY 2024–25, i.e., within the 5th MYT Control Period (FY 2024–25 to FY 2028–29) as discussed in the relevant section, which is governed by the HPERC Transmission Tariff Regulations, 2023.

2.1.25 Accordingly, the Commission has computed the ARR and tariff for the 5th Control Period. With regard to Capital cost, the Commission observes that the actual cost at COD is lower than the DPR cost. However, the same has been scrutinised and required prudence check carried out in accordance with the HPERC Transmission Tariff Regulations, 2023.

2.1.26 On the issue of the debt-equity ratio, the Commission notes that the Petitioner has restricted equity to 30% of the capital cost in line with the Regulation 18 of HPERC Transmission Tariff Regulations 2011. Accordingly, the admissible debt-equity ratio has been determined based on actual deployment, subject to the normative ceiling prescribed in the HPERC Transmission Tariff Regulations, 2023.

2.1.27 Regarding the nature of funding, the classification of GoHP loan/ assistance (whether loan or grant) has been dealt with in detail in the respective chapters and allowed strictly in accordance with the Tariff Regulations.

2.1.28 The Return on Equity has been computed on the admissible equity in accordance with Regulation 34 of the HPERC Transmission Tariff Regulations, 2023.

2.1.29 Accordingly, all components of tariff, including IDC, Interest on Loan, Return on Equity, and any additional capitalization, is dealt in detail in the respective chapters after a detailed prudence check in accordance with the applicable Regulations.

Asset-3: LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Sub-Station

Stakeholder's Submissions

2.1.30 The Stakeholder has mentioned that the Petitioner has claimed the actual project cost as on COD, i.e., 27.03.2024, as Rs. 14.46 Cr. (including IDC and departmental charges) as against the DPR cost of Rs. 15.36 Cr. The effective date of execution was 24.06.2020, with a scheduled completion period of 15 months (i.e., up to 25.09.2021). However, the Petitioner has claimed COD on 27.03.2024, indicating a delay of about 30 months and 2 days. Therefore, the IDC for the delay should not be allowed.

2.1.31 The delay has been attributed to the COD of the sub-station (Asset-1) and the time taken in signing the Connection Agreement with HPSEBL. As per the Petition, the project was completed on 21.01.2024 and the HPSEBL was approached for signing the Connection Agreement on 16.02.2024, which was eventually executed on 27.07.2024.

2.1.32 It has been further submitted that the process for signing the Connection Agreement should have been initiated prior to the completion of the project; hence, the project has experienced additional time overrun.

2.1.33 The Stakeholder has further submitted that as per Regulation 18 of the HPERC Transmission Tariff Regulations, 2011 and amendments thereof, the actual equity infused as on COD was Rs. 5.90 Cr., constituting 40.81% of the project cost. The stakeholder has mentioned that the equity should be allowed in line with the HPERC Transmission Tariff Regulations.

2.1.34 The HPSEBL has further submitted that the Petitioner has taken debt from the ADB through Government of Himachal Pradesh. The HPSEBL has suggested that the Commission, after prudence check, may consider the debt-equity ratio in line with its earlier decisions wherein conversion of 90% GoI grant to 80% loan by GoHP was not allowed e.g. the Panchkula–Kunihar line, Urni, and Nirmand–Kotla assets.

2.1.35 The Stakeholder has further submitted that the additional capital expenditure of Rs. 0.08 Cr. incurred during FY 2023–24 may be considered by the Commission, subject to prudence check, in accordance with Regulation 16 of the HPERC Transmission Tariff Regulations, 2011 and amendments thereof.

2.1.36 The stakeholder has also submitted that the Return on Equity (RoE) is required to be computed in accordance with Regulation 19 of the HPERC Transmission Tariff Regulations, 2011 and amendments thereof, based on the actual admissible equity.

2.1.37 The Stakeholder has prayed that the aforesaid submissions be considered.

Petitioner's Response

2.1.38 The Petitioner has denied the averments of the Stakeholder regarding time overrun in Asset-3 as being devoid of merits. It has been submitted that the contention of delay in signing of the Connection Agreement is misplaced and contrary to practical realities. Further, the delay in COD of Asset-3 has occurred due to uncontrollable factors, including COVID-19 disruption, delay in FCA approval and non-readiness of the associated transmission element (Asset-1) which were beyond the control of the Petitioner. Accordingly, the delay cannot be attributed to the Petitioner and has prayed to condone the delay.

2.1.39 In response to the averments made by the Respondents on Debt:Equity Ratio of Asset-3, the Petitioner has submitted that in terms of Regulation 18 of the HPERC Tariff Regulations, 2011, tariff is to be determined based on the actual debt and equity deployed, subject to an equity ceiling of 30%, and not on the proposed Debt-Equity ratio indicated in the DPR.

2.1.40 The Petitioner has further submitted that the Respondent has erroneously treated ADB-funded debt as a "grant", which is contrary to the facts and applicable Regulations. As per the binding On-lending Agreement dated 04.07.2024 with GoHP, 80% of the funding is an interest-free repayable loan and 10% carries interest at 10% and remaining 10% is convertible into equity, thereby establishing that the funding (except equity) constitutes repayable debt.

2.1.41 Accordingly, the Petitioner has prayed that the said funding be recognized appropriately, and the tariff be determined in accordance with the HPERC Transmission Tariff Regulations, 2011 and the governing agreements.

2.1.42 In response to the averments made by the Respondent with respect to Asset-3 regarding allowance of Additional Capital Expenditure after prudence check, the Petitioner has submitted that the Commission undertakes detailed prudence checks during tariff determination, wherein requisite information is sought at various stages. The Petitioner has duly complied with all such requirements and directions issued by the Commission during the course of the tariff proceedings.

2.1.43 Further, the HPPTCL being a State Transmission Licensee strictly adheres to all applicable laws, rules, guidelines and standards issued by the Central and State Governments and any other authority in relation to the planning, routing, construction, operation, and maintenance of transmission infrastructure.

Commission's Observations

2.1.44 The Commission has considered the submissions of the Respondent and the Petitioner. The project has experienced a time overrun of about 30 months. The reasons cited for the delay have been examined and analyzed and accordingly, delay has been condoned only to the extent found justified and not attributable to the Petitioner.

2.1.45 Regarding the capital cost, the Commission observes that the actual cost at COD is lower than the DPR cost and the detailed prudence check for the admissibility of the same has been carried out as per the HPERC Transmission Tariff Regulations, 2023.

2.1.46 The debt-equity ratio has been determined based on actual deployment and further restricted in accordance with provisions of the Regulation 31 of HPERC Transmission Tariff Regulations, 2023.

2.1.47 The nature of ADB funding has been assessed in line with the lending agreements, and Interest on Loan has been allowed only on the admissible loan component in accordance with the applicable Regulations.

2.1.48 The claimed additional capital expenditure has been considered in accordance with the HPERC Transmission Tariff Regulations, 2023. Accordingly, all tariff components for Asset-3 have been allowed only after a detailed prudence check in accordance with the HPERC Transmission Tariff Regulations, 2023.

3. APPROVAL OF CAPITAL COST

3.1 Introduction

3.1.1 The HPPTCL has submitted the instant Petition for the approval of Capital cost and determination of Tariff for 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation (Asset-3) for the period from COD (27.03.2024) to FY 2023-24 in accordance with the provisions of the 'HPERC Transmission Tariff Regulations, 2011', as amended from time to time.

3.1.2 As per Regulation 14 of the HPERC Transmission Tariff Regulations 2011, the Capital cost of the Project is described as under:

"14. Capital cost of the project

(1) The capital cost for a project shall include-

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii)being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling norms as per regulation 15;

(c) additional capital expenditure determined under regulation 16:

Provided that the assets forming part of the project, but not in use, shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission, after prudence check, shall form the basis for determination of tariff:

Provided that the prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff:

Provided further that where the implementation agreement and the transmission service agreement entered into between the transmission licensee and the long-

term transmission customer provides for ceiling of actual expenditure, the capital expenditure admitted by the Commission shall take into consideration such ceiling for determination of tariff:

Provided further that in case of the existing projects, the capital cost admitted by the Commission prior to the start of the control period and the additional capital expenditure projected to be incurred for the respective years of the control period, as may be admitted by the Commission, shall form the basis for determination of tariff:"

3.1.3 The Commission has reviewed the proposed Capital cost and ARR projected for each year as claimed by the Petitioner from COD until the end of the 4th Control Period i.e., FY 2023-24 and for 5th Control Period from FY 2024-25 to FY 2028-29 as per the Interlocutory Application in the additional submissions. Multiple set of deficiencies in the Petition were shared with the Petitioner to realistically validate the claims of the Petitioner viz. capital cost incurred, reasons for cost and time overrun, additional capital expenditure, amendments to contract along with relevant approvals, Interest During Construction (IDC), beneficiary details, etc. The Petitioner has submitted separate ARRs for Asset-1, 2 and 3.

3.1.4 The original Petition lack detailing and supporting information to validate the capital cost for each of the assets. Also, details such as Auditor's Certificate, force majeure events, beneficiary details, etc. were not provided as part of the main petition. Information provided in the Petition was inadequate and the Commission had to seek additional submissions and supporting documents from the Petitioner through deficiency letters for reviewing the capital cost and ARR. With respect to few queries, the information provided by the Petitioner remained incomplete and/or could not be validated through appropriate supporting documents specifically for consideration of Interest During Construction (IDC) and Departmental Charges (DC).

3.1.5 The Commission has undertaken detailed prudence check and adequate assumptions, wherever required, for approving the capital cost of project. The scrutiny and prudence check undertaken by the Commission for approval of capital cost has been discussed in the following paragraphs.

3.2 Summary of the Project

Petitioner's Submissions

3.2.1 The Petitioner has submitted that the transmission line Asset-1 was planned for evacuation of power from upcoming generating stations, including Chanju-I (36 MW), Surgani Sundla (48 MW), Devi Kothi-I (30 MW), Chanju-III (42 MW), and other small hydropower projects, aggregating to an estimated capacity of 176 MW awarded by GoHP to various IPPs.

3.2.2 Asset-2 (220 kV D/C transmission line) was planned to evacuate approximately 330 MW of power from nearby small and medium hydro stations. The 220/132 kV Mazra Substation (Asset-1) is connected to the 33/220 kV Karian GIS Substation through the Mazra–Karian line and further linked to the PGCIL Chamera Pooling Station.

The system is designed to cater to the envisaged and additional capacity, including projects by HIMURJA.

3.2.3 Further, Asset-3 involves establishment of a 220/132 kV, 2×80/100 MVA substation at Mazra with LILO of the 132 kV Kurthala–Bathri D/C line, intended to evacuate about 150 MW of hydro capacity in the Tissa area.

3.2.4 The Petitioner has submitted that the HPSEBL is the sole beneficiary of the Assets.

3.2.5 The Petitioner has also submitted that the Board of Directors' approvals and CEA Approval for Asset-1, 2 and 3 were granted on 24.06.2013 and 24.5.2016 respectively. The delay between BoD and CEA approvals was due to finalization of ADB Tranche-III funding and subsequent DPR revisions based on CEA observations regarding cost, technical parameters, and scope. The final Approvals were granted after incorporation of these revisions as under:

Table 4: Asset Wise Approval of Scheme and Cost by Competent Authority

Name of Asset	BoD Approval	CEA Approval	DPR Cost (Rs. Cr.)	IDC and DC as per DPR (Rs. Cr.)	Funding Agency
Asset-1	24.06.2013	24.5.2016	(Combined for Asset-1 & 3) 88.93* (Asset-1 Sub-station) 87.16	(Combined for Asset-1 & 3) IDC – 2.87, DC- 8.30 (Asset-1 Sub-station) IDC-2.81, DC-8.14	ADB
Asset-2	24.06.2013	24.5.2016	35.06	IDC-1.06 DC-3.07	ADB
Asset-3	24.06.2013*	24.5.2016	(Pre-revised) 1.77 (Revised) 15.36#	(Pre-revised) IDC= 0.06, DC= 0.17 (Revised) IDC-0.97, DC- 1.18	ADB

**BoD & CEA approval for Asset-3 (132kV LILO) included in combined DPR for Asset-1(Sub-station) & Asset-3 (132kV LILO)*
#Revised estimated Cost for Asset-3 was based on 132kV LILO length of 7.5 km as per survey

3.2.6 Regarding Asset-3, the LILO component was initially estimated at Rs.1.50 Cr. However, due to change in substation location and increase in line length to 7.5 km (approx.) and later was finalised as 7.048 km, a revised estimate of Rs.15.36 Cr. was prepared (June 2018 price level) and approved by the Director (P&C), HPPTCL.

3.2.7 The Petitioner has listed the implementing agencies selected for execution of these assets along with the awarded cost as shown below:

Table 5: Details of Awarded Cost

Name of Asset	Implementing Agency	LoA date	Awarded Cost
Asset-1	M/s TBEA Energy (India) Pvt. Ltd.	19.06.2019	Rs. 70.14 C r.
Asset-2	M/s R.S. Infraprojects Pvt. Ltd.	20.12.2018	Rs. 37.37 Cr.
Asset-3	M/s R.S. Infraprojects Pvt. Ltd.	05.04.2018	Rs.11.97 Cr.

3.2.8 The Petitioner has submitted the actual cost of the project as on CoD of Asset -1 to 3 along with the comparison of Capital cost of the project as per original scope of work (DPR Cost) as shown under:

Table 6: Comparison of DPR Cost and Actual Cost as on CoD (Rs. Cr.)

Particulars	Hard Cost	IDC	DC (Departmental Charges)	Total
Asset -1				
DPR Cost*	76.21	2.81	8.14	87.16
Actual Cost (including cost of 1 No. 220 kV Line bay at Karian S/s (initially in the scope of M/s TBEA)	68.51	4.34	2.65	75.50
Asset -2				
DPR Cost	30.93	1.06	3.07	35.06
Actual Cost	43.06	4.43	2.86	50.35
Asset-3				
DPR Cost (Revised)	13.21	0.97	1.18	15.36
Actual Cost	13.33	0.37	0.76	14.46

**excluding 132kV LILO part being combined DPR for Asset-1 & 3*

3.2.9 The relevant technical details and configuration of the assets as submitted by Petitioner are as follows:

Table 7: Details of Assets

Asset	Name of Sub-Station	Type	Voltage level (kV)	No. of Bays/ Line Length	COD
Asset-1	220/132 kV, 2×80/100 MVA GIS Substation Mazra	GIS	220 /132	9 No. of Bays of 132 kV and 5+1* Bays of 220 kV	27.03.2024
Asset-2	220 kV D/C Mazra-Karian Transmission Line	D/C	220 kV	18.533 KM Line Length	27.03.2024
Asset-3	LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation	D/C	132 kV	7.048 KM Line Length	27.03.2024

**220 kV line bay (Supply & erection) at Karian for the termination of 220kV Mazra-Karian T/L at Karian Sub-station was included in the award for sub-station at Mazra*

3.2.10 The Petitioner has submitted that the initial contract consisting of Supply and Services was amended at different stages as per the requirement. The details with regard to the amendment of each asset are tabulated as under:

Table 8: Summary of Contract Value with incremental impact of Amendments Issued for Asset 1, 2 & 3 (Rs. Cr.)

Particulars	Unit	Total Contract Cost (INR Cr)	Reason by HPPTCL
Asset-1			
Initial Order	Rs.	70.14	
1st Amendment	Rs.	-4.80	Deletion of 1 No. Transmission Line feeder bay & 2 sets of Bus bar modules at Karian S/s covered under the award for Mazra Sub-station
2nd Amendment	Rs.	0.04	Qty. Variation
3rd Amendment	Rs.	0.13	Qty. Variation
4th Amendment	Rs.	4.78	Deviation in civil qty

Particulars	Unit	Total Contract Cost (INR Cr)	Reason by HPPTCL
5th Amendment	Rs.	0.86	Deviation in civil qty
6th Amendment	Rs.	0.009	Conversion of secondary voltage of 220kV CVT core-3 from 110 N to 110/3V star connection for respective line CRP's in 220/33kV GIS as per detailed engineering at Karian
7th Amendment	Rs.	0.048	Addition of Security cabin bunk house
Final Value	Rs.	**71.21**	
Asset-2			
Initial Award Price	Rs.	37.38	
1st Amendment	Rs.	38.44	Deviation in Quantity
2nd Amendment	Rs.	38.74	
3rd Amendment	Rs.	36.59	
Asset-3			
Initial Award Price	Rs.	11.98	
1st Amendment	Rs.	11.88	Deviation in Quantity
2nd Amendment	Rs.	11.19	

3.2.11 Further, the Petitioner has submitted that there has been a decrease in the contract cost after Amendments which have been primarily on account of variation in quantities. The comparison of capital cost as per the original scope of work and the actual cost incurred as on COD of Asset-1, 2 and 3 vis à-vis the amount approved in the DPR are provided below:

Table 9: Comparison of Capital Cost as on COD for Asset-1,2 & 3 (Rs. Cr.)

Particulars	Asset-1		Asset-2		Asset-3	
	Cost as per DPR	Actual Cost as on COD	Cost as per DPR	Actual Cost as on COD	Cost as per DPR	Actual Cost as on COD
Supply	49.53	51.84	13.13	21.48	10.22	3.61
Erection Works	16.57	15.15	14.80	12.98		6.36
Contingency @3%			0.84		0.32	
Forest Clearance			2.00		2.00	
Centages and Contingencies for forest @8% of forest clearance			0.16		0.16	
Compensation towards crop, tree & PTCC					0.51	
Tender Exp./Adv		0.01		0.0123		0.0086
Survey Charges				0.0570		0.0498
Testing Charges		0.04				
FCA		0.27		6.1099		2.7996

Particulars	Asset-1		Asset-2		Asset-3	
	Cost as per DPR	Actual Cost as on COD	Cost as per DPR	Actual Cost as on COD	Cost as per DPR	Actual Cost as on COD
Right of Way				0.6736		0.2274
Site Preparation Exp.		0.06				
Site Supervision & Site Admin Exp		0.02				
Cost of Land	3.00	1.28		1.7487		0.1236
Legal Charges				0.0004		0.0077
Cost of Residential Colony	4.88					
Other Miscellaneous Expenses	2.23	0.01		0.0023		0.0003
Departmental Charges	8.14	2.76	3.07	2.86	1.18	0.61
Interest During Construction	2.81	4.34	1.06	4.42	0.97	0.66
Total	**87.16**	**75.77**	**35.06**	**50.35**	**15.36**	**14.46**

3.2.12 The Petitioner has further submitted that with reference to the increase in Supply & Services cost of Asset-1 as on COD with respect to the DPR Cost, the same has been due to the fact that the DPR cost was prepared based on price level of 4th quarter of 2010 whereas Notification of Award for construction of said Substation was placed on dated 19.06.2019, thus leading to increase in prices considered during preparation of DPR.

3.2.13 Similarly with respect to Asset- 2, the petitioner has submitted that the DPR was estimated at 2nd quarter of 2015 price level whereas Notification of Award for construction was placed on dated 20.12.2018 and thus leading to increase in prices at the time of award with respect to prices at DPR stage.

3.2.14 The Petitioner has also submitted that there was a delay in commissioning of the Assets as follows:

Table 10: Details of Commissioning

Assets	Scheduled Completion date of the Projects	Actual COD	Delay
Asset-1	14.08.2021	27.03.2024	31 months
Asset-2	18.01.2021	27.03.2024	38 months
Asset-3	25.09.2021	27.03.2024	30 months

Commission's Analysis

3.2.15 The Commission has reviewed the Petition and supporting annexures in detail and found several deficiencies in the information provided. In order to undertake in-depth analysis, the Commission through various discrepancy letters sought information and supporting documents such as approvals of BoD/competent agencies, details of awards/ contracts, correspondences, documents against project funding, details and justifications regarding amendments to contracts and time and cost overrun, payments made to contractors, and COD certificate, etc. In response, the Petitioner has submitted the relevant documents.

3.2.16 Based on the review of the documents and contract agreements, the Commission has noted that the contract was awarded separately for each asset through competitive bidding process which covered the scope of work as under:

3.2.17 **Asset-1:** "Design, Engineering, Manufacture, Fabrication, Testing, at Manufacturers works, Transportation to site, Insurance, Loading/Unloading, Storage, Erection, Testing and Commissioning certain Facilities, viz. Construction of 220/132 kV, 2×80/100 MVA Substation at Mazra."

