Approval of Capital Cost and Determination of Tariff for 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100 MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line

Himachal Pradesh Power Transmission Corporation Limited
(HPPTCL)

Himachal Pradesh Electricity Regulatory Commission
10 September, 2024

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT SHIMLA

PETITION NO: 02/2020

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 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO 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 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line (hereinafter referred to as the 'Project') under the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 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 stakeholder representatives through various representations. The Commission has also held formal interactions with the officers of the HPPTCL and having 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, and in exercise of powers vested in the Commission under section 62, read with 86 of the Electricity Act, 2003 and Regulation 12(1) of HPERC Tariff Regulation, 2011, along with its subsequent amendments, the Commission passes the following Order for determining the Capital Cost and transmission tariff for 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line.

The Commission has determined the capital cost and Aggregate Revenue Requirement (ARR) for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line in accordance with 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 Determination of Tariff for 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO 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**

Place: Shimla

Dated: 10 September, 2024

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1. INTRODUCTION

1.1 Himachal Pradesh Electricity Regulatory Commission

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

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 its 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 its order dated 10th June, 2010 and as a result thereof the Commission recognized HPPTCL as a deemed "Transmission Licensee" as per the Commission's Order dated 31st July, 2010 in Petition No. 32 of 2010 filed by HPPTCL under Sections 14 and 15 of the Act, for grant of Transmission Licensee in the State of Himachal Pradesh. Prior to FY 2010-11, the transmission tariff was being determined as a part of the tariff orders applicable to HPSEBL system.

1.3 Multi Year Tariff Framework

1.3.1 The Commission follows the principles of Multi Year Tariff (MYT) for determination of tariffs, in line with the 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 has 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 has issued the first Multi-Year Tariff (MYT) Order for HPPTCL for the period FY 2011-12 to FY 2013-14 on 14th July, 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 2016-17 to FY 2018-19. On 29th June, 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 28th December, 2022.

1.4 Interaction with the Petitioner

1.4.1 The HPPTCL filed the application/Petition for approval of Capital Cost and Determination of Tariff for 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line, with the Commission on 12.08.2019. 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 05.02.2020. 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 14.06.2023.

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)-11/2019-1263-64 dated 31.08.2019	Filling No. 147/2019 dated 07.09.2019
2	HPERC-F(1)-11/2019-1558-59 dated 05.10.2019	Filling No. 147/2019 dated 14.11.2019
3	HPERC-F(1)-11/2019-2765-66 dated 13.01.2020	Filling No. 147/2019 dated 31.01.2020
4	HPERC-F(1)-11/2019-3287-88 dated 22.02.2020 **(Post Technical Validation Session)**	Filling No. 147/2019 dated 09.03.2020
5	HPERC-F(1)-11/2019-3918 dated 22.02.2024	Petition No. 02/2020 dated 07.05.2024

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	13.02.2020
2.	The Tribune	14.02.2020

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.	Dainik Bhaskar	16.02.2020
2.	Hindustan Times	16.02.2020

1.5.3 The stakeholders were requested to file their objections by 09.03.2020. The HPPTCL was required to submit replies to the suggestions/ objections to the Commission by 17.03.2020 with a copy to the objectors on which the objectors were required to submit their response by 25.03.2020.

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 27.03.2020. 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 In the meanwhile, an appeal was filed before the Hon'ble APTEL by M/s Kanchanjunga Power Company Pvt. Ltd. (KPCPL) and the Hon'ble APTEL was please to stay the proceedings before this Commission. On vacation of stay Order by the Hon'ble APTEL vide Order dated 10.11.2023 in Appeal no 111/2020, the fresh hearing was proposed to be held on 17.02.2024 and the notice in this regard was published as under as shown in table below:

Table 4: List of Newspapers for Revised Public Notice by the Commission

Sl.	Name of News Paper	Date of Publication
1.	"Dainik Bhaskar"	03.01.2024
2.	"The Tribune"	03.01.2024

1.5.6 The stakeholders were requested to file their objections by 02.02.2024. The HPPTCL was required to submit replies to the suggestions/ objections to the Commission by 09.02.2024 with a copy to the objectors on which the objectors were required to submit their rejoinder by 15.02.2024. The Public Hearing was scheduled to be held on 17.02.2024 at 11:00 AM in the Commission at Shimla.

1.5.7 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 3rd and 4th Control Period from COD to FY 2023-24 for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line.

2.1.2 Accordingly, the public hearing was conducted on 17.02.2024 in the Commission. The comments/suggestions were received on the Petition from the asset beneficiary only i.e., 'Kanchanjunga Power Company Private Limited' (KPCPL). Issues raised by the stakeholders in their written submissions, along with replies given by the Petitioner and views of the Commission on the issues raised are summarized in the following paragraphs.

2.2 Maintainability of the Petition

Stakeholder's Submissions

2.2.1 The Stakeholder i.e., Kanchanjunga Power Company Pvt. Ltd. (KPCPL)has argued that the asset in question is inter-state and, therefore, outside the jurisdiction of the Commission. Further, M/s KPCPL has submitted that the Petitioner's tariff Petition is not maintainable and that the Commission lacks jurisdiction to determine the tariff. Also, the Stakeholder has submitted that the HPPTCL seeks tariff recovery from KPCPL without following the principle of sharing transmission charges among all users of the State system, which should be first addressed. Any order passed without a fair hearing, as held by the Hon'ble Supreme Court in various cases especially Athamanathaswami Devasthanam V.K. Gopalaswami Ayyangar, is null and void.

Petitioner's Submissions

2.2.2 HPPTCL has submitted that according to the Hon'ble CERC's Order in Petition No. 550/TT/2015 and Regulation 7(1)(n) of CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (Third Amendment), the HPERC is within its jurisdiction to proceed in the matter. HPPTCL has submitted that the Hon'ble CERC in its Order dated 23.09.2015 in Petition No. 550/TT/2015 has clearly stated that the jurisdiction to determine the tariff for transmission assets of a State Transmission Utility (STU) lies with the respective State Regulatory Commissions, regardless of whether the asset is considered inter-state or intra-state.

Commission's Analysis

2.2.3 The Commission has considered the various written as well as oral submissions made during the public hearings by the KPCPL while passing this Order. Further, the Commission observes that the Hon'ble CERC Order dated 23.09.2015 in Petition No. 550/TT/2015 clearly states that transmission assets owned or controlled by a State Transmission Utility (STU), regardless of whether they are used for inter-state or intra-state power transmission, falls under the jurisdiction of the State Electricity Regulatory Commissions for the tariff determination. Also, it is observed that the Hon'ble Appellate Tribunal for Electricity (APTEL) in its Order in Appeal no. 111 of 2020 dated 29.01.2024 has turned down the request of the Stakeholder and has upheld that the matter falls under the jurisdiction of respective State Commission as per Section 86 of the Electricity Act 2003. Therefore, in accordance with the cited judgements, the Commission passes the current tariff Order.

2.3 ISTS Certification by NRPC

Stakeholder's Submissions

2.3.1 KPCPL has submitted that the Petitioner had approached NRPC for certification of the asset as an inter-state transmission asset, as it carries inter-state power. However, NRPC denied certification in its meetings on 29.10.2018 and 30.10.2018, citing that the average inter-state power flow was only 36.55% as against the requirement of over 50% average utilization for inter-state purposes.

2.3.2 The Stakeholder has contended that NRPC had erred by not considering the power flow from AD Hydro's line which is part of the same regional system and has challenged the certificate on grounds that only a part of the 220 kV D/c transmission line from Alain Dungan Substation to 400 kV Nalagarh substation through LILO at Patlikul was considered. Further, M/s KPCPL has highlighted that considering HPSEBL's seasonal inter-state power utilization, the entire transmission asset would show over 50% utilization by the inter-state power flow, making this transmission asset as an ISTS .

2.3.3 M/s KPCPL has further submitted that the certification of a line as an ISTS is governed by the CERC Regulations, specifically the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, and the NRPC cannot contradict these Regulations. The 2011 amendment to these regulations included provisions for certifying non-ISTS lines carrying inter-state power based on load flow studies, requiring such lines to carry more than 50% of the total power as inter-state power, vetted by the NLDC. However, the 2015 amendment to these regulations has removed the 50% threshold, allowing even a 10% power flow outside the state to qualify a line as ISTS. Given that over 36.55% of power flows through the HPPTCL line outside Himachal Pradesh, the NRPC should have certified the line as ISTS.

2.3.4 The Stakeholder has submitted that the NRPC's failure to consider the 2015 amendment and certify the line as ISTS, despite substantial inter-state power flow, undermines the regulatory framework. M/s KPCPL also asserts that the HPPTCL's stance is substantiated by the minutes of the 156th OCC meeting dated 07.02.2019, where the HPPTCL's has highlighted that the actual operational scenario differs significantly from the NRLDC's simulations, which has treated the Phojal substation as a load bus rather than a generator bus, thereby misrepresenting its true inter-state transmission role. They emphasized seasonal variations in generation and demand, advocating for inclusion of all four quarters in the assessment to capture realistic usage patterns. Accordingly, M/s KPCPL has submitted that the entire asset in question serves inter-state transmission purposes and has challenged NRPC's contrary findings. They have also raised the issue of shared transmission charges among beneficiaries, urging clarity on this crucial aspect.

Petitioner's Submissions

2.3.5 In response to the objections raised by M/s KPCPL regarding the NRPC certification, the Petitioner has submitted that the assets in question are not ISTS and the Stakeholder instead of addressing the facts on their merits, is focusing on finding faults in the NRPC certification process. The Petitioner has submitted that the current proceedings do not pertain to disputes about NRPC certification.

2.3.6 Also, the Petitioner has clarified that the amendment of CERC Sharing Regulations, 2010 allows for the certification of non-ISTS lines carrying inter-state power based on load flow studies conducted by the Regional Power Committees (RPC) in consultation with the Regional Load Despatch Centre (RLDC) using Web Net Software. The accompanying Statement of Object and Reasons to the Regulations do not specify a minimum percentage for qualifying as ISTS but suggests that RPCs may uniformly decide such thresholds. The NRPC has considered this framework, forming a group in July 2015 to develop certification methodologies, which stipulated that a transmission line could be classified as ISTS only if its average inter-state utilization in the 2ndand 4thquarters exceeded 50%. Despite this, in October 2018, the NRPC determined that the assets in question did not meet the criteria for certification as inter-state lines. The Stakeholder's citation of a 10% threshold from the Statement of object and reasons does not align with the actual procedures followed by the NRPC.

