Approval of Capital Cost and determination of tariff for 4th Control Period from COD to FY 2023-24 for 220 kV LILO of Panchkula-Kunihar Transmission Line

Himachal Pradesh Power Transmission Corporation Limited

(HPPTCL)

Himachal Pradesh Electricity Regulatory Commission

June 12, 2024

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

PETITION NO: 28/2024

CORAM

Sh. DEVENDRA KUMAR SHARMA

Sh. YASHWANT SINGH CHOGAL

Sh. SHASHI KANT JOSHI

In the matter of:

Approval of Capital Cost and determination of tariff for 4th Control Period from COD to FY 2023-24 for 220 kV LILO of Panchkula-Kunihar Transmission Line under the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011 and subsequent amendments to the Regulations carried thereafter 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 a Petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') for approval of capital cost and determination of tariff for 4th Control Period from COD to FY 2023-24 for 220 kV LILO of Panchkula-Kunihar Transmission Line(hereinafter referred to as the 'Project')under the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2011 as amended from time to time(hereinafter referred to as 'HPERC Transmission Tariff Regulation, 2011') and under Section-62, read with Section-86 of the Electricity Act, 2003 (hereinafter referred to as "the Act").

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. As a result, even post the written submissions, clarifications were sought verbally from the Petitioner.

The Commission has heard the applicant, interveners, stakeholders 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 by the Applicant in its subsequent filings, the responses of the Applicant to the objections and documents available on record, the Commission in exercise of powers vested in it with 86 of the

Electricity Act, 2003 and 12(1) of HPERC Tariff Regulation, 2011 along with its subsequent amendments passes the following Order for determining the capital cost and transmission tariff of 220kV LILO Panchkula-Kunihar Transmission Line from COD to FY 2023-24. While determining the capital cost and Aggregate Revenue Requirement (ARR) for 220 kV LILO of Panchkula-Kunihar Transmission Line 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, 2019 and the HPERC Transmission Regulations, 2011 along with subsequent amendments framed by the Commission. Detailed reasons and approach adopted by the Commission with regard to approval of capital cost and ARR for 220 kV LILO of Panchkula-Kunihar Transmission Line have been summarized in the detailed Order.

-Sd/-	-Sd/-	-Sd/-
(SHASHI KANT JOSHI)	**(YASHWANT SINGH CHOGAL)**	**(DEVENDRA KUMAR SHARMA)**
Member	**Member, Law**	**Chairman**

Shimla

Dated: 12th June, 2024

Table of Contents

List of Tables

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.

1.1.2 Functions of the Commission

As per Section 86 of the Electricity Act, 2003, 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 shall advise the State Government on all or any of the following matters, namely

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

b) promotion of investment in electricity industry;

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

d) 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 provision of Section 14 of the Electricity Act, 2003 (hereinafter referred to as '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 a 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 HPPTCL was declared the State Transmission Utility (STU) by the GoHP vide order dated 10th June, 2010 and as a result thereof the Commission has 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 provisions of Section 61 of the Act.

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 had notified the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011. These Regulations were amended in 2013, 2018 and 2023 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 respectively (The Regulations and the subsequent amendments combined shall be herein after referred to as "HPERC Transmission Tariff Regulations, 2011").

1.3.5 The Commission issued the first Multi-Year Tariff (MYT) Order for HPPTCL for the period FY 2011-12 to FY 2013-14 on 14thJuly,2011 and thereafter for the second Control Period (FY 2014-15 to FY 2018-19) on 10thJune, 2014. The Commission has also issued the Tariff Order on True Up for the FY 2014-2015 to FY 2015-2016 and Mid Term Review for Third Control Period FY 2016-2017 to FY 2018-19. On 29thJune, 2019, the Commission issued the MYT Order for the fourth Control Period (FY 2019-20 to FY 2023-24). Thereafter, the Commission issued the final True-up Order for second Control Period (FY 2014-15 to FY 2018-19) on 28thDecember, 2022.

1.4 Interaction with the Petitioner

1.4.1 The HPPTCL has filed the application/Petition for approval of Capital Cost and determination of Tariff for the period from COD to FY 2023-24 for 220 kV LILO of Panchkula-Kunihar Transmission Line, with the Commission on 03rd March, 2023. 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 17.02.2024. 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 along with the affidavit on 14th June, 2023.

1.4.3 Based on the detailed scrutiny of the Petition, further clarifications/ information were sought by the Commission from time to time. The following submissions made by the Petitioner in response there to, have been taken on record:

Table 1: Communication with the Petitioner

S.No.	Letter from Commission	Response from Petitioner
1	HPERC-F(1)-55/2023-333 dated 17.05.2023	Filling No. 57 of 2023 dated 21.07.2023
2	HPERC-F(1)-55/2023-1472 dated 28.08.2023	Filling No. 57 of 2023 dated 09.01.2024

1.5 Public Hearings

1.5.1 The Interim Order inter alia, included directions 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 Stakeholders comments

S. No.	Name of News Paper	Date of Publication
1.	Amar Ujala	24.02.2024
2.	The Tribune	24.02.2024

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 Act which was published in the newspapers as mentioned in the table:

Table 3: List of Newspapers for Public Notice by the Commission

S. No.	Name of News Paper	Date of Publication
1.	Amar Ujala	28.02.2024
2.	Hindustan Times	28.02.2024

1.5.3 The stakeholders were requested to file their objections by 19th March, 2024. The HPPTCL was required to submit replies to the suggestions/objections to the Commission by 22nd March, 2024 with a copy to the objectors on which the objectors were required to submit their response by 23rd March, 2024.

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 28th March, 2024. 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 considered the submissions made by the Petitioner and the various objections raised by stakeholders carefully 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 kV LILO of Panchkula-Kunihar Transmission Line

2.1.2 Accordingly, the public hearing was conducted on 28.03.2024 in the Commission. The Comments/Suggestions were received on the Petition from the Consumer Representative only. Issues raised by the stakeholder 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.

Stakeholders' Submissions

2.1.3 The Consumer Representative has highlighted that the Petition No. 28, filed by HPPTCL, seeks approval of the capital cost and determination of tariff for the 4th control period starting from COD to FY 2023-24 for the 220 KV LILO of the Panchkula-Kunihar Transmission Line under Section 62, read with Section 86 of the Electricity Act, 2003, and the HPERC (Terms & Conditions for Determination of Generation Tariff) Regulations, 2011, as amended from time to time. The Petition in its present form is not a detailed Petition as required under the Commission's Regulations. It lacks the determination of annual and aggregate fixed charges (AFC) from COD till FY 2023-24, thus making it a vague Petition with very few details provided. It apparently does not meet the requirements under the 'HPERC Transmission Tariff Regulation, 2011'.

Petitioner's Response

2.1.4 The Petitioner has denied the averments made by the stakeholder. Further, the Petitioner submitted that the Petition has been filed in line with the provisions of Section-62 read with Section-86 of the Electricity Act, 2003 and the Regulation 12(1) of HPERC Transmission Tariff Regulation, 2011 and its subsequent amendments.

Commission's Observations

2.1.5 The Commission has noted the observation of the stakeholder. The submitted Petition is in accordance with the 'HPERC Transmission Tariff Regulations, 2011'. Further, the Commission while analyzing the Petition has raised multiple set of queries asking for requisite additional information and clarification required for processing the Petition and determining the Tariff for the 220 kV LILO of the Panchkula-Kunihar Transmission Line. The details of clarification sought and submissions with respect to the same are covered as part of Chapter 3 and 4 of this Order.

Stakeholders' Submissions

2.1.6 The Consumer Representative has highlighted that based on projections for the control period (FY-2023-24) for 220 kV LILO Panchkula-Kunihar Transmission Line, the Petitioner has submitted the proposed annual and aggregate fixed charges (AFC) from COD to FY 2023-24 for the approval of capital cost and tariff determination.

Petitioner's Response

2.1.7 The Petitioner has submitted that the submissions of the stakeholder are a matter of record and do not merit any rejoinder.

Commission's Observations

2.1.8 The Commission has noted down the comments of the stakeholder and has determined the capital cost of the project and tariff as per the provisions of the Regulations and after doing required prudence check.

Stakeholders' Submissions

2.1.9 The Consumer Representative has highlighted that the Petitioner has forecasted the annual revenue requirement (ARR) for FY 22-23 at Rs. 93.12 lakh and for FY 23-24 at Rs. 90.58 lakh based on projected capital and annual costs/charges. However, the claimed O&M expenses of Rs. 51.43 lakh for FY 22-23 and Rs. 53.24 lakh for FY 23-24 appear to be on the higher side and are not substantiated with factual and audited data/accounts.

Petitioner's Response

2.1.10 The Petitioner has denied the submissions made by the stakeholder. Further, the Petitioner has submitted that the O&M expenses for the project asset have been claimed considering the norms of the CERC Tariff Regulation, 2019. The Petitioner prays the Commission to allow the same.

Commission's Observations

2.1.11 The Commission has noted down the comments of the stakeholder and the Petitioner. Further, the Commission has determined the capital cost of the project and tariff as per the provisions of the Regulations and after doing required prudence check.

Stakeholders' Submissions

2.1.12 The Consumer Representative has highlighted that it has been observed and inferred from the Petition that the Petitioner is required to address and justify the observations and queries raised by the Commission on 17.05.2023 and 28.08.2023. Further, the Petitioner is required to prudently work out the annual fixed charges, capital costs, and additional capitalization and the same will be approved by the Commission.

Petitioner's Response

2.1.13 The Petitioner has submitted that they have already submitted the reply to the queries raised by the Commission vide letter dated 18.07.2023 and 08.01.2024.