3.2.18 **Asset-2:** "Supply, Design and Installation & other Services of 220 kV D/C Transmission Line with Single Zebra conductor from proposed 132/220 kV sub-station Mazra to 33/220 kV Sub-station at karian in Chamba district"

3.2.19 **Asset-3:** "Design, Engineering, Manufacture, Fabrication, Testing at manufacturers works, Transportation to site, Insurance, Loading and Unloading, Storage, Erection, Testing and Commissioning of LILO of 132 kV D/C Transmission Line Kurthala-Bathri at proposed 33/132/220 kV GIS Substation Mazra at Pukhari in District Chamba of Himachal Pradesh on Turnkey basis"

3.2.20 Accordingly, the Commission has tabulated the details in the following table with regard to the dates of approvals by CEA and BOD, COD dates etc. for all the Assets as under:

Table 11: Asset-wise dates of various Approvals, Awards and COD of Assets

Asset	BOD Approval Date	CEA Approval Date	Contract Award Date	Contract Effective Date	Scheduled COD Date	Date of Initial Charging/ Actual COD Claimed	Total Delay (Day)
Asset-1	24.06.2013	24.05.2016	24.05.2019	15.08.2019	14.08.2021	27.03.2024	31 months
Asset-2	24.06.2013	24.05.2016	20.12.2018	18.01.2019	18.01.2021	27.03.2024*	38 months
Asset-3	24.06.2013	24.05.2016	27.04.2020	24.06.2020	25.09.2021	27.03.2024*	30 months

**Deemed COD*

3.2.21 The Commission observes that the project has not been completed within the scheduled time, and the Petitioner has claimed the commissioning date as 27.03.2024. The Commission after analyzing the reasons, facts and information submitted in the Petition, has considered the Commercial Operation date as 20.11.2024 and the justification for the same is explained in detail in the relevant section of this order.

3.2.22 With respect to Asset-1, 2 and 3, the Commission observes that the Petitioner in its BoD meeting held on 24.06.2013, got approval for implementation of 220/132 kV, 2×80/100 MVA Substation at Mazra (Asset-1), 220 kV D/C Mazra-Karian Transmission Line from 220/132 kV GIS Sub-station Mazra to 220/33 kV Karian GIS Sub-station (Asset-2) and LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra (Asset-3). In addition, the CEA had also granted its approval on 24.05.2016 for all these assets. Copy of the BoD Resolution, CEA approval letter and DPR were analysed in detail by the Commission for Asset-1,2 and 3. However, the Commission observes that the BoD and CEA approvals for Asset-1 and Asset-3 were provided by considering it as a single asset. Subsequently, the estimated Cost for Asset-3 was revised to Rs. 15.36 Cr. from Rs. 1.77 Cr. (Pre-revised), based on increase in 132 kV LILO length to 7.048 km as per revised survey.

3.2.23 The Commission has observed that subsequent to the revision in the Capital Cost of Asset-3, the Petitioner has not obtained the approval of the Board of Directors (BoD) or the Central Electricity Authority (CEA). Instead, the Petitioner has submitted a revised cost estimate duly approved by the competent authority of HPPTCL, i.e., the Director (Projects & Commercial). In this regard, the Commission provisionally approves the cost of Asset-3 and directs the Petitioner to submit the requisite BoD approvals at the time of True-up.

3.2.24 The Commission observes that the Petitioner has amended the awarded contract several times for each asset. In this regard, the Commission sought clarification and reasons for the amendments. In response, the Petitioner has submitted detailed justification for the contract amendments along with the supporting documents. Based on the submitted documents, the Commission has noted down all the contract amendments with reasons for each asset in the table below:

Table 12: Summary of Contract Value and Amendments with reasons (Rs. Cr.)

Particulars	Data of Amendment	Supply Contract	Services Contract	Total Contract Cost	Reasons by HPPTCL
Asset-1					
Award Price		26.09+29.76	14.10+0.17	70.14	
1st Amendment	03.12.2021	-(3.67+1.03)	-0.095	65.34	Deletion of 1 No. Transmission Line feeder bay & 2 sets of Bus bar modules at Karian S/s covered under the award for Mazra Sub-station
2nd Amendment	12.09.2022	-1.02	+1.07	65.38	Qty. Variation
3rd Amendment	21.03.2023		0.13	65.51	Qty. Variation
4th Amendment	13.09.2023	4.78		70.29	Deviation in civil qty
5th Amendment	17.02.2024	0.86		71.15	Deviation in civil qty
6th Amendment	30.03.2024	0.009		71.159	Conversion of secondary voltage of 220 kV CVT core-3 from 110 N to 110/3V star

Particulars	Data of Amendment	Supply Contract	Services Contract	Total Contract Cost	Reasons by HPPTCL
					connection for respective line CRP's in 220/33kV GIS as per detailed engineering at Karian
7th Amendment	30.04.2024	0.048		71.207	Addition of Security cabin bunk house
Final Value		**55.83**	**15.375**	**71.21**	
Asset-2					
Award Price	20.12.2018	20.43	16.94	37.38	Original Contract Value
1st Amendment	24.06.2020	21.32	17.12	38.44	Deviation in Quantity
2nd Amendment	04.08.2021	21.62	17.12	38.74	
3rd Amendment	03.12.2021	21.62	14.97	36.59	
Final Value		**21.62**	**14.97**	**36.59**	
Asset-3					
Award Price	27.04.2020	6.51	5.47	11.98	Original Contract Value
1st Amendment	11-08-2021	6.41	5.47	11.88	Deviation in Quantity
2nd Amendment	20.09.2023	6.41	4.78	11.20	
Final Value		**6.41**	**4.78**	**11.20**	

3.2.25 The capital cost as on COD claimed by the Petitioner for Asset-1, 2 and 3 is certified by the Statutory Auditor. The HPPTCL had secured funding for the project from Asian Development Bank (ADB) for Asset-1, 2 and 3 with debt-equity ratio envisaged at 80:20, 70:30 and 75:25 as per DPR respectively. However, the Petitioner has claimed 70:30 for all the assets after debt restructuring. Further, the asset wise cost details submitted by the Petitioner are as under:

Table 13: Asset-wise details of various Costs (Rs. Cr.)

Asset	Contractor Details (A)	DPR Cost (B)	Awarded Cost (C)	Final Cost post Amendment (D)	Cost as on COD as per Auditor's Certificate (E)
Asset-1	M/s TBEA Energy (India) Private Ltd.	87.16	70.14	75.50	75.76
Asset-2	M/s R.S Infraprojects Pvt Ltd.	35.06	37.37	36.59	50.35
Asset-3	M/s R.S Infraprojects Pvt Ltd.	15.36	11.98	11.20	14.46

3.3 Commercial Operation Date (COD) of Asset

Petitioner's Submissions

3.3.1 The Petitioner has submitted that Asset-1, 2, and 3 were originally scheduled to be commissioned on 14.08.2021, 18.01.2021, and 25.09.2021, respectively. However, the actual date of commissioning for Asset-1 has been achieved on 27.03.2024. The same date, i.e., 27.03.2024, has been considered as the deemed COD for the Asset-2 and Asset-3 as well.

3.3.2 The Petitioner has further submitted that the implementation of the Project was delayed by approximately 31 months for Asset-1, 38 months for Asset-2, and 30 months for Asset-3. It has been contended that these delays occurred due to reasons entirely beyond the control of the Petitioner.

3.3.3 With respect to Asset-1, the Petitioner has attributed the delay to the following factors:

- Delay in tree felling
- Disruptions caused by the COVID-19 pandemic, including the second wave
- Changes in route alignment
- Changes in scope of work
- Increase in overall scope of work
- Delay in extension of the 220 kV GIS bay at the Karian Substation
- Execution of internal road works
- Yard PCC gravelling works
- Drainage works
- NIFPS (Nitrogen Injection Fire Protection System) tank works
- Delay in construction of the septic tank due to late finalization of the site
- Delay in construction of a 110-metre retaining wall near the culvert and nallah
- Delay in addressing observations during pre-commissioning testing
- Delay during charging/commissioning of the 220/132 kV Mazra Substation
- Adverse meteorological conditions
- Right-of-way (ROW) issues
- Delay in obtaining approval from the Chief Electrical Inspector

3.3.4 In the case of Asset-2, he delay has been attributed to the following factors:

- Impact of the COVID-19 pandemic
- Non-availability of power shutdowns
- Delay in charging of the Mazra–Chamera section
- Delay in execution of the connection agreement with HPSEBL

3.3.5 For Asset-3, the delay has been attributed to the following factors:

- Delay in obtaining approval under the Forest Conservation Act (FCA)
- Disruptions due to the second wave of the COVID-19 pandemic
- Non-readiness of the 132 kV gantry
- Delay in charging/commissioning of the 220/132 kV Mazra Substation
- Delay in signing of the connection agreement with HPSEBL

3.3.6 In view of the above, the Petitioner has sought approval of Capital Cost and determination of transmission charges for all the Assets from 27.03.2024 (COD) upto to the end of the 4th Control Period, i.e., FY 2023-24. Further, through Interlocutory Application included in the additional submission filed along with the affidavit dated 26.11.2025, the Petitioner has requested the Commission to determine the tariff for the 5th MYT Control Period from FY 2024-25 to FY 2028-29, in accordance with the Regulation 12(3) of the HPERC Transmission Tariff Regulations, 2023.

Commission's Analysis

3.3.7 With respect to commissioning of all the Assets, the Petitioner has submitted the Electrical Inspector (EI) certificates in reply to the deficiency letter of the Commission. As per Regulation 6(1) of CEA (Grid Standards) Regulations, 2010, introduction of an element in the State Grid requires concurrence of HPSLDC in the form of Operation Code. The Chief Electrical Inspectorate (CEI) approval is one of the requirements for 1st time charging of a new transmission element. Accordingly, approval for energizing these assets was provided by the Chief Electrical Inspectorate for all the Assets. It has been observed that the charging of the assets was delayed due to various controllable and uncontrollable factors. Consequently, the assets could not be charged on the provisional dates indicated by the CEI, and rescheduling of the charging programme was sought. The revised charging schedule was thereafter approved by the CEI.

3.3.8 The Chief Electrical Inspector (CEI) approvals were granted as follows: for Asset-1 on 22.11.2023, for Asset-2 on 12.10.2023, and for Asset-3 on 19.03.2024.

3.3.9 The Commission has examined the letters dated 29.02.2024 and 07.05.2024 issued by HPSLDC to HPPTCL regarding the issuance of certificates for successful initial charging and COD, which include time stamped records. Based on these documents, the Commission observes that Asset-1, Asset-2, and Asset-3 were charged on 27.03.2024, 20.11.2024, and 16.11.2024, respectively.

3.3.10 Accordingly, the claim for deemed COD 27.03.2024 is not acceptable. Further, based on the replies submitted by the Petitioner in response to the deficiencies, the Commission notes that the actual flow of energy commenced on 20.11.2024. Therefore, the actual date of utilisation/commissioning, i.e., 20.11.2024, is considered as the COD for all the assets.

3.3.11 In view of the above, the Commission approves the actual COD of the Project as 20.11.2024, as against the claimed COD of 27.03.2024.

3.3.12 The summary of the COD dates claimed, actual charging of Assets and approved COD for Asset-1, 2 and 3 are given as below:

Table 14: Commercial Operation Date (COD) approved by the Commission

Asset		Date of Charging of Assets	Actual Energy flow	Delay Reason	Claimed COD	Approved COD
Asset-1	ICT-1	20.01.2024	20.11.2024	-	27.03.2024	20.11.2024
	ICT-2	27.03.2024	20.11.2024	Delay due to an oil leakage issue in the OLTC blue phase chamber		
Asset-2	Circuit-1	20.01.2024	20.11.2024	-	27.03.2024	20.11.2024
	Circuit-2	20.11.2024	20.11.2024	Delay occurred due to HPSLDC's requirement of installing a cybersecurity		

Asset		Date of Charging of Assets	Actual Energy flow	Delay Reason	Claimed COD	Approved COD
				firewall as a pre-condition for telemetry clearance.		
Asset-3	LILO	16.11.2024	20.11.2024	Delay in obtaining shutdown consents from IPPs and HPSEBL during peak generation season.	27.03.2024	20.11.2024

3.4 Energy flow and Nature of Asset

Petitioner's Submissions

3.4.1 The Petitioner has submitted that Asset-1 was planned to evacuate power from upcoming generating stations, namely Chanju-I (36 MW), Surgani Sundla (48 MW), Devi Kothi-I (30 MW), Chanju-III (42 MW), and other small hydropower projects, with an aggregate installed capacity of about 176 MW, awarded to various Independent Power Producers (IPPs) by the Government of Himachal Pradesh.

3.4.2 The Petitioner has further submitted that Asset-2, i.e., the 220 kV double-circuit transmission line, was primarily planned to meet the evacuation requirements of an estimated generation capacity of about 330 MW from nearby small and medium power projects. It has also been submitted that the 220/132 kV Mazra Substation (Asset-1) is to be connected to the 220/33 kV Karian GIS Substation through the 220 kV Mazra–Karian line, and further linked to the Chamera Power Station of PGCIL through a 220 kV line. The overall transmission system is designed to cater to the envisaged generation capacity in the area, including additional capacity proposed under HIMURJA.

3.4.3 The Petitioner has stated that the 220/132 kV, 2×80/100 MVA substation at Mazra has been configured with a LILO arrangement on both circuits of the 132 kV Kurthala–Bathri double-circuit transmission line to facilitate evacuation of power from upcoming hydropower projects in the Tissa area, with an estimated potential of about 150 MW.

3.4.4 The Petitioner has further submitted that Himachal Pradesh State Electricity Board Limited (HPSEBL) is the sole beneficiary of all three assets, which are being utilized for power drawal as well as for improving the quality and reliability of supply across the distribution network.

Commission's Analysis

3.4.5 The Commission has observed based on the DPR that the total hydropower potential in the Tissa area of the Ravi river basin is about 422 MW, of which approximately 330 MW is proposed to be evacuated through the 132/220 kV pooling substation at Mazra by LILO of both circuits of the 132 kV Kurthala–Bathri double-circuit line. The balance power is to be evacuated through the existing 132 kV system up to the Bathri substation. The Mazra substation, equipped with two 220/132 kV, 100 MVA transformers, is connected to the 220/33 kV Karian GIS substation through a 220 kV double-circuit line and further linked to the 400/220 kV Chamera Power Station of PGCIL, thereby ensuring system reliability and redundancy.

3.4.6 The Commission has also observed that the overall transmission system was planned as an evacuation scheme, wherein the Mazra substation functions as the pooling point and the 220 kV Mazra–Karian line facilitates transfer of power to the inter-State transmission system. The LILO arrangement at Mazra also enables integration of additional hydropower projects in the Tissa area, thereby supporting optimal utilization of the region's generation potential.

3.4.7 The Petition and the record show that the aforementioned transmission scheme, including Asset-2, was approved in the 39th Standing Committee Meeting on Power System Planning for the Northern Region held on 29.05.2017 and 30.05.2017, and has been designed to cater to the projected evacuation requirement in a coordinated and phased manner.

3.4.8 The Commission, through a deficiency letter, sought updated details regarding the present and prospective beneficiaries of the project. In response, the Petitioner has submitted that Himachal Pradesh State Electricity Board Limited (HPSEBL) is the sole beneficiary of all the assets.

3.4.9 The matter of recovery of ARR by the Petitioner has been discussed in detail in Chapter 4 of this Order.

3.5 Capital Cost

Petitioner's submissions

3.5.1 The Petitioner has submitted that the contract was awarded separately for each asset on turnkey basis. Further, the contract underwent several amendments as per the requirement and change in scope/quantity.

3.5.2 The Petitioner has submitted that the construction of Asset-1 was awarded through a competitive bidding process at a contract price of Rs.70.14 Cr., as against the DPR cost of Rs.66.10 Cr., which was subsequently revised to Rs.71.21 Cr. after final amendment. However, the Petitioner has claimed the Cost as Rs. 66.84 Cr. as on COD. It is further submitted that the total capital cost of Asset-1 as on COD, i.e., 27.03.2024, including IDC and departmental charges, amounts to Rs.75.51 Cr.

3.5.3 The Petitioner has submitted that, as per the award issued to M/s TBEA, the scope of work included the supply of two transmission line feeder bay modules and two bus bar modules for the 220/33 kV Karian Substation. The GIS equipment was required to be compatible with the existing Siemens-make GIS system at Karian Substation for termination of one circuit of the 220 kV Mazra–Karian Transmission Line. However, M/s TBEA informed that M/s Siemens, being the original equipment manufacturer (OEM) of the existing GIS, was neither willing to share the detailed construction drawings of the installed system nor to supply Siemens-make GIS equipment to M/s TBEA. In view of these constraints, M/s TBEA requested de-scoping of the said items.

3.5.4 Accordingly, vide Amendment No. 1, the supply portion of one transmission line feeder bay and two sets of bus bar modules at the Karian Substation was de-scoped from M/s TBEA's contract, while the remaining works continued under the original award dated 19.06.2019. Considering the technical constraints and project requirements, the work of supply, supervision of erection, testing, and commissioning of one 220 kV GIS bay at the Karian Substation was subsequently awarded directly to M/s Siemens, without a formal bidding process, vide letter dated 06.09.2021, at a contract price of Rs.2,91,00,527/- (excluding taxes, duties, and insurance).

3.5.5 Accordingly, the Petitioner has prayed the Commission to approve the actual cost claimed as on COD for the purpose of working out the tariff for Asset-1.

Table 15: Details of variation in Cost (Rs. Cr.) as submitted by the Petitioner – Asset-1

Particulars	DPR Cost	Initial Contract Award Price	Contract Award Price after amendment 1 – 7	Actual Cost as on COD
Supply	49.53	70.14	71.21	48.57+3.11
Erection	16.57			14.83+0.33
Cost of Land	3.00	Said Components do not form part of the Award		1.28
Cost of residential Colony	4.88			-
Other miscellaneous expenses	2.23			0.40
Departmental Charges	*8.14*			*2.38+0.27*
Interest During Construction	*2.81*			*4.34*
Total	**87.16**	**70.14**	**71.21**	**75.50**

**Siemens Award due to descope of the following:*

Particulars	DPR Cost	Initial Contract Award Price	Contract Award Price after amendment 1 – 4	Actual Cost as on COD
220 kV Bay at Karian S/s				
Supply	-	-	**3.11**	-
Supervision of Erection	-	-	**0.33**	-
Departmental Charges	-	-	**0.27**	-

3.5.6 The Petitioner has submitted that as per the DPR, the estimated project cost for Asset-2 was Rs. 27.93 Cr., against which the construction work was awarded through a competitive bidding process at a contract price of Rs.37.37 Cr. (Rs.20.43 Cr. for supply and Rs.16.94 Cr. for erection). It has further been submitted that upon final amendment, the contract price was revised to Rs.36.59 Cr. as compared to the initially awarded cost of Rs.27.93 Cr. However, the Petitioner has claimed the Cost as Rs. 34.46 Cr. as on COD. The total capital cost of Asset-2 as on COD, i.e., 27.03.2024, including IDC and departmental charges, is stated to be Rs.50.35 Cr.

3.5.7 Accordingly, the Petitioner has prayed the Commission to approve the actual cost claimed as on COD for the purpose of working out the tariff for Asset-2 as under:

Table 16: Details of variation in Cost (Rs. Cr.) as submitted by the Petitioner – Asset-2

Particulars	DPR Cost	Initial Contract Award Price	Contract Award Price after the amendments (1,2 & 3	Actual Cost as on COD
Supply	13.13	37.37	21.62	21.48
Erection Cost	14.80		14.97	12.98
Contingency @ 3%	0.84			8.60*
Forest Clearance	2.00			
Centages and Contingencies for forest @8% of forest clearance	0.16			
Departmental Charges	*3.07*			*2.86*
Interest During Construction	*1.06*			*4.43*
Total	**35.06**	**37.37**	**36.59**	**50.35**

**Rs 8.60 Cr. cost includes tender expenses, survey charges, land, FCA, ROW, legal charges and other misc. charges*

3.5.8 Further, the Petitioner has submitted that as per the original DPR, the estimated hard cost for the LILO of the 132 kV Kurthala–Bathri D/C line at the 220/132 kV Mazra Substation i.e. Asset-3, was Rs.10.22 Cr., against which the construction work was awarded through a competitive bidding process at a contract price of Rs.11.98 Cr. It has further been stated that upon final amendment, the contract price was reduced to Rs.11.20 Cr. However, the Petitioner has claimed the Cost as Rs. 9.97 Cr. as on COD. The total capital cost of the asset as on COD, i.e., 27.03.2024, including IDC and departmental charges, is reported as Rs.14.46 Cr.