2.3.7 The Petitioner has emphasized that during the 156th OCC meeting on 07.02.2019, it had highlighted the discrepancy in NRPC's non-certification of the assets as inter-state lines and had stressed the importance of considering all four quarters of the year for a comprehensive assessment, which was acknowledged and approved by NRPC in its 41stTCC and 44thNRPC meetings. This decision led to the analysis of data from FY 2018-19, which revealed that the assets did not qualify for ISTS certification due to significant reliance on transmission charges from other entities. Accordingly, the Petitioner has refuted KPCPL's claim regarding jurisdiction over the current Petition.

Commission's Analysis

2.3.8 The Commission observes that the Hon'ble APTEL in its judgement in Appeal no. 111 of 2020 dated 29.01.2024 has turned down the request of the Stakeholder and has clearly stated the following:

"26. The Appellant, vide its IA 40/2020, had disputed the findings of the NRPC with regard to denial of ISTS status to HPPTCL's assets. As noted

hereinabove, in Ishwar Singh vs. State of Rajasthan [(2005) 2 SCC 334] the Supreme Court held that if an authority delegates the power to act, the power exercised by the delegate shall be deemed to be the exercise of power on behalf of the delegator. In such a situation, there is no scope for revision of the order of the delegate by the delegator. In the present case also, the CERC has delegated the power conferred on it to the NRPC, and consequently the power exercised by NRPC, as a delegate of the CERC, cannot be the subject matter of enquiry in proceedings before the CERC. The Appellant, therefore, lacks locus standi to invoke the jurisdiction of the CERC against the exercise undertaken by the NRPC as a delegate of the CERC."

2.3.9 Therefore, the authority of NRPC to determine the status of transmission assets has been upheld by the Hon'ble APTEL and the Commission thereforerejects the objections raised by the Stakeholder in regard to the NRPC certification.

2.4 Transmission Charges for Long-term consumers

Stakeholder's Submissions

2.4.1 M/s KPCPL has highlighted that the Regulation 33(1) of the HPERC Transmission Tariff Regulations, 2011 mandates the sharing of Annual Transmission Service Charges (ATSC) among all Long-Term Open Access (LTOA) and Medium-Term Open Access (MTOA) customers based on allotted or contracted capacity on a monthly basis, emphasizing the equitable distribution of transmission costs. Further, it is submitted that the definition of 'transmission system' under Regulation 3(39) includes extra high voltage lines used for electricity conveyance but excludes distribution system components, thus supporting fair allocation of transmission service charges among users. KPCPL has asserted that, under the HPERC Transmission Tariff Regulations, 2011, all LTOA and MTOA customers of HPPTCL must collectively bear the burden of transmission system charges, without restricting to specific transmission elements. Further, the Stakeholder has mentioned the reference of Regulation 27 of the HPERC (Grant of Connectivity, Long-term and Medium-term intra-State Open Access and Related Matters) Regulations, 2010, which affirms that all LTOA and MTOA customers are liable for transmission charges across the entire system, challenging the Petitioner's plea to recover tariffs solely from specific users.

2.4.2 M/s KPCPL also has given the references of the National Tariff Policy, 2016, which mandates that transmission charges be shared among all LTA and MTOA customers based on their utilization of the transmission system. Furthermore, KPCPL submitted that it is paying a higher transmission charges in line with the Interim Power Transmission Agreement as compared to other hydro projects in the state. Also, M/s KPCPL has stated that 90% of the transmission charges cannot be borne only by the users of the subject transmission asset of the Petitioner alone and the same has to be shared by all long-term and medium-term transmission customers of the State. M/s KPCPL, as a Small HEP, argued that the Petitioner's attempt to recover transmission charges solely from them violates these regulations and policies, jeopardizing the financial viability and existence of their renewable energy power plant.

Petitioner's Submissions

2.4.3 The Petitioner has submitted that under Regulation 12(1) of the HPERC Tariff Regulations, 2011, they are entitled to seek tariff determination for either the entire transmission system or specific transmission lines and substations. Regulation 3(39) defines the transmission system as encompassing extra high voltage electric lines owned or controlled by the transmission licensee, used for conveying electricity between generating set switchyards, substations, or external interconnections, but excluding distribution system components. Based on these provisions, the Petitioner asserted its right to file the current petition to determine the tariff for the specific asset and propose a recovery mechanism from the beneficiaries of that asset.

2.4.4 The Petitioner also stated that while it is true that transmission charges are to be shared among Long Term and Medium-Term Open Access consumers, the regulation specifies that these charges are to be apportioned based on the allocated transmission capacity.

2.4.5 The Petitioner submitted that the Stakeholder's request to follow the Tariff Policy and its own Regulations is unnecessary and overreaching. Further, the Petitioner has submitted that the Stakeholder willfully entered into a connection agreement and IPTA to avail the benefits of being a long-term consumer, which grants first right for the evacuation of power.

Commission's Analysis

2.4.6 The Commission in its previous orders have also approved for recovery of transmission charges from relevant users in line with the Regulations 12(1) of the HPERC Tariff Regulations, 2011. Therefore, no contradiction in the claim of the Petitioner with respect to existing regulations is observed. The Commission has approved the transmission charges against the assets as detailed in Chapter 4 of this Order.

2.5 Transmission Charges to be shared amongst all Beneficiaries

Stakeholder's Submissions

2.5.1 The Stakeholder submitted that the Petitioner's request for the recovery of transmission charges exclusively from the users of the specified transmission system contradicts the provisions of the Electricity Act, 2003. It has submitted that by seeking to recover charges solely from specific users, the Petitioner imposes an additional financial burden on the Stakeholder, which already pays transmission charges for other lines due to the State Transmission Utility's (STU) failure to develop an adequate evacuation system.

2.5.2 M/s KPCPL has raised concerns regarding deviation from the original scheme in commissioning the transmission assets, resulting in evacuation of power through a private transmission line owned by AD Hydro Power Private Ltd. The Stakeholder has submitted that this deviation resulted payment of unregulated high transmission charges compared to other small hydroelectric projects (SHEPs) in Himachal Pradesh. The Stakeholder has requested that transmission charges should be rationalized to ensure equity among all generators in the State and avoid burdening of excessive costs on the Stakeholder.

Petitioner's Submissions

2.5.3 The Petitioner has mentioned that the Stakeholder's contention that the cost of transmission assets used by them should be socialized and passed on to other consumers in the State is unjust and would unfairly burden those who are not utilizing the assets in question. The Petitioner has asserted that the proposed recovery is in accordance with the HPERC Tariff Regulations, 2011 and the Stakeholder is attempting to benefit as a long-term customer while paying charges appropriate for short-term Open Access Consumers.

2.5.4 It is also mentioned that the Petitioner has surprised with regard to the claim of Stakeholder that the IPTA was entered into under duress after using the system for approximately four years. Further, the Petitioner has submitted that the listed SHEPs are Short-Term Open Access (STOA) consumers of HPPTCL and are liable to pay STOA charges determined by this Commission while the Stakeholder is a long-term consumer. Moreover, the Stakeholder has not signed the Long-Term Access (LTA) Agreement even after intimating for signing of Long-term Open Access Agreement in respect to Stakeholder's Baragaon SHEP (24 MW) by the Petitioner on 06.02.2020.

Commission's Analysis

2.5.5 The Commission is of the view that recovery of the transmission charges should be as per the principles outlined in the HPERC Tariff Regulations, 2011, as amended from time to time.

2.6 Interim Transmission Charges

Stakeholder's Submissions

2.6.1 M/s KPCPL has conveyed that the HPPTCL had submitted a compliance report on 15.11.2019 in response to the Commission's letter dated 05.10.2019 and has sought an interim payment of 90% of transmission charges for the subject asset. The request was made without filing an Interlocutory Application as required and therefore was against the procedures. The Stakeholder has submitted that any prayer for interim relief must adhere to the prescribed formats and be supported by the appropriate affidavits. But the same was not the case here, thereby invalidating the request for interim payment.

Petitioner's Submissions

2.6.2 The Petitioner has submitted that the request for an interim payment of 90% of transmission charges was to alleviate significant liquidity constraints which were impacting the operations. Also, HPPTCL has submitted that the request stems from the ongoing challenges, including partial payments by the Stakeholder amounting to 80% of monthly charges since 2017 and 60% since April 2019, as mandated under Ld. CERC directives in response to disputes over the IPTA between the Respondent, Petitioner, and ADHPL. Since the ongoing disputes had resulted in arrears exceeding Rs. 80 lakhs, it had severely affected Petitioner's ability to timely commission other critical projects essential for statewide consumer benefit. Therefore, the compliance report submitted on 15.11.2019, supported by an affidavit, was necessitated by the stated circumstances to address the financial concerns.

Commission's Analysis

2.6.3 The Commission observes that the Petitioner's request for an interim payment of 90% of transmission charges was to mitigate financial strain caused by outstanding arrears and requirement of capital for completion of other projects in the state. However, due to the pending case in the Hon'ble APTEL in the instant matter, the Commission had not issued any Order with respect to the same. Further, the Commission while issuing this Order approves the transmission charges which shall be adjusted for any earlier recovery made by the Petitioner.

2.7 Treatment of Consumer Contribution

Stakeholder's Submissions

2.7.1 M/s KPCPL has submitted that it had deposited an amount of Rs. 1 Cr. towards the bay cost required for physical connectivity of its transmission line with the 33 KV interfacing system at the 33/220 kV Phojal substation, as per the demand issued by the HPPTCL. Further, it has submitted that the amount was deposited under protest to ensure the smooth commissioning of its plant. Also, M/s KPCPL claimed that the Petitioner had earlier requested to get approval of the cost and to recover it as per the directions of Commission. However, the process was not followed and the amount was recovered from M/s KPCPL based on self-approved cost of 33kV GIS substation.