Commission's Observations

2.1.14 The Commission has noted down the comments of the stakeholder and the Petitioner. The Commission has also scrutinized the additional information and clarification submitted by the Petitioner for determining the Capital Cost. The details of information sought and submissions with respect to the same are covered as part of Chapter 3 of this Order.

Stakeholders' Submissions

2.1.15 The Consumer Representative has highlighted that the Petitioner is required to justify and substantiate the variations in "Hard Costs" (Rs. 4.65 lakh) as claimed in the Petition as on COD vis-à-vis the hard costs as per the 5^{TH} Amendment of the contract (Rs. 4.36 lakh). Further the Petitioner has justified the variation in Supply Costs (Rs. 3.71 lakh) against (Rs. 3.67 lakh), and (Rs. 0.98 lakh) against (Rs. 0.64 lakh). The Commission may not approve such escalation.

Petitioner's Response

2.1.16 The Petitioner has submitted that it has already detailed out the reason for variation in hard cost in the Petition and subsequently submitted the clarification in this regard against the queries raised by the Commission vide letters dated 17.05.2023 and 28.08.2023.

Commission's Observations

2.1.17 The Commission partially concurs with the observation of the stakeholder. However, the Commission while analyzing the Petition has raised multiple set of queries asking for requisite additional information and clarification required for processing the Petition and determining the Capital Cost. The details of clarification sought and submissions with respect to the same are covered as part of Chapter 3 of this Order.

Stakeholders' Submissions

2.1.18 The Consumer Representative has highlighted that no plausible justification is provided for the substantial increase in the cost from Rs. 4.71 Cr. (DPR cost) to the bid price of Rs. 6.10 Cr. The cost is now stated to be revised to Rs. 4.81 Cr. excluding GST, which is still unjustified. Similarly, A&G expenses and Interest During Construction (IDC) of Rs. 0.40 Cr. revised to Rs. 33.47 lakh for 01.04.2022 to 23.06.2022 (COD), and departmental charges of Rs. 0.18 Cr. without adopting a methodology for pro-rata monthly departmental charges are without any plausible justification. The Commission may not allow these costs while deciding the Petition.

Petitioner's Response

2.1.19 The Petitioner has denied the averments made by the stakeholder. Further, the Petitioner has submitted that the detailed justification with respect to cost variation and time overrun has been submitted by the Petitioner in the Petition and further additional clarification has also been submitted against the deficiency letters raised by the Commission. The Petitioner has prayed to allow the same.

Commission's Observations

2.1.20 The Commission has noted down the comments of the stakeholder and the Petitioner. The Commission after scrutiny of the information and clarification submitted by the Petitioner has finalized the capital cost and tariff. Further, details of the same are covered as part of Chapter 3 of this Order.

Stakeholders' Submissions

2.1.21 The Consumer Representative has highlighted that the Petition does not effectively explain the time delay of more than 7 months (from 23.3.2021 to 23.6.2022) as claimed on account of the shutdown. This delay appears to be the result of inefficiency and lack of commitment on the part of the Petitioner to adhere to the project timelines, leading to cost and time overruns. Therefore, the revision claimed and the associated costs in terms of time overrun may not be allowed, as the consumer should not bear the burden for the Petitioner's inefficiencies.

Petitioner's Response

2.1.22 The Petitioner has denied the averments made by the stakeholder. Further, the Petitioner has submitted that the detailed justification with respect to cost variation and time overrun has been submitted by the Petitioner in the Petition and further additional clarification has also been submitted against deficiency letters raised by the Commission. The Petitioner has prayed to allow the same.

Commission's Observations

2.1.23 The Commission has noted down the comments of the stakeholder and the Petitioner. Further, the Commission has scrutinized the additional information and clarification submitted by the Petitioner for determining the Capital Cost. The details sought from the Petitioner and submissions with respect to the same are covered as part of Chapter 3 of this Order.

Stakeholders' Submissions

2.1.24 The Consumer Representative has highlighted that the Petitioner has not justified the claim of ARR of Rs. 93.12 Cr for FY 2022-23 and Rs. 90.58 Cr for FY 2023-24. These amounts are not justified in view of the submissions and observations made above, and the Petitioner may be directed to provide audited and accurate data regarding capital cost and tariff determination to facilitate the approval and determination by the Commission.

Petitioner's Response

2.1.25 The Petitioner has denied the averments made by the stakeholder. Further, the Petitioner has submitted that the detailed justification with respect to cost variation and time overrun has been conveyed in the Petition and additional information has also been submitted against the deficiency letters raised by the Commission. The Petitioner has prayed to allow the same.

Commission's Observations

2.1.26 The Commission has noted down the comments of the stakeholder and the Petitioner. The further details with respect to the same are covered as part of Chapter 3 of this Order.

Stakeholders' Submissions

2.1.27 The Consumer Representative has prayed that the above-mentioned observations and suggestions be considered in the larger interests of the State's consumers while deciding the Petition, and that no additional burden on the Consumers on account of tariff revision be allowed.

Petitioner's Response

2.1.28 The Petitioner has denied the averments made by the stakeholder. Further, the Petitioner has submitted that the detailed justification with respect to cost variation and time overrun has been submitted by the Petitioner in the Petition and further additional information has also been submitted against the deficiency letters raised by the Commission. The Petitioner has prayed to the Commission to allow the same.

Commission's Observations

2.1.29 The Commission has noted down the comments of the stakeholders and the Petitioner.

3. APPROVAL OF CAPITAL COST

3.1 Introduction

3.1.1 The HPPTCL has submitted a Petition for approval of Capital Cost and determination of tariff for the 4th Control Period from COD to FY 2023-24 for 220 kV LILO of Panchkula-Kunihar Transmission Line (hereinafter referred to as the 'Project') in accordance with the provisions of the 'HPERC Transmission Tariff Regulations, 2011'.

3.1.2 As perRegulation 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;

© 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 for the Project and the ARR projected for each year by the Petitioner from COD until the end of the Control Period i.e., FY 2023-24. Multiple set of deficiencies in the Petition were shared with the Petitioner to realistically validate the claims of the Petitioner viz. reasons for cost and time overrun, additional capital expenditure, amendments to contract along with relevant approvals, Interest During Construction (IDC), beneficiary details etc.

3.1.4 The original Petition lacked significant detailing and supporting information to ascertain the capital cost for the Project. The information provided in the Petition was inadequate and lacked justifications with respect to (w.r.t) capital cost, variation in actual cost vis-à-vis awarded cost, time and cost overrun, missing documents and approvals, schedule of debt disbursal etc. for which the Commission has sought additional submissions and supporting documents from the Petitioner through deficiency letters for the purpose of reviewing the capital cost and ARR for the Project. In some of the cases, the information provided by the Petitioner in response to the queries of the Commission 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 the transmission line. The scrutiny and prudence check undertaken by the Commission for approval of capital cost for the Project has been discussed in the following paragraphs.

3.1.6 Relevant technical details and configuration of the transmission line as submitted by the Petitioner is tabulated as follows:

Table 4: Asset Details

Name of Transmission line	No. of Circuits	Type of Line	Type of Conductor	Voltage level	Line Length (Km)	COD
220 kV LILO of Panchkula-Kunihar Transmission Line	Single Circuit (S/C)	AC	ACSR Zebra	220 kV	5.40	23.06.2022

3.2 Summary of the Project

***Petitioner* Submissions**

3.2.1 The 220 kV of 2nd circuit of Panchkula-Kunihar transmission line in district Solan, Himachal Pradesh was required in order to take care of unbalanced loading, proper utilisation of circuit, and to reduce the losses of the system. Currently, only one circuit of 220kV Panchkula-Kunihar transmission line is LILO at Baddi substation. This creates unbalancing in the circuit and low voltage in the Baddi area. The construction of 2nd circuit of 220kV Panchkula-Kunihar shall balance both the circuits and improve voltage profile in the area.

3.2.2 The Petitioner has submitted that the capital cost of the instant project was envisaged as Rs. 595.08 Lakh including Interest During Construction (IDC) of Rs. 40.00 Lakh, Department Charge (DC) of Rs. 63.77 Lakh and Contingency Charges of Rs. 14.31 Lakh as per the scope of work defined in the original DPR.

3.2.3 The Petitioner has submitted that the Board of Director's (BOD) had approved the 220 kV LILO of Panchkula-Kunihar Transmission Line at Rs. 595.08 Lakh in the 42nd Board Meeting held on 24.05.2019. Further, CEA has accorded the approval of the scheme vide 40th Standing Committee Meeting dated 22.06.2018.

3.2.4 The work for the Project was awarded on Turnkey basis through a tendering process to M/s GE T&D Private Limited on 22.02.2020. The awarded contract amounted to Rs. 568.47 Lakh, which includes supplies (Rs. 434.21 Lakh) and erection & civil works (Rs. 134.26 Lakh) with a stipulated completion period of 12 months from the effective date 31.03.2020, culminating on 30.03.2021. Further, the amount of the contract was revised four (04) times and the final revised amount cost was Rs. 467.27 Lakh, which includes supplies (Rs. 391.95 Lakh) and erection & civil works (Rs.75.32Lakh).