3.5.9 Accordingly, the Petitioner has prayed the Commission to approve the actual cost claimed as on COD for the purpose of working out the tariff for Asset-3.

Table 17: Details of variation in Cost (Rs. Cr.) as submitted by the Petitioner – Asset-3

Particulars	DPR Cost	Allocated Contract Award Price after amendment 1 – 10	Actual Cost claimed as on COD
	A	C	D
Supply & Erection Cost	10.22	11.20	9.97
Other miscellaneous expenses	2.99#	These expenses do not form part of award cost	3.36*
Departmental Charges	*1.18*		*0.76*
Interest During Construction	*0.97*		*0.37*
Total	**15.36**	**11.20**	**14.46**

#Amount of Rs 2.99 Cr. as considered in DPR under as compensation towards crop, tree & PTCC of Rs 0.51 Cr., Compensation towards forest for Rs 2 Cr., Contingencies @ 3% of Rs 0.32 Cr. and Centages & Contingencies for forest @8% of forest compensation of Rs 0.16 Cr.

**Amount of Rs 3.36 Cr. pertaining to 'other miscellaneous expenses' as on COD includes primarily tender/Adv expense of Rs 0.86 lakhs, Survey charges of Rs 4.98,* *Land of Rs 12.36 lakh, FCA of Rs 279.96 lakh, Right of Way of 37.57 lakh, Legal charges of Rs 0.77 lakh and other miscellaneous charge of Rs 0.31 lakh.*

Commission's Analysis

3.5.10 The Commission has observed that the Petition submitted by the Petitioner for capital cost and the tariff determination is for three number of assets for which the competent authorities had approved the schemes separately. Further, the Petitioner has awarded the works separately for each asset. The Capital cost approved for each asset has been discussed in the following paragraphs:

A. <u>Asset-1: 132/220 kV, 2×80/100 MVA GIS Sub-station at Mazra:</u>

3.5.11 The Commission sought additional information and supporting documents including Auditor's Certificate, approvals of BOD, reasons for price variation, details of awards/ contracts, correspondences, payments made to Contractors, COD certificate etc., as part of the prudence check for approval of the capital cost.

3.5.12 The Commission observes that the total cost of Asset-1 as per DPR was Rs. 87.16 Cr. which includes Rs. 66.10 Cr. towards Supply & Erection cost, Rs. 2.23 Cr. towards Miscellaneous charges, Rs. 3.00 Cr. for Cost of land, Rs. 4.88 Cr. for Cost of Residential colony, Rs. 8.14 Cr. towards Departmental Charges and Rs. 2.81 Cr. towards Interest During Construction (IDC). The scheme for construction of Asset-1 was approved in its BoD meeting held on 24.06.2013. Subsequently, the CEA gave its approval to Asset-1 on 24.05.2016. The Commission also observes that the cost approved by the Board of Directors (BoD) for Asset-1 initially was at Rs. 116 Cr. on 24.06.2013. However, during the course of appraisal, the Central Electricity Authority (CEA) raised certain queries and observations on the submitted DPR. In response, HPPTCL revised the cost estimates along with modifications in the scope of work. Accordingly, based on the revised submissions, the CEA approved the project cost at Rs. 87.16 Cr., which is aligned with the DPR dated 24.05.2016. As per the copy of the contracts provided, the Supplies and Services contract for the Asset-1 was awarded to M/s TBEA Energy (India) Private Limited on turnkey basis at Rs. 70.14 Cr. In response to the query raised on major deviation in price as envisaged in DPR for the Supplies and Services at Rs. 66.10 Cr. and that in the initial award for Asset-1 at Rs. 70.14 Cr., the Petitioner has submitted that the DPR for construction of Asset-1 was approved based on price level of 4th quarter of 2010 whereas, the notification of award for the construction of said scheme was placed on 19.06.2019.

3.5.13 The Commission with respect to the selection process of Contractor has observed that the competitive bidding mechanism was followed by the Petitioner and the contract was awarded to M/s TBEA Energy (India) Private Limited at an amount of Rs. 70.14 Cr. with a completion period of 24 months, from an effective date of 15.08.2019.

3.5.14 As per the subsequent submissions of the Petitioner, the Commission has noted that the awarded contract was amended seven times owing to the factors such as deviation in quantity, deletion of assets in Scope of Work, revision in assets configuration, etc.

3.5.15 Based on the scrutiny of the copies of amendments letters as provided by the Petitioner, the Commission has outlined the contract revision values as under:

Table 18: Summary of Contract Value and Amendments for Asset-1 (Rs. Cr.)

Particulars	Date of Amendment	Supply Contract	Services & Erection Contract	Total Cost	Reasons for Amendment
Asset 1					
Award Price		26.09+29.76	14.10+0.17	70.14	
1st Amendment	03.12.2021	-(3.67+1.03)	-0.095	65.34	Deletion of 1 No. Transmission Line feeder bay & 2 sets of Bus bar modules at Karian S/s covered under the award for Mazra Sub-station
2nd Amendment	12.09.2022	-1.02	+1.07	65.38	Qty. Variation
3rd Amendment	21.03.2023		0.13	65.51	Qty. Variation
4th Amendment	13.09.2023	4.78		70.29	Deviation in civil qty
5th Amendment	17.02.2024	0.86		71.15	Deviation in civil qty
6th Amendment	30.03.2024	0.009		71.159	Conversion of secondary voltage of 220kV CVT core-3 from 110 N to 110/3V star connection for respective line CRP's in 220/33kV GIS as per detailed engineering at Karian
7th Amendment	30.04.2024	0.048		71.207	Addition of Security cabin bunk house
Final Value		**55.83**	**15.375**	**71.21**	

3.5.16 The Commission has also noted that the major enhancement in contract price has been due to 4th Amendment of Rs. 4.78 Cr. As per these amendment letters, the change in cost has been on account of variation in quantities, and revised rates for civil works.

3.5.17 The Commission has further observed that the increase in cost due to variation in quantities is considerably nominal apart from the Amendment-4 which is Rs. 4.78 Cr. Therefore, considering the submissions of the Petitioner, the Commission has provisionally approved the cost towards Amendment-1-7, subject to detailed scrutiny at the time of truing-up and submission of BoD approval for the final cost including amendments to the LoA.

3.5.18 Further, the cost claimed by the Petitioner as on COD (i.e., 27.03.2024) amounts to Rs. 75.76 Cr. The cost has been revised on account of the addition of a 220 kV line bay at Karian Substation. The claimed cost is higher than the last amended cost of Rs. 71.21 Cr. approved vide the 7th Amendment. The Commission has further observed that the Petitioner has descoped/removed the 220 kV Line bay at Karian S/s from the scope of M/s TBEA as M/s Siemens, being the original equipment manufacturer (OEM) of the existing GIS, was neither willing to share the detailed construction drawings of the installed system nor to supply Siemens-make GIS equipment to M/s TBEA. Considering the technical constraints and project requirements, the work of supply, supervision of erection, testing, and commissioning of one 220 kV GIS bay at the Karian Substation was subsequently awarded directly to M/s Siemens, without a formal bidding process. The Petitioner has submitted the Auditor's Certificate for the claimed amount as on COD in response to the query of the Commission. Accordingly, based on the due diligence of the supporting documents and Auditor's Certificate, the Commission has provisionally approved the cost for Asset-1 along with 220 kV Line bay at Karian S/s as per the Petitioner's claim. As the payment proofs are not available, the Commission provisionally approves the hard cost of Rs. 66.99 Cr. for Asset-1, subject to review at the time of truing up. However, the Petitioner is directed to submit payment proofs with regard to the payment made to the Contractor as on COD against Supplies and Services Contract, at the time of truing-up, with proper documentary evidence substantiating the actual capital cost incurred for Asset-1.

3.5.19 In view of the above, the Commission approves the Capital cost (hard cost) excluding Departmental Charges (DC) and Interest During Construction (IDC) (discussed in the subsequent section) for the Project as shown in the table below:

Table 19: Hard Cost approved by Commission for Asset-1 (Rs. Cr.)

Particulars	DPR Cost	Amended Contract Cost	Claimed Cost as on COD	Approved Cost as on COD
Supply	49.53	55.83	51.83	51.83
Service/Erection	16.57	15.38	15.15	15.15
Total	**66.10**	**71.21**	**66.99**	**66.99**

3.5.20 With regards to the Other charges which include tender Expenses / Advertisement Expenses, Testing Charges, FCA, Site Preparation Expenses, Site Supervision & Site Administration Expenses, Entry Tax, Cost of Land, Cost of Residential Colony, Other Miscellaneous Expenses, the Petitioner has claimed an amount of Rs. 1.67 Cr. On initial scrutiny, the Commission did not find any details with regard to the payment made. In response to the queries, the Petitioner has submitted the supporting documents against the claimed amount of Rs. 1.67 Cr. In view of the submitted Auditor's Certificate for miscellaneous expenses, the cost as described in the following table has been submitted.

Table 20: Other expenses approved by Commission for Asset-1 (Rs. Cr.)

Particulars	DPR Cost	Claimed Cost as on COD	Auditor's Certificate	Approved as on COD
Tender Exp./Adv		0.01	0.01	0.01
Testing Charges		0.04	0.04	0.04
FCA		0.27	0.27	0.27
Site Preparation Exp.		0.06	0.06	0.06
Site Supervision & Site Admin Exp		0.02	0.02	0.02
Entry tax	-	-	-	-
Cost of Land	3.00	1.28	1.28	1.28
Cost of Residential Colony	4.88	-	-	-
Other Miscellaneous Expenses	2.23	0.01	0.01	0.01
Total	**10.11**	**1.67**	**1.67**	**1.67**

3.5.21 As the payment proofs are not available, the Commission provisionally approves the other charges of Rs. 1.67 Cr. for Asset-1, subject to review at the time of truing up. However, the Petitioner is directed to submit payment proofs with regard to the payment made to the Contractor as on COD, at the time of truing-up, with proper documentary evidence substantiating the actual cost incurred for Asset-1.

B. Asset-2: 220 kV D/C Mazra-Karian Transmission Line :

3.5.22 The Commission sought additional information and supporting documents including Auditor’s Certificate, approvals of BOD, reasons for price variation, details of awards/ contracts, correspondences, payments made to Contractors, COD certificate etc., as part of the prudence check for approval of the capital cost.

3.5.23 The Commission has observed that as per the original DPR, the estimated total project cost was Rs. 35.06 Cr., which included Rs. 13.13 Cr. towards Supply Cost, Rs. 14.80 Cr. towards Erection cost, Rs.0.84 Cr. towards Contingency, Rs. 2.00 Cr. towards forest clearance cost, Rs. 0.16 Cr. towards Centages and Contingencies for forest @8% of forest clearance, Rs. 3.07 Cr. towards Departmental Charges and Rs. 1.06 Cr. towards Interest During Construction (IDC). The scheme for construction of Asset-2 was approved in the 19th BoD Meeting of the Petitioner held on 24.06.2013. Subsequently, the CEA gave its approval to Asset-2 on 24.05.2016. The approval for Asset-2 from the BoD and CEA was for Rs. 49 Cr. and Rs. 35.06 Cr. respectively. The Commission observes that the cost approved by the Board of Directors (BoD) for Asset-1 initially was at Rs. 49 Cr. on 24.06.2013. However, during the course of appraisal, the Central Electricity Authority (CEA) raised certain queries and observations on the submitted DPR. In response, HPPTCL revised the cost estimates along with modifications in the scope of work. Accordingly, based on the revised submissions, the CEA approved the project cost at Rs. 35.06 Cr., which is aligned with the DPR dated 24.05.2016

3.5.24 As per the copy of the contracts provided, the Supplies and Services contract for the Asset-2 was awarded to M/s. R. S. Infraprojects Pvt Ltd. on turnkey basis at Rs. 37.37 Cr. The Petitioner in the submissions has mentioned that major deviation in price as envisaged in DPR for the Supplies and Services at Rs. 27.93 Cr. as against the initial award for Asset-2 at Rs. 37.37 Cr. was primarily because the DPR for construction of Asset-2 was approved based on price level of 2nd Quarter of 2015 whereas, the notification of award for the construction of said scheme was placed on 20.08.2018.

3.5.25 The Commission with respect to the selection process of Contractor has observed that the competitive bidding mechanism was followed by the Petitioner and the contract was awarded to M/s. R. S. Infraprojects Pvt Ltd at an amount of Rs. 37.37 Cr. with a completion period of 24 months, from an effective date of 18.01.2019.

3.5.26 As per the subsequent submissions of the Petitioner, the Commission has noted that the awarded contract was amended three times owing to the factors such as deviation in quantity.

3.5.27 Based on the details provided by the Petitioner, the Commission has outlined the contract revision values as under:

Table 21: Summary of Contract Value and Amendments for Asset-2 (Rs. Cr.)

Particulars	Date of Amendment	Supply Contract	Services Contract	Total Cost	Reasons for Amendment
Asset-2					
Award Price	20.12.2018	20.43	16.94	37.38	
1st Amendment	24.06.2020	21.32	17.12	38.44	Deviation in Quantity
2nd Amendment	04.08.2021	21.62	17.12	38.74	
3rd Amendment	03.12.2021	21.62	14.97	36.59	

3.5.28 However, the Petitioner has claimed the hard cost as on COD as Rs. 34.46 Cr. (supply cost as Rs. 21.48 Cr. and erection cost as Rs. 12.98 Cr.) against the last amended cost of Rs. 36.59 Cr. (supply cost as Rs. 21.62 Cr. and erection cost as Rs. 14.97 Cr.).

3.5.29 In this regard, the Commission sought justification from the Petitioner as no specific reason for the same was submitted by the Petitioner in the Petition. In response, the Petitioner has submitted that the DPR for 220kV Mazra-Karian Transmission Line amounting to Rs. 35.06 Cr. was prepared based on 2nd quarter of 2015 price level. Further, the Bidding for construction of said Transmission line was carried out in 2018 and prices were discovered after following competitive bidding process. The Petitioner has further submitted that Initial Award Price of Rs 37.37 Cr. was amended to Rs 36.59 Cr. after carrying out 3 No. amendments in Contract due to deviation in quantities. The expenditure booked against final Award Price of Rs 36.59 Cr. has been Rs.34.46 Cr. which is on lower side. The major items contributing to the reduction of cost includes excavation quantities, lean concrete (M10), RCC and coping concrete, rubble masonry, cement concrete works, backfilling and soil transportation, stone packing, and PVC weep holes.

3.5.30 The Petitioner has also submitted the Auditor's Certificate for the claimed amount as on COD, in response to the Commission's query. Therefore, the Commission has approved an amount of Rs. 34.46 Cr. against the claim of Rs. 34.46 Cr. as per the supporting documents and Auditor's Certificate. As the payment proofs are not available, the Commission provisionally approves the cost of Rs. 34.46 Cr. for Asset-2, subject to review at the time of truing up. However, the Petitioner is directed to submit payment proofs with regard to the payment made to the Contractor as on COD against Supplies and Services Contract, at the time of truing-up, with proper documentary evidence substantiating the actual capital cost incurred for Asset-2.

3.5.31 Accordingly, the Commission approves the hard cost (excluding miscellaneous expenses) as under:

Table 22: Hard Cost approved by Commission for Asset-2 (Rs. Cr.)

Particulars	DPR Cost	Amended Contract Cost*	Claimed Cost as on COD	Approved Cost as on COD
Supply	13.13	21.62	21.48	21.48
Service/Erection	14.80	14.97	12.98	12.98
Total	**27.93**	**36.59**	**34.46**	**34.46**

3.5.32 With regards to the Other charges which include tender expenses, survey chares, land, FCA, ROW, legal chares and other misc. charges, the Petitioner has claimed an amount of Rs. 8.60 Cr. On initial scrutiny, the Commission did not find any details with regard to the payment made. In response to the queries, the Petitioner has submitted the supporting documents against the claimed amount of Rs. 8.60 Cr. In view of the submitted Auditor's Certificate for miscellaneous expenses, the Commission has approved the cost as described in the following table.

Table 23: Other expenses approved by Commission for Asset-2 (Rs. Cr.)

Particulars	DPR Cost	Claimed Cost as on COD	Auditor's Certificate	Approved as on COD
Tender expenses		0.0123	0.0123	0.0123
Survey Charges		0.0570	0.0570	0.0570
Land		1.7487	1.7487	1.7487
FCA	2.16	6.1099	6.1099	6.1099
Right of Way		0.6736	0.6736	0.6736
Other Misc. Expenses	0.84	0.0023	0.0023	0.0023
Legal Charges		0.0004	0.0004	0.0004
Total	**300**	**8.60**	**8.60**	**8.60**

3.5.33 As the payment proofs are not available, the Commission provisionally approves the other charges of Rs. 8.60 Cr. for Asset-2, subject to review at the time of truing up. The Petitioner is directed to submit payment proofs with regard to the payment made to the Contractor as on COD, at the time of truing-up, with proper documentary evidence substantiating the actual cost incurred for Asset-2.

C. Asset-3: LILO of 132 kV Kurthla -Bathri D/C line at 220/132 kV Mazra Substation:

3.5.34 The Commission sought additional information and supporting documents including Auditor's Certificate, approvals of BOD, reasons for price variation, details of awards/ contracts, correspondences, payments made to Contractors, COD certificate etc., as part of the prudence check for approval of the capital cost.

3.5.35 The Commission observes that the cost for LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation as per DPR was Rs. 15.36 Cr. which included Rs. 10.22 Cr. towards Supply and Erection, Rs. 2.99 Cr. towards Miscellaneous charges, Rs. 1.18 Cr. towards Departmental Charges and Rs. 0.97 Cr. towards Interest During Construction (IDC). The scheme for construction of LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation was approved by the BOD in its meeting vide Agenda Item No. 19.05 held on 24.06.2013. Subsequently, the CEA gave its approval on 24.05.2016. The Commission observes that the cost approved by the Board of Directors (BoD) and Central Electricity Authority (CEA) was Rs. 1.77 Cr. only. However, due to revision in scope of work as LILO length was increased to 7.048 kms, the cost got increased to Rs. 15.36 Cr. from Rs.1.77 Cr. envisaged earlier.

3.5.36 The Commission with respect to the selection process of Contractor observes that the competitive bidding mechanism was followed by the Petitioner for LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation and the contract was awarded to M/s R.S Infraprojects Pvt Ltd on turnkey basis at an amount of Rs. 11.98 Cr. with a completion period of 15 months, from the effective date of 25.09.2021.

3.5.37 As per the subsequent submissions of the Petitioner, the Commission has noted that the awarded contract was amended two times owing to the factors such as deviation in quantity, etc.

3.5.38 Based on the details provided by the Petitioner, the Commission has outlined the contract revision values as under:

Table 24: Summary of Contract Value and Amendments for Asset-3 (Rs. Cr.)

Particulars	Date of Amendment	Supply Contract	Services Contract	Total Cost	Reasons for Amendment
Asset-3					
Award Price	27.04.2020	6.51	5.47	11.98	
1st Amendment	11-08-2021	6.41	5.47	11.88	Deviation in Quantity
2nd Amendment	20.09.2023	6.41	4.78	11.20	

3.5.39 The Commission notes that the 1st Amendment was due to changes in BOQ quantities based on final measurements, which were lower than earlier estimates. The reduction in cost is mainly in towers, conductor, and other materials. Accordingly, the Supply Contract cost is reduced by Rs. 0.10 Cr.

3.5.40 The Commission also notes that the 2nd Amendment was also due to reduction in quantities after detailed survey and final alignment. The decrease in towers, line length, and related works have reduced the cost. Accordingly, the Supply Contract cost is reduced by Rs. 0.69 Cr.