2.7.2 Also, the Stakeholder has highlighted that the HPPTCL planned to recover the costs associated with the bays, including the 33kV GIS substation, from the users of which one bay is utilized by KPCPL, two bays by HPSEBL and the remaining bays allocated to upcoming Small Hydro Projects (SHPs) and the cost against these bays are included in the Annual Revenue Requirement (ARR). Further, M/s KPCPL has requested that 6 nos. of GIS substation bays should be treated separately as STU was entrusted to carry works of voltage level 66kV and above and separate Petition should be filed for approval of O&M expenses for these bays. Further, the balance cost of said elements may be recovered from connected/ planned users of bays (except KPCPL as its share of cost has been deposited).

2.7.3 Alternatively, M/s KPCPL has proposed refunding the deposited amount or allocating equity equivalent to the deposited amount, as it cannot contribute further financially to the project. M/s KPCPL has also submitted for the non-applicability of O&M charges for the bay, stating that these should be covered within the licensee's ARR, since the costs of the element are already included.

Petitioner's Submission

2.7.4 The Petitioner has submitted that as per HPERC Tariff Regulations, 2011, transmission licensee can obtain estimated costs from the users of the system, which are classified as Deposit Works and also provides for the treatment of the same. Accordingly, the Petitioner had collected an estimated cost from the Stakeholder for providing physical connectivity of the Stakeholder's transmission line to one out of six 33kV bays at Phojal Substation. Further, the Petitioner submitted that the amount was estimated in line with the existing market scenario. Also, with regard to the necessity of prior approval from the Commission for collecting the deposit amount from the Stakeholder, the Petitioner has submitted that such approval is not required as the details of the amount collected are submitted while filing the Petition for determination of tariff for the subject assets.

2.7.5 The Petitioner has submitted that the 33kV system of the subject assets is an integral part of the entire scheme which comes under the purview of Petitioner. Also, the Petitioner with respect to recovery of balance cost from connected/ planned users of bays (except KPCPL) has mentioned that it shall recover the cost as and when generators approach the Petitioner in line with the HPERC (Grant of Connectivity, Long-Term and Medium-Term Intra-State Open Access and Related Matters), Regulations, 2010 and HPERC Tariff Regulations, 2011, as amended from time to time.

2.7.6 The Petitioner has clarified that since the recovery of cost of bay from the Stakeholder has been done in line with HPERC Tariff Regulations, 2011, there is no merit in refunding the same. Also, claim of allocation of equity to M/s KPCPL is out of context and not in line with the HPERC Tariff Regulations, 2011.

2.7.7 With respect to non-applicability of O&M charges against bays, the Petitioner has stated that the scheme is viewed in totality and there is no merit in separate treatment of O&M charges. Further, with regard to the objection that O&M charges are already covered in ARR, the Petitioner has submitted that the actual O&M charges are apart from the O&M cost recovered from the Stakeholder and therefore they are not double accounted. The details of such recovery have already been submitted vide compliance report dated 07.09.2019 to the Commission.

Commission's Analysis

2.7.8 The Commission has noted the submissions of the Stakeholder and the Petitioner. The Commission has adjusted any amounts recovered towards the capital cost as highlighted in Chapter 3 of this Order. Further, the Commission is of the view that the cost of bay charges etc. received by the Petitioner is not the subject matter of this Petition and the same cannot be adjudicated here in this Petition. Any aggrieved stakeholder on this account may file a separate petition with the Commission in this regard. The Commission in this Order has approved the Capital Cost and ARR of the transmission system of the Petitioner in line with the provisions of the HPERC Transmission Tariff Regulations, 2011.

2.8 Lack of Evidence regarding declaration of COD by HPPTCL

Stakeholder's Submissions

2.8.1 The Stakeholder M/s KPCPL has submitted that adherence to the provisions outlined in the Indian Electricity Grid Code 2010 has not been followed by the Petitioner, particularly regarding the definitions of successful trial operation and the date of commercial operation. As per Regulation 6.3 (A) (4) of the Indian Electricity Grid Code 2010, the date of commercial operation mandates a declaration from the transmission licensee after the transmission system or element undergoes successful trial operation, validated by a certificate affirming compliance with grid standards and code requirements. Regulation 6.3 (A) (5) specifies that trial operation involves a continuous 24-hour operation with functioning metering, telemetry, and protection systems, accompanied by a certificate from the Regional Load Despatch Centre. M/s KPCPL has highlighted the absence of documentary evidence from RLDC or SLDC confirming the successful trial run of the transmission system. Further, the Petitioner has failed to provide the requisite certification of compliance with IEGC 2010 and CEA Technical Standards for Construction.

Petitioner's Submissions

2.8.2 The Petitioner has submitted that as per HPERC MYT Transmission Regulations 2011, the date of commercial operation is defined as the date declared by the transmission licensee from 0000 hours when an element of the transmission system is in regular service after successful charging and trial operation. Accordingly, the assets were declared under commercial operation on 05.06.2016, supported by the approval for shutdown conveyed by Northern Regional Load Dispatch Center (NRLDC) for LILO of 220 kV Phojal to Patlikul Transmission Line of HPPTCL to ADHPL. Further, the Petitioner has submitted that these documents have been submitted as Annexure 1 to the compliance report dated 13.01.2020. Also, the Stakeholder has been utilizing the asset for evacuating power for nearly four years.

Commission's Analysis

2.8.3 The Commission observes that relevant documents with regard to the commissioning of the transmission assets have been submitted by the Petitioner vide response to the deficiencies raised by the Commission.

2.9 Deviation from Commission's Regulations

Stakeholder's Submissions

2.9.1 The Stakeholder has submitted that HPERC MYT Tariff Regulations 2011 mandate that the Commission approves all system augmentation plans based on load growth forecasts and network expansion needs. Therefore, any capital expenditure incurred, including emergency works, necessitates prior approval and submission of detailed justifications to the Commission. However, the Petitioner proceeded with the capital expenditure related to the assets without seeking adequate approvals.

2.9.2 Also, the Stakeholder has mentioned that as stipulated in Regulation 7(4), the Commission shall oversee the actual versus approved capital expenditure and capitalization annually, with adjustments made during mid-term reviews and end-of-period true-ups. The Petitioner, despite commissioning the assets in 2016, failed to submit a business plan or undergo mid-term review as required. The Stakeholder has submitted that any deviation from benchmark costs should not burden consumers and has urged to ensure compliance with Clause 7 of the HPERC MYT Transmission Regulations 2011 and approving the ARR based on the benchmark costs.

Petitioner's Submissions

2.9.3 The Petitioner has submitted that HPPTCL was designated as the State Transmission Utility (STU) on June 10, 2010, and has been recognized as "Transmission Licensee" by the Commission through its Order dated July 31, 2010. Prior to HPPTCL, the HPSEB (now HPSEBL) was responsible for the functions of STU, including the planning and coordination of intra-state transmission systems. The HPSEB had prepared the master Transmission evacuation plan for Small Hydro Generating Stations, which received "in principle" approval from the Commission through its letter dated October 18, 2009. This approval encompassed the construction of the Palchan 220/33 kV Substation and associated infrastructure, as outlined in the master Transmission evacuation plan. Therefore, the Petitioner has filed this Petition in compliance with the provisions of the HPERC Transmission Tariff Regulations, 2011, as amended from time to time.

Commission's Analysis

2.9.4 The Commission partly concurs with the views of the Petitioner and has reviewed the current Petition in line with the HPERC Transmission Tariff Regulation, 2011.

2.10 Overstatement of Evaluation of Gross Fixed Assets

Stakeholder's Submissions

2.10.1 The Stakeholder has submitted that project was awarded to M/s L&T for substation works and M/s Hythro Power Ltd. for line related works at Palchan. However, the existing scope of works could not be pursued as per the recommendations of the special task force constituted to review the evacuation arrangements of Chenab Basin and the substation was relocated to Phojal.

2.10.2 The Stakeholder has claimed that the proposed scheme for Palchan Pooling Station and proposed scheme of Phojal pooling station are entirely different as both pooling stations are approximately 25 km apart, located in different terrains, and implemented based on the identification of different generating stations. Therefore, HPPTCL cannot consider both pooling stations under the present petition, as Palchan Pooling Station is part of a different scheme and the Petitioner should file a separate petition for the same.

2.10.3 Further, M/s KPCPL submitted that the reasons stated by the Petitioner for changing the location to Phojal is based on task force recommendations and is inconsistent with the Petitioner's reply to HPERC-query 2, where the Petitioner has submitted that the sub-station location was changed due to flash floods at Palchan. This reason conflicts with the CAG Audit report on the economic sector for the Government of Himachal Pradesh dated 31.03.2012, which stated the abandonment of the Palchan site was due to right of way problems after incurring Rs 1.91 crore. These contradictions suggest that the Petitioner's reasons are unreliable, and the Commission should take cognizance of this discrepancy.

2.10.4 Also, M/s KPCPL submitted that the Petitioner should have cancelled the initial bidding process and initiated a new one. Instead, the projects were awarded to the original bidders through private negotiations. It was highlighted that Petitioner has not provided any reasonable explanation for deviating from the competitive bidding process due to a change in scope, nor considered limited tendering despite the urgency which raises doubts about the process. Furthermore, in the 15th STU meeting, it was noted that the Phojal HEP was already delayed by 2-3 years, indicating that the Petitioner could have retendered the work. The Stakeholder has accordingly requested the Commission to conduct adequate diligence and approve the Gross Fixed Assets in accordance with benchmark rates, with any cost increase due to delay being borne solely by the Petitioner.

Petitioner's Submissions

2.10.5 The Petitioner has submitted that the location of the proposed scheme at Palchan was shifted to Phojal based on recommendations from the Special Task Force, which was formed to revise the master plan for evacuation considering corridor constraints and space availability at various substations, with representatives from HPPCL, HPPTCL, CEA, and Powergrid. The Task Force recommended evacuating power from the projects in the Chanderbagha basin through a high-capacity 400 kV single corridor line from the proposed pooling station at Sissu/Gramphu to the 400 kV substation of PGCIL under construction at Hamirpur. This revision made the proposed 220 kV Palchan-Prini line techno-economically unjustified. Consequently, it had to abandon the construction of the 220 kV Palchan-Prini line and the 33/220 kV substation at Palchan and shift it to the Phojal location on 30.12.2011. Additionally, a flash flood in the Beas River on 02.08.2012 washed away the proposed construction site for the 33kV switching station at Palchan. The Petitioner further submitted that constructing the substation at the Palchan site would have resulted in significant resource loss with minimal utilization, underscoring the prompt decision by the Petitioner.