3.2.5 The COD of the project was claimed as on 23.06.2022 with the capital cost as on COD of Rs. 523.54 Lakh.

3.2.6 The Petitioner has submitted that the initial contract consisting of Supply and Services was amended four (04) times, the details of which are provided as follows:

Table 5: Summary of Contract Value and Amendments (Rs. Lakh)

Particulars	Supply Contract	Services Contract	Total Contract Cost
Award Price	434.21	134.26	568.47
1st Amendment	443.27	138.46	581.73
2nd Amendment	443.27	140.72	583.99
3rd Amendment	445.89	142.01	587.90
4th Amendment	391.95	75.32	467.27

3.2.7 The following table provides the breakup and variation of claimed capital cost submittedby the Petitioner vis-à-vis the cost as per DPR:

Table 6: Details of Cost Variation in Total Project Cost (Rs. Lakh)

Particulars	DPR Cost (A)	Claimed Cost (B)	Variation (B-A)
Supply and Erection Cost	477.00	465.22	(11.78)
Contingency Charges	14.31	0.00	(14.31)
Departmental Charges (DC)	63.77	17.69	(46.08)
Miscellaneous expense (Tender publication and A&G expense)	0.00	0.27	0.27
Interest during construction (IDC)	40.00	40.36	(0.36)
Total	**595.08**	**523.54**	**(71.54)**

Commission's Analysis

3.2.8 The Commission has reviewed the Petitioner's submissions in detail. The Commission observes that 220 kV LILO of Panchkula-Kunihar transmission line was planned to resolve the voltage issues in the Baddi area by balancing power flows from the Panchkula and the Pinjore areas and enhancing the power reliability as well. In accordance with the Clause-5.2 of the Transmission Service Agreement (TSA) dated 10.02.2012, a supplementary TSA is required to be signed between the parties as and when new Transmission elements owned by HPPTCL come in operation and being utilised by the HPSEBL. Accordingly, the Petitioner has executed the Supplementary Transmission Service Agreement with the HPSEBL on 17.01.2023.

3.2.9 As per the DPR, the Project was originally envisaged at a cost of Rs.595.08 Lakh and was accorded CEA approval vide 40th Standing Committee Meeting, dated 22.06.2018. Further, the BOD approval for the Project was received in the 42ndmeeting held on 24.05.2019. The 'In-Principal' approval for the project was also granted by the HPERC vide letter dated 31.08.2019.

3.2.10 The Commission has analysed the Petition and the supporting documents submitted in detail and found several deficiencies in the information provided. In order to undertake in-depth analysis, the Commission in its various deficiency letters has sought additional information and supporting documents such as approvals of the BOD/competent agencies, details of awards/contracts, correspondences, documents against project funding, payments made to contractors, and COD certificate, etc. In response, the Petitioner subsequently submitted these documents.

3.2.11 Based on the review of the documents and contract agreements, the Commission has noted that the contract was awarded on turnkey basis and it covered the scope of work as *'Design, Engineering, Manufacture, Fabrication, Transportation, Insurance, Loading and Unloading, Storage, Erection, Testing and Commissioning of 2 Nos. of AIS bays and LILO of 2nd Circuit of 220 kV Kunihar-Panchkula Transmission Line'*. The contract was awarded to M/s GE T&D Private Limited on 22.02.2020 at an amount of Rs. 568.47 Lakh, which includes supplies (Rs. 434.21 Lakh) and erection & civil works (Rs. 134.26 Lakh) with a stipulated completion period of 12 months from the effective date 31.03.2020, culminating on 30.03.2021.

3.2.12 The Commission has noted that the Project was commissioned on 23.06.2022 at a cost of Rs. 523.54 Lakh. As part of the Petition, the Petitioner has submitted that the cost claimed as on COD was revised four times. In this regard the Commission sought justification with regard to the amendments. In response, the Petitioner has submitted the detailed justification for the same along with BOQ calculation sheet. Additionally, the Petitioner has submitted that the cost claimed as on COD was again revised post COD vide 5th amendment dated 05.06.2023.

3.2.13 Further, the Commission has sought justification with regard to the 5th amendment in the contract. In response, the Petitioner has submitted that it has made payment of an approximate amount of Rs. 32 Lakh to other contractors i.e., M/s Telegence Pvt. Ltd. and M/s National Enterprises for the work which was not covered under the said work awarded to M/s GE T&D Pvt. Ltd. and it was further revised vide 5th amendment. The Commission has noted down all the contract details as stipulated in the table below:

Table 7: Summary of Contract Value and Amendments (Rs. Lakh)

Particulars	Date of Amendment	Supply Contract	Services Contract	Total Contract Cost
Initial Award	22.02.2020	434.21	134.26	568.47
1st Amendment	08.04.2021	443.27	138.46	581.73
2nd Amendment	30.06.2021	443.27	140.72	583.99
3rd Amendment	17.08.2021	445.89	142.01	587.90
4th Amendment	03.12.2021	391.95	75.32	467.27
Cost as on COD	23.06.2022	366.74	98.48	465.22
5th Amendment	05.06.2023	371.30	64.46	435.77

3.3 Commercial Operation Date (COD) of Asset

***Petitioner* Submissions**

3.3.1 The Petitioner has submitted that the Project was schedule to be commissioned on 30.03.2021. However, the actual date of commissioning of the Project was 23.06.2022.

3.3.2 The Petitioner has submitted that the implementation of the project was delayed by approximately 14.5 months due to reasons entirely beyond their control. The primary reasons for the delay highlighted by the Petitioner were the lockdown resulting from the Covid-19 pandemic, manpower and resource shortages, and technical and commercial issues related to bus bar integration.

***Commission's* Analysis**

3.3.3 As per the submissions of the Petitioner, the Commission has noted that the Petitioner vide letter dated 11.04.2022 had requested the HPSLDC for initial charging/connectivity of bay at Baddi Sub-station along with associated 220 kV Baddi-Kunihar Circuit-2. The HPSLDC vide letter dated 27.04.2022 provided approval for first time charging. Further, the Petitioner has obtained the approval from the 'Chief Electrical Inspector', GoHP, Shimla vide letter dated 15.06.2022. The approval from the NRLDC was received vide letter dated 22.06.2022 and thus the 220kV main bay was finally charged on 23.06.2022. Hence, the COD of the project has been considered as on 23.06.2022.

3.3.4 As per the submissions, it is observed that there has been a delay of over 14.5 months in execution of the project. The Commission based on the submissions of the Petitioner observes that the effective date of start of work was 31.03.2020 as per the contract agreement. However, due to Covid-19 pandemic the Government of India (GoI) imposed lockdown in the country from 23.03.2020 onwards in different phases till 14.07.2020. The Petitioner has also submitted that the Contractor could not carry out any obligation as per the terms and conditions of the contract agreement due to subsequent restrictions even after relaxation in lockdown and has also experienced problems relating to procurement and supply of material and manpower deployment at site.

3.3.5 The Commission also noted that the Petitioner has submitted delays on account of technical issues related to shutdown of the existing system and integration of bus-bar at HPSEBL sub-station.

3.3.6 In view of all the above-mentioned points, the Commission noted that the Schedule COD of the Project was on 30.03.2021. The Commission approves the actual COD of the Project as 23.06.2022 primarily based on the certificates issued by the 'Chief Electrical Inspector-Shimla' and 'NRLDC'. So, the delay in COD of the project was around 14.5 months which was mainly on account of outbreak of COVID-19 pandemic, manpower and resource shortages, and technical and commercial issues related to bus bar integration at HPSEBL Sub-station. The Commission as per the available record has detailed out the project timelines in the following table:

Table 8: Project Timelines

S.No.	Particulars	Date
I	Date of approval from CEA (40th Standing Committee Meeting)	22.06.2018
II	Date of approval from BOD (42nd BOD Meeting)	24.05.2019

S.No.	Particulars	Date
III	Date of approval from HPERC	31.08.2019
IV	Date of Award of Contract to M/s GE T&D Private Limited	22.02.2020
V	Scheduled Commissioning Date of the Project	30.03.2021
VI	Certificate issued by the Electrical Inspectorate, Himachal Pradesh	15.06.2022
VII	Approval issued by NRLDC	22.06.2022
VIII	Actual Commissioning Date of the Project	23.06.2022
IX	Date of Supplementary Transmission Service Agreement between HPPTCL and HPSEBL	17.01.2023

3.4 Energy flow and Nature of Asset

***Petitioner* Submissions**

3.4.1 The Petitioner has submitted that the project is required to improve imbalance in loading and to reduce the losses. Further, the HPSEBL has executed Transmission Service Agreement (TSA) on 17.01.2023.

***Commission's* Analysis**

3.4.2 From the review of the submissions of the Petitioner and the DPR, the Commission has noted that the Baddi-Barotiwala area and Kunihar substation, currently receive the power from both the PGCIL Sub-station-Panchkula and the HVPN Sub-Station Pinjore. Therefore, by commissioning of the LILO of the second circuit of the 220 kV Kunihar-Panchkula line at Baddi, the flows in both circuits has balanced and consequently enhancing the voltage profile in the area which was earlier facing imbalance due to existence of only one connected circuit at the Baddi Sub-Station.

3.4.3 The Commission has noted that the HPSEBL is the beneficiary of the Project for which the HPSEBL and the Petitioner executed a supplementary TSA on 17.01.2023. The same has been discussed in the Para 3.2.8 of this order.

3.5 Capital Cost

***Petitioner* submissions**

3.5.1 The Petitioner has submitted that the contract was awarded on turnkey basis to M/s GE T&D Private Limited on 22.02.2020 at an amount of Rs. 568.47 Lakh, which includes supplies (Rs. 434.21 Lakh) and erection & civil works (Rs. 134.26 Lakh) with a stipulated completion period of 12 months from the effective date 31.03.2020, culminating on 30.03.2021.

3.5.2 The contract underwent four amendments: the first, third and fourth were due to the deviation in quantity, and the second attributed due to additional scope of work. Further, the details of the same are provided as follows:

Table 9: Summary of Contract Value and Amendments

Particulars	Supply Contract	Services Contract	Total Contract Cost	Reasons for Amendment
Award Price	434.21	134.26	568.47	-
1st Amendment	443.27	138.46	581.73	Deviation in quantity
2nd Amendment	443.27	140.72	583.99	Additional scope of work
3rd Amendment	445.89	142.01	587.90	Deviation in quantity
4th Amendment	391.95	75.32	467.27	Deviation in quantity

3.5.3 The Petitioner has submitted that the final awarded cost after all amendments has been Rs. 467.27 Lakh which is below the DPR cost of Rs. 595.08 Lakh (considering only cost against supply & erection).