3.5.41 Further, the cost towards supplies and services claimed as on COD by the Petitioner for LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation has been Rs. 9.97 Cr. (supply cost Rs. 3.61 Cr. and service cost as Rs. 6.36 Cr.) against the last amended cost of Rs. 11.20 Cr. (supply cost Rs.6.41 Cr. and service cost as Rs. 4.78 Cr.). In response to the query of the Commission, the Petitioner has submitted an Auditor's Certificate with respect to the claimed COD cost for Asset-3. Accordingly, after scrutiny of the supporting documents and Auditor's Certificate, the Commission has allowed an amount of Rs. 9.97 Cr. as on COD which includes Rs. 3.61 Cr. towards Erection & Civil Work and Rs. 6.36 Cr. towards Materials supplied.

3.5.42 As the payment proofs are not available, the Commission provisionally approves the cost of Rs. 9.97 Cr. for Asset-3, subject to review at the time of truing up. However, the Petitioner is directed to submit payment proofs with regard to the payment made to the Contractor as on COD against Supplies and Services Contract, at the time of truing-up, with proper documentary evidence substantiating the actual capital cost incurred for Asset-3.

3.5.43 Accordingly, the Commission approves the hard cost (excluding miscellaneous expenses) approved by the Commission is provided as under:

Table 25: Hard Cost approved by Commission for Asset-3 (Rs. Cr.)

Particulars	Allotted DPR Cost	Amended Contract Cost	Claimed Cost as on COD	Approved Cost as on COD
Supply	10.22	6.41	3.61	3.61
Service/Erection		4.78	6.36	6.36
Total	**10.22**	**11.20**	**9.97**	**9.97**

3.5.44 With regard to the 'Miscellaneous Expenses', the Cost approved by the Central Electricity Authority in the DPR was an amount Rs. 2.99 Cr. against which the Petitioner has claimed an amount of Rs. 3.36 Cr. as on COD. On initial scrutiny, the Commission did not find any details with regard to the payment. In response to the queries, the Petitioner has submitted the revised amount of 3.22 Cr. along with the supporting documents and prayed the commission to consider the revised amount.

3.5.45 In view of the submitted Auditor's Certificate and payment proofs for miscellaneous expenses, the Commission has approved the cost as described in the following table.

Table 26: Miscellaneous Expenses approved by Commission for Asset-3 (Rs. Cr.)

Particulars	Allotted DPR Approved	Claimed Cost as on COD	Claimed Cost as on COD (1st Data gap Reply)	Auditor's Certificate	Approved as on COD
Compensation towards crop, tree & PTCC	0.51				
Compensation towards forest	2				
Contingencies @ 3%	0.32				
Centages & Contingencies for forest @8% of forest compensation	0.16				
Tender/Adv expense		0.0086	0.0086	0.0086	0.0086
Survey charges		0.0498	0.0498	0.0498	0.0498
Cost of Land		0.1236	0.1236	0.1236	0.1236
FCA		2.7996	2.7996	2.7996	2.7996
Right of Way		0.3757	0.2274	0.2274	0.2274
Legal charges		0.0077	0.0077	0.0077	0.0077
Other miscellaneous charge		0.0031	0.0003	0.0003	0.0003
Total	**2.99**	**3.36**	**3.217**	**3.217**	**3.217**

3.5.46 As the payment proofs are not available, the Commission provisionally approves the other charges of Rs. 3.217 Cr. for Asset-3, subject to review at the time of truing up. The Petitioner is directed to submit payment proofs with regard to the payment made to the Contractor as on COD, at the time of truing-up, with proper documentary evidence substantiating the actual cost incurred for Asset-3.

3.6 Overheads (IDC and Departmental Charges)

Petitioner's submissions

A. <u>Asset-1: 220/132 kV, 2×80/100 MVA Substation at Mazra:</u>

3.6.1 With regard to Interest during Construction (IDC) for Asset-1, the Petitioner has submitted that the provision for IDC was kept at Rs. 2.81 Cr. in the DPR. Owing to the time over-run and the restructuring of debt (as detailed in the Project funding section), the actual IDC is Rs. 4.34 Cr. upto COD (27.03.2024).

3.6.2 In this regard, the Petitioner has submitted that the IDC in the DPR was computed considering 24 Months, as the timeline for implementation of project. However, against the same, there has been a time delay of 31 Months in the implementation of project for reasons beyond the control of Petitioner.

3.6.3 The Petitioner has further submitted that the IDC at the DPR stage for Asset-1 was computed on the basis of LIBOR (London Interbank Offered Rate) interest rate of 4.64% as against the actual interest rate of 10% which is being paid to GoHP as per the loan agreement. The IDC details as submitted by the Petitioner are as under:

Table 27: Details regarding IDC as submitted by the Petitioner (Rs. Cr.) – Asset-1

Cost without IDC	Interest Rate	IDC
As per DPR (Rs. 84.35 Cr.)	LIBOR interest rate of 4.64%	2.82 Cr. (As per DPR)
	RoI of 10% as per the loan agreement	6.08 Cr.
As per actual execution of Project (Rs. 71.15 Cr.)	RoI of 10% as per the loan agreement	5.12 Cr.
	RoI of 10% due to time over-run	4.34 Cr. (incurred)

3.6.4 Therefore, the Petitioner has prayed the Commission to allow the actual IDC incurred for Asset-1 condoning the entire time over-run as it was beyond the control of Petitioner.

3.6.5 With regard to Departmental Charges for Asset-1, the Petitioner has submitted that the provision for Departmental charges in the DPR was kept at Rs. 8.14 Cr., at the rate of 12.31% of Rs. 66.10 Cr. (cost against supplies & erection). As against the same, the actual Departmental Charges as on COD are Rs. 2.75 Cr. which are within 12.31% of the actual hard cost and, therefore, the Petitioner has requested the Commission to allow the actual Departmental Charges as on COD.

B. <u>Asset-2: 220 kV D/C Mazra-Karian Transmission Line :</u>

3.6.6 With regard to IDC for Asset-2, the Petitioner has submitted that the provision for IDC in the DPR prepared for construction of 220 kV D/C Mazra-Karian Transmission Line was estimated at Rs. 1.06 Cr. However, owing to the time over-run and and the restructuring of debt (as detailed in the Project funding section), the actual IDC is Rs. 4.43 Cr. upto Claimed deemed COD (27.03.2024).

3.6.7 In this regard, the Petitioner has submitted that the IDC in the DPR was computed considering 24 Months as the timeline for implementation of project. However, there has been a time delay of 38 Months and 10 days in the implementation of project for reasons beyond the control of Petitioner.

3.6.8 The Petitioner has further submitted that the IDC at the DPR stage for Asset-2 was computed on the basis of LIBOR (London Interbank Offered Rate) interest rate of 4.64% as against the actual interest rate of 10% which is being paid to GoHP as per the loan agreement. The IDC details as submitted by the Petitioner are as under:

Table 28: Details regarding IDC as submitted by the Petitioner (Rs. Cr.) – Asset-2

Cost without IDC	Interest Rate	IDC
As per DPR (Rs. 34.00 Cr.)	LIBOR interest rate of 4.64%	1.45 Cr.
	RoI of 10% as per the loan agreement	3.13 Cr.
As per actual execution of Project (Rs. 45.92 Cr.)	RoI of 10% as per the loan agreement	4.23 Cr.
	RoI of 10% due to time over-run	4.43 Cr. (incurred)

3.6.9 The Petitioner has prayed the Commission to allow the actual IDC incurred for Asset-2 condoning the entire time over-run as it was beyond the control of Petitioner.

3.6.10 With regard to Departmental Charges for Asset-2, the Petitioner has submitted that the provision for Departmental charges in the DPR was Rs. 3.07 Cr. at the rate of 11% of Rs 27.93 Cr. (cost against supplies & erection). As against the same, the actual Departmental Charges upto COD is Rs. 2.86 Cr. which is within 11% of the project cost and therefore, the Petitioner has requested the Commission to allow the actual Departmental Charges as on COD.

C. Asset-3: LILO of 132 kV Kurthla -Bathri D/C line at 220/132 kV Mazra Substation:

3.6.11 With regard to IDC for LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation, the Petitioner has submitted that the IDC in the DPR was computed on the basis of LIBOR rate of 4.64% at Rs. 0.97 Cr. However, owing to restructuring of debt (as detailed in the Project funding section), the actual IDC is Rs. 0.66 Cr. upto claimed deemed COD (27.03.2024).

3.6.12 With regard to Departmental Charges for LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation, the Petitioner has submitted that the provision for Departmental charges in the DPR was Rs. 1.18 Cr. at the rate of 11% of the Hard Cost. As against the same, the actual Departmental Charges upto COD is Rs. 0.61 Cr. only which is within 11% of the project cost and therefore, the Petitioner has requested the Commission to allow the actual Departmental Charges as on COD.

Commission's Analysis

A. Asset-1: 220/132 kV, 2×80/100 MVA Substation at Mazra:

3.6.13 The Commission has reviewed the IDC and DC claimed on the basis of the Auditor's Certificate submitted by the Petitioner. The Petitioner has claimed IDC of Rs. 4.34 Cr. and DC of Rs. 2.75 Cr. against the DPR approved amount of Rs.2.81 Cr. and Rs.8.14 Cr., respectively. The details of which are depicted in the Table as under:

Table 29: IDC and Departmental charges claimed by Petitioner for Asset-1 (Rs. Cr.)

Particulars	DPR	As on COD	Auditor's Certificate
Interest During Construction (IDC)	2.81	4.34	4.34
Departmental Charges (DC)	8.14	2.75	2.75

3.6.14 The Commission observed that the Petitioner has not submitted proper details, working and the basis for consideration of IDC and DC and accordingly, sought justification on assumptions for consideration of DC and IDC in the Petition.

3.6.15 The Petitioner has submitted the Departmental Charges (DC) as on COD as Rs. 2.75 Cr. against the DPR approved value of Rs. 8.14 Cr. Further, in response to the deficiency letter, the Petitioner has submitted the Auditor's Certificate mentioning the DC amount of Rs. 2.75 Cr.

3.6.16 The Commission has observed that the Petitioner in the DPR has computed the DC of Rs. 8.14 Cr. as 11% of hard cost (Supply & Erection + Cost of Land + Cost of residential Colony). The Commission has allowed the minimum of normative DC and actual departmental charges. Since the actual DC as on COD are lower than 11% of the approved hard cost, actual DCs as on COD have been considered. Accordingly, the DC for Asset-1 is approved as follows:

Table 30: DC approved by the Commission for Asset-1 (Rs. Cr.)

Particular	DPR	As on COD	Auditor's Certificate	Approved
Asset-1	8.14	2.75	2.75	2.75

3.6.17 The Commission, in order to authenticate the claim, sought detailed computation of IDC considered consisting of date of drawl of debt, amount of debt, etc. However, despite several communications, the Petitioner could not submit the detailed working of IDC as per the desired information.

3.6.18 The project was envisaged to be completed in 24 months as per the contract awarded by the Petitioner. However, the actual time of execution of the project was higher by almost 31 months and 14 days. From the submissions of the Petitioner, the following reasons were identified to be the major reasons for time overrun:

Table 31: Reasons for time over-run for Asset-1

S. No.	Period of Delay	Net Delay (Months)	Effective Delay w.r.t SCOD i.e. 27.03.2024 (months)	Description of Hindrances
1	15.08.2019 to June 2020	10 months and 15 days	Period falls prior to SCOD. However,	Delay in Tree Felling

S. No.	Period of Delay	Net Delay (Months)	Effective Delay w.r.t SCOD i.e. 27.03.2024 (months)	Description of Hindrances
2	May 2020 to August 2020	4 months	encountering these delays lead to slippages in project execution which ultimately delayed COD	Delay Due to COVID -19 Pandemic
3	22.10.2020 to 26.03.2021	5 months and 4 days		Delay due to change in Route and Scope of Work
4	April 2021 to June 2021	3 months		Due to 2nd COVID Wave
5	December 2019 to November 2023	3 years and 11 months	1.5 (w.e.f. December 2019)	Inclement Weather Conditions
6	Specific period cannot be provided as there was enhancement of LOA Quantities		2	Delay on Account of Increased Scope of Work
7	17.08.2021 to 28.09.2022	13 months and 11 days	13.5	Extension of 220 kV GIS Bay at Karian Substation
8	26.08.2022 to 29.07.2023	11 months and 3 days	11	Internal Road Work, Yard PCC Graveling, drain work & NIFPS Tank work
9	Upto 31.12.2023		28	Delay in execution of Work of Retaining Wall 110 meter near Culvert and Nallah
10	19.06.2019 to 17.07.2023	4 years and 28 days	23	Septic Tank
11	(March 2023 to November 2023) & (December 2023 to COD)	8 months & 3 months and 27 days	=12(8+4)	Delay in attending observation during Pre-Commissioning testing and charging/commissioning of 220/ 132kV Mazra Substation
	Total		**31 months and 14 days**	

3.6.19 The Commission has observed that the major reasons for time overrun include delay due to tree felling, COVID-19 Pandemic, change in Route and Scope of Work, extension of 220 kV GIS Bay at Karian Substation, Internal Road Work, Yard PCC Graveling, drain work & NIFPS Tank work, finalisation of the site for construction of Septic Tank, execution of Work of Retaining Wall of 110 of meter near Culvert and Nallah, delay in attending observation during Pre-Commissioning testing and charging/commissioning of 220/132kV Mazra Substation, meteorological conditions, ROW issues and getting approval from Chief Electrical Inspector. The charging of the Asset-1 was finally achieved on 27.03.2024 with an overall delay of around 31 months and 14 days. The Commission is of the view that the delay could have been avoided by proper planning and timely taking up the matters with the concerned competent agencies and authorities.

3.6.20 Further, the Commission is of the view that it would be unreasonable to consider that each individual activity led to the overall delay of almost 31 months and 14 days in project execution, certain activities could have been undertaken in parallel, and the delay could have been averted by proper planning and follow up at the Petitioner's end.

3.6.21 In addition, though the Petitioner provided the details w.r.t. time overrun mentioned dates when issues emerged, or activities completed but did not mention as how each activity had impacted the overall timeline of the project and whether other activities could have been planned in a manner to avoid time overrun.

3.6.22 The Petitioner has submitted IDC of Rs. 4.34 Cr. as on COD, against the DPR approved IDC of Rs. 2.81 Cr. Further, in response to the deficiency letter, the Petitioner has submitted the Auditor's Certificate mentioning the IDC amount of Rs. 4.34 Cr. along with the calculation methodology including date of drawl of debt, amount of debt, etc.

3.6.23 In response to the Commission's query regarding the rate of interest, the Petitioner has submitted the loan agreement signed between the HPPTCL and the GoHP specifying the rate of interest as 10%. Further, the Commission has considered a project duration of 24 months as per the contract to estimate the benchmark IDC.

3.6.24 The Commission notes that the Petitioner has performed debt restructuring for Asset-1, as informed by the Petitioner. The Commission for the purpose of IDC calculation has considered the restructured loan.

Table 32: Restructuring of Debt for Asset-1 for IDC Computation

Particular	Formula	Approved	%	Details
Approved Hard Cost	A	68.67		
Departmental Charges (DC)	B	2.75		
Hard Cost including DC	C=A+B	71.42		
Funding requirement	D=C	71.42		
Normative Debt	E=80% of D	57.14		
Normative Equity	F=20% of D	14.28		
Debt Restructuring				
Interest led Loan @ 10% RoI	G=10% of E	5.71	8.00%	10% of disbursed loan
Interest Free Loan	H=80% of E	45.71	64.00%	80% of disbursed loan
Equity	I=(10% of E + F)	20.00	28.00%	10% of disbursed loan + Equity component

3.6.25 For assessing the benchmark IDC, the Commission has considered the normative debt as per the DPR at 80% of approved hard cost including DC. However, based on the restructuring of loan undertaken by the Petitioner, the Commission has considered 10% of the normative loan (Rs. 5.71 Cr.) for calculating the benchmark IDC. In addition, the Commission has considered the interest rate at 10% as per the Loan agreement.

3.6.26 Further, as the project duration is 24 months, the Commission has considered debt phasing as 40% and 60% in year 1 and year-2 respectively, as per the DPR.

3.6.27 Thus, the benchmark IDC computed for Asset-1 is summarized as follows:

Table 33: Computation of benchmark IDC for Asset-1 (Rs. Cr.)

Particulars	Unit	Year I	Year II	Total
		Qtr-1	Qtr-2	
Debt disbursement	%	40%	60%	**100%**
Opening Debt (a)	Rs. Cr.	0	2.29	
Addition during the year (b)	Rs. Cr.	2.29	3.42	5.71
Closing Debt (c)	Rs. Cr.	**2.29**	**5.71**	
Average Debt (d=(a+c)/2)	Rs. Cr.	1.14	4.00	
Interest rate (e)	%	10%	10%	
Total IDC (f=d*e)	**Rs. Cr.**	**0.11**	**0.40**	**0.51**

3.6.28 Against the benchmark IDC of Rs. 0.51 Cr., the Petitioner has claimed IDC of Rs. 4.34 Cr. as on COD for the Project.

3.6.29 As discussed above, the Commission is of the view that certain activities could have been undertaken in parallel, and the delay could have been averted by proper planning and follow up at the Petitioner's end. The Commission, therefore, decides to allow sharing of difference amount of IDC (over and above the normative IDC) between the Petitioner and beneficiaries in equal ratio (i.e., 50:50). The computation is provided as follows:

Table 34: IDC Approved by the Commission for Asset-1 (Rs. Cr.)

Particular	Benchmark (A)	Actual /Claimed (B)	Difference (C=B-A)	Approved (A+50%*C)
Asset-1	0.51	4.34	3.83	2.43

3.6.30 In line with the Hard Cost, IDC and DC approved in preceding sections, the approved project cost as on COD vis-à-vis the project cost claimed by the Petitioner for the Project is summarized in the following table:

Table 35: Claimed and Approved Project Cost for Asset-1 (Rs. Cr.)

S. No.	Particulars	Claimed as on COD	Approved as on COD
	Asset-1		
a)	Supply	51.84	51.84
b)	Services	15.15	15.15
c)	Miscellaneous Expenses	1.67	1.67
d)	**Hard Cost**	**68.67**	**68.67**
1)	IDC	4.34	2.43
2)	Departmental Charges	2.76	2.76
	Total	**75.76**	**73.85**

3.6.31 The Commission approves the cost under Supply, Services, Miscellaneous Expenses, IDC and DC on a provisional basis. The same shall be subject to review at the time of truing-up.

B. Asset-2: 220 kV D/C Mazra-Karian Transmission Line :

3.6.32 The Commission has reviewed the IDC and DC claimed based on the Auditor's Certificate submitted by the Petitioner. The Petitioner has claimed IDC of Rs. 4.42 Cr. and DC of Rs. 2.86 Cr. against the DPR approved amount of Rs. 1.06 Cr. and Rs. 3.07 Cr., respectively, as depicted in Table as under:

Table 36: IDC and Departmental charges claimed by Petitioner for Asset-2 (Rs. Cr.)

Particulars	DPR	As on COD	Auditor's Certificate
Interest During Construction (IDC)	1.06	4.42	4.42
Departmental Charges (DC)	3.07	2.86	2.86

3.6.33 The Commission observed that the Petitioner has not submitted proper details, working and the basis for consideration of IDC and DC and accordingly, sought justification on assumptions for consideration of DC and IDC in the Petition.

3.6.34 The Petitioner has claimed the Departmental Charges (DC) as on COD as Rs. 2.86 Cr. against the DPR approved value of Rs.3.07 Cr. Further, in response to deficiency letter, the Petitioner has submitted the Auditor's Certificate mentioning the DC amount of Rs.2.86 Cr.

3.6.35 The Commission has allowed the minimum of normative DC and actual departmental charges. Since the actual departmental charges on COD are lower than 11% of the approved hard cost, actual departmental charges as on COD have been considered. Accordingly, the DC for Asset-2 is approved as follows:

Table 37: DC approved by the Commission for Asset-2 (Rs. Cr.)

Particular	DPR	As on COD	Auditor's Certificate	Approved
Asset-2	3.07	2.86	2.86	2.86

3.6.36 The Commission in order to authenticate the claim, sought detailed computation of IDC considered consisting of date of drawl of debt, amount of debt, computation of IDC, etc. However, despite several submissions, the Petitioner could not submit the detailed working of IDC as per the desired format.