2.10.6 Further, with respect to the CAG Audit Report dated 31.03.2012, the Petitioner submitted that report only noted the abandonment of works at the proposed Palchan site but failed to mention that the proposed works were shifted to Phojal. The expenditure of Rs. 1.91 crore corresponds to the advance paid to M/s Hythro Power Company Limited, which was adjusted against works executed at the new site as the award was amended and the works were carried out by the same company.

2.10.7 The Petitioner has clarified that construction works at Palchan were awarded to M/s L&T and M/s Hythro Power Company Ltd. On a turnkey basis following a transparent competitive bidding process. The timelines for completion were short, with L&T expected to complete the substation within 8 months from the contract's receipt. Consequently, the contractors had commenced work promptly. For example, L&T initiated engineering and procurement activities immediately upon receiving the LOA and began manufacturing the 33 kV GIS after the Petitioner approved the drawings. However, issues related to finalizing the layout and handing over the land led to some ordered items being held back from manufacturing by L&T. Considering the potential delay that re-selecting a contractor through ICB would have caused, the Petitioner decided to continue with the existing contractors after exploring all options and obtaining the approval of the competent authority. Detailed correspondences showing the revised orders are included in the contract documents already submitted to the Commission. Additionally, the Petitioner has provided details and justifications for the time and cost overrun in the Petition and compliance reports dated 07.09.2019, 14.11.2019, 31.01.2020, and 07.03.2020 for the Commission's due consideration.

Commission's Analysis

2.10.8 The Commission has taken into consideration all information submitted by the Petitioner for the purpose of approving the capital cost. Also, the Commission sought several clarifications and approval with respect to the revisions made with respect to the contracts awarded to the firms which are also detailed out in Chapter-3 of this Order.

2.11 Delayed Board Approval

Stakeholder's Submissions

2.11.1 The Stakeholder has highlighted significant concerns regarding the Petitioner's handling of cost estimates and board approvals throughout the project lifecycle. The Petitioner had earlier emphasized that despite an initial projected cost of Rs 70.40 Crores, subsequent revisions due to scope changes escalated the project cost to Rs 78.46 Crores in 2014, representing a 12% increase without board approval. However, following the project's commissioning in 2016, the capitalized cost submitted by the Petitioner further rose to Rs 87.75 Crores, indicating a 25% escalation, which too was without board approval. Ultimately, the Petitioner sought approval for a final cost of Rs 93.63 Crores, marking a 33% increase over the initial estimate. The Stakeholder has raised concern over the delay in submitting revised costs to the board—nearly 24 months after commissioning—reflects a lapse in industry norms where timely communication and management oversight are critical to managing project finances effectively. The Stakeholder has accordingly urged the Commission to scrutinize the practices closely to ensure transparency and accountability in cost management procedures moving forward.

Petitioner's Submissions

2.11.2 The Petitioner has submitted that it had duly sought the approval of the Board of Directors (BOD) during the 38th Board Meeting under agenda item 38.18, presenting comprehensive details of the actual expenditures and justifications for the increased project costs, as evidenced in Annexure 4 submitted with this Petition. Regarding concerns over management oversight, the Petitioner has submitted that BOD-designated representatives diligently supervised project construction, intervening as necessary to ensure adherence to standards and objectives.

2.11.3 Further, the Petitioner submitted that it has furnished comprehensive justifications in support of its additional capital expenditure claim within the tariff petition and has further substantiated these claims in response to data gaps raised by the Commission. Further, the asserted additional capital expenditure beyond the specified cut-off date falls under Regulation 16(2)I of the HPERC Transmission Tariff Regulations, 2011, and subsequent amendments, pertaining to restoration work and the construction of office and residential facilities at the Phojal Substation.

Commission's Analysis

2.11.4 The Commission acknowledges the importance of adhering to procedural norms, especially concerning cost escalations and board approvals, to uphold transparency and accountability in project management. The Commission has reviewed the various submissions of the Petitioner with respect to the capital cost and has also sought detailed justification and approval of competent authority for the purpose of prudence check for approval of capital cost of the transmission asset. The detail of the same is covered under Chapter-3 of this Order.

2.12 Compliance Data Gap

Stakeholder's Submissions

2.12.1 The Stakeholder has submitted that there are major information and compliance gaps observed in the Petition. Further, it has mentioned that the Petitioner has failed to comply and provide the vital information/ documents which are required for the purpose of determination of the transmission tariff of the subject assets.

Petitioner's Submissions

2.12.2 The Petitioner has submitted that it has provided all the information raised by the Commission vide its various compliance reports.

Commission's Analysis

2.12.3 The Commission has noted the submissions of both the stakeholder and the Petitioner. Further, the Commission had sought several information with respect to data gaps and additional information from the Petitioner vide multiple deficiency letters. The same is detailed out in the Chapter – 3 of this Order.

2.13 Deficiency in Capital Cost data

Stakeholder's Submissions

2.13.1 The Stakeholder has submitted that in light of the inconsistencies in planning and delays in implementing the transmission asset, which directly impact tariff implications for the public, it is imperative to assess the cost-effectiveness by comparing the project's expenses against benchmarking norms. The Stakeholder has highlighted that the norms for capital costs are explicitly outlined in Regulation 14 of the Transmission Tariff Regulations 2011, which stipulate that the Commission must conduct a prudence check on admitted capital costs. This includes benchmark norms specified by the Commission, or in their absence, an evaluation of capital expenditure reasonableness, financing plans, interest during construction, technology efficiency, cost and time overruns, and other pertinent factors deemed appropriate by the Commission should be done.

2.13.2 M/s KPCPL has further suggested that given the observed gaps in compliance ensuring competitive and economical project completion, the most viable approach to determine and approve costs is by aligning them with benchmark standards.

Petitioner's Submissions

2.13.3 The Petitioner has submitted that Regulation 14 of the HPERC Transmission Tariff Regulations explicitly outlines the process for determining the capital cost of projects, stipulating that the Commission, after conducting a prudence check, shall establish the basis for tariff determination. This check may involve benchmark norms specified by the Commission or an assessment of factors such as the reasonableness of capital expenditure, financing plans, interest during construction, technology efficiency, cost and time overruns, and other relevant considerations deemed appropriate. The Petitioner submitted that it has provided all necessary details in response to the Commission's requests for information through various data gaps to facilitate the prudence check. Accordingly, the Petitioner has requested the Commission to approve the claimed capital cost and tariff in accordance with the regulations.

Commission's Analysis

2.13.4 The Commission has noted the submissions of both the stakeholder and Petitioner. Further, the Commission had sought several information with respect to data gaps and additional information from the Petitioner vide multiple deficiency letters. The same is detailed out in the chapter – 3 of this order.

2.14 Hard Cost of Transmission Line and Substation

Stakeholder's Submissions

2.14.1 The Stakeholder has submitted that the relocation of the Palchan Substation to Naggar purportedly saved forest cover but also influenced the line's length to 0.250 km. However, concerns arise as contracts regarding these transmission lines are not accessible via the web portal, and there is no evidence of competitive bidding for the awarded contract. Further, the significant cost escalation, attributed to supply elements and foundation works delays, underscores the necessity for recovering liquidated damages from the contractor as per standard contract terms.

2.14.2 Further, M/s KPCPL has requested that the estimated costs should ideally align with the 2013-14 benchmark cost, comparable to HPS’BL's data for 1 km of 220 KV D/C Line (Snow Zone), to ensure fairness to consumers and that the Commission’s scrutiny is crucial to prevent undue financial burden, especially concerning the high land compensation costs of Rs. 415.57 lakhs.

2.14.3 M/s KPCPL has highlighted concerns regarding the escalated completion cost and lack of transparency in awarding the sub-station project without competitive bidding. Also, considering delays beyond the stipulated contract period of 14 months, the recovery of liquidated damages has not been detailed in the Petition. The Stakeholder has urged the Commission to benchmark the cost of the sub-station against 2013-14 standards.

Petitioner’s Submissions

2.14.4 In response, the Petitioner has submitted that it has already provided comprehensive explanations for the cost escalation due to various uncontrollable factors in the submissions made to the Commission.

2.14.5 Further, the Petitioner has clarified that it has adhered to a transparent process, ensured competitive pricing for the transmission line construction project and managed the execution economically, despite delays caused by factors beyond its control. Also, with respect to liquidated damages (LD), the Petitioner has mentioned that it had provided the details of LD recovery in response to data gaps.

2.14.6 Furthermore, the selection of alternate land at Phojal was meticulously evaluated by the Task Force and HPP’CL's internal team after considering all available options.

Commission’s Analysis

2.14.7 The Commission has noted the submission of both the stakeholder and Petitioner. Further, the Commission had sought several information with respect to data gaps and additional information from the Petitioner vide multiple deficiency letters. The same is detailed out in the chapter – 3 of this order.

2.15 Financing Plan

Stakeholder’s Submissions

2.15.1 M/s KPCPL has raised concerns about deviations in the financing plan, noting discrepancies between the decision to fund from ADB Trench-I in the [1]3th STU meeting and the subsequent utilization of an REC loan for the project, potentially impacting the overall completion cost. The Stakeholder has also flagged the absence of prior estimation of Interest During Construction (IDC), urging the Commission to scrutinize these financial aspects thoroughly.

Petitioner's Submissions

2.15.2 The Petitioner has submitted that the funding decisions for projects are influenced by multiple considerations, and it is committed to effective and efficient asset construction for the benefit of State consumers. All requisite financial details pertaining to project financing have been meticulously furnished by the Petitioner in the Petition and subsequent compliance reports.

Commission's Analysis

2.15.3 The Commission has reviewed the funding pattern along with details of equity, debt and consumer contribution related to the project. The same is detailed out in the Chapter – 3 of this Order.

2.16 Interest During Construction

Stakeholder's Submissions

2.16.1 M/s KPCPL has highlighted that the Petitioner has failed to sufficiently justify the deviations between estimated IDC and actual IDC in their current response. Also, the DPR lacks an essential estimate of IDC, which is crucial for any construction project.