***Commission's* Analysis**

3.5.4 The Commission observes that the Project cost as per DPR was Rs. 595.08 Lakh which includes Rs. 477.00 Lakh towards Supply & Erection cost, Rs. 14.31 Lakh towards Contingency charges, Rs. 63.77 Lakh towards Departmental Charges and Rs. 40.00 Lakh towards Interest During Construction (IDC). The claimed cost by the Petitioner as on COD has been Rs. 465.22 Lakh. The Commission has undertaken detailed scrutiny of the variation in the actual cost of the transmission line © the DPR.

3.5.5 The Commission with respect to the selection process of Contractor observes that the competitive bidding mechanism was followed by the Petitioner which is in line with the applicable standard government procedures and accordingly the prices were discovered for supplies and services contracts of the project. The contract was awarded to M/s GE T&D Pvt. Ltd. at an amount of Rs. 568.47 Lakh.

3.5.6 As per the subsequent submission of the Petitioner, the Commission has noted that the awarded contract was amended five times owing to the factors such as change in design, reduction of material required, enhancement in scope, etc.

3.5.7 The Commission through various deficiency letters sought additional information and supporting documents including approvals of BOD, details of awards/contracts, correspondences, payments made to contractors, COD certificate, justification for amendments etc. Based on the details provided by the Petitioner, the Commission has outlined the contract revision values as under:

Table 10: Summary of Contract Value and Amendments (Rs. Lakh)

Particulars	Date of Amendment	Supply Contract	Services Contract	Total Contract Cost	Reasons for Amendment
Initial Award	22.02.2020	434.21	134.26	**568.47**	Awarded Amount
1st Amendment	08.04.2021	443.27	138.46	**581.73**	Increase in length of Cables, Earth mat and other related accessories
2nd Amendment	30.06.2021	443.27	140.72	**583.99**	Enhanced scope of work due to dismantling of existing 220 kV terminal equipment which was not part of the main contract
3rd Amendment	17.08.2021	445.89	142.01	**587.90**	Increase in length of Cables, Earth mat and other related accessories
4th Amendment	03.12.2021	391.95	75.32	**467.27**	Reduction in length of Earth mat and other related accessories
Cost as on COD	23.06.2022	366.74	98.48	**465.22**	Claimed amount as on COD
5th Amendment	05.06.2023	371.30	64.46	**435.77**	Due to adjustment in pending payment

3.5.8 The Commission, as per the submissions of the Petitioner, has noted that the reasons for the 1st Amendment in the contract were attributed to increase in the supply cost by Rs. 9.06 Lakh from the original contract value. This was due to increase in quantity of the control cables, insulator strings, LT Cables and Earth mat. Further, with respect to Erection part, the cost of Rs. 4.2 Lakh increased from the original contract value. It was due to the increase in supply items, which increased the cost of transportation and erection.

3.5.9 The Commission has noted that the 2nd, 3rd and 4th Amendments were issued by the Petitioner vide letters dated 30.06.2021, 17.08.2021 and 03.12.2021 respectively. As per these amendment letters, the variation in costs were due to deviation in quantity and additional scope of work.

3.5.10 Further, the cost claimed as on COD (i.e., on 23.06.2022) by the Petitioner is deviated from the 4th Amendment. For supply part, the cost was reduced by Rs. 25.21 Lakh on account of deviation in quantity for copper conductor control cables, fibre optical ground wire and inter utility meter with online software system for each bay. Further, the erection cost has increased by Rs. 23.16 Lakh from the 4th Amendment. In this regard the Commission sought justification from the Petitioner as no specific reason was submitted by the Petitioner. In response, the Petitioner has submitted that it had revised the claimed COD cost vide 5th amendment after finalisation of accounts, which is below than the cost claimed as on COD.

3.5.11 The Commission sought clarification with regard to the variation in cost as on COD and the reasons for carrying out 5th Amendment. The Petitioner in this regard submitted the detailed justification for the variation in supply and erection cost. The Commission noted that the Petitioner has issued the 5th Amendment letter on 05.06.2023 approximately after one year from the COD after finalisation of accounts.

3.5.12 The Commission noted that in the 5th Amendment, the Petitioner has submitted the supply cost as Rs. 371.30 Lakh, which is higher than the cost claimed as on COD, i.e., Rs. 366.74 Lakh. Furthermore, the erection cost was considered as Rs. 64.46 Lakh, which is lower than the cost claimed as on COD, i.e., Rs. 98.48 Lakh.

3.5.13 In view of the variation in actual cost claimed vis-à-vis the 5th amendment, additional clarifications were sought. In response, the Petitioner has submitted that the cost of supply i.e., Rs. 371.30 Lakh as per the 5thamendment consists of the amount of Rs. 4.94 Lakh for design services, which the Petitioner had not booked as on COD in the supply cost. The Petitioner has further clarified that the cost of Rs. 4.94 Lakh for design services (i.e., part of supply cost) were wrongly booked in the 'Erection part' instead of the 'Supply cost part'. Furthermore, the payment of Rs. 0.50 Lakh was wrongly booked in the 'Supply cost' as on COD, which was related to other contractors and not related to this project (i.e., M/s National Enterprises and M/s Telegence Pvt. Ltd.).

3.5.14 Similarly, for the Service or Erection part, the Petitioner has paid an amount of Rs. 31.61 Lakh to M/s Telegence Pvt. Ltd. as on COD, which was not part of the main contract awarded to M/s GE T&D Ltd. Therefore, the Petitioner in the 5th Amendment reduced Rs. 31.61 Lakh which was paid to M/s Telegence Pvt. Ltd.

3.5.15 The Commission has also noted the submissions of the Petitioner submitted against the deficiency letters. However, the Petitioner could not provide detailed justification regarding the payments made to M/s National Enterprises and M/s Telegence Pvt. Ltd.

3.5.16 Based on the submissions of the Petitioner, the Commission, as per para no. 3.5.13, reclassified cost in the supply part and accordingly reduced the cost of Rs. 0.50 Lakh paid to other contractors (i.e., M/s National Enterprises and M/s Telegence Pvt. Ltd.) and added Rs. 4.94 Lakh for design cost (part of supply cost), which was wrongly booked under the erection cost part as on COD. Therefore, the Commission approves Rs. 371.18 Lakh as supply cost, against Rs. 371.30 Lakh which is claimed in the 5th Amendment. The same is tabulated below in the table no.11.

3.5.17 Similarly, for the Service or Erection part, the claimed cost as on COD by the Petitioner was Rs. 98.48 Lakh. The Commission has reduced the wrongly booked design cost of Rs. 4.94 Lakh as on COD from Rs. 98.48 Lakh and has further reduced the payment made to other contractors amounting to Rs. 31.61 Lakh (i.e., M/s Telegence Pvt. Ltd.). Therefore, the Commission approves Rs. 61.93 Lakh as erection cost against Rs. 64.46 Lakh which is claimed in the 5th Amendment. The same is tabulated below in the table no.11.

3.5.18 The Petitioner has initially not submitted the auditor certificate corresponding to the capital cost of the project. The Commission sought an Auditor certificate as on date of COD along with break-up of funding. However, in response, the Petitioner submitted a Provisional Auditor certificate with Rs. 523.54 Lakh as the capital cost. Considering that the project was commissioned in June 2022, the Commission has asked the Petitioner to submit a copy of the final Auditor Certificate. In response, the Petitioner submitted the revised certificate. But the revised certificate submitted by the Petitioner was again a Provisional certificate and the same was merely certified by the internal finance department officials of the Petitioner. In this revised internal certificate, the cost of the transmission line was reflected as Rs. 517.93 Lakh as on COD.

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

Table 11: Hard Cost approved by Commission (Rs. Lakh)

Particulars	Contract Award Cost	Claimed Cost (5th Amendment)	Adjusted Claimed cost	Approved
Supply	434.21	371.30	371.18	371.18
Service/Erection	134.26	64.46	61.93	61.93
Total	**568.47**	**435.77**	**433.11**	**433.11**

3.5.20 With regard to the 'Miscellaneous Expenses' the Petitioner has claimed an amount of Rs. 0.27 Lakh. On initial scrutiny, the Commission did not find any details with regard to the payment. In response to the queries, the Petitioner submitted that the amount of Rs. 0.21 Lakh was paid to newspaper agency 'The Tribune Trust' and 'Amar Ujala' for the publication of tender. Further, an amount of Rs. 0.06 Lakh was booked against the A&G expenses. In view of the submitted documents and payment proofs, the Commission approves Rs. 0.27 Lakh as claimed by the Petitioner.

3.6 Overheads (IDC and Departmental Charges)

***Petitioner's* submissions**

3.6.1 The Petitioner as on COD submitted the IDC amount of Rs. 40.36 Lakh against the DPR approved Rs. 40.00 Lakh. Further, the Petitioner considered 10% interest rate in line with the DPR, and the loan agreement signed between the HPPTCL and the GoHP.

3.6.2 With regards to the Departmental Charges, the Petitioner as on COD has claimed the Departmental Charges of Rs. 17.69 Lakh for the project.

***Commission's* Analysis**

3.6.3 The Commission has reviewed the IDC and DC claimed with respect to the revised cost certificate (dated 23.06.2022) provided by the Petitioner. An amount of Rs. 33.80 Lakh against IDC and Rs. 18.64 Lakh against DC has been claimed by the Petitioner against the transmission asset which is lower than the DPR amount of Rs. 40.00 Lakh and Rs. 63.77 Lakh, respectively.