3.6.37 The project was envisaged to be completed in 24 months as per the contract awarded by the Petitioner, however, the actual time of execution of the project was higher by almost 38 months and 10 days. From the submissions of the Petitioner, the following reasons were identified to be the major reasons for time overrun:

Table 38: Reasons for time over-run for Asset-2

S. No.	Period of Delay	Net Delay (Months)	Effective Delay w.r.t SCOD i.e. 23.11.2020 (months)	Description of Hindrances
1	March 2020 to August 2020	6 months	6	Delay due to Extensive stoppage & subsequent slowness of work at site due to COVID-19 – 1st Wave
2	April 2021 to June 2021	3 months	9	Due to 2nd COVID Wave
3	26.04.2021 to 18.09.2021	4 months and 23 days	13	Non-availability of Power Shutdown

S. No.	Period of Delay	Net Delay (Months)	Effective Delay w.r.t SCOD i.e. 23.11.2020 (months)	Description of Hindrances
4	14.12.2022 to deemed COD	15 months and 13 day	Power flow started in the month of November 2024 due to delay not attributable to HPPTCL; 28	Delay in charging of Mazra-Chamera Section
5	16.02.2024 to 20.11.2024	9 months	35	Reason for claiming deemed COD
	Total		**38 months and 10 days**	

3.6.38 The Commission has observed that the major reasons for time overrun include COVID-19 pandemic, non-availability of Power Shutdowns, delay in charging of Mazra-Chamera Section, signing of the connection agreement with HPSEBL which could have been avoided by proper planning before initiation of the project. Undisputedly, the Petitioner is having significant experience in construction of Sub-stations and Transmission lines and other related assets and was aware about the weather conditions prevailing in the State of Himachal Pradesh. Thus, the Commission is of the view that the above delay of 38 months and 10 days could have been avoided by proper planning and timely taking up the matters with the concerned competent agencies and authorities.

3.6.39 In addition, the Commission has considered the delay of Covid-19 Pandemic under force majeure condition. However, it would be unreasonable to consider that each individual activity led to the overall delay of almost 38 months and 10 days in project execution. The Commission is of the view that certain activities could have been undertaken in parallel, and the delay could have been averted by proper planning and follow up at the Petitioner's end.

3.6.40 In addition, the details provided by the Petitioner w.r.t. time overrun mentioned dates when issues emerged, or activities completed but did not mention as how each activity had impacted the overall timeline of the project and whether other activities could have been planned in a manner to avoid time overrun.

3.6.41 The Petitioner has submitted the IDC of Rs. 4.42 Cr. as on COD against the DPR approved IDC of Rs. 1.06 Cr. Further, in response to the deficiency letter, the Petitioner has submitted the Auditor's Certificate mentioning the IDC amount of Rs. 4.42 Cr. along with the calculation methodology including date of drawl of debt, amount of debt, etc.

3.6.42 In response to the Commission's query regarding the rate of interest, the Petitioner has submitted the loan agreement signed between the HPPTCL and the GoHP specifying the rate of interest as 10%. Further, the Commission has considered a project duration of 24 months as per the contract to estimate the benchmark IDC.

3.6.43 The Commission notes that the Petitioner has performed debt restructuring for Asset-2, as informed by the Petitioner. The Commission for the purpose of IDC calculation has considered the restructured loan.

Table 39: Restructuring of Debt for Asset-2 for IDC Computation

Particular	Formula	Approved	%	Details
Approved Hard Cost	A	43.06		
Departmental Charges (DC)	B	2.86		
Hard Cost including DC	C=A+B	45.93		
Funding requirement	D=C	45.93		
Normative Debt	E=80% of D	34.44		
Normative Equity	F=20% of D	11.48		
Debt Restructuring				
Interest led Loan @ 10% RoI	G=10% of E	3.44	7.50%	10% of disbursed loan
Interest Free Loan	H=80% of E	27.56	60.00%	80% of disbursed loan
Equity	I=(10% of E + F)	14.93	32.50%	10% of disbursed loan + Equity component

3.6.44 For assessing the benchmark IDC, the Commission has considered the normative debt as per the DPR at 80% of approved hard cost including DC. However, based on the restructuring of loan undertaken by the Petitioner, the Commission has considered 10% of the normative loan (Rs. 3.44 Cr.) for calculating the benchmark IDC. In addition, the Commission has considered interest rate of 10% as per the Loan agreement.

3.6.45 Further, as the project duration is 24 months, the Commission has considered debt phasing as 40% and 60% in Year-1 and Year-2 respectively, as per the DPR.

3.6.46 The benchmark IDC computed for Asset-2 is summarized as follows:

Table 40: Computation of benchmark IDC for Asset-2 (Rs. Cr.)

Particulars	Unit	Year I Qtr-1	Year I Qtr-2	Total
Debt disbursement	%	40%	60%	**100%**
Opening Debt (a)	Rs. Cr.	-	1.38	
Addition during the year (b)	Rs. Cr.	1.38	2.07	3.44
Closing Debt (c)	Rs. Cr.	**1.38**	**3.44**	
Average Debt (d=(a+c)/2)	Rs. Cr.	0.69	2.41	
Interest rate (e)	%	10%	10%	
Total IDC (f=d*e)	**Rs. Cr.**	**0.07**	**0.24**	**0.31**

3.6.47 Against the benchmark IDC of Rs. 0.31 Cr., the Petitioner has claimed IDC of Rs. 4.42 Cr. as on COD for the Project. The Petitioner has submitted the computation and the Auditor's Certificate in this regard.

3.6.48 As discussed above, the Commission is of the view that certain activities could have been undertaken in parallel, and the delay could have been averted by proper planning and follow up at the Petitioner's end. The Commission, therefore, decides to allow sharing of difference amounts of IDC (over and above the normative IDC) between the Petitioner and beneficiaries in equal ratio (i.e., 50:50). The computation is provided as follows:

Table 41: IDC Approved by the Commission for Asset-2 (Rs. Cr.)

Particular	Benchmark (A)	Actual/Claimed (B)	Difference (C=B-A)	Approved (A+50%*C)
Asset-2	0.31	4.42	4.11	2.37

3.6.49 In line with the Hard Cost, IDC and Departmental Charges approved in preceding sections, the approved project cost as on COD vis-à-vis the project cost claimed by the Petitioner for the Project is summarized in the following table:

Table 42: Claimed and Approved Project Cost for Asset-2 (Rs. Cr.)

S. No.	Particulars	Claimed as on COD	Approved as on COD
	Asset-2		
a)	Supply	21.48	21.48
b)	Services	12.98	12.98
c)	Miscellaneous Expenses	8.60	8.60
d)	**Hard Cost**	**43.06**	**43.06**
1)	IDC	4.42	2.37
2)	Departmental Charges	2.86	2.86
	Total	**50.35**	**48.29**

3.6.50 The Commission approves the cost under Supply, Services, Miscellaneous Expenses, IDC and DC on a provisional basis. The same shall be subject to review at the time of truing-up.

C. Asset-3: LILO of 132 kV Kurthla-Bathri D/C line at 220/132 kV Mazra Substation :

3.6.51 The Commission has reviewed the IDC and DC claimed with respect to the Auditor's Certificate provided by the Petitioner. The Petitioner has claimed IDC of Rs. 0.66 Cr. and DC of Rs. 0.61 Cr. against the DPR approved amount of Rs. 0.97 Cr. and Rs. 1.18 Cr. respectively, as depicted in Table as under:

Table 43: IDC and Departmental charges claimed by Petitioner for Asset-3 (Rs. Cr.)

Particulars	DPR	As on COD	Auditor's Certificate
Interest During Construction (IDC)	0.97	0.66	0.66
Departmental Charges (DC)	1.18	0.61	0.61

3.6.52 The Commission observed that the Petitioner has not submitted proper details, working and the basis for consideration of IDC and DC and accordingly, sought justification on assumptions for consideration of DC and IDC.

3.6.53 The Petitioner has submitted the Departmental Charges (DC) as on COD as Rs. 0.61 Cr. against the DPR approved value of Rs. 1.18 Cr. Further, in response to the deficiency letter, the Petitioner has submitted the Auditor's Certificate mentioning the DC amount of Rs. 0.61 Cr.

3.6.54 The Commission has allowed the minimum of normative charges and actual departmental charges. Since the actual departmental charges on COD are lower than 11% of the approved hard cost, actual departmental charges as on COD have been considered. Accordingly, the DC for Asset-3 are approved as follows:

Table 44: DC approved by the Commission for Asset-3 (Rs. Cr.)

Particular	DPR	As on COD	Auditor's Certificate	Approved
Asset-3	1.18	0.61	0.61	0.61

3.6.55 The Commission, in order to authenticate the claim, sought detailed computation of IDC considered consisting of date of drawl of debt, amount of debt, computation of IDC, etc. However, despite several submissions, the Petitioner could not submit the detailed working of IDC as per the desired format.

3.6.56 The project was envisaged to be completed in 15 months as per the contract awarded by the Petitioner. However, the actual time of execution of the project was higher by almost 30 months and 2 days. From the submissions of the Petitioner, the following reasons were identified to be the major reasons for time overrun:

Table 45: Reasons for time over-run for Asset-3

S. No.	Period of Delay	Effective Delay w.r.t SCOD i.e. 25.05.2020 (Months)	Description of Hindrances
1	Upto 20.01.2021	Period falls prior to SCOD. However, encountering these delays lead to slippages in project execution which ultimately delayed COD	Delay in Approval of FCA (Forest Conservation Act) case
2	April 2021 to June 2021	6	Delay due to COVID-19 (2nd Wave)
3	April 2022 to deemed COD	23	Non-Readiness of 132 kV Gantry and delay in charging/commissioning of 220/132 kV Majra Substation
4	February 2024 to November 2024	Power flow started in the month of November 2024 due to delay not attributable to HPPTCL	Reason for claiming deemed COD
	Total	**30 months and 2 days**	

3.6.57 The Commission has observed that the major reasons for time overrun include delay in Approval of FCA (Forest Conservation Act) case, COVID-19 (2nd Wave), Non-Readiness of 132 kV Gantry and delay in charging/commissioning of 220/132 kV Majra Substation, signing of the connection agreement with HPSEBL, the charging of the Asset-3. The Commission noted that the delay claimed by the Petitioner could have been avoided by proper planning before initiation of the project as all the delay mentioned are to be taken care during the planning phase only like approval from SLDC for COD dates. Therefore, the Petitioner ought to have taken adequate steps to avoid such delays and, therefore, the Commission is of the view that the above delay of 30 months and 2 days could have been avoided by proper planning and timely taking up the matters with the concerned competent agencies and authorities.

3.6.58 Further, the Commission is of the view that it would be unreasonable to consider that each individual activity led to the overall delay of almost 30 months and 2 days in project execution, as certain activities could have been undertaken in parallel, and the delay could have been averted by proper planning and follow up at the Petitioner's end.

3.6.59 In addition, the details provided by the Petitioner w.r.t. time overrun mentioned dates when issues emerged, or activities were completed but did not mention as how each activity had impacted the overall timeline of the project and whether other activities could have been planned in a manner to avoid time overrun.

3.6.60 The Petitioner has submitted the IDC of Rs. 0.66 Cr. as on COD against the DPR approved IDC of Rs. 0.97 Cr. Further, in response to the deficiency letter, the Petitioner has submitted the Auditor's Certificate mentioning the IDC amount of Rs. 0.66 Cr. along with the calculation methodology including date of drawl of debt, amount of debt, etc.

3.6.61 In response to the Commission's query regarding the rate of interest, the Petitioner has submitted the loan agreement signed between the HPPTCL and the GoHP specifying the rate of interest as 10%. The Commission has considered a project duration of 15 months as per the contract has been considered to estimate the benchmark IDC.

3.6.62 The Commission noted that the Petitioner has performed debt restructuring for Asset-3, as informed by the Petitioner. The Commission for the purpose of IDC calculation has considered the restructured loan.

Table 46: Restructuring of Debt for Asset-3 for IDC Computation

Particular	Formula	Approved	%	Details
Approved Hard Cost	A	**13.18**		
Departmental Charges (DC)	B	**0.61**		
Hard Cost including DC	C=A+B	**13.80**		
Funding requirement	D=C	**13.80**		
Normative Debt	E=80% of D	10.35		
Normative Equity	F=20% of D	3.45		
Debt Restructuring				
Interest led Loan @ 10% RoI	G=10% of E	1.03	7.50%	10% of disbursed loan
Interest Free Loan	H=80% of E	8.28	60.00%	80% of disbursed loan
Equity	I=(10% of E + F)	4.48	32.50%	10% of disbursed loan + Equity component

3.6.63 For assessing the benchmark IDC, the Commission has considered the normative debt as per the DPR at 80% of approved hard cost including DC. However, based on the restructuring of loan undertaken by the Petitioner, the Commission has considered 10% of the normative loan (Rs. 1.03 Cr.) for calculating the benchmark IDC. In addition, the Commission has considered the interest rate at 10% as per the Loan agreement.

3.6.64 Further, as the project duration is of 15 months, the Commission has considered debt phasing as 20% for all 5 quarters respectively, as per the DPR. The benchmark IDC computed for Asset-3 is summarized as follows:

Table 47: Computation of benchmark IDC for Asset-3 (Rs. Cr.)

Particulars	Unit	Q1	Q2	Q3	Q4	Q5	Total
Debt disbursement	%	20.00%	20.00%	20.00%	20.00%	20.00%	**100%**
Opening Debt (a)	Rs. Cr.	0	0.21	0.41	0.62	0.83	
Addition during the year (b)	Rs. Cr.	0.21	0.21	0.21	0.21	0.21	1.03
Closing Debt (c)	Rs. Cr.	**0.21**	**0.41**	**0.62**	**0.83**	**1.03**	
Average Debt (d=(a+c)/2)	Rs. Cr.	0.10	0.31	0.52	0.72	0.93	
Interest rate (e)	%	2.50%	2.50%	2.50%	2.50%	2.50%	
Total IDC (f=d*e)	**Rs. Cr.**	**0.00**	**0.01**	**0.01**	**0.02**	**0.02**	**0.06**

3.6.65 Against the benchmark IDC of Rs. 0.06 Cr., the Petitioner has claimed IDC of Rs. 0.66 Cr. as on COD for the Project.

3.6.66 As discussed above, the Commission is of the view that certain activities could have been undertaken in parallel, and the delay could have been averted by proper planning and follow up at the Petitioner's end. The Commission, therefore, decides to allow sharing of difference amounts of IDC (over and above the normative IDC) between the Petitioner and beneficiaries in equal ratio (i.e., 50:50). The computation is provided as follows:

Table 48: IDC Approved by the Commission for Asset-3 (Rs. Cr.)

Particular	Benchmark (A)	Actual (B)	Difference (C=B-A)	Approved (A+50%*C)
Asset-3	0.06	0.66	0.60	0.36

3.6.67 In line with the Hard Cost, IDC and DC approved in preceding sections, the approved project cost as on COD vis-à-vis the project cost claimed by the Petitioner for the Project is summarized in the following table:

Table 49: Claimed and Approved Project Cost for Asset-3 (Rs. Cr.)

S. No.	Particulars	Claimed as on COD	Approved as on COD
	Asset-3		
a)	Supply	3.61	3.61
b)	Services	6.36	6.36
c)	Miscellaneous Expenses	3.22	3.22
d)	**Hard Cost**	**13.18**	**13.18**
1)	IDC	0.66	0.36
2)	Departmental Charges	0.61	0.61
	Total	**14.46**	**14.16**

3.6.68 The Commission approves the cost under Supply, Services, Miscellaneous Expenses, IDC and DC on a provisional basis. The same shall be subject to review at the time of truing-up.

3.7 Project Funding

Petitioner's Submissions

3.7.1 The Petitioner has quoted the Regulation 18 of the HPERC Transmission Tariff Regulations, 2011, which provides as follows:

"18. Debt-equity ratio

For the purpose of determination of the tariff, the equity and outstanding debt as determined for the base year by the Commission shall be considered as given. However, for any fresh capitalization of assets, the Commission shall apply a debt equity ratio of 70:30 on the capitalized amount as approved by the Commission for each year of the control period:

Provided that where equity employed is in excess of 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. The interest rate applicable on the equity in excess of 30% treated as loan has been specified in regulation 20. Where actual equity employed is less than 30%, the actual equity shall be considered."

3.7.2 For Asset-1, as per the DPR, the scheme was originally envisaged to be executed with the debt and equity ratio of 80:20 and the same has accordingly been funded by ADB. The Debt: Equity ratio considered as on COD is as under:

Table 50: Project funding proposed by Petitioner – Asset-1

Particulars	Capital Cost (As per DPR) (Rs. Cr.)	Debt: Equity Ratio as per DPR	Actual Debt: Equity (Rs. Cr.)	Actual Debt: Equity Ratio	Normative Debt: Equity claimed (Rs. Cr.)	Normative Debt: Equity Ratio claimed
Debt	60.4	80.00%	48.00	63.59%	52.85	70.00%
Equity	15.1	20.00%	27.50	36.41%	22.65	30.00%
Project Cost	**75.50**	**100.00%**	**75.50***	**100.00%**	**75.50***	**100.00%**

**As per Petition*

3.7.3 With regards to Asset-2, as per the DPR, the scheme was originally envisaged to be executed with the debt and equity ratio of 75:25 and the same has accordingly been funded by ADB. The Debt:Equity ratio considered as on COD is as under:

Table 51: Project funding proposed by Petitioner – Asset-2

Particulars	Capital Cost (As per DPR) (Rs. Cr.)	Debt: Equity Ratio as per DPR	Actual Debt: Equity (Rs. Cr.)	Actual Debt: Equity Ratio	Normative Debt: Equity claimed (Rs. Cr.)	Normative Debt: Equity Ratio claimed
Debt	26.30	75.00%	33.41	66.35%	35.25	70.00%
Equity	8.77	25.00%	16.94	33.65%	15.11	30.00%

Particulars	Capital Cost (As per DPR) (Rs. Cr.)	Debt: Equity Ratio as per DPR	Actual Debt: Equity (Rs. Cr.)	Actual Debt: Equity Ratio	Normative Debt: Equity claimed (Rs. Cr.)	Normative Debt: Equity Ratio claimed
Total Project Cost	**35.06**	**100.00%**	**50.35**	**100%**	**50.35**	**100.00%**

3.7.4 With regards to Asset-3, as per the DPR, the scheme was originally envisaged to be executed with the debt, grant and equity ratio of 75:25 and the same has accordingly been funded by ADB. The Debt:Equity ratio considered as on COD is as under:

Table 52: Project funding proposed by Petitioner – Asset-3

Particulars	Capital Cost (As per DPR) (Rs. Cr.)	Debt: Equity Ratio as per DPR	Actual Debt: Equity (Rs. Cr.)	Actual Debt: Equity Ratio	Normative Debt: Equity claimed (Rs. Cr.)	Normative Debt: Equity Ratio claimed
Debt	11.52	75.00%	8.56	59.19%	10.12	70.00%
Equity	3.84	25.00%	5.90	40.81%	4.34	30.00%
Project Cost	**15.36**	**100.00%**	**14.46**	**100.00%**	**14.46**	**100.00%**

3.7.5 For Asset-1, 2 and 3, the Petitioner after approval from GoHP, has restructured the Asian Development Bank (ADB) funded loan. Pursuant thereto, an agreement for restructuring of the ADB-funded loan was executed between HPPTCL and the GoHP. Subsequently, the GoHP, formally notified HPPTCL of the restructuring, whereby the key terms and conditions of the existing ADB lending arrangements were modified.

3.7.6 The relevant extract of the Revised ADB Loan agreement is as follows:

"……

2. The second party hereby agrees that: -

*i. **Rate of Interest shall be 10% per annum for 10 % of all disbursements**.*

*ii. **Interest on 10% of total disbursed amount shall start immediately from the date of disbursement which will be payable by HPPTCL to the GoHP.***

iii. 10 % of all disbursement shall be infused as equity by GoHP.

iv. 80 % of all disbursement shall be interest free loan.

v. Principal repayment for 90 % of total disbursed amount will be made in 15 equal annual instalments with a moratorium period of 5 years.

vi. The interest will be repaid as due in January of each financial year. The amount of the interest will be calculated on the above rate and terms up to last day of the preceding month in which the payment is due i.e. 31st December.

vii. The second party agrees to supply such information and maintain accounts in such manner as may be desired by the first party and will be subject to audit.

viii. The transactions under this agreement shall be in Indian Rupees only. The first party agrees and undertakes to further make repayment of loan to Government of India/ Asian Development Bank and second party will have no responsibility towards this.