2.16.2 The Stakeholder has requested the Commission to approve IDC using the following methodology: i) IDC should be calculated and approved based solely on actual loan drawdowns, ii) IDC approval should be limited to the completion period stipulated in the contract, which is 14 months in this case, iii). whether the Petitioner has taken sufficient measures to minimize IDC, including scrutiny of equity drawdowns and, iv) considering the delay in project completion and its potential impact on consumers, IDC approval should be capped at less than 50% of the claimed Rs 6.43 Cr.

Petitioner's Submissions

2.16.3 The Petitioner has submitted that it has clarified that due to the absence of a definitive financing plan during the DPR preparation phase, the estimation of IDC was not included. Regarding the provision of information on this matter, the Petitioner has diligently submitted all required details, including justifications for various circumstances, to the Commission as mandated, through compliance reports.

Commission's Analysis

2.16.4 The Commission has carefully considered the submissions made by the Petitioner regarding the IDC. The detailed computation of IDC as considered by the Commission for approval has been detailed in Chapter 3 of this Order.

2.17 Initial Spares

Stakeholder's Submissions

2.17.1 M/s KPCPL has emphasized that ensuring high availability and minimizing forced outage of generating stations necessitates the transmission licensee to maintain a minimum quantity of initial spares, as mandated in the appropriate Regulations of the Commission. Despite the Petitioner's inclusion of initial spares in capital expenditure claims, no evidence has been presented to confirm their availability for the instant assets. Therefore, M/s KPCPL has urged the Commission to defer approval of initial spares until adequate evidence is provided by the Petitioner.

Petitioner's Submissions

2.17.2 The Petitioner has mentioned that the inclusion of Initial Spares in the capital cost aligns with Regulation 15 of the HPERC Transmission Tariff Regulations, 2011 and subsequent amendments. As evidence, the Petitioner has submitted an Auditor's certificate validating this inclusion, documented as Annexure 6 in response to the queries of the Commission dated 13.01.2020.

Commission's Analysis

2.17.3 The Commission has taken note of the response of the Petitioner. The detailing with respect to inclusions of capital cost and basis for approval of such cost are detailed in Chapter 3 of this Order.

2.18 Additional Capitalization

Stakeholder's Submissions

2.18.1 M/s KPCPL has submitted that the Petitioner has claimed additional capital expenditure attributed to damages from flash floods besides claiming normative R&M expenses. It is emphasized that costs related to restoration should typically be categorized under O&M expenses in accordance with established norms. Moreover, regarding the civil structures' design and execution, it is contended that any improvements or changes in scope beyond the cut-off date specified in the Regulations should be addressed through insurance provisions rather than burdening transmission customers. The Stakeholder has highlighted that in generation projects, flood-related rectifications are covered by insurance to mitigate financial impacts on consumers over the project's lifespan. Accordingly, any expenses due to damages from such events should be appropriately managed through insurance claims to prevent additional financial strain on transmission beneficiaries.

Petitioner's Submissions

2.18.2 The Petitioner has responded stating that expenses incurred due to a flash flood constitute a Force Majeure event, distinctly separate from normative O&M expenses, which are recurring and intended for the routine operation and maintenance over the asset's lifecycle.

Commission's Analysis

2.18.3 The Commission agrees with the views of the Stakeholder regarding appropriate insurance coverage for limiting the financial impact on account of damages caused due to force majeure events such as flood, cloud burst, etc. In the absence of adequate details regarding the additional capitalization claimed by the Petitioner, the Commission has not allowed any additional capitalization and shall consider the same during subsequent filing when the actual expenditure details are available along with supporting documents.

2.19 Additional Capitalization for Residential Building

Stakeholder's Submissions

2.19.1 M/s KPCPL has highlighted that the proposed expenditure for non-power system related assets lacks independent verification and does not align with regulatory provisions, potentially burdening transmission customers without sufficient justification.

Petitioner's Submissions

2.19.2 In response, the Petitioner has mentioned that such infrastructure is integral to efficient operation and not an undue burden on beneficiaries. Further, the Petitioner has highlighted operational challenges due to remote location and existing staff accommodation being located far from the site impact the operational and maintenance efficiency during emergencies. Therefore, the Petitioner has planned to alleviate these issues with the construction of a residential building at Phojal sub-station, pending approval from the Commission.

Commission's Analysis

2.19.3 The Commission has reviewed the claim with respect to residential building and has not considered the cost as part of the additional capitalization as detailed in Chapter 3 of this Order.

2.20 Debt-Equity Ratio

Stakeholder's Submissions

2.20.1 The Stakeholder has submitted that the Petitioner has opted for a capital structure skewed heavily towards equity rather than debt, thereby potentially compromising the economic efficiency mandated for transmission systems. Further, the Stakeholder has also highlighted discrepancies in the utilization of long-term loans, where the Petitioner chose to utilize only a portion of the entitlement, resulting in higher transmission tariffs for consumers to compensate for increased return on equity. Accordingly, M/s KPCPL has requested the Commission to consider a capital structure ratio of 90:10 (debt to equity) as per the terms of the long-term loan approved by REC.

Petitioner’s Submissions

2.20.2 The Petitioner has responded mentioning that ’the choice of equity over debt was deliberate, aiming to mitigate higher Interest During Construction (IDC) costs that would have arisen with a higher debt component. Further, the Petitioner has clarified that the reported debt-equity ratio excludes consumer contributions and adheres to normative guidelines for tariff determination, as specified in their submissions to the Commission.

Commission’s Analysis

2.20.3 The Commission has noted the submissions of the Stakeholder as well as the Petitioner. Based on the detailed scrutiny of the submissions made by the Petitioner, the Commission has observed that the debt-equity approved by REC as per their sanction letter was based on 90:10 debt equity ratio. However, the Petitioner has not utilized the complete amount of loan available. Therefore, the Commission has retained the original debt:equity ratio of 90:10 as per the loan agreement. The details of the same are discussed in Chapter 3 of this Order.

2.21 Operation & Maintenance expenses

Stakeholder’s Submissions

2.21.1 M/s KPCPL has asserted that the O&M expenses for the Intra-State transmission system have already been approved under the ARR for the fourth Control Period and if the subject asset pertains to the ISTS, its inclusion will lead to double recovery from consumers through the Point of Connection (POC) pool, significantly increasing costs. Additionally, M/s KPCPL has raised concerns about the inclusion of the cost of insurance in A&G Expenses, urging clarity and adherence to regulatory guidelines to prevent undue financial burden on transmission users.

Petitioner’s Submissions

2.21.2 The Petitioner has clarified that the O&M expenses approved for the intra-state transmission system under the MYT Order for th^{e} 4th Control Period specifically apply to existing intra-state assets, with separate approval required for the instant assets under consideration. Regarding the inclusion of cost of insurance in A&G expenses, the Petitioner has clarified that such expenses are appropriately categorized and included in accordance with regulatory guidelines.

Commission’s Analysis

2.21.3 The Commission has carefully analyzed the claimed O&M expenses in line with the approach followed in the past and also in line with the Regulations. The detailed scrutiny and approval of the same is detailed in Chapter 4 of this Order.

2.22 Corporate Tax

Stakeholder's Submissions

2.22.1 M/s KPCPL has highlighted that the Petitioner has only provided accounting statements for the fiscal year 2016-17, without evidence for the corporate tax rate in subsequent years. Further, the project qualifies for the 80IA of the Income Tax Act benefit which shall significantly reduce the Petitioner's tax liability. Noting that the Petitioner did not incur any corporate tax expense in 2016-17, M/s KPCPL has suggested that the Commission should allocate the tax benefit to mitigate impacts on consumers.

Petitioner's Submissions

2.22.2 The Petitioner has clarified that the claimed RoE with grossing up of corporate tax complies with the provisions set forth in the HPERC Tariff Regulations, 2011.

Commission's Analysis

2.22.3 The Commission during scrutiny has observed that there has been Nil incidence of tax on the Petitioner for past years and therefore has decided to approve RoE without grossing up for tax. The same is also covered under Chapter 4 of this Order.

2.23 Delay in Commissioning of Transmission system

Stakeholder's Submissions

2.23.1 The Stakeholder has highlighted that the significant delays in the commissioning of the transmission system by the HPPTCL has impacted the overall project timelines and operational plans. M/s KPCPL asserted that delays were anticipated from the initial stages of the SHEP commissioning, citing agreements dating back to 2002 and subsequent Implementation Agreements that detailed project execution timelines and infrastructure upgrades. As per revised DPR of the Baragaon HEP (3x8 MW), power evacuation was to be evacuated through the Naggar sub-station, contingent upon its capacity upgradation to 132 kV by HPSEBL. However, it was later decided that power from Baragaon project shall be evacuated over 132 kV line from the project to 132 kV Pooling Station (P.S) at Fozal Nallah in joint mode. Post number of deliberations and discussions, in the [1]3th STU meeting dated 29.10.2011, 132/220 kV PS at Naggar was relocated to 33/220 kV at Phojal and was finalized to be included in ADB Trench- 1 loan to ensure commissioning by Sep 2013. Further, during 15th STU Coordination Committee meeting held on 10.01.2012, the Petitioner confirmed awarding contract of construction for the asset.

2.23.2 The Stakeholder has further submitted that since 2009, the Petitioner has been continuously revising the timelines for the proposed evacuation system. Also, due to the delays, M/s KPCPL was unable to conduct necessary system studies resulting in delay in commissioning of power plant until June 5, 2016.

Petitioner's Submission

2.23.3 With regard to objection on delay in commissioning, the Petitioner has submitted that the construction of subject assets was delayed on account of uncontrollable factors details whereof along with the justification are already submitted by the Petitioner through the Petition and subsequent compliance reports.

Commission's Analysis

2.23.4 The Commission has analyzed the various reasons of delay and has observed that part of the delay was on account of uncontrollable aspects while some part could have been controlled by the Petitioner. A review of the same is presented under Chapter 3 of this Order.

3. APPROVAL OF CAPITAL COST

3.1 Introduction

3.1.1 HPPTCL has submitted a petition for approval capital cost and determination of Tariff for 3rd and 4th control period from COD (i.e., 05.06.2016) to FY 2023-24 for 33/220kV, 80/100 MVA GIS Sub Station at Phojal along with 220kV D/C LILO Transmission line.