3.6.4 The Petition lacks proper details, working and the basis for consideration of IDC and DC submitted by the Petitioner. Accordingly, the Commission sought justification on assumptions for consideration of DC and IDC in the Petition from the Petitioner through the deficiency letters. The Commission in order to authenticate the Petitioner claim also sought the detailed computation of IDC considered consisting of date of draw-down 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.

3.6.5 The project was envisaged to be completed in 12 months as per the contract awarded by the Petitioner, however, the actual time of execution of the project was higher by almost 14.5 months. From the submissions of the Petitioner, the following reasons were identified to be the major reasons for time overrun.

Table 12: Reasons for time over-run

S. No.	Period of Delay	Duration (Months)	Description of Hindrances
1	March-2021 to Oct-2021	7	Delay due to Covid-19 and critical supply issue of oxygen plant during 2nd peak of Covid-19
2	July-2021 to Nov-2021	1	Delay due to logistic challenges imposed by 2nd wave peak of Covid-19
4	Dec-2021 to April-2022	3.5	Delay due to issues in bus bar integration at HPSEBL substation
5	April-2022 to June-2022	3	Charging/connectivity of 2nd bay (No. 211) and main bay (No. 212)
	Total	**14.5**	

3.6.6 From fine reading of the submissions of the Petitioner and the supporting documentary proofs, it can be easily inferred that certain delays were on account of technical and commercial issues faced during integration and connectivity with the HPSEBL Sub-station. The Petitioner is having significant experience in construction of transmission lines and other transmission assets. Therefore, the Petitioner must have adequate knowledge of standard practices to be followed and timelines required to take clearances and connectivity for a new line. The Commission is of the view that the above delay of 24alcula. 07 months (as per S. No. 4 & 5) could have been avoided by proper planning and timely taking up the matters with the concerned competent agencies and authorities.

3.6.7 Accordingly, based on reasons stated by the Petitioner, 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 14.5 months in project execution. The Commission is of the view that certain activities could have been undertaken in parallel, and the delay could have been shortened/ averted by proper planning and follow up at the Petitioner's end.

3.6.8 In addition, the details provided with respect to time overruns only mentioned various dates when issues emerged, or activities were completed. However, it could not be established as how each activity had impacted the overall timeline of the project and whether other activities could have been planned in a manner where the delay could have been avoided. However, at the same time there was delay on account of reasons such as COVID-19, social hindrances, etc. which weren't in the control of the Petitioner. Hence, post detailed review of each of the reasons of delay, the Commission has calculated the IDC as discussed below.

3.6.9 The Commission noted that the Petitioner has submitted the IDC cost of Rs. 40.36 Lakh as on COD against the DPR approved IDC of Rs. 40.00 Lakh. Further, the Petitioner has not submitted the Auditor certificate in support of its claim. In response to the deficiency letter, the Petitioner submitted the revised certificate mentioning the IDC amount of Rs. 33.80 Lakh along with the methodology and 25alculationn sheet.

3.6.10 The Commission noted that as on COD the Petitioner has submitted the Departmental Charges (DC) as Rs. 17.69 Lakh against the DPR approved DC of Rs. 40.00 Lakh. Further, the Petitioner has not submitted the Auditor certificate in support of its claim. In response to the deficiency letter, the Petitioner submitted the revised certificate mentioning the DC amount of Rs. 18.64 Lakh.

3.6.11 Based on the submissions of the Petitioner, it is noted that an incremental IDC of amount of Rs. 0.94 Lakh has been added for the period 01.04.2022 to 23.06.2022 and an amount of Rs. 7.06 Lakh has been reduced on account of restructuring of loan from the overall claim of Rs. 40.36 Lakh. Therefore, the final IDC claimed by the Petitioner was Rs. 33.80 Lakh.

3.6.12 With regards to the rate of interest, the Commission sought the supporting documentary proofs in support against which the Petitioner has submitted the loan agreement signed between HPPTCL and GoHP specifying the rate of interest as 10%. Accordingly, the Commission has considered the rate of interest in line with the Petitioners submissions for the computation of IDC.

3.6.13 In view of revision in hard cost as well as rate of interest, the Commission has computed a revised benchmark for the IDC. A project duration of 12 months as per DPR has been considered to estimate the benchmark IDC.

3.6.14 The following table provides the IDC and Departmental Charges claimed by Petitioner as per original DPR, COD and as per the revised certificate dated 23.06.2022.

Table 13: IDC and Departmental charges claimed by Petitioner (Rs. Lakh)

Particulars	DPR	As on COD	Revised Certificate
Interest During Construction (IDC)	63.77	40.36	33.80
Departmental Charges (DC)	40.00	17.69	18.64

3.6.15 Further, it is observed that the Petition lacks proper details, working and the basis for consideration of IDC and DC submitted by the Petitioner. The Commission sought justification on assumptions for consideration of DC and IDC from the Petitioner through the deficiency letters. The Commission in order to authenticate the Petitioner claim also sought the detailed computation of IDC (Excel) considered including date of draw-down 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.

3.6.16 In view of revision in hard cost vide 5th Amendment, the Commission has computed a revised benchmark for the IDC. A project duration of 12 months as per contract awarded has been considered to estimate the revised benchmark IDC.

3.6.17 For assessing the benchmark IDC with project duration of 12 months, the Commission has assumed 25% debt disbursement in each quarter for four (04) quarters.

3.6.18 The benchmark IDC computed for Asset-1 is summarized as follows:

Table 14: Computation of benchmark IDC

Particulars	Unit	Year I	Year I	Year I	Year I	Total
		Qtr-1	Qtr-2	Qtr-3	Qtr-4	
Debt disbursement	%	25%	25%	25%	25%	**100%**
Opening Debt (a)	Rs. Lakh	0.00	86.62	173.24	259.86	
Addition during the year (b)	Rs. Lakh	86.62	86.62	86.62	86.62	
Closing Debt ©	Rs. Lakh	86.62	173.24	259.86	346.48	
Average Debt (d=(a+c)/2)	Rs. Lakh	43.31	129.93	216.55	303.17	
Interest rate ©	%	2.50%	2.50%	2.50%	2.50%	
Total IDC (f=d*e)	**Rs. Lakh**	**1.08**	**3.25**	**5.41**	**7.58**	**17.32**

3.6.19 Against the benchmark IDC of Rs. 17.32 Lakh, the Petitioner has claimed IDC of Rs. 33.80 Lakh as on COD for the Project. The Petitioner has submitted the computation and the revised certificate in this regard.

3.6.20 As discussed in preceding paras, the Commission, commensurate to the delay on account of uncontrollable factors allows 50% of the excess IDC vis-à-vis claimed over and above the revised benchmark IDC computed assuming no time delay. The computation is provided as follows:

Table 15: IDC Approved by the Commission

Particular	Benchmark	Actual/Claimed	Difference	Approved = Actual -50% of difference
220 kV LILO of Panchkula-Kunihar Transmission Line	17.32	33.80	16.48	25.56

3.6.21 The Commission while approving the Departmental Charges (DC) has considered the minimum of the actual departmental charges and normative charges determined in accordance with the standard provisions of DPR (11% of hard cost). Accordingly, the Departmental Charges for both the assets are approved as follows:

Table 16: DC approved by the Commission

Particular	DPR	As on COD	Revised Certificate	Approved
220 kV LILO of Panchkula-Kunihar Transmission Line	63.77	17.69	18.64	18.64

3.6.22 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 17: Claimed and Approved Project Cost

S. No.	Particulars	Claimed as on COD	Approved
	Asset-1		
a)	*Supply*	*366.74*	*371.18*
b)	*Services*	*98.48*	*61.93*
c)	*Miscellaneous Expenses (Tender Publication and A&G)*	*0.27*	*0.27*
1)	**Hard Cost**	**465.22**	**433.11**
2)	IDC	40.36	25.56
3)	Departmental Charges	17.69	18.64
	Total	**523.54**	**477.58**

3.7 Project Funding

Petitioner 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 capitalised 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 As per the DPR, the scheme was originally envisaged to be funded with the debt and equity ratio of 80:20.

3.7.3 As per the Petition, the Petitioner has drawn actual loan from ADB amounting to Rs. 426.78 Lakh which is 81.52 % of project cost as on COD, and the balance has been infused in the form of equity amounting to Rs. 96.76 Lakh which is 18.48% of the project cost for the construction of Project.

3.7.4 The following table provides the project funding of the project as proposed by the Petitioner:

Table 18:Project Funding proposed by the Petitioner

Particulars	DPR	Actual	Claimed
Debt	80.00%	81.52%	81.52%
Equity	20.00%	18.48%	18.48%
Total Project Cost	**100.00%**	**100.00%**	**100.00%**

***Commission's* Analysis**

3.7.5 The Commission observes that the project was originally envisaged at a debt and equity ratio of 80:20 as provided in the DPR. As per the documents submitted by the Petitioner, the project is funded through ADB but the loan has been received by GoHP which has further extended the loan to the Petitioner at an interest rate of 10%. A copy of the loan agreement signed between the Petitioner and GoHP has been submitted by the Petitioner.

3.7.6 As per the submissions of the Petitioner, actual loan drawn from GoHP was Rs. 426.78 Lakh which is 81.52 % of project cost as on COD. Further, the equity infused was Rs. 96.76 Lakh which is 18.48% of the project cost. The Petitioner has considered the same ratio for the computation of tariff.