……"

3.7.7 The following is the Abstract of Funding of Capital Cost for Asset-1, 2 and 3:

Table 53: Abstract of Funding of Capital cost for Asset-1 (Rs. Cr.)

Particulars	Revised Cost based on the Terms of revised Loan Agreement (As on COD)		Debt Equity Claimed (Rs. Cr.)	Debt Equity Claimed (Rs. Cr.)	ACE during FY 2023-24	ACE during FY 2024-25	Total capital cost as on 31.03.2025
	Rs. Cr.	%					
Debt (10% of actual Loan)	4.80	6.36	4.80	4.80			4.80
Normative Debt after restricting Equity to 30%	9.64	12.77	9.64	9.82	0.51	0.61	10.94
Total Debt which is to be serviced	**14.44**	**19.13**	**14.44**	**14.62**			**15.74**
Interest Free Debt (80% of actual Loan)	38.41	50.87	38.41	38.41			38.41
Equity (Restricted to 30%)	**22.65**	**30.00**	**22.65**	**22.73**	**0.22**	0.26	23.21
Total	**75.50**	100.00	**75.50***	**75.76****	**0.73**	**0.87**	**77.36**

**As per Petition*

***As per revised submission in the 1st Data gap*

Table 54: Abstract of Funding of Capital cost for Asset-2 (Rs. Cr.)

Particulars	Revised Cost based on the Terms of revised Loan Agreement (As on Deemed COD)		Debt Equity Claimed (Rs. Cr.)	ACE during FY 2023-24	ACE during FY 2024-25	Total capital cost as on 31.03.2025
	Rs. Cr.	%				
Debt (10% of actual Loan)	3.34	6.64	3.34	-		3.34
Normative Debt after restricting Equity to 30%	5.18	10.28	5.18	0.10	0.06	5.34
Total Debt which is to be serviced	**8.52**	**16.92**	**8.52**	**-**		**8.68**
Interest Free Debt (80% of actual Loan)	26.73	53.08	26.73	-		26.73
Equity (Restricted to 30%)	**15.11**	**30.00**	**15.11**	**0.04**	**0.02**	**15.17**
Total	**50.35**	100.00	**50.35**	**0.14**	**0.10**	**50.58**

Table 55: Abstract of Funding of Capital cost for Asset-3 (Rs. Cr.)

Particulars	Revised Cost based on the Terms of revised Loan Agreement (As on COD)		Debt Equity Claimed (Rs. Cr.)	ACE during FY 2023-24	ACE during FY 2024-25	Total capital cost as on 31.03.2025
	Rs. Cr.	%				
Debt (10% of actual Loan)	0.86	5.92	0.86	-		0.86
Normative Debt after restricting Equity to 30%	2.42	16.73	2.42	0.053	0.284	2.76
Total Debt which is to be serviced	**3.28**	**22.65**	**3.28**	-		**3.61**
Interest Free Debt (80% of actual Loan)	6.85	47.35	6.85	-		6.85
Equity (Restricted to 30%)	**4.33**	**30.00**	**4.33**	0.023	**0.122**	**4.48**
Total	**14.46**	100.00	**14.46**	**0.08**	**0.41**	**14.95**

Commission's Analysis

3.7.8 The Commission has observed that as per DPR, the Assets-1, 2 and 3 were originally envisaged at a debt-equity ratios of 80:20, 75:25 and 75:25 respectively. As per the documents submitted by the Petitioner, it is observed that these Assets have been funded through ADB; however, the funds were received by GoHP and subsequently extended to the Petitioner as loan at an interest rate of 10%.

3.7.9 In response to the deficiency letter, the Petitioner has submitted Debt-Equity structure, Loan Agreement, Sanctioned Letters, Board of Director (BoD) approvals and other relevant documents to verify the Debt and Equity claimed by the Petitioner. The Commission has observed that the Petitioner has revised the actual debt and equity figures for Asset-1, 2 and 3.

3.7.10 The Commission has also observed that the copy of Auditor's Certificate does not specify the original debt-equity funding ratio. Also, no information on source of funding of equity funding, date of infusion, or supporting documentary evidence for the equity infused in the project has been provided. The Petitioner has submitted that equity received from GoHP is on overall basis at the firm level and not on project-specific basis and such equity is allocated across projects based on requirements by the HPPTCL.

3.7.11 The Commission has further observed that ADB has sanctioned loan to the Government of India (GoI) under the Himachal Pradesh Clean Energy Transmission Investment Programme (HPCETIP), which was further channelized to the HPPTCL through GoHP. However, the GoHP has modified the terms and conditions of the financial assistance for extending it to the HPPTCL. Although the entire multilateral funds were received by the State in the ratio of 90% grant and 10% loan from the GoI, the entire amount was extended to the Petitioner as loan carrying interest rate of 10% per annum.

3.7.12 In its previous Orders of funding of the projects of HPPTCL, the Commission had directed the Petitioner to re-negotiate with GoHP and align the terms and conditions of the loan agreements in line with the tripartite agreement among GoHP, ADB and HPPTCL. In compliance, the Petitioner has submitted that GoHP, vide letter dated 04.03.2023, has conveyed approval for restructuring of the ADB loan as 80% of disbursed loan to be converted into interest free loan, 10% of disbursed loan to be kept as interest-bearing loan @10% and remaining 10% of disbursed loan to be converted to equity. It is observed that as per the GoHP letter dated 04.03.2023 and HPPTCL letter dated 04.05.2024, while partial relief has been provided but the entire terms and conditions have not been adopted resulting in additional equity consideration towards the project. The Commission is of the considered view that the debt equity considered against each scheme during the funding stage should be retained and the capital allocation by the GoHP to the Petitioner should be on the same terms & conditions as GoHP has received from the GoI on account of Himachal Pradesh being a special category State. The Petitioner has not been able to produce on record the copy of the agreement between the GoI and Govt. of HP with respect to funding which would have enabled the Commission to consider the submission of the Petitioner as presented. Therefore, for want of sufficient documentary evidence, the Consumers of electricity can't be burdened with higher tariff. In this regard, it is relevant to mention that the Commission has taken a similar view in other matters including the Petitions of the Himachal Pradesh Power Corporation Ltd. (HPPCL), against which Orders have been assailed by the HPPCL before the Hon'ble APTEL.

3.7.13 In view of the above, for the Asset-1, 2 and 3, the Commission has provisionally considered the funding of debt under the ADB scheme as 90% grant and 10% debt. For calculating the grant portion, the Commission has considered 90% of minimum amongst Normative Debt and Actual Debt. Further, after reducing such amount of grant from the total approved Capital cost, the Commission has considered Debt:Equity ratio as 70:30 for the balance amount in line with Regulation 30(2) of the 'HPERC Transmission Tariff Regulations, 2023', which specify the following:

"30. Consumer Contribution, Deposit Work, Grant and Capital Subsidy.-
....
(2) The expenses on such capital expenditure shall be treated as follows:-
....
the debt : equity ratio shall be considered in accordance with Regulation 31, after deducting the amount of financial support received;"

3.7.14 Thus, the Commission relying upon the documentary proof as submitted has approved the project funding as follows:

Table 56: Debt Equity Grant approved by the Commission (Rs. Cr.)

Particulars	Claimed (As on COD)		Approved (As on COD)	
	Capital cost	% of Funding	Capital cost	% of Funding
Asset-1				
Total Cost	**75.76**		**73.85**	
Normative Debt (A)			59.08	80.00%

Particulars	Claimed (As on COD)		Approved (As on COD)	
	Capital cost	% of Funding	Capital cost	% of Funding
Actual Debt (B)			48.00	
Grant (90%*minimum (A, B))			43.20	90.00%
Balance Requirement			**30.65**	
Debt	48.01	66.37%	21.46	70.00%
Equity	27.75	36.63%	9.20	30.00%
Total Cost less of grant	**75.76**	**100.00%**	**30.65**	**100.00%**
Asset-2				
Total Cost	**50.35**		**48.29**	
Normative Debt (A)			36.22	75.00%
Actual Debt (B)			26.30	
Grant (90%*minimum (A, B))			23.67	90.00%
Balance Requirement			**24.62**	
Debt	35.25	70.00%	17.24	70.00%
Equity	15.11	30.00%	7.39	30.00%
Total Cost less of grant	**50.35**	**100.00%**	**24.62**	**100.00%**
Asset-3				
Total Cost	**14.46**		**14.16**	
Normative Debt (A)			10.62	75.00%
Actual Debt (B)			8.56	
Grant (90%*minimum (A, B))			7.70	90.00%
Balance Requirement			**6.46**	
Debt	10.12	70.00%	4.52	70.00%
Equity	4.34	30.00%	1.94	30.00%
Total Cost less of grant	**14.46**	**100.00%**	**6.46**	**100.00%**

3.8 Additional Capital Expenditure

Petitioner's Submissions

3.8.1 For Asset-1, the Petitioner has projected an Additional Capitalisation Expenditure (ACE) of Rs. 0.73 Cr. (i.e. Rs. 0.73 Cr. + Rs. 0 Cr. for Mazra Station and the 220 kV GIS bay respectively) during FY 2023-24 (from COD to 31.03.2024) and Rs. 0.87 Cr. (i.e., Rs. 0.55 Cr. + Rs. 0.32 Cr. for Mazra Station and the 220 kV GIS bay respectively) for FY 2024-25 in accordance with Regulation 16(1) and Regulation 16(2) of HPERC Transmission Tariff Regulations, 2011. The detail of works under additional capitalization projected are as shown below:-

Table 57: Additional Capitalisation claimed – Asset-1 (Rs. Cr.)

Sr. No.	Particulars	FY 2023-24 (COD to 31.03.2024)	FY 2024-25
1	Erection and Civil Work	0.7203	0.8310
2	Material Supplied	-	0.0387

Sr. No.	Particulars	FY 2023-24 (COD to 31.03.2024)	FY 2024-25
	Sub Total (A)	**0.7203**	**0.8697**
3	Forest Clearance Expenses	0.0028	
4	Right of Way		
5	Tree Compensation Charges		
6	Shifting of Other Lines		
7	Other Miscellaneous Expenses	0.0015	
	Sub Total (B)	**0.0043**	**0.00**
	Total (C) = (A+B)	**0.7246**	**0.00**
8	Overhead Charges	**0.0012**	
9	DC (Departmental Charges)		
10	IDC (Interest During Construction)		
	Total (D)	**0.0012**	**0.00**
	Grand Total (E) = (C+D)	**0.7258**	**0.8697**

3.8.2 For Asset-2, the Petitioner has projected an ACE of Rs. 0.14 Cr. during FY 2023-24 (from COD to 31.03.2024) and Rs. 0.08 Cr. during FY 2024-25 in accordance with Regulation 16(1) and Regulations 16(2) of HPERC Transmission Tariff Regulations, 2011. The detail of works under additional capitalization projected are as shown below:-

Table 58: Additional Capitalisation claimed – Asset-2 (Rs. Cr.)

Sr. No.	Particulars	FY 2023-24 (COD to 31.03.2024)	FY 2024-25
1	Erection and Civil Work	-	-
2	Material Supplied	-	-0.26
	Sub Total (A)	-	**-0.26**
3	Land	-	0.35
4	FCA	0.12	-
5	Right of Way	0.01	-
	Sub Total (B)	**0.13**	-
	Total (C) = (A+B)	**0.13**	**0.35**
6	DC (Departmental Charges)	0.003	-
7	IDC (Interest During Construction)	0.004	-
	Total (D)	**0.007**	-
	Grand Total (E) = (C+D)	**0.14**	**0.08**

3.8.3 For Asset-3, the Petitioner has projected an ACE of Rs. 0.08 Cr. during FY 2023-24 (from COD to 31.03.2024) and Rs. 0.41 Cr. for FY 2024-25 in accordance with Regulation 16(1) and Regulation 16(2) of HPERC Transmission Tariff Regulations, 2011. The detail of works under additional capitalization projected are as shown below:-

Table 59: Additional Capitalisation claimed– Asset-3 (Rs. Cr.)

Sr. No.	Particulars	FY 2023-24 (COD to 31.03.2024)	FY 2024-25
1	Erection and Civil Work	0.03	-0.09
2	Material Supplied	-	0.50
	Sub Total (A)	**0.03**	**0.41**
3	FCA	0.05	-
4	A&G Expense	-	-
5	Legal Expense	-	-
6	Other Misc. Expense	0.003	-
	Sub Total (B)	0.05	0
	Total (C) = (A+B)	**0.08**	**0.41**
7	DC (Departmental Charges)	-	-
8	IDC (Interest During Construction)	-	-
	Total (D)	0	0
	Grand Total (E) = (C+D)	**0.08**	**0.41**

Commission's Analysis

3.8.4 The Regulations 25 & 26 of the 'HPERC Transmission Tariff Regulations, 2023', provide as follows:

"25. Additional Capitalisation within the original scope and upto the cut-off date.-

(1) The additional capital expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:-

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 24 of these Regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The Transmission Licensee shall submit the details of works asset wise/work wise included in the original scope of work alongwith estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.

26. Additional Capitalisation within the original scope and after the cut-off date.-

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence

check:-

(a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;

(b) Change in law or compliance of any existing law;

(c) Liability for works executed prior to the cut-off date;

(d) Force Majeure events;

(e) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

(f) Any additional capital expenditure which has become necessary for efficient operation:

Provided that the approval of additional capital expenditure for efficient operation shall be subject to submission of report on impact assessment done by any reputed third-party technical expert/agency on the benefits realised from previous investments under this head in the last five years.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:-

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these Regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission:

Provided that the claim shall be substantiated with the technical justification duly supported by documentary evidence like test results carried out by an independent agency in case of deterioration of assets, damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level"

3.8.5 In response to the Commission's query, the Petitioner has submitted the Auditor's Certificate for ACE, along with the supporting documents for each expense claimed. The Commission has examined the supporting documents with respect to the amounts claimed towards Additional Capitalisation and finds them to be in order.

3.8.6 The Petitioner has further submitted that all the expenses claimed towards ACE fall within the original scope of work; however, the payments to the contractors were made after the COD. Accordingly, these expenses are claimed as per the provisions of the Regulations mentioned above.

3.8.7 With respect to Asset-1, the Commission has allowed the ACE claimed under supply cost, erection cost, department Charges, change in civil quantities, recovery of ACSR Conductor, Recovery of DG spare materials and EOT crane spare and recovery wrongly made from Sunda Substation based on the verification of payment proofs and Auditor's Certificate submitted by the Petitioner. In addition, the Commission has observed that the actual hard cost for Asset-1 as on COD including post-COD ACE for FY 2023-24 and FY 2024-25 is within the awarded cost as per latest amendment (7th amendment) to LoA. However, the Commission notes that the Petitioner has descoped the 220 kV line bay (i.e., one transmission line feeder bay & two sets of busbar modules) at Karian S/s, which was originally included under the award for Mazra Sub-station and subsequently amended the overall project cost. Thereafter, Siemens was appointed as implementing agency without any competitive bidding process. However, the Commission has allowed the Petitioner's claim in the Capital cost for this component, and the same approach has been followed in respect of the additional capitalization.

3.8.8 With respect to Asset-2, the Commission has allowed the ACE claimed against forest clearance expenses, right of way, departmental Charges, IDC, erection cost, civil cost and expenses towards land, based on the verification of payment proofs and the Auditor's Certificate submitted by the Petitioner. The Commission has further observed that the actual hard cost for Asset-2 as on COD, including post-COD ACE for FY 2023-24 and FY 2024-25 is within the limit of awarded cost post the latest amendment (3rd amendment) to LoA.

3.8.9 With respect to Asset-3, the Commission has allowed the ACE claimed against supply cost, forest clearance expenses, other miscellaneous charges, departmental charges, IDC and variation in civil quantities based on the verification of payment proofs and Auditor's Certificate submitted by the Petitioner. The Commission has further observed that the actual hard cost for Asset-3 as on COD, including post-COD ACE for FY 2023-24 and FY 2024-25 is within the limit of awarded cost post the latest amendment (2nd amendment) to the LoA.

3.8.10 The following table summarises the additional capitalisation approved by the Commission for all the assets:

Table 60: Additional Capitalisation approved by the Commission (Rs. Cr.)

Sr. No.	Particulars	FY 2023-24 (COD to 31.03.2024)	FY 2024-25
Asset-1			
1	Erection and Civil Work	0.7203	0.8310
2	Material Supplied	-	0.0387
	Sub Total (A)	**0.7203**	**0.8697**
3	Forest Clearance Expenses	0.0028	
4	Right of Way		
5	Tree Compensation Charges		
6	Other Miscellaneous Charges	0.0015	
	Sub Total (B)	**0.0043**	**0.00**
	Total (C) = (A+B)	**0.7246**	**0.8697**
7	Overhead Charges	0.0012	
8	DC (Departmental Charges)		
9	IDC (Interest During Construction)		
	Total (D)	0.0012	0.00
	Grand Total (E) = (C+D)	**0.7258**	**0.8697**
Asset-2			
1	Erection and Civil Work	-	-0.0022
2	Material Supplied	-	-0.2615
	Sub Total (A)	-	**-0.2637**
3	Land	-	0.35
4	FCA	0.1211	-
5	Right of Way	0.0102	-
	Sub Total (B)	**0.1313**	-
	Total (C) = (A+B)	**0.1313**	**0.3463**
5	DC (Departmental Charges)	0.0031	-
6	IDC (Interest During Construction)	0.0036	-
	Total (D)	**0.0067**	-
	Grand Total (E) = (C+D)	**0.1380**	**0.0826**
Asset-3			
1	Supply	0.0288	-0.0902
2	Erection	-	0.4960
	Sub Total (A)	**0.0288**	**0.4058**
3	FCA	0.0469	-
4	A&G Expense	-	-
5	Legal Expense	-	-

Sr. No.	Particulars	FY 2023-24 (COD to 31.03.2024)	FY 2024-25
6	Other Misc. Expense	-	-
	Sub Total (B)	0.0469	0
	Total (C) = (A+B)	**0.0757**	**0.4058**
7	DC (Departmental Charges)	**-**	**-**
8	IDC (Interest During Construction)	-	-
	Total (D)	0	0
	Grand Total (E) = (C+D)	**0.0757**	**0.4058**

3.8.11 The funding of the above approved additional capitalization for Asset-1, 2 and 3 has been considered as per the Debt:Equity ratio (70% debt and 30% Equity) of the project as approved above.

4. APPROVAL OF ARR AND TARIFF

4.1 Background

4.1.1 The Petitioner has submitted projections for COD to FY 2023–24 in the present Petition in accordance with the provisions of the HPERC Transmission Tariff Regulations, 2011.

4.1.2 As per the submissions of the Petitioner, ARR for each year of the Control Period has been divided into following elements:

- O&M Expenses;
- Depreciation;
- Interest and Financing Charges;
- Interest on Working Capital;
- Return on Equity

4.1.3 Further, in the additional submissions, the Petitioner has submitted an Interlocutory Application along with the Affidavit dated 26.11.2025, praying the Commission to determine the tariff for the 5th MYT Control Period, covering FY 2024–25 to FY 2028–29, in accordance with Regulation 12(3) of the HPERC Transmission Tariff Regulations, 2023.

4.1.4 The Commission has examined the Petition, Interlocutory Application, and the subsequent submissions made by the Petitioner in response to the deficiency letters, for the purpose of approving the elements of ARR for the period from COD to FY 2028-29. The Petitioner, in the present petition, initially claimed ARR only for FY 2023–24. Further, as the Petitioner has not claimed any ARR parameters for the 5th Control Period in the Interlocutory Application, the Commission has on a suo motu basis, projected the ARR for the 5th MYT Control Period covering FY 2024–25 to FY 2028–29 based on the approved COD.

4.1.5 The Commission has considered the provisions of the HPERC Transmission Tariff Regulations, 2023, Capital cost certificate by statutory auditor, CERC Tariff Regulations, 2019, CERC Tariff Regulations, 2024 and approved capital expenditure and funding plan for Asset-1, 2 and 3 and accordingly approved the ARR for each year.