3.1.2 The relevant technical details and configuration of the assets as submitted by Petitioner have been provided as follows:

Table 5: Asset Details

Asset	Name of Sub-Station	Type	Voltage level (kV)	No. of Bays/ Line Length	COD
Asset-1	33/220 kV, 80/100 MVA Sub-Station at Phojal	GIS	220 kV	2 Nos. of 220 kV Bays and6 Nos. of 33 kV Bays	05.06.2016
Asset-2	220 kV D/C Transmission Line from Phojal Sub-Station to LILO at Patlikul with 220 kV D/C AD hydro Transmission line	D/C	220 kV	6.875 km Line Length	05.06.2016

3.1.3 Regulation 14 of the HPERC Transmission Tariff Regulations 2011, provides as under:-

"14. Capital cost of the project

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

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

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

(c) additional capital expenditure determined under regulation 16:

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

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

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

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

Provided further that where the implementation agreement and the transmission service agreement entered into between the transmission licensee and the long-term transmission customer provides for ceiling of actual expenditure, the capital expenditure admitted by the Commission shall take into consideration such ceiling for determination of tariff:

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

3.1.4 The Commission has reviewed the proposed capital cost and ARR for each year from COD until the end of the 4thControl Period i.e., FY 2023-24.

3.1.5 Multiple set of deficiencies in the petition were shared with the Petitioner to realistically validate the reasons for cost and time overrun, the capital cost claimed, beneficiary details, etc.

3.1.6 The original Petition lacks detailing and supporting information to validate the capital cost for each of the assets. Also, details such as justification for time and cost overrun, final auditors certificate, standard time period of construction, beneficiary details, etc. was not provided as part of the main petition. The information provided in the Petition was inadequate and the Commission had to seek additional submissions and supporting documents from the Petitioner through deficiency letters for reviewing the capital cost and ARR. With respect to some queries of the Commission, the information provided by the Petitioner remained incomplete and/or could not be validated through appropriate supporting documents specifically for consideration of Interest During Construction (IDC) and Departmental Charges (DC).

3.1.7 The Commission has undertaken detailed prudence check and adequate assumptions, wherever required, for approving the capital cost of Sub-Station and transmission line. The scrutiny and prudence check undertaken by the Commission for approval of capital cost has been discussed in the following paragraphs.

3.2 Summary of the Project

Petitioner Submissions

3.2.1 The Petitionerhas submitted that 33/220 kV GIS Sub-Station at Phojal (Asset-1) was approved vide 14th Board of Directors (BOD)meeting dated 29.03.2012. As per the BOD Minutes of the Meeting (MoM), the 33/220 KV GIS Sub-Station was primarily planned to cater to the evacuation needs of approximately 100 MW of power from upcoming small hydroelectric power generating stations in Kullu region. The BOD had approved Rs. 62.25 Cr. for execution of the same.

3.2.2 The Petitionerhas submitted the DPR for the 33/220 kV GIS Sub-Station at Phojal (Asset-1) and for the 220 kV D/C Transmission Line from Phojal Sub-Station to LILO at Patlikul with 220 kV D/CAD hydro Transmission line (Asset-2). As per the DPR, the estimated cost for both the assets was envisaged as Rs. 70.40 Cr. (Rs. 62.25 Cr. for GIS Sub-Station at Phojal and Rs. 8.15 Cr. for 220 kV transmission line)

3.2.3 The Petitioner has submitted that both the assets were commissioned on 05.06.2016. The cost as on COD claimed by the Petitioner is Rs. 87.75 Cr. as against the DPR cost of Rs. 70.40 Cr. The same is tabulated below:

Table 6: DPR and COD Cost Comparison (Rs. Cr.)

Particulars	DPR Cost	COD Cost
33/220kV, 80/100MVA GIS Sub-Station at Phojal (Asset-1) along with 220kV D/C LILO Transmission Line (Asset-2)	70.40	87.75

3.2.4 Further, the Petitioner has mentioned that the post COD, the cost for both the assets was further revised to Rs. 93.63 Cr. by the BOD vide 38th BOD meeting dated 30.06.2018. The Petitioner has also submitted that the assets were declared under Intra-State Transmission System by the NRPC/TCC on dated 29.10.2018 and 30.10.2018.

Commission’s Analysis

3.2.5 The Commission has reviewed the Petitioner submissions in detail for the purpose of this Order. The Commission observes that as per the 14th BOD MoM, the 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line was planned to evacuate approximately 100 MW of power from the upcoming small hydroelectric power generating stations in Kullu region.

3.2.6 The Commission observes that the information provided in the Petition was inadequate or lacked justifications with respect to (w.r.t) many aspects vis. BOD approvals, Capital cost details as on COD, supporting documents, the approvals from the competent authorities etc. The Commission due to these shortcomings raised multiple deficiency/query letters and sought information/clarification on the same from the Petitioner.

3.2.7 Based on the submissions, the Commission observes that the 33/220 kV GIS Sub-Station was originally proposed at Palchan with a capacity of 25/31.5 MVA.

Further, the transmission line was proposed from Palchan to AD Hydro Switch Yard with total line length approx. 12 km. The total cost envisaged for the same was Rs. 76.44 Cr. (Rs. 55.35 Cr. for the Sub-station and Rs. 21.09 Cr. for the Transmission line). The cost with respect to the transmission assets were approved by the BOD of the Petitioner in meeting dated 21.05.2010.

3.2.8 Subsequently, the Petitioner on 23.12.2010 awarded the tender on turnkey basis to M/s Larsen & Toubro Limited (L&T) for 33/220 kV GIS Sub-Station at Palchan for an amount of Rs. 28.15 Cr. Also, the Petitioner awarded the tender on turnkey basis to M/s Hythro Power Corporation Limited for Transmission line from 33/220 kV GIS Sub-Station at Palchan to 220 kV AD Hydro Switchyard to an amount of Rs.10.99 Cr.

3.2.9 As part of the response to the queries, the Petitioner submitted that after award of tender in 2011, the original Palchan site for the construction of sub-station was washed out due to flash flood and a new site at Phojal was proposed for the substation which was 8 km away from the original Palchan site. Further, the transmission line length also got reduced from 12 km to 6 km. Additionally, the Petitioner submitted that no loss has been incurred due to flash flood as work had not initiated at the original site (i.e., Palchan).

3.2.10 The Petitioner subsequently took approval on the revised DPR from the BOD vide their 14th Meeting dated 29.03.2012. As per the MoM of the said BOD meeting, the cost estimated was revised from Rs. 76.44 Cr. to Rs. 70.40 Cr. (Rs. 62.25 Cr. for Sub-station and Rs. 8.15 Cr. for transmission line) due to change of location and transmission line length. The revised cost also includes the enhanced capacity of the sub-station from 31.5 MVA to 100 MVA.

3.2.11 The contract value for Asset-1 was revised on 08.03.2013 from Rs. 28.15 Cr. to Rs.39.20 Cr., with revised timeline of 14 months. Further, the contract value for Asset-2 was revised on 08.05.2012 from Rs. 10.99 Cr. to Rs. 6.85 Cr. in view of the decrease in line length to 6 kms and with a revised timeline of 12 months.

3.2.12 Subsequently, the Petitioner on 13.08.2015 undertook the cost revision in thecontract award cost for Asset-1 from Rs. 39.20 Cr. to Rs. 40.16 Cr. on account of quantity variation, additional work for erection and supply of lightning fixtures, clamps, connectors, construction of neutral at site, road construction, bore hole work and water storage tank installation. Further, contract award cost for Asset-2 was also revised from Rs. 6.85 Cr. to Rs. 6.91 Cr. on account of erection related works, on 05.06.2012.

3.2.13 The Commission noted that the Petitioner on 02.12.2015 again revised the cost ofAsset-1 from Rs. 40.16 Cr. to Rs. 40.28 Cr. on account of erection and supply of additional work for the fire alarm system. Further, no cost amendment was done in Asset-2.

3.2.14 As on COD (i.e., 05.06.2016) of the transmission assets, the Petitioner has claimed an amount of Rs. 87.75 Cr. (including Rs. 71.54 Cr. for Asset-1 and Rs. 16.20 Cr. for Asset-2). However, post the commissioning of the project, the Petitioner has submitted copy of 38th BOD Meetings dated 30.06.2018 for approval of the revised project cost for Rs. 93.63 Cr. (Rs. 76.82 for Asset-1 and Rs. 16.81 Cr. for Asset-2) on account of higher land, tree, crop and forest land charges paid to authority, additional bore holes required due to higher earth resistance, increase in length of busduct, rail track, and 33kV XLPE cable and installation of additional two number of special towers as per the site requirement which amounts to Rs. 0.66 Cr. Additionally, a provisional amount of Rs. 4.00 Cr. was allocated for the construction of residential and office buildings.

3.2.15 The Commissionhas noted all these cost revisions and the same is tabulated as under:

Table 7: Summary of Hard cost as per the DPR, Contract Awards and the subsequent Amendments (Rs. Cr.)

S. No.	Particular	Asset-1 (Hard Cost)	Asset-2 (Hard Cost)
1	DPR Cost	41.08	14.10
2	Initial Contract Award Cost	28.15	10.99
3	Revised DPR Cost	49.61	5.63
4	1st Cost Revision	39.20	6.85
5	2nd Cost Revision	40.15	6.91
6	3rd Cost Revision	40.28	-
7	Cost as on COD (05.06.2016)	58.22	10.27
8	Cost as per 38th BOD (30.06.2018)	60.58	10.33

3.3 Commercial Operation Date (COD) of Asset

Petitioner Submission

3.3.1 The Petitionerhas submitted that both the Assets (i.e., Asset-1 and Asset-2) were commissionedon05.06.2016.

Commission's Analysis

3.3.2 The Commission has noted that the Petitioner did not submit any proof with regard to the COD along with Petition. The Commission in this regard sought clarification and asked the Petitioner to submit the certificate issued by the Electrical Inspector and/or any other agency responsible for it. In response to the query, the Petitioner submitted a copy of the certificate issued by the Electrical Inspector as well as a copy of certificate issued by Northern Regional Load Despatch Centre (NRLDC). The Commission noted that as per the certificates submitted by the Petitioner, the COD of both the assets were declared on 05.06.2016.

3.3.3 The Commission has further noted that as per the 14th BOD meeting dated 29.03.2012, the Petitioner has taken approval for the revision of contract value and contract period for Asset-1 and Asset-2in view of the shifting of sub-station location. As per the revised contract agreement, the scheduled completion period was 14 months for Asset-1 and 12 months for Asset-2 from the contract date i.e., 08.03.2013. However, the actual COD for both the assets has been declared on 05.06.2016.