3.7.7 To verify the Debt and Equity claimed by the Petitioner, the Commission vide deficiency letters sought details of Debt-Equity received, Loan Agreement, Sanctioned Letters, Board of Director (BOD) approvals and other relevant documents. In response to the queries, the Petitioner has submitted the additional details and documents.

3.7.8 It is important to note here that the Commission had sought information of source of funding of equity, date of infusion along with documentary evidence for the equity infused in the project. But the Petitioner has failed to submit these details. The Petitioner has submitted that it receives equity from Government of H.P (GoHP) on overall basis at the firm level and not on individual projects basis and the amount of equity received by the HPPTCL is further allocated to various projects on requirement basis.

3.7.9 In view of the above, it is noted that the project was originally envisaged at a debt and equity ratio of 80:20 as provided in the DPR. Considering the actual funding claimed by the Petitioner for computation of tariff as on COD i.e., 81.52% debt and 18.48% equity, the Commission has considered the same for the purpose of funding of the project and as per the approved cost.

3.7.10 The Commission has relied on the documentary proofs submitted and has approved the normative project funding as follows:

Table 19:Normative Debt Equity approved by Commission

Particulars	Claimed (As on COD)		Approved (As on COD)	
	Capital Cost	% of Funding	Capital Cost	% of Funding
Total Cost	**523.54**		**477.58**	
Less: Consumer contribution	0.00		0.00	
Balance Cost	**523.54**		**477.58**	
Debt	426.78	81.52%	389.32	81.52%
Equity	96.76	18.48%	88.26	18.48%
Total Cost	**523.54**	**100.00%**	**477.58**	**100.00%**

3.7.11 The Commission observes that ADB has sanctioned a multi tranche financing facility (MFF)of $350 million to the Government of India (GoI) under the Himachal Pradesh Clean Energy Transmission Investment Programme (HPCETIP) which was further channelized to HPPTCL through Government of Himachal Pradesh (GoHP). The proposed Program was targeted for the construction of transmission infrastructure of 66kV and above along with Sub-stations for evacuation of power of upcoming hydro power projects. However, the scheme itself implies that the financing support by the ADB is to promote the generation as well as evacuation of clean energy in the State. Further, the Commission is of the view that the Himachal Pradesh being a special category state receives these multi tranche financing from the GoI as 90% grant and 10% loan. The Commission has noted this aspect while finalising the tariff orders of the HPPCL hydro projects. However, no such information has been furnished by the Petitioner.

3.7.12 In this specific instance, it is noted that the multilateral agency i.e., the ADB, is funding this project in collaboration with the GoI and the GoHP. However, the GoHP has amended the terms and conditions of the financial assistance for extending it to the HPPTCL. While the entire multilateral funds were received by the State in the ratio of 90% grant and 10% loan from the Govt. of India, the entire loan proceeds were extended by GoHP to the Petitioner as loan carrying interest rate of 10% per annum.

3.7.13 The Commission takes serious note against consideration of the amount as loan which was available as grant (90% of overall amount) to the State shall result in unnecessarily burdening the consumers of the State due to such treatment. It is also observed that the Petitioner is already facing financial challenges. The Commission feels that it would be prudent that the Petitioner takes up the matter with the GoHP regarding restructuring of the loan amount availed against the project on same terms and conditions as envisaged under the original scheme of funding i.e., 90% of the amount to be converted to grant. This would be in interest of the consumers of the State who would have to bear the burden of the additional interest cost and repayment of such loan that is being provided as grant.

3.7.14 Accordingly, the Commission has provisionally considered the debt amount availed under the ADB scheme as 90% grant and 10% debt. Further, after reducing such amount of grant from the total approved capital cost, the Commission has considered debt:equity ratio as 70% debt and 30% equity for the balance amount in line with Regulation 10© of the 'HPERC Transmission Tariff Regulations, 2011' which specify the following:

"(b) the debt to equity ratio shall be considered in accordance with Regulation 16, after deducting the amount of financial support provided through consumer contribution, deposit work, capital subsidy or grant;"

3.7.15 The details of the same is tabulated below:

Table 20: Debt, Grant and Equity on Approved Cost (Rs. Lakh)

S. No.	Particulars	Approved Cost	Remarks
I	Total Project Cost Approved	477.58	As per Table No. 19
II	Normative Debt	389.32	As per Table No. 19
III	Actual Debt availed from ADB	426.79	As per Table No. 19
IV	**Grant** ***(90% of the ADB Scheme Loan)***	**350.39**	**Minimum (II and III) x 90%**
V	Balance Requirement	127.19	(I-IV)
VI	Debt (70%)	89.03	(V x 70%)
VII	Equity (30%)	38.16	(V x 30%)
VIII	**Total**	**477.58**	**(IV+VI+VII)**

3.7.16 In case of ADB loans availed by the HPPTCL, the Commission has been considering the same as in the past tariff orders issued and, therefore, corresponding depreciation as well as interest for servicing of such loans were being allowed to the Petitioner. This treatment was undertaken in view of the limited information available to the Commission. However, the Commission had directed the Petitioner in these Orders to re-negotiate with GoHP and align the terms and conditions of the Loan Agreements in line with the tri-patriate agreement. But no information or update in this regard has been provided by the Petitioner. In this Order the Commission has preferred to consider the availability of loan through ADB funded projects as 90% grant considering the special category status to the State of Himachal Pradesh. The Commission shall also take appropriate decision with regard to the treatment of similar ADB loans for the previous projects during the truing-up.

3.7.17 The Petitioner is directed to take up this matter with the GoHP for extending the benefit of grant under the ADB funded projects and update the same to the Commission. Also, the Commission is of the view that the GoHP shall consider the transfer of grant as availed from the Government of India to the Petitioner for the benefit of the Consumers of the State.

3.8 Additional Capital Expenditure (Add- Cap)

***Petitioner* Submissions**

3.8.1 The Petitioner has not proposed any additional capital expenditure.

***Commission's* Analysis**

3.8.2 The Commission in order to verify additional capitalisation in the Project has raised deficiency letters to the Petitioner. In response, the Petitioner submitted total Rs. 1.59 Lakh of Additional Capitalisation for the payment made beyond COD. The details submitted by the Petitioner against the claimed amount is as follows:

Table 21: Add-Cap Claimed by the Petitioner (Rs. Lakh)

Date of Payment	Name of Firm	A&G Expenses	Erection	TotalCost
25.07.2022	M/s GE T&D Ltd.	0.00	0.94	0.94
25.07.2022	M/s GE T&D Ltd.	0.00	0.28	0.28
30.11.2022	M/s GE T&D Ltd.	0.00	0.49	0.49
23.03.2023	M/s GE T&D Ltd.	0.00	(0.13)	(0.13)
Upto 23.03.2023	A&G Expenses	0.01	0.00	0.01
Total (Rs. Lakh)		**0.01**	**1.58**	**1.59**

3.8.3 In light of the above, the Commission sought details for the same. In response, the Petitioner submitted that the entire amount of Rs. 1.58 Lakh was paid to the Contractor for erection works only, with an additional Rs. 0.01 Lakh allocated for Administrative and General (A&G) Expenses.

3.8.4 The Commission in view of the submissions of the Petitioner has approved the additional capital expenditure of Rs. 1.58 Lakh paid to the Contractor for erection work, as the paid amount was within the original contract award cost and its subsequent revisions. However, the Commission has not allowed the cost amounting to Rs. 0.01 Lakh claimed for A&G expenses, as the same forms part of the Operation and Maintenance (O&M) expenditure post commissioning of the asset.

3.8.5 Therefore, the Commission has approved the Additional Capitalisation as summarised below:

Table 22: Add-Cap Claimed and Approved (Rs. Lakh)

Date of Payment	Name of Firm	Claimed	Approved
25.07.2022	M/s GE T&D Ltd.	0.94	0.94
25.07.2022	M/s GE T&D Ltd.	0.28	0.28
30.11.2022	M/s GE T&D Ltd.	0.49	0.49
23.03.2023	M/s GE T&D Ltd.	(0.13)	(0.13)
Up to 23.03.2023	A&G Expenses	0.01	0.00
Total (Rs. Lakh)		**1.59**	**1.58**

4. APPROVAL OF ARR AND TARIFF

4.1 Background

4.1.1 The Petitioner has proposed projections for COD to FY 2023-24 as per the 'HPERC Transmission Tariff Regulations, 2011' as amended from time to time. 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

4.1.2 The Commission has examined the Petition and the subsequent submissions made in response to the deficiency letters for the purpose of approving the elements of ARR for the period from COD to FY 2023-24. The Commission has also considered the provisions of 'HPERC Transmission Tariff Regulations, 2011', Audited Annual Accounts, Capital cost certificate by statutory auditor, CERC Tariff Regulations, 2019 and approved capital expenditure and funding plan for the Project for the purpose of ARR projections for each year.

4.1.3 In this chapter, the Commission has detailed the methodology for computing each component of the ARR for each year of the Control Period from COD till FY 2023-24 for 220 kV LILO of Panchkula-Kunihar Transmission Line of HPPTCL including O&M expenses, interest on loan, depreciation, return on equity, working capital requirement, etc. The methodology followed and approved values for each component of the ARR is detailed in the subsequent sections.

4.2 O&M Expenses

Petitioner **Submission**

4.2.1 The Petitioner has submitted that as per HPERC Transmission Tariff Regulations, 2011, Operation and Maintenance Expense is 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;

Provided that, repair and maintenance expenses determined shall be utilized 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."