4.1.6 Further, as discussed in COD section of the previous Chapter, the Commission has approved the recovery of the ARR for transmission assets from the date of actual utilisation of the assets i.e., from 20.11.2024. In line with the approach, the ARR components for the first year have been pro-rated based on the number of days starting from 20.11.2024.

4.1.7 In this Chapter, the Commission has discussed the methodology for computing each component of the ARR including O&M expenses, interest on loan, depreciation, return on equity, working capital requirement and interest, etc. for approving the total ARR for each year from COD till FY 2028-29. The methodology followed and approved values for each component of the ARR are detailed in the subsequent sections.

4.2 O&M Expenses

Petitioner's Submissions

4.2.1 The Petitioner has submitted that as per the HPERC Transmission Tariff Regulations, 2011, Operation and Maintenance Expenses are computed considering the following methodology:

"(3) The O&M expenses for the nth year of the control period shall be approved based on the formula given below:-

O&Mn = R&Mn + EMPn + A&Gn : Where –

'EMPn' = [(EMPn-1) x (1+Gn) x (CPIinflation)] + Provision (Emp);

'A&Gn' = [(A&Gn-1) x (WPIinflation)] + Provision(A&G);

'R&Mn' = K x (GFA n-1) x (WPIinflation) ;

'K' - is a constant (could be expressed in %). Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

'CPIinflation' – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years before the base year;

'WPIinflation' – is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years before the base year;

'EMPn' – employee's cost of the transmission licensee for the nth year (employee cost for the base year would be adjusted for provisions for expenses beyond the control of the licensee and one-time expected expenses, such as recovery/ adjustment of terminal benefits, implication of pay revisions, arrears and interim relief.);

'Provision (Emp)'- Provision corresponding to clauses (iii), (iv) and (v) of sub regulation (1-a) of regulation 13, duly projected for relevant year for expenses beyond control of the Transmission Licensee and expected one-time expenses as specified above;

'A&Gn' – administrative and general costs of the transmission licensee for the nth year;

'Provision(A&G)'-Cost for initiatives or other one-time expenses as proposed by the Transmission licensee and approved by the Commission after prudence check;"

'R&Mn' – Repair and Maintenance costs of the transmission licensee for the nth year;

'GFAn-1' – Gross Fixed Asset of the transmission licensee for the n-1th year;

'Gn' - is a growth factor for the nth year. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking, approved cost by the Commission in past and any other factor that the Commission feels appropriate;

4.2.2 The Petitioner has further submitted that, in the Order dated 1.11.2021, passed in Petition No. 98 of 2020, in the matter of approval of Capital cost and Tariff for the 33/220 kV GIS sub-station at Karian along with the 220 kV D/C transmission line to the PGCIL pooling sub-station at Chamera-II, the Commission has approved the normative Operation and Maintenance (O&M) expenses for the period from FY 2018-19 to FY 2023-24, based on the normative O&M expenses specified in the CERC (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the "CERC Tariff Regulations, 2019"). The Petitioner has further stated that any variation in Operation and Maintenance (O&M) expenses shall be reviewed and considered at the time of true-up.

4.2.3 Accordingly, the Petitioner has projected O&M Expenses based on the number of Sub-station Bays and Line length for Asset-1, 2 and 3 respectively as mentioned in the CERC Regulations from COD to FY 2023-24 as shown in the table below.

Table 61: O&M Expenses claimed by Petitioner (Rs. Lakh)

Particulars	FY24
Asset-1	
Norm – 220 kV Bays (Rs. Lakh per Bay)	18.09
Norm – 132 kV Bays (Rs. Lakh per Bay)	11.05
No. of Bays – 220 kV	6
No. of Bays – 132 kV	9
Norm – 220 kV Transformer (Rs. Lakh per MVA)	0.28
Transformer Capacity – 220 kV	2 x 100
O&M Expenses	**264.34**
Asset-2	
Norm – 220 kV line (Rs. Lakh per Km.)	0.43
220 kV Line Length	18.53
O&M Expenses	**8.02**
Asset-3	
Norm – 132 kV line (Rs. Lakh per Km.)	0.43
132 kV Line Length	7.048
O&M Expenses	**3.05**

Commission's Analysis

4.2.4 The Commission has approved the Commercial Operation Date (COD) of Assets 1, 2, and 3 as 20.11.2024. Accordingly, the O&M expenses is not considered for FY 2023–24. The O&M expense projections have therefore been projected for the 5th Control period from FY 2024–25 to FY 2028–29. Accordingly, the Commission in accordance with the provisions of Regulation 33 of the HPERC Transmission Tariff Regulations, 2023, Operation and Maintenance Expenses are computed considering the following methodology:

"33. Operation and Maintenance (O&M) Expenses.-

…

(4) The O&M expenses for the nth year of the control period shall be approved based on the formula given below:-

O&Mn = R&Mn + EMPn + A&Gn :

Where –

O&Mn = Operation and Maintenance expense for the nth year;

EMPn = Employee Costs for the nth year;

A&Gn = Administrative and General Costs for the nth year;

R&Mn = Repair and Maintenance Costs for the nth year.

(5) The above components shall be computed in the manner specified below:

EMPn = (EMPn-1) x (1+Gn) x (1+CPIinflation);

R&Mn = K x (GFAn-1) x (1+WPIinflation); and

A&Gn = (A&Gn-1) x (1+WPIinflation) +Provision.

Where –

(i) EMPn-1 - Employee Costs for the (n-1)th year;

(ii) A&Gn-1 - Administrative and General Costs for the (n-1)th year;

(iii) Provision: Cost for initiatives or other one-time expenses as proposed by the Transmission Licensee and approved by the Commission after prudence check;

(iv) 'K' is a constant specified by the Commission in %. Value of K for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Transmission Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-a-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

(v) CPIinflation - is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;

(vi) WPIinflation - is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;

(vii) GFAn-1- Gross Fixed Asset of the Transmission Licensee for the (n-1) th year;

(viii) Gn is a growth factor for the nth year and it can be greater than or less than zero based on the actual performance. Value of Gn shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on Transmission Licensee's filings, benchmarking and any other factor that the Commission feels appropriate:

Provided that repair and maintenance expenses as determined shall be utilised towards repair and maintenance works only:

Provided further that, the impact of pay revision (including arrears) shall be allowed on actual during the mid-term performance review or at the end of the control period as per actual/ audited accounts, subject to prudence check and any other factor considered appropriate by the Commission."

4.2.5 The Commission has reviewed the submissions of the Petitioner. As the actual audited O&M expenses for sufficient number of years are not available for all the Assets, it is difficult to ascertain a realistic trend for O&M expenses for the upcoming years. In the absence of any accurate benchmark, the Commission has relied upon the normative O&M expenses prescribed in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 (CERC Tariff Regulations, 2024) for the purpose of year wise estimation of O&M expenses for the 5th Control Period.

4.2.6 As the above regulations provide for O&M expenses for the GIS Sub-Station, based on voltage level, number of circuits and conductor size, the following norms have been considered as per the technical specifications of Asset-1, 2 and 3 for computation of O&M expense as per CERC Tariff Regulations, 2019:

Table 62: Normative O&M Expenses

Item	Unit	FY25	FY26	FY27	FY28	FY29
220 kV	Rs. Lakh/bay	20.67	21.75	22.9	24.10	25.36
132 kV and below	Rs. Lakh/bay	15.78	16.61	17.48	18.40	19.35

4.2.7 Further, the CERC Tariff Regulations, 2024 stipulate that O&M expenses for the GIS Sub-station shall be allowed as worked out considering a factor of 0.70 over the normative O&M expenses for bays as provided in the table above.

4.2.8 Accordingly, the Commission has approved the O&M expenses for each year. Any variation in O&M expenses shall be reviewed and considered at the time of true-up.

4.2.9 The following table provides the O&M expenses approved by the Commission for each year:

Table 63: O&M Expenses approved by Commission (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-1					
Norm – 220 kV Bays (Rs. Lakh per Bay)	14.47	15.23	16.03	16.87	17.75
Norm – 132 kV Bays (Rs. Lakh per Bay)	11.05	11.63	12.24	12.88	13.55
No. of Bays – 220 kV	5	5	5	5	5
No. of Bays – 132 kV	9	9	9	9	9
Norm – 220 kV Transformer (Rs. Lakh per MVA)	0.262	0.276	0.290	0.305	0.322
Transformer Capacity – 220 kV	2 x 100	2 x 100	2 x 100	2 x 100	2 x 100
O&M Expenses (Rs. Cr.)	**2.2416**	**2.3597**	**2.4827**	**2.6127**	**2.7507**
Days of Operation	**132**	**365**	**365**	**366**	**365**
Pro-rated to No. of days in Operation (Rs. Cr.)	**0.8107**	**2.3597**	**2.4827**	**2.6199**	**2.7507**
Asset-2					
Norm – 220 kV line (Rs. Lakh per Km.)	0.37	0.39	0.41	0.43	0.45
220 kV Line Length	18.53	18.53	18.53	18.53	18.53
O&M Expenses (Rs. Cr.)	**0.0684**	**0.0719**	**0.0758**	**0.0797**	**0.0840**
Days of Operation	**132**	**365**	**365**	**366**	**365**
Pro-rated to No. of days in Operation (Rs. Cr.)	**0.0247**	**0.0719**	**0.0758**	**0.0799**	**0.0840**
Asset-3					
Norm – 132 kV line (Rs. Lakh per Km.)	0.369	0.388	0.409	0.430	0.453
132 kV Line Length	7.05	7.05	7.05	7.05	7.05
O&M Expenses (Rs. Cr.)	**0.0260**	**0.0273**	**0.0288**	**0.0303**	**0.0319**
Days of Operation	**132**	**365**	**365**	**366**	**365**
Pro-rated to No. of days in Operation (Rs. Cr.)	**0.0094**	**0.0273**	**0.0288**	**0.0304**	**0.0319**

4.3 Depreciation

Petitioner's Submissions

4.3.1 The Petitioner has submitted the depreciation for FY 2023-24 for Assets-1, 2 and 3 in accordance with the Regulation 23 of the HPERC Transmission Tariff Regulations, 2011 based on the actual capital cost.

4.3.2 In accordance with the Regulations, the depreciation for each year has been worked out by the Petitioner as shown in the following table:

Table 64: Depreciation claimed by Petitioner (Rs. Lakh)

Particulars	FY24
Asset-1	
Opening GFA	7,549.96
Less: Grant/ Consumer Contribution	-
Net Opening GFA	7,549.96
Addition	88.03
Net Closing GFA	7,637.99
Average GFA	7,593.98
Less: Land under full ownership	128.05
Depreciable Value	7,465.93
Rate of Depreciation	5.28%
Depreciation	**394.20**
Asset-2	
Opening GFA	5,035.05
Less: Grant/ Consumer Contribution	-
Net Opening GFA	5,035.05
Addition	13.80
Net Closing GFA	5,048.85
Average GFA	5,041.95
Less: Land under full ownership	174.87
Depreciable Value	4,867.08
Rate of Depreciation	5.28%
Depreciation	**256.98**
Asset-3	
Opening GFA	1,446.12
Less: Grant/ Consumer Contribution	-
Net Opening GFA	1,446.12
Addition	8.04
Net Closing GFA	1,454.16
Average GFA	1,450.14
Less: Land under full ownership	12.36
Depreciable Value	1,437.78
Rate of Depreciation	5.28%
Depreciation	**75.91**

Commission's Analysis

4.3.3 The Commission has approved the depreciation in line with provisions of the Regulation 38 of the HPERC Transmission Tariff Regulations, 2023, which reads as follows:

*"**38. Depreciation***

Depreciation.- (1) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.

(2) Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.

(3) The rate of depreciation for each of the components of the fixed assets based on the useful life of the assets shall be as given in Appendix – I:

Provided that the salvage value of any category of assets given in Appendix -I shall be 10% of the initial cost of the asset.

(4) The rate of depreciation should be based on Straight Line Method (SLM) over the useful life of the assets, after factoring the salvage value of the assets:

Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

(5) The Transmission licensee having fixed asset records for the assets procured before 31st March, 2024 shall have one time option to adopt the new rates for the older assets, if opted by the Transmission Licensee:

Provided that in case the Transmission Licensee does not have an asset record to assess the date of commissioning of assets as per the categorization provided in Appendix– I, the Commission shall allow the existing method of depreciation on the assets already commissioned till the issue of last tariff Order:

Provided that record of the assets being commissioned by the Transmission Licensee during the ongoing FY subsequently shall be properly maintained by the Transmission Licensee and the computation of depreciation of such assets shall be in accordance with sub-regulation (3) above.

(6) Depreciation shall be charged from the first year of operation of the asset:

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(7) A provision of replacement of assets shall be made in the capital investment plan"

4.3.4 The Commission has examined the depreciation proposed by the Petitioner for FY 2023-24. However, since the Commission has considered the COD as 20.11.2024, the depreciation is computed for FY 2024-25 to FY 2028-29. The Commission has arrived on Gross Fixed Assets (GFA) for each year based on the capital cost less of payments received as grants, towards bay charges from the generators (Consumer contribution) and year wise capitalisation approved in the previous Chapter. The

Additional Capitalisation incurred by the Petitioner for the Asset-1, 2 and 3 in FY 2023-24 is considered along with FY 2024-25.

4.3.5 The Commission has considered the depreciation rate as per the Depreciation Schedule of the HPERC Transmission Tariff Regulations, 2023 for the purpose of estimation of depreciation for each year. The actual depreciation will be considered at the weighted average depreciation rates as per norms approved in the HPERC Transmission Tariff Regulations, 2023 at the time of true-up.

4.3.6 The yearly depreciation approved from COD to FY 2028-29 is summarized in the table below:

Table 65: Depreciation approved by Commission (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-1					
Opening GFA	73.8506	32.2461	32.2461	32.2461	32.2461
Less: Grant	43.2000	-	-	-	-
Less: Consumer Contribution	-	-	-	-	-
Net Opening GFA	**30.6506**	**32.2461**	**32.2461**	**32.2461**	**32.2461**
Addition	1.5955	-	-	-	-
Closing GFA	32.2461	32.2461	32.2461	32.2461	32.2461
Average GFA	31.4483	32.2461	32.2461	32.2461	32.2461
Less: Freehold Land	1.2805	1.2805	1.2805	1.2805	1.2805
Depreciable Value	**30.1678**	**30.9656**	**30.9656**	**30.9656**	**30.9656**
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciation	**1.5929**	**1.6350**	**1.6350**	**1.6350**	**1.6350**
Asset-2					
Opening GFA	48.2929	24.8435	24.8435	24.8435	24.8435
Less: Grant	23.6700				
Less: Consumer Contribution	-	-	-	-	-
Net Opening GFA	***24.6229***	***24.8435***	***24.8435***	***24.8435***	***24.8435***
Addition	0.2206	-	-	-	-
Net Closing GFA	24.8435	24.8435	24.8435	24.8435	24.8435
Average GFA	24.7332	24.8435	24.8435	24.8435	24.8435
Less: Freehold Land	1.7487	1.7487	1.7487	1.7487	1.7487
Depreciable Value	**22.9845**	**23.0948**	**23.0948**	**23.0948**	**23.0948**
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciation	**1.2136**	**1.2194**	**1.2194**	**1.2194**	**1.2194**

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-3					
Opening GFA	14.1618	6.9393	6.9393	6.9393	6.9393
Less: Grant	7.7040				
Less: Consumer Contribution					
Net Opening GFA	***6.4578***	***6.9393***	***6.9393***	***6.9393***	***6.9393***
Addition	0.4815	-	-	-	-
Closing GFA	6.9393	6.9393	6.9393	6.9393	6.9393
Average GFA	6.6986	6.9393	6.9393	6.9393	6.9393
Less: Freehold Land	0.1236	0.1236	0.1236	0.1236	0.1236
Depreciable Value	**6.5750**	**6.8157**	**6.8157**	**6.8157**	**6.8157**
Rate of Depreciation	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciation	**0.3472**	**0.3599**	**0.3599**	**0.3599**	**0.3599**

4.4 Interest on Loan

Petitioner's Submissions

4.4.1 The Petitioner has submitted the interest on loan in accordance with the Regulation 20 of the HPERC Transmission Tariff Regulations, 2011, as amended from time to time.

4.4.2 For Asset-1, the Petitioner has considered the Total Debt which is to be serviced after considering the Debt (10% of actual Loan) and normative debt after restricting Equity to 30% as on COD amounting Rs. 14.44 Cr. and additional loan on normative basis for ACE proposed during 2023-24.

4.4.3 For Asset-2, the Petitioner has considered the Total Debt which is to be serviced after considering the Debt (10% of actual Loan) and normative debt after restricting Equity to 30% as on COD as normative loan amounting to Rs. 8.52 Cr. and additional loan on normative basis for ACE proposed during for FY 2023-24.

4.4.4 For Asset-3, the Petitioner has considered the Total Debt which is to be serviced after considering the Debt (10% of actual Loan) and normative debt after restricting Equity to 30% as on COD amounting to Rs. 3.28 Cr.

4.4.5 The Petitioner has considered the interest rate of 10% as per the ADB Loan Agreement read with lending agreement with GoHP for Asset-1, 2 and 3.

4.4.6 The computation of Interest on Loan for all the assets has been provided in the following table:

Table 66: Interest on Loan claimed by Petitioner (Rs. Lakh)

Particulars	FY24
Asset-1	
Opening Balance	1,444.21
Addition	61.62
Repayment	107.72
Closing Balance	1,398.11
Rate of Interest (%)	10.00%
Interest on Loan	**142.12**
Asset-2	
Opening Balance	851.78
Addition	9.66
Repayment	62.11
Closing Balance	799.34
Rate of Interest (%)	10.00%
Interest on Loan	**82.56**
Asset-3	
Opening Balance	327.53
Addition	5.63
Repayment	24.56
Closing Balance	308.60
Rate of Interest (%)	10.00%
Interest on Loan	**31.81**

Commission's Analysis

4.4.7 The Commission has considered the loan amount in line with the project funding approved for the project in the previous chapter.

4.4.8 Regulation 36 of the HPERC Transmission Tariff Regulations, 2023 stipulates the following:

"36. Interest on loan capital

Interest on Loan Capital.- (1) The Transmission Licensee shall provide detailed loanwise, project-wise and utilization- wise details of all the pending loans.

(2) If the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loan.

(3) Actual loan or normative loan, if any, shall be referred as gross normative loan in this Regulation.

(4) The normative loan outstanding as of 1st April of 2024 shall be computed by deducting the cumulative repayment as approved by the Commission (basis as mentioned below) upto 31st March, 2023 from the gross normative loan.

(5) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.

(6) Notwithstanding any moratorium period availed by the Transmission Licensee, the repayment of the loan shall be considered from the first year of the control period as per annual depreciation allowed.

(7) The rate of interest shall be the weighted average rate of interest calculated on the basis of actual loan portfolio at the beginning of each year of the control period, in accordance with terms and conditions of relevant loan agreements, or bonds or non-convertible debentures:

Provided that if no actual loan is outstanding but normative loan is still outstanding, the last available weighted average rate of interest shall be applicable:

Provided further that the interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest:

Provided further that exception shall be made for the existing loans which may have different terms as per the agreements already executed, if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

(8) The Transmission Licensee shall make every effort to refinance the loan as long as it results in net benefit to the users:

Provided that the cost associated with such refinancing shall be eligible to be passed through in tariff and the benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 50:50 between the Transmission Licensee and the users:

Provided further that the Transmission Licensee shall submit the calculation of such benefit to the Commission for its approval."

4.4.9 The Commission has approved the Interest on Loan in accordance with the HPERC Transmission Tariff Regulations, 2023. As the Commission has considered the COD as 20.11.2024, the Interest on Loan is computed for FY 2024-25 to FY 2028-29. Repayment equivalent to approved depreciation has been considered for each year in line with the regulations. Accordingly, the opening and closing loan balances for each year have been considered.

4.4.10 The Commission has considered the debt amount as per the approved funding, including additional capitalization as discussed in Chapter 3 earlier.

4.4.11 Accordingly, the Commission has considered the rate of interest as 10% as applicable in accordance with the terms and conditions of the loan as per agreement between the Petitioner and the GoHP.