3.3.4 In view of all the above-mentioned submissions, the Commission concludes that the Schedule COD of the Project was 08.05.2014. Further, while the EI certificate were issued for 07.01.2015 and 11.05.2016, actual power flow from the transmission asset had happened from 05.06.2016 as per the claim of the

Petitioner. Accordingly, the Commission has considered 05.06.2016 as the date of COD for both the assets. As per the submissions of the Petitioner, the delay in COD of the Project has been primarily on account of the additional scope in the work, unavailability of the access road, change in scope and design. The reasons of the delay have been deliberated in the subsequent sections in detail.

3.3.5 In view of all the above, the summary of the COD dates claimed, approval granted from Electrical Inspectorate, actual charging of Assets and approved COD are given as below:

Table 8: Approved Commercial Operation Date (COD) for Asset-1 and Asset-2

Particulars	Asset 1	Asset 2
Electrical Inspectorate Approval	07.01.2015	11.05.2016
COD claimed by the Petitioner	05.06.2016	05.06.2016
Approved COD	05.06.2016	05.06.2016

3.4 Energy flow and Nature of Asset

Petitioner Submission

3.4.1 The Petitioner has submitted that the Transmission Asset-1 and Asset-2 were primarily planned to cater to the evacuation needs of 100 MW of power from upcoming small hydroelectric power generating stations in the Kullu region.

3.4.2 Further, the Petitioner has submitted the details of the projects and the status of connectivity and open access which is summarized in table below:

Table 9: Details of Projects and their Connectivity Status

S. No.	Name of Project	Capacity (MW)	Bay No.	Mode	Connectivity Status	Open Access Status
1	Kathi	3.50	1 & 2	Joint Mode	Not Applied	Not Applied
2	Baloot Fozal	5.00	1 & 2	Joint Mode	Granted	Not Applied
3	Kukri	5.00	1 & 2	Joint Mode	Not Applied	Not Applied
4	Kesta	4.50	1 & 2	Joint Mode	Granted	Not Applied
5	Galang	3.50	1 & 2	Joint Mode	Not Applied	Not Applied
6	Baragaon *(KPCPL)*	24.00	3	Independent	Taken	STOA
7	Fozal	16.00	4	Joint Mode	Applied	Not Applied
8	HPSEBL*	11.40	5 & 6	Independent	Taken	Not Applied

** The utilisation of line at some instances were recorded to the tune of 51 MW*

Commission's Analysis

3.4.3 From the review of the submissions of the Petitioner and the DPRs submitted, the Commission noted that the transmission asset was primarily planned to cater to the evacuation needs of approx.100 MW of power from the upcoming small hydroelectric power generating stations located in the Kullu region.

3.4.4 Further, as per the submissions of the Petitioner, the Kanchanjunga Power Company Private Limited (KPCPL) and the HPSEBL are the main beneficiary of the transmission assets.

3.4.5 The KPCPL is a generating company having a 24 MW ‘Baragaon’ Small Hydro Electricity Plant (SHEP), at Village Hallan-II, district Kullu, in the State of Himachal Pradesh. The KPCPL evacuate its power through the transmission lines/ assets built by the Petitioner and AD Hydro Power Limited.

3.4.6 The HPPTCL had filed a petition (No. 244/TT/2017) with the Hon’ble CERC to approve the capital cost of its 220 KV double-circuit transmission line from Phojal substation to LILO at Patlikul, including a 220 KV AD Hydro–Nalagrah transmission line and a 33/220 kV 80/100 MVA GIS substation at Phojal. Hon’ble CERC dismissed this petition on 08.10.2018 due to the lack of certification from the Northern Region Power Committee (NRPC) that the line carries interstate power. Hon’ble CERC allowed HPPTCL to file a new petition once the NRPC certificate is available.

3.4.7 The Petitioner had applied for certification from the NRPC for the transmission assets to be recognized as inter-state. However, NRPC, in their meetings on 29.10.2018 and 30.10.2018, declined to certify the lines as the average interstate power flow was only 36.55% as against the requirement of above 50%. Post rejection of the NRPC certification, HPPTCL approached the Commission for tariff determination of its transmission assets.

3.4.8 In view of the rejection of inter-state status to the transmission assets, M/s KPCPL filed an interim application (IA 14/IA/2020) in the existing Petition No. 124/MP/2017, seeking inter-state status for the HPPTCL’s transmission assets against the NRPC rejection of inter-state certificate and determination of tariff by Hon’ble CERC for the respective assets.

3.4.9 The Hon’ble CERC dismissed said Petition upholding the NRPC’s certification with respect to the same. However, M/s KPCPL appealed this decision vide (Appeal No. 111 of 2020) in the Hon’ble APTEL.

3.4.10 The Commission observes that the Hon’ble APTEL in its judgement in Appeal no. 111 of 2022 dated 29.01.2024 has turned down the request of the Stakeholder and has clearly stated the following:

> *“26. The Appellant, vide its IA 40/2020, had disputed the findings of the NRPC with regard to denial of ISTS status to HPPTCL’s assets. As noted hereinabove, in Ishwar Singh vs. State of Rajasthan [(2005) 2 SCC 334] the Supreme Court held that if an authority delegates the power to act, the power exercised by the delegate shall be deemed to be the exercise of power on behalf of the delegator. In such a situation, there is no scope for revision of the order of the delegate by the delegator. In the present case also, the CERC has delegated the power conferred on it to the NRPC, and consequently the power exercised by NRPC, as a delegate of the CERC, cannot be the subject matter of enquiry in proceedings before the CERC. The Appellant, therefore, lacks locus standi to invoke the jurisdiction of the CERC against the exercise undertaken by the NRPC as a delegate of the CERC.”*

3.4.11 In view of the above, the authority of NRPC to determine the status of transmission assets has been upheld by the Hon’ble APTEL. As the transmission assets have not been certified as inter-state by NRPC, the Commission considers the same as part of intra-state transmission network and has proceeded to determine the capital cost and tariff against the said transmission assets.

3.5 Capital Cost

Petitioner's submissions

3.5.1 The Petitionerhas submitted that the approval for the Project (i.e., for both the assets) was received vide its 14th BOD Meeting dated 29.03.2012 with an estimate cost of Rs. 70.40 Cr. excluding Interest During Construction (IDC)and Departmental Charges (DC). Further, the Petitioner has submitted that as on COD (i.e. 05.06.2016) the actual cost incurred was Rs. 87.75 Cr. which includes IDC of Rs. 6.43Cr. and DC of Rs. 2.88 Cr. for both the assets.

3.5.2 The Petitioner has submitted that the transmission asset also includes consumer contribution of Rs. 1.00 Cr. received from M/s Kanchanjunga Power Company Private Limitedfor bay connectivity at Asset-1.

3.5.3 The Petitioner has submitted that the cost of the Project (i.e., Asset-1 and Asset-2) has been further revised to Rs. 93.63 Cr. vide 38th BOD meeting dated 30.06.2018. The major reason for the deviation in the cost was due to additional scope of work with regard to the construction of office as well as staff accommodation at Phojal. The details of the project cost submitted by the Petitioner in the Petition is tabulated below:

Table 10: Project Cost (Rs. Cr.)

Particulars	Cost as per DPR	Actual cost as on COD	Revised Cost as per 38th BOD meeting
33/220 kV, 80/100 MVA Sub-Station at Phojal (Asset-1) and220 kV D/C Transmission Line from Phojal Sub-Station to LILO at Patlikul with 220 kV D/C AD hydro Transmission line (Asset-2)	70.40	87.75	93.63

Commission's Analysis

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

3.5.5 Based on the submissions and clarifications of the Petitioner against multiple deficiencies, the Commission has scrutinised the capital cost as on COD for the project in the following paras.

3.5.6 From the record, it is observed that the Project was originally proposed at Palchan with an approved cost of Rs. 76.44 Cr. (Rs. 55.35 Cr. for Asset-1 and Rs. 21.09 Cr. for Asset-2) vide 7th BOD meeting dated 21.05.2010. Post the approval, the tender for 33/220 kV GIS Sub-Station at Palchan was awarded to M/s Larsen & Toubro Limited (L&T) on turnkey basis at an amount of Rs. 28.15 Cr. The Transmission line from 33/220 kV GIS Sub-Station at Palchan to 220 kV AD Hydro Switchyard was awarded to M/s Hythro Power Corporation Limited on turnkey basis at an amount of Rs. 10.99 Cr.

3.5.7 Subsequently, in 2011, the Palchan site was washed out due to flash flood and a new location for the substation was proposed at Phojal which is 8 km away from the original Palchan site. The Petitioner has submitted that no loss has been incurred due to flash flood as no work was undertaken at the original site (i.e., Palchan). Also, the length of transmission line was revised from 12 kms to 6 kms based on the new location of the substation.

3.5.8 Accordingly, the revised DPR for Rs. 70.40 Cr. (Rs. 62.25 Cr. for Sub-station works and Rs. 8.15 Cr. for transmission line works) was prepared and subsequently approved in the 14th BOD Meeting dated 29.03.2012. The revised cost included enhancement of sub-station capacity from 31.5 MVA to 100 MVA.

3.5.9 Subsequently, amendments were undertaken by the Petitioner during construction stage as per the site requirements. The Petitioner revised the scope of work for both the assets. The Petitioner has made three amendments in the Asset-1 and the cost revision for the same as per the 3rd Amendment has been Rs. 40.28 Cr. and the cost claimed as on COD has been Rs. 54.83 Cr. Similarly, the Petitioner made two amendments in Asset-2, the cost for the same as per the 2nd amendment has been Rs. 6.91 Cr. and the cost claimed as on COD has been Rs. 9.24 Cr. The details of the amendments are tabulated below:

Table 11: Cost Amendments in both the assets along with the Reasons

Particulars	Date	Supply Contract	Services Contract	Total Contract Cost	Reasons for Amendment
Asset-1					
Initial Award	23.12.2010	21.79	6.36	**28.15**	-
1st Amendment	08.03.2013	31.27	7.93	**39.20**	Cost increased from initial award amount due to revision in tender after change in location. Further, capacity increased from 31.5 MVA to 100 MVA.
2nd Amendment	13.08.2015	31.92	8.23	**40.15**	Deviation due to additional scope of work with regard to lightning fixtures, neutral formation, road and water tank storage
3rd Amendment	02.12.2015	32.03	8.25	**40.28**	Deviation due to additional scope of work with regard to installation of fire alarm system
Cost as on COD	05.06.2016	45.64	9.19	**54.83**	Deviation due to larger land area, crop compensation and forest land compensation charges paid to MoEF, additional bore holes required due to higher earth resistance, increase in length of busduct, rail track, and 33kV XLPE cable etc.