4.2.2 The Petitioner has further submitted that the Commission in the Order dated November 1, 2021 in Petition No. 98 of 2020 in the matter of approval of capital cost and tariff for 33/220kV GIS sub-station at Karian along with 220kV D/C transmission line to PGCIL pooling Sub-station at Chamera-II has approved the normative O&M expenses for the period from FY 2018-19 to FY 2023-24 based on the normative O&M expenses specified in CERC (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "CERC Tariff Regulations, 2019") ordering that any variation in O&M expenses shall be reviewed and considered at the time of true up. The Commission has followed the above approach considering the following:

i. that the O&M expenses for the first year of the project on conservative side and may be due to partial operations but may increase in upcoming years

ii. the actual audited O&M expenses for sufficient number of years are not available and it shall be difficult to ascertain a realistic trend for O&M expenses for the upcoming years.

4.2.3 The Petitioner in line with the above approach, has projected O&M expenses considering the norms specified in CERC Tariff Regulations, 2019 and seeks liberty to submit actual at the time of truing up.

4.2.4 The following table provides the O&M expenses claimed by the Petitioner:

Table 23: O&M Expenses claimed by Petitioner (Rs. Lakh)

Particular	Units	FY 23	FY 24
220 kV D/C Line	km	5.40	5.40
220 kV D/C Line – Norm	Rs./Lakh/km	0.28	0.29
AIS Bay - 220 kV – Norms	Rs./Lakh/Bay	2.00	2.00
No. of 220 kV Bays	Nos.	24.96	25.84
Total O&M Expense	**Rs./Lakh**	**51.43**	**53.24**

***Commission's* Analysis**

4.2.5 The Commission has reviewed the submissions of the Petitioner. In the absence of actual audited O&M expenses for sufficient years to ascertain the O&M trends, the Commission has relied upon the normative O&M expenses prescribed in the 'CERC Tariff Regulations, 2019'. The following norms have been considered as per the technical details of the Project for the computation of O&M expenses as per the 'CERC Tariff Regulations, 2019':

Table 24: Normative O&M Expenses

Item	Unit	FY23	FY24
Single Circuit (Single Conductor)	Rs. Lakh/Cktm	0.279	0.289
220 kV bay	Rs. Lakh/Bay	24.96	25.84

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

4.2.7 The following table provides the O&M expenses approved by the Commission for the Control Period:

Table 25: O&M Expenses approved by Commission (Rs. Lakh)

Particulars	FY23	FY24
Line Length (km)	5.4	5.4
Single Circuit (Single Conductor)	0.279	0.289
Annual O&M Expenses for Transmission Line (Rs. Lakh)	**1.51**	**1.56**
No. of 220kV AIS Bays	2	2
Norms for 220 kV bay (Rs Lakh per Bay)	24.96	25.84
Annual O&M Expenses for 220 kV Bays (Rs. Lakh)	**49.92**	**51.68**
Total Annual O&M charges	**51.43**	**53.24**
O&M Expenses for Transmission Line (Rs. Lakh)	**39.59***	**53.24**

**O&M Expense pro-rated for FY23 based on approved COD*

4.3 Depreciation

***Petitioner* Submissions**

4.3.1 The Petitioner has submitted the depreciation for each year of the control period in accordance with the Regulation 23 of the HPERC Transmission Tariff Regulations, 2011, as amended from time to time.

4.3.2 In accordance with above Tariff Regulations, the depreciation for the Control Period has been estimated as shown in the following table:

Table 26: Depreciation claimed by Petitioner (Rs. Lakh)

Particulars	Unit	FY23	FY24
Opening GFA	Rs. Lakh	523.54	523.54
CC and Grants	Rs. Lakh	-	-
Net Opening GFA less CC/Grants	Rs. Lakh	523.54	523.54
Additions	Rs. Lakh	-	-
Net Closing GFA	Rs. Lakh	523.54	523.54
Average GFA	Rs. Lakh	523.54	523.54
GFA excl. land and CC/ Grants	Rs. Lakh	523.54	523.54
Depreciation Rate	%	5.28%	5.28%
Depreciation	**Rs. Lakh**	**27.64**	**27.64**

***Commission's* Analysis**

4.3.3 The Commission has approved the depreciation in line with provisions of the Regulation 23 of the HPERC Transmission Tariff Regulations, 2011 which reads as follows:

*"**23. Depreciation***

(1)The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2)The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

(3)(2-a) The salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable.

(4)Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset.

(5)For transmission project which are in operation for less than 12 years, the difference between the cumulative depreciation recovered and the cumulative depreciation arrived at by applying the depreciation rates specified in this regulation corresponding to 12 years, shall be spread over the period up to 12 years, and the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the asset.

(6)For the project in operation for more than 12 years, the balance depreciation to be recovered shall be spread over the remaining useful life of the asset.

(7)Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

4.3.4 The Commission has examined the depreciation proposed by the Petitioner in detail. The Commission has arrived Depreciation on Gross Fixed Assets (GFA) for each year based on the approved capitalization for each year in the previous Chapter.

4.3.5 The Commission has determined the effective weighted average depreciation rate based on asset wise depreciation rate prescribed as per the applicable Regulations.

4.3.6 The depreciation expenses approved from FY 2020-21 to FY 2023-24 are summarized in the table below:

Table 27: Depreciation approved by Commission (Rs. Lakh)

Particulars	FY23	FY24
Opening GFA	***477.58***	***128.77***
Add: Addition during the year	1.58	-
Less: Grant	350.39	-
Less: Freehold Land	-	-
Closing GFA	128.77	128.77
Rate of Depreciation (%)	5.28%	5.28%
Depreciation	**5.20***	**6.80**

**Depreciation Expense pro-rated for FY23 based on approved COD*

4.4 Interest on Loan

Petitioner Submissions

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

4.4.2 The Petitioner has claimed the interest on loan as per the ADB Loan agreement with GoHP at 10%. The Petitioner has claimed that in the absence of any actual repayment, for the purpose of working out the Interest on Loan, the repayment has been considered equal to Depreciation charged during each year of the Control Period for calculation of Interest on Loan. The Computation of Interest on Loan has been shown as under:

Table 28: Interest on Loan claimed by Petitioner (Rs. Lakh)

Particular	Units	FY23	FY24
Opening Balance	Rs. Lakh	426.79	399.15
Addition	Rs. Lakh	-	-
Repayment	Rs. Lakh	27.64	27.64
Closing Balance	Rs. Lakh	399.15	371.50
Average	Rs. Lakh	412.97	385.33
Interest rate (%)	%	10.00%	10.00%
Interest on Loan	**Rs. Lakh**	**41.30**	**38.53**

***Commission's* Analysis**

4.4.3 The Commission has considered the loan amount in line with the project funding approved for the Project in the previous chapter no. 03, para no. 3.7.15.

4.4.4 Regulation 20 of the HPERC Transmission Tariff Regulations, 2011, stipulates the following:

"20. Interest and Finance Charges

(1) Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment in accordance with the terms and conditions of relevant agreements of loan, bond or non-convertible debentures. Exception can be made for the existing or past 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.

(2) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the transmission licensee does not have actual loan then the weighted average rate of interest of the transmission licensee as a whole shall be considered.

Provided further that if the Transmission Licensee as a whole does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 200 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

(3) The interest rate on the amount of equity in excess of 30% treated as notional loan shall be the weighted average rate of the loans of the respective years and shall be further limited to the rate of return on equity specified in these regulations:

Provided that all loans considered for this purpose shall be identified with the assets created:

Provided further that the interest and finance charges of re-negotiated loan agreements shall not be considered, if they result in higher charges:

Provided further that the interest and finance charges on works in progress shall be excluded and shall be considered as part of the capital cost:

Provided further that neither penal interest nor overdue interest shall be allowed for computation of tariff.

(4) In case any moratorium period is availed of in any loan, depreciation provided or in the tariff during the years of moratorium shall be treated, as notional repayment of loan during those years and interest on loan capital shall be calculated accordingly.

(5) The transmission licensee shall make every effort to refinance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such refinancing shall be borne by the transmission customers and any

benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 2:1 between the transmission licensee and the transmission customers. Refinancing may also include restructuring of debt.

(6) In respect of foreign currency loans, variation in rupee liability due to foreign exchange rate variation, towards interest payment and loan repayment actually incurred, in the relevant year shall be admissible; provided it directly arises out of such foreign exchange rate variation and is not attributable to the transmission licensee or its suppliers or contractors.

(7) The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by transmission licensee."

4.4.5 The Commission has approved the Interest on Loan in accordance with the 'HPERC Transmission Tariff Regulations, 2011'. 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 has been determined.

4.4.6 In the previous Chapter, the Commission has approved the project funding through a mix of debt, grant and equity. The loan amount from GoHP along with the normative loan has been considered for the purpose of computation of interest on loan and an interest rate of 10% has been considered in line with the agreement between GoHP and the Petitioner with regard to the payment of interest on the loans. The Commission as per para 3.7.15 of the previous chapter and the 'HPERC Transmission Tariff Regulations, 2011', has considered the repayment of loan equal to depreciation and has computed the Interest on Loan from COD to FY 2023-24. The approved Interest on Loan for each year from the date of COD to FY-24 is computed in the table no. 29 below.

4.4.7 However, the Commission directs the Petitioner to negotiate with GoHP and align the interest rate in line with the rate of interest agreed by GoHP with ADB. Any efforts in this direction will not only lead to better cost optimization in the form of lower interest costs, but also benefit the asset beneficiaries and consumers of the State of Himachal Pradesh as a whole.

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

Table 29: Interest on Loan approved by Commission (Rs. Lakh)

Particulars	FY23	FY24
Opening Balance	89.03	84.94
Addition	1.11	-
Repayment	5.20	6.80
Closing Balance	84.94	78.14
Rate of Interest	*10.00%*	*10.00%*
Interest on Loan	**6.70***	**8.15**

**Interest on Loan pro-rated for FY23 based on approved COD*

4.5 Interest on Working Capital

***Petitioner* Submissions**

4.5.1 The Petitioner has computed interest on working capital as per Regulations 21 and 22 of the 'HPERC Transmission Tariff Regulations, 2011' as amended from time to time.