4.4.12 It is observed that the rate of interest charged from the Petitioner by the GoHP is 10% which is higher than the rate of interest agreed with the ADB. The Petitioner has submitted that the GoHP levies interest rate at 10% on all loans funded by ADB as per the agreement entered by the GoHP with HPPTCL.

4.4.13 Since ADB provides loan to GoHP which is transferred to the Petitioner for implementation, the rate of interest of 10% is applicable as per the agreement of the Petitioner with GoHP. The Commission is of the view that the rate of 10% is competitive as compared with the rates applicable on other Transmission assets of HPPTCL and borrowings by similar utilities in other States from various sources and, therefore, approves the same for Tariff determination for the Assets.

4.4.14 However, considering that the lending agencies may be charging at lower rate, the Commission directs the Petitioner to negotiate with the GoHP and align the interest rate in line with the rate of interest agreed by the GoHP with ADB. Any efforts in this direction will not only lead to better cost optimisation in the form of lower interest costs but also benefit the Consumers of the State of Himachal Pradesh as a whole. The debt serviced in Additional Capitalisation of incurred by the Petitioner for the Asset-1, 2 and 3 in FY 2023-24 is considered along with FY 2024-25.

4.4.15 The following table provides the Interest on Loan approved by the Commission for each year:

Table 67: Interest on Loan approved by Commission (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-1					
Opening Balance	21.4554	20.9794	19.3444	17.7094	16.0745
Addition	1.1169	-	-	-	-
Repayment	1.5929	1.6350	1.6350	1.6350	1.6350
Closing Balance	20.9794	19.3444	17.7094	16.0745	14.4395
Average Loan Balance	**21.2174**	**20.1619**	**18.5269**	**16.8919**	**15.2570**
Rate of Interest (%)	10.00%	10.00%	10.00%	10.00%	10.00%
Interest on Loan	**2.1217**	**2.0162**	**1.8527**	**1.6892**	**1.5257**
Asset-2					
Opening Balance	17.2361	16.1769	14.9575	13.7381	12.5187
Addition	0.1544	-	-	-	-
Repayment	1.2136	1.2194	1.2194	1.2194	1.2194

Particulars	FY25	FY26	FY27	FY28	FY29
Closing Balance	16.1769	14.9575	13.7381	12.5187	11.2993
Average Loan Balance	**16.7065**	**15.5672**	**14.3478**	**13.1284**	**11.9090**
Rate of Interest (%)	*10.00%*	*10.00%*	*10.00%*	*10.00%*	*10.00%*
Interest on Loan	**1.6706**	**1.5567**	**1.4348**	**1.3128**	**1.1909**
Asset-3					
Opening Balance	4.5205	4.5104	4.1505	3.7906	3.4308
Addition	0.3371	-	-	-	-
Repayment	0.3472	0.3599	0.3599	0.3599	0.3599
Closing Balance	4.5104	4.1505	3.7906	3.4308	3.0709
Average Loan Balance	**4.5154**	**4.3304**	**3.9706**	**3.6107**	**3.2508**
Rate of Interest (%)	*10.00%*	*10.00%*	*10.00%*	*10.00%*	*10.00%*
Interest on Loan	**0.4515**	**0.4330**	**0.3971**	**0.3611**	**0.3251**

4.5 Return on Equity

Petitioner's Submissions

4.5.1 The Petitioner has claimed the Return on Equity (RoE) in accordance with the Regulation 19 of the HPERC Transmission Tariff Regulations, 2011.

4.5.2 For Asset-1, 2 and 3, the Petitioner has submitted that it has considered the Opening Equity as on COD as normative equity corresponding to 30% of the total Project Cost.

4.5.3 The RoE proposed by the Petitioner for each year is summarised in the table as follows:

Table 68: RoE claimed by Petitioner (Rs. Lakh)

Particulars	FY24
Asset-1	
Opening Equity	2,264.99
Addition	26.41
Closing Equity	2,291.40
Average Equity	**2,278.19**
RoE (%)	15.50%
Return on Equity	**353.12**
Asset-2	

Particulars	FY24
Opening Equity	1510.52
Addition	4.14
Closing Equity	1514.66
Average Equity	**1512.59**
RoE (%)	15.50%
Return on Equity	**234.45**
Asset-3	
Opening Equity	433.84
Addition	2.41
Closing Equity	436.25
Average Equity	**435.04**
RoE (%)	15.50%
Return on Equity	**67.43**

Commission's Analysis

4.5.4 Regulation 34 of the HPERC Transmission Tariff Regulations, 2023 stipulates the following:

"34. Return on Equity Capital.-

(1) Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that assets funded by consumer contribution, capital subsidies/ grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Transmission Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation:

Provided that accumulated depreciation, over and above debt repayment, shall be used to reduce the equity base for return on equity after debt repayment is over.

(2) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

(3) Transmission Licensee shall be allowed 14.5% post-tax return on equity:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the transmission system."

4.5.5 Equity corresponding to the Capital cost has been approved by the Commission in the previous Chapter under the head 'Project Funding'. The same has been considered for approving the return on equity. Equity corresponding to additional capitalization has been considered at 30% in the subsequent years. As the Commission has considered the COD as 20.11.2024, the Return on Equity is computed for FY 2024-25 to FY 2028-29.

4.5.6 The Commission has considered rate of return @ 14.50% for approval of RoE for the 5th Control Period. Any tax liability arising on the Petitioner during the Control Period will be trued-up at the end of Control Period/ Mid Term Review based on effective tax rate/ liability. The equity serviced in Additional Capitalisation of incurred by the Petitioner for the Asset-1, 2 and 3 in FY 2023-24 is considered along with FY 2024-25.

4.5.7 Based on the above, the return on equity approved by the Commission is summarised in the table below:

Table 69: RoE approved by Commission (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-1					
Opening Equity	9.1952	9.6738	9.6738	9.6738	9.6738
Addition	0.4787	-	-	-	-
Closing Equity	9.6738	9.6738	9.6738	9.6738	9.6738
Equity Value	**9.4345**	**9.6738**	**9.6738**	**9.6738**	**9.6738**
RoE (%)	14.50%	14.50%	14.50%	14.50%	14.50%
Return on Equity	**1.3680**	**1.4027**	**1.4027**	**1.4027**	**1.4027**
Asset-2					
Opening Equity	7.3869	7.4531	7.4531	7.4531	7.4531
Addition	0.0662	-	-	-	-
Closing Equity	7.4531	7.4531	7.4531	7.4531	7.4531
Equity Value	**7.4200**	**7.4531**	**7.4531**	**7.4531**	**7.4531**
RoE (%)	*14.50%*	*14.50%*	*14.50%*	*14.50%*	*14.50%*
Return on Equity	1.0759	1.0807	1.0807	1.0807	1.0807
Asset-3					
Opening Equity	1.9374	2.0818	2.0818	2.0818	2.0818
Addition	0.1445	-	-	-	-
Closing Equity	2.0818	2.0818	2.0818	2.0818	2.0818
Equity Value	**2.0096**	**2.0818**	**2.0818**	**2.0818**	**2.0818**
RoE (%)	*14.50%*	*14.50%*	*14.50%*	*14.50%*	*14.50%*
Return on Equity	0.2914	0.3019	0.3019	0.3019	0.3019

4.6 Interest on Working Capital (IoWC)

Petitioner's Submissions

4.6.1 The Petitioner has computed interest on working capital as per Regulations 21 and 22 of the HPERC Transmission Tariff Regulations, 2011.

4.6.2 For Asset-1, 2 and 3, the Petitioner has calculated the interest on working capital considering prevalent SBI MCLR as on 01.04.2023 for FY 2023-24 plus 300 basis points. Further, the MCLR rate prevalent as on 01.04.2024 has been considered for remaining control period.

4.6.3 In accordance with the above regulations, the interest on working capital claimed is as shown below:

Table 70: Interest on Working Capital claimed by Petitioner (Rs. Lakh)

Particulars	FY24
Asset-1	
O&M Expenses for 1 month	22.03
Maintenance Spares (at 15% monthly O&M Expenses)	3.30
Receivables for 2 months	196.61
Less: Consumer Security Deposit	-
Total Working Capital	**221.94**
Interest Rate (%)	*11.65%*
Interest on Working Capital	**25.86**
Asset-2	
O&M Expenses for 1 month	0.67
Maintenance Spares (at 15% monthly O&M Expenses)	0.10
Receivables for 2 months	98.94
Less: Consumer Security Deposit	
Total Working Capital	**99.71**
Interest Rate (%)	*11.65%*
Interest on Working Capital	11.62
Asset-3	
O&M Expenses for 1 month	0.25
Maintenance Spares (at 15% monthly O&M Expenses)	0.04
Receivables for 2 months	30.29
Less: Consumer Security Deposit	-
Total Working Capital	**30.59**
Interest Rate (%)	*11.65%*
Interest on Working Capital	3.56

Commission's Analysis

4.6.4 Based on the approved O&M expenses and expected receivables, the Commission has approved the working capital requirements and interest on working capital for the Control Period in accordance with Regulations 37 of the HPERC Transmission Tariff Regulations, 2023.

4.6.5 The relevant clauses of the above regulations are reproduced as follows:

"37. Interest on Working Capital – (1) The working capital shall cover,-

(i) Receivables equivalent to two months of annual fixed charges;

(ii) Maintenance spares @ 15% of annual operation and maintenance expenses; and

(iii) Operation and maintenance expenses for one month.

(2) Rate of interest on working capital shall be on normative basis and shall be considered at the bank rate as on 1st April, 2024 or as on 1st April of the year during the tariff period 2024-29 in which the transmission system including system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2024-29.

(3) Interest on working capital shall be payable on normative basis notwithstanding that the Transmission Licensee has not taken loan for working capital from any outside agency."

4.6.6 According to the provision for computation of interest on working capital, the Commission has considered the rate of interest on working capital as SBI MCLR as on 1st April of each year plus 350 basis points from FY 2024-25 to FY 2028-29. As the Commission has considered the COD as 20.11.2024, the Interest on working capital is computed for FY 2024-25 to FY 2028-29.

4.6.7 The computation for working capital requirement and interest on working capital is shown in the table as follows:

Table 71: Interest on Working Capital approved by Commission (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-1					
O&M Expenses for 1 month	0.1868	0.1966	0.2069	0.2177	0.2292
Maintenance Spares (at 15% monthly O&M Expenses)	0.0280	0.0295	0.0310	0.0327	0.0344
Receivables for 2 months	1.2504	1.2667	1.2593	1.2538	1.2498
Total Working Capital	**1.4652**	**1.4928**	**1.4972**	**1.5042**	**1.5134**
Interest Rate (%)	12.15%	12.50%	12.20%	12.20%	12.20%
Interest on Working Capital	**0.1780**	**0.1866**	**0.1827**	**0.1835**	**0.1846**

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-2					
O&M Expenses for 1 month	0.0057	0.0060	0.0063	0.0066	0.0070
Maintenance Spares (at 15% monthly O&M Expenses)	0.0009	0.0009	0.0009	0.0010	0.0010
Receivables for 2 months	0.6854	0.6689	0.6484	0.6284	0.6084
Total Working Capital	**0.6920**	**0.6758**	**0.6557**	**0.6360**	**0.6164**
Interest Rate (%)	*12.15%*	*12.50%*	*12.20%*	*12.20%*	*12.20%*
Interest on Working Capital	**0.0841**	**0.0845**	**0.0800**	**0.0776**	**0.0752**
Asset-3					
O&M Expenses for 1 month	0.0022	0.0023	0.0024	0.0025	0.0027
Maintenance Spares (at 15% monthly O&M Expenses)	0.0003	0.0003	0.0004	0.0004	0.0004
Receivables for 2 months	0.1899	0.1911	0.1851	0.1792	0.1734
Total Working Capital	**0.1924**	**0.1937**	**0.1879**	**0.1821**	**0.1764**
Interest Rate (%)	12.15%	12.50%	12.20%	12.20%	12.20%
Interest on Working Capital	**0.0234**	**0.0242**	**0.0229**	**0.0222**	**0.0215**

4.7 Aggregate Revenue Requirement

Petitioner's Submissions

4.7.1 The table given below summarizes the proposed Aggregate Revenue Requirement for each year from COD to FY 2023-24 as claimed by the Petitioner.

Table 72: Summary of ARR claimed by Petitioner (Rs. Lakh)

Particulars	FY24
Asset-1	
Depreciation	394.20
Interest on Loan	142.12
Interest on Working Capital	25.86
Return on Equity	353.12
O&M Expenses	264.34
Total ARR – Asset-1	**1,179.63**
Pro-rata for no. of days in operation (Asset-1)	**16.16**
Asset-2	
Depreciation	256.98
Interest on Loan	82.56

Particulars	FY24
Interest on Working Capital	11.62
Return on Equity	234.45
O&M Expenses	8.02
Total ARR – Asset-2	**593.63**
Pro-rata for no. of days in operation (Asset-2)	**8.13***
Asset-3	
Depreciation	75.91
Interest on Loan	31.81
Interest on Working Capital	3.56
Return on Equity	67.43
O&M Expenses	3.05
Total ARR – Asset-3	**181.77**
Pro-rata for no. of days in operation (Asset-3)	**2.49***

**Asset-1, 2 and 3: ARR pro-rated for FY 2023-24 based on COD (27.03.2024) as per the Petition*

4.7.2 In the Interlocutory Application submitted along with the affidavit dated 26.11.2025, the Petitioner has prayed the Commission to determine the tariff for the 5th MYT Control Period from FY 2024-25 to FY 2028-29 in accordance with the Regulation 12(3) of the HPERC Transmission Tariff Regulations, 2023.

Commission's Analysis

4.7.3 The Petitioner has filed the present Petition claiming Annual Revenue Requirement (ARR) only for FY 2023–24. However, the Commission, upon examination of the submissions on record, has approved the Commercial Operation Date (COD) of Assets 1, 2 and 3 as 20.11.2024. In view of the above, ARR for FY 2023–24 is not admissible and has not been considered. Further, it is observed that the Petitioner, in the present Interlocutory Application, has sought to amend the Tariff Petition to include a prayer for determination of tariff for the 5th Control Period i.e. FY 2024-25 to FY 2028-29 under the provisions of the HPERC Transmission Tariff Regulations, 2023. Accordingly, the Commission has computed the ARR for the 5th Control Period, i.e., from FY 2024–25 to FY 2028–29, in accordance with the applicable provisions of the Tariff Regulations.

4.7.4 The Commission has observed that the Petitioner has not claimed any additional capitalisation for the 5th MYT Control Period in its Interlocutory Application submitted. However, as per Regulation 20(2) of the HPERC Transmission Tariff Regulations, 2023, the Commission is empowered to determine the Tariff on Suo-Moto basis. Regulation 20(2) of the HPERC Transmission Tariff Regulations, 2023 is reproduced below for reference:

"20. Determination of Tariff-

…

(2) Notwithstanding anything contained in these Regulations, the Commission shall have, at all times, the authority, either on Suo-motu basis or on a

Petition filed by the Transmission Licensee, to determine the tariff or Fees and Charges, including terms and conditions thereof, of Transmission Licensee:

Provided that such determination of tariff or Fees and Charges may be pursuant to an agreement or arrangement or otherwise whether or not previously approved by the Commission and entered into at any time before or after the applicability of these Regulations."

4.7.5 Accordingly, the Commission has determined the ARR, for the 5th MYT Control Period on provisional basis, subject to review at the time of Mid-Term Review, which is as shown below.

4.7.6 Based on the discussions in sections above, the summary of the Aggregate Revenue Requirement (ARR) approved by the Commission from COD to FY 2028-29 is summarised in the table as follows:

Table 73: Summary of ARR approved by Commission (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Asset-1					
O&M Expenses	2.2416	2.3597	2.4827	2.6127	2.7507
Depreciation	1.5929	1.6350	1.6350	1.6350	1.6350
Interest on Loan	2.1217	2.0162	1.8527	1.6892	1.5257
Interest on Working Capital	0.1780	0.1866	0.1827	0.1835	0.1846
Return on Equity	1.3680	1.4027	1.4027	1.4027	1.4027
Total ARR – Asset-1	**7.5022**	**7.6002**	**7.5558**	**7.5231**	**7.4987**
Pro-rata for no. of days in operation (Asset-1)	**2.7131***	**7.6002**	**7.5558**	**7.5231**	**7.4987**
Asset-2					
O&M Expenses	0.0684	0.0719	0.0758	0.0797	0.0840
Depreciation	1.2136	1.2194	1.2194	1.2194	1.2194
Interest on Loan	1.6706	1.5567	1.4348	1.3128	1.1909
Interest on Working Capital	0.0841	0.0845	0.0800	0.0776	0.0752
Return on Equity	1.0759	1.0807	1.0807	1.0807	1.0807
Total ARR – Asset-2	**4.1126**	**4.0132**	**3.8907**	**3.7702**	**3.6502**
Pro-rata for no. of days in operation (Asset-2)	**1.4873***	**4.0132**	**3.8907**	**3.7702**	**3.6502**
Asset-3					
O&M Expenses	0.0260	0.0273	0.0288	0.0303	0.0319
Depreciation	0.3472	0.3599	0.3599	0.3599	0.3599

Particulars	FY25	FY26	FY27	FY28	FY29
Interest on Loan	0.4515	0.4330	0.3971	0.3611	0.3251
Interest on Working Capital	0.0234	0.0242	0.0229	0.0222	0.0215
Return on Equity	0.2914	0.3019	0.3019	0.3019	0.3019
Total ARR – Asset-3	**1.1395**	**1.1463**	**1.1105**	**1.0753**	**1.0403**
Pro-rata for no. of days in operation (Asset-3)	**0.4121***	**1.1463**	**1.1105**	**1.0753**	**1.0403**

**Asset-1, 2 and 3: ARR pro-rated for FY 2024-25 based on actual utilisation (20.11.2024)*

4.7.7 Further, as per Regulation 12(3) of the HPERC Transmission Tariff Regulations, 2023, the Commission is empowered to grant Interim Tariff relief upto 70%, to avoid financial burden and to ensure smooth operations of the HPPTCL. Regulation 12(3) of the HPERC Transmission Tariff Regulations, 2023 is reproduced below for reference:

"12. Tariff determination-

…

(3) If the information furnished by the Transmission Licensee in the Petition is in accordance with these Regulations, the Commission, in case of a new transmission system or element thereof, through a specific prayer in the tariff application may consider granting interim tariff of up to seventy per cent (70%) of the tariff claimed from the date of commercial operation during the first hearing of the application:"

4.7.8 Therefore, in the interest of justice, equity and to ensure uninterrupted transmission services in the State, the Commission hereby allows the Petitioner to recover the Interim Transmission Charges at 70%, determined for the 5th MYT Control Period as shown below. However, these Interim Transmission Charges determined are subject to review at the time of Mid-Term Review and True-up.

Table 74: Interim Tariff approved for 5th MYT Control Period (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Interim Transmission Charges Recoverable					
Asset-1	**1.8992**	**5.3201**	**5.2890**	**5.2662**	**5.2491**
Asset-2	**1.0411**	**2.8092**	**2.7235**	**2.6392**	**2.5551**
Asset-3	**0.2885**	**0.8024**	**0.7774**	**0.7527**	**0.7282**

4.8 Transmission Charges

Petitioner's Submissions

4.8.1 The Petitioner has submitted that in absence of any tariff, the Petitioner is facing financial hardship in the upkeep of the assets. Therefore, the Commission may approve annual transmission charges which can be recovered from the beneficiaries as per the provisions of the TSA.

Commission's Analysis

4.8.2 The Commission sought information with regards to existing and future beneficiaries of all the assets. In response, the Petitioner has submitted that the HPSEBL is the sole beneficiary for the project. Accordingly, the Petitioner is directed to recover the transmission charges from the identified beneficiary(ies) of the Transmission Assets as per terms and conditions of the TSA(s)/ Open Access Agreements and as per the Regulation 45 of HPERC Transmission Tariff Regulations, 2023.

4.8.3 The Petition is disposed off as above.

-Sd-	-Sd-
(SHASHI KANT JOSHI)	**(YASHWANT SINGH CHOGAL)**
Member	**Member (Law) – Cum Chairman**

Place: Shimla
Dated: 23rd June 2026