Particulars	Date	Supply Contract	Services Contract	Total Contract Cost	Reasons for Amendment
38th BOD	30.06.2018	45.53	11.58	**57.11**	Provisional amount as per best available data and payment records. Further, provision of Rs. 4.00 Cr. of amount booked in service contract for construction of official accommodation and staff quarters. Construction of retaining wall.
Asset-2					
Initial Award	27.01.2010	6.88	4.11	**10.99**	-
1st Amendment	08.05.2012	4.72	2.13	**6.85**	Cost reduced from initial award amount due to change in line length from 12 km to 6 km
2nd Amendment	05.06.2012	4.72	2.19	**6.91**	Deviation due to change in items and price variation
Cost as on COD	05.06.2016	4.77	4.47	**9.24**	Deviation due to change in site, change in soil classification, foundation and stub setting, change in number of towers from 20 to 23, installation of additional two number of special towers as per the site requirement and increase in quantity due to increase in line length from 6km to 6.875 km
38th BOD	30.06.2018	4.73	4.51	**9.24**	Provisional amount.

3.5.10 In view of the above-mentioned table, it is noted that the price variation in Asset-1 vide 1st, 2nd, 3rdamendmentwasdue to change in location, deviation in quantity and additional scope of work as per the requirement. Similarly, in Asset-2 the price variation vide 1st and 2nd amendment was due to change in location and change in transmission line length. Hence, the cost claimed by the Petitioner as on COD is Rs. 87.75 Cr. which includes cost of preliminary works, land acquisition, forest compensation, IDC and departmental charges.

3.5.11 The Petitioner has also mentioned in the Petition that the cost of the transmission assets was further revised from Rs. 87.75 Cr. to Rs. 93.63 Cr. as per the revised approval by BOD in their meeting dated 30.06.2018. It has been stated that the major reason for deviation was due to additional scope of work for construction of office as well as staff accommodation at Phojal. The Petitioner was further asked to provide details regarding revision of costs. In response the Petitioner has submitted that the cost claimed as per the approval of the 38th BOD meeting was based on the best available information with respect to various expenses prior to finalisation of account for FY 2016-17. However, the accounts for FY 2016-17 were finalised and audited subsequently on 12.09. 2018.An auditor certificate with respect to the completed cost as on COD of the transmission assets was also provided by the Petitioner.

3.5.12 It is observed that there have been significant variations in cost of few sub-heads which remains unexplained and not supported by adequate documents. Even post approval of the revised cost of the transmission assets in 38th BOD meeting, the

Petitioner has not provided any copy of the subsequent amendments issued to the contractors or any other document in support of the claim with respect to the revised costs.

3.5.13 In the table no. 12 below, the Commission has approved the hard cost for both the assets based on the available supporting documents, 38th BOD MoM and the auditor certificate. Further, the Commission noted that the erection work cost for asset-1 as per the 38th BOD MoM has been Rs. 7.58 Cr. However, as per the auditor certificate the cost is Rs. 9.08 Cr. and as per COD the cost claimed was Rs. 9.19 Cr. In view of the above, the Commission did not find any rationale from the Petitioner even in the fifth query raised by the Commission. Therefore, the Commission as per the 38th BOD MoM approved Rs. 7.58 Cr. against the erection work for Asset-1. Similarly, in the Supply cost for the Asset-1, the Petitioner has claimed Rs. 45.64 Cr. as on COD, Rs. 45.54 Cr. as per 38th BOD and Rs. 45.61 Cr. as per auditor certificate. The Commission is not able to find out the rationale for the cost deviations. The Commission based on the 38th BOD MoM has allowed Rs. 45.54 Cr. against the supply work. In absence of the adequate details and supporting documents, the Commission has limited the cost under various heads to the extent of cost approved or as per the auditor certificate.

3.5.14 A comparison of the awarded cost, cost claimed as on COD, revised cost approved in 38th BoD, cost as per the Auditor certificate and final approved cost by the Commission is provided below:

Table 12: Hard Cost approved by Commission (Rs. Cr.)

S. No.	Particulars	Contract Award	Cost as on COD	Revised cost by BOD	Cost as per Auditor Certificate	Approved Cost
	Asset-1:					
1	**Supply**	**21.79**	**48.40**	**48.37**	**48.37**	**48.30**
a	*Supply Cost*	21.79	45.64	45.54	45.61	45.54
b	*Entry Tax*	*0.00*	*1.83*	*1.86*	*1.83*	*1.83*
c	*Price Variation*	*0.00*	*0.93*	*0.97*	*0.93*	*0.93*
2	**Erection**	**6.36**	**9.82**	**12.21**	**9.72**	**8.21**
a	*Erection Cost*	6.36	9.19	7.58	9.08	7.58
b	*Price Variation*	*0.00*	*0.63*	*0.63*	*0.63*	*0.63*
c	*Provision for Staff quarter*	*0.00*	*0.00*	*4.00*	*0.00*	*0.00*
A-Sub-Total (1+2) (Asset-1)		**28.15**	**58.22**	**60.58**	**58.08**	**56.51**
	Asset-2:					
1	**Supply**	**6.88**	**4.77**	**4.79**	**4.77**	**4.77**
a	*Supply Cost*	6.88	4.77	4.73	4.71	4.71
b	*Entry Tax*	*0.00*	*0.00*	*0.06*	*0.06*	*0.06*
2	**Erection**	**4.11**	**5.50**	**5.54**	**5.51**	**5.51**
a	*Erection Cost*	4.11	4.47	4.51	4.48	4.48
b	*Price Variation*	*0.00*	*1.03*	*1.03*	*1.03*	*1.03*
B-Sub-Total (1+2) (Asset-2)		**10.99**	**10.27**	**10.33**	**10.28**	**10.28**
Total Cost (A+B)		**39.14**	**68.49**	**70.91**	**68.36**	**66.79**

3.5.15 Based on the available supporting documents, the Commission has approved Rs. 66.79 Cr. as hard cost against the COD claimed cost of Rs. 68.49 Cr. Further the

Commission has approved the Departmental Charges (DC) and Interest During Construction (IDC) in the subsequent section of this order.

3.6 Preliminary, Land, Afforestation, Forest and Other Expenses

Petitioner's submissions

3.6.1 The Petitioner has submitted the cost for the Preliminary works, forest compensation, land acquisition and other expense which includes cost of tender and testing expenses. The Asset-1 cost as per revised DPR dated 29.03.2012 against all the heads was Rs. 4.28 Cr. Further, as on COD the cost incurred was Rs. 5.96 Cr. Similarly, the Cost for Asset-2 as per the revised DPR was Rs. 1.43 Cr. and the same as on COD was Rs. 5.02 Cr.

3.6.2 The Petitioner post COD has approved the cost in the 38th BOD meeting dated 30.06.2018. The cost approved in the said BOD meeting against all the heads for the Asset-1 was Rs. 5.93 Cr. and for the Asset-2 was Rs. 5.26 Cr.

Commission's Analysis

3.6.3 Based on the Petitioner's submissions and subsequent clarifications, the Commission has scrutinised the various elements including preliminary, forest, land and other expenses as detailed in the following paras:

3.6.4 **Preliminary Cost:** As per the revised DPR dated 29.03.2012, 'Preliminary Cost' was envisaged as Rs. 1.93 Cr. for Asset-1 and Rs. 0.07 Cr. for Asset-2. As against the DPR cost, the Petitioner has claimed an amount of Rs. 3.82 Cr. for Asset-1 and Rs. 0.05 Cr. for Asset-2 as on COD. Also, post COD, preliminary expenses were approved under the 38th BOD meeting as Rs. 3.79 Cr. and Rs. 0.07 Cr. Respectively for Asset-1 and Asset-2.

3.6.5 It was observed that the Petitioner has neither provided any details nor justification for the increased cost towards preliminary expenses. In response to the query of the Commission, the Petitioner submitted the copy of the payment bills which included several invoices but did not justify the cost claimed towards preliminary expense and did not even add-up to the claimed amount. It was observed that most invoices were against land as well as stamp duty, etc. which were claimed separately. Further, the Petitioner has submitted copy of38th BOD MoM in which a consolidate amount was booked towards preliminary expenses against both the assets.

3.6.6 While the Auditor certificate provided by the Petitioner included an amount of Rs. 3.82 Cr. and Rs. 0.04 Cr. towards preliminary expenses but due to lack of proper details regarding the break-up of expenditure as well as inadequate supporting documents, the Commission has restricted the amount approved for Asset-1 to the amount approved in the DPR i.e., Rs. 1.93 Cr. as against the claimed amount Rs. 3.82 Cr. Further, for Asset-2 the Commission has approved an amount of Rs. 0.04 Cr. as per the auditor certificate and supporting documents provided by the Petitioner. The same is tabulated below:

Table 13: Preliminary Cost approved by the Commission (Rs. Cr.)

S. No.	Particulars	DPR Cost	Cost as On COD	Cost approved in 38th BOD meeting	Cost as per Auditor Certificate	Approved Cost
	Asset-1					
1	Periphery Fencing	0.05	3.82	3.79	3.82	0.05
2	Detailed survey	0.009				0.009
3	Construction of temporary approach to sub-station, cutting of vegetation at site and demolition of huts etc.	0.02				0.02
4	Construction of site office	0.20				0.20
5	Construction of approach road and link roads	0.75				0.75
6	Site development	0.35				0.35
	Total	**1.93**	**3.82***	**3.79***	**3.82***	**1.93**
	Asset-2					
1	Preliminary and survey	0.07	0.05	0.07	0.04	0.04
	Total	**0.07**	**0.05***	**0.07***	**0.04***	**0.04***

**Consolidate amount provided by the Petitioner*

3.6.7 **Land, Afforestation and Forest Cost