4.5.2 The Petitioner has calculated the Interest on Working Capital considering prevalent SBI MCLR as on 1st April of FY 2022-23 plus 300 basis points. In accordance with the above Regulations, the interest on working capital claimed is as shown below:

Table 30: Interest on Working Capital claimed by Petitioner (Rs. Lakh)

Particular	Units	FY 23	FY 24
O&M Expense for 1 month	Rs. Lakh	4.29	4.44
Receivables for 2 months	Rs. Lakh	23.05	22.89
Maintenance Spares (at 15% monthly O&M Expenses)	Rs. Lakh	0.64	0.67
Total Working Capital	**Rs. Lakh**	**27.97**	**27.99**
Interest rate on Working Capital	%	10.50%	10.50%
Interest on Working Capital	**Rs. Lakh**	**2.94**	**2.94**

***Commission's* Analysis**

4.5.3 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 21 & 22 of the HPERC Transmission Tariff Regulations, 2011.

4.5.4 The relevant clauses of the Regulations 21 and 22 of HPERC Transmission Tariff, Regulation, 2011 are reproduced as under:

"21. Working Capital- The Commission shall calculate the working capital requirement for the transmission licensee containing the following components: -

(a) O&M expenses for 1 month;

(b) receivables for two months on the projected annual transmission charges; and

(c) maintenance spares @ 15% of repair and maintenance expenses for one month.

"22. Interest Charges on Working Capital- Rate of interest on working capital to be computed as provided hereinafter in these regulations shall be on normative basis and shall be equal one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 300 basis points. The interest on working capital shall be payable on normative basis notwithstanding that the licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures."

4.5.5 According to the revised 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, 2021 plus 300 basis points. The computation for approved working capital requirement and interest on working capital is shown in the table as follows: (SBI MCLR + 300 basis point)

Table 31: Interest on Working Capital (WC) approved by Commission (Rs. Lakh)

Particulars	FY23	FY24
Operation & Maintenance Expenses for 1 Month	4.29	4.44
Maintenance Spares Equivalent to 15% monthly of O&M	0.64	0.67
Receivable Equivalent of 2 Months of Fixed Cost	12.43	12.70
Total Working Capital Requirement	**17.36**	**17.81**
Interest on Working Capital %	*10.00%*	*11.50%*
Interest on Working Capital	**1.34***	**2.05**

**WC pro-rated for FY23 based on approved COD*

4.6 Return on Equity

***Petitioner* Submissions**

4.6.1 The Petitioner had submitted that it had claimed the Return on Equity as per Regulation 19 of 'HPREC Transmission Tariff Regulation, 2011' and its amendment thereof. Hence the Return on Equity claimed by the Petitioner is as below:

Table 32: RoE claimed by Petitioner (Rs. Lakh)

Particular	Units	FY23	FY24
Opening Equity	Rs. Lakh	96.75	96.75
Additions	Rs. Lakh	-	-
Closing Equity	Rs. Lakh	96.75	96.75
Average Equity	Rs. Lakh	96.75	96.75
Rate of RoE	%	15.50%	15.50%
Return on Equity	**Rs. Lakh**	**15.00**	**15.00**

***Commission's* Analysis**

4.6.2 Regulation 19 of the HPERC Transmission Tariff Regulations, 2011 stipulates the following:

"19. Return on Equity

(1) Return on equity shall be computed on the equity determined in accordance with regulation 18 and on pre-tax basis at the base rate of 15.5% to be grossed up as per sub-regulation (3) of this regulation:

(2) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate applicable to the concerned transmission licensee company:

Provided that return on equity with respect to the actual tax rate applicable to the transmission licensee in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(3) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:-

(a) Rate of pre-tax return on equity = Base rate / (1-t)

(b) Where t is the applicable tax rate in accordance with sub-regulation (2) of this regulation."

4.6.3 The Commission in Chapter 03, para no. 3.7 (Project Funding) has detailed the working of debt, grant and equity. The Commission as per para no. 3.7.15 and the 'HPERC Transmission Tariff Regulations, 2011', has computed the ROE from COD to FY 2023-24. The approved ROE for each year from the date of COD to FY 2023-24 is summarized below:

4.6.4 Based on the above submissions, the Commission has considered rate of return @15.50% for approval of RoE for the Control Period. Any tax liability arising on the Petitioner during the Control Period shall be trued-up at the end of Control Period based on effective tax rate/ liability.

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

Table 33: RoE approved by Commission (Rs. Lakh)

Particulars	FY23	FY24
Opening Equity	38.16	38.63
Addition	0.47	-
Closing Equity	38.63	38.63
RoE (%)	*15.50%*	*15.50%*
RoE	**4.58***	**5.99**

**ROE pro-rated for FY23 based on proposed COD*

4.7 Aggregate Revenue Requirement

Petitioner Submissions

4.7.1 The table given below summarizes the proposed Aggregate Revenue Requirement for the Control Period as claimed by the Petitioner.

Table 34: Summary of ARR claimed by Petitioner (Rs. Lakh)

Particulars	FY23	FY24
O&M expense	51.43	53.24
Depreciation	27.64	27.64
Interest & Finance charges	41.30	38.53
Interest on working capital	2.94	2.94
Return on equity	15.00	15.00
Aggregate Revenue Requirement	**138.31**	**137.35**
Prorate for 282 days for FY 23	**106.86***	**137.35**

**ARR pro-rated for FY23 based on proposed COD*

Commission's Analysis

4.7.2 Based on the discussions in sections above, the Aggregate Revenue Requirement (ARR) approved by the Commission for each year is summarised in the table as follows:

Table 35: Summary of ARR approved by Commission (Rs. Lakh)

Particulars	FY23	FY24
O&M expense	39.59	53.24
Depreciation	5.20	6.80
Interest & Finance charges	6.70	8.15
Interest on working capital	1.34	2.05
Return on equity	4.58	5.99
Aggregate Revenue Requirement*	**57.41**	**76.23**

**ARR pro-rated for FY23 based on approved COD*

4.8 Carrying Cost

***Petitioner* Submissions**

4.8.1 The Petitioner has sought approval to charge carrying cost due to delayed tariff recovery for 220 kV Panchkula-Kunihar transmission line.

4.8.2 The Petitioner submitted that the project was in use from COD (i.e., 23.06.2022). However, in absence of Commission approved tariff, HPPTCL had to bear the cost towards working capital. The Petitioner has further submitted that as per Regulation 10-A of HPERC (Terms and Conditions for Determination of Transmission Tariff) (Second Amendment) Regulations, 2018, the Commission has allowed carrying cost at the rate of one-year average MCLR + 300 basis points to be considered as carrying cost for delayed and differential recoveries.

4.8.3 The Petitioner has claimed, that, due to delayed recoveries, it is facing financial hardship and that the Petitioner is under strain in arranging working capital for ensuring smooth operations. Therefore, the Commission is requested to charge the carrying cost from the beneficiary from COD till issuance of first bill based on tariff order.

***Commission's* Analysis**

4.8.4 The Commission observes that the tariff petition was filed in March 2023, as against the COD of the asset as 23.06.2022, which is a delay of almost 09 months. Further, the Petitioner has also taken considerable time in responding to the various queries raised by the Commission resulting in further delays. Since, the delay was attributable to the Petitioner, the Commission feels inappropriate to allow any carrying cost as part of the Order.

4.9 Transmission Charges

***Petitioner* Submissions**

4.9.1 The Petitioner has submitted that HPSEBL is the sole beneficiary of the project as the second circuit of 220kV LILO of Panchkula-Kunihar transmission line was required in order to take care of unbalanced loading so that the asset could be fully utilized and also help in reducing losses. The same was discussed by CEA during the meeting held on 16.10.2017 and was agreed in-principally in the 40th Standing Committee on Power System Planning of Northern Region held on 22.06.2018.

***Commission's* Analysis**

4.9.2 It is observed from the submissions that only one circuit of the 220 kV Panchkula-Kunihar transmission line was connected (LILO) at the Baddi substation, leading to imbalances in the circuits and low voltage issues in the Baddi area. By implementing LILO of the second circuit of the 220 kV Kunihar-Panchkula line at Baddi, the objective is to remove the imbalance and to enhance the voltage profile in the area.

4.9.3 Further, as per the submissions of the Petitioner, the HPSEBL is the primary beneficiary of the Project as the asset is being utilized for drawal by HPSEBL and has been created to strengthening the existing system as per the HPSEBL request in the 40th Standing Committee on Power System Planning of Northern Region held on 22.06.2018. Also, a supplementary TSA has been executed between the Petitioner and HPSEBL on 17.01.2023 which includes this transmission element as well. Therefore, the Commission is of the view that the key beneficiary of the 220 kV LILO of Panchkula-Kunihar transmission line is HPSEBL and the ARR determined above is required to be recovered from HPSEBL as per the Regulation 33 of the HPERC Transmission Tariff Regulations, 2011:

"33. Allocation of Transmission Service Charge and Losses (1) The Annual Transmission Service Charge (ATSC) shall be shared between the long and medium-term customers of the transmission system on monthly basis based on the allotted transmission capacity or contracted capacity, as the case may be."

4.9.4 The Petition is accordingly disposed off in the above terms.

-Sd/-	-Sd/-	-Sd/-
(SHASHI KANT JOSHI)	**(YASHWANT SINGH CHOGAL)**	**(DEVENDRA KUMAR SHARMA)**
Member	**Member, Law**	**Chairman**

Shimla

Dated: 12th June, 2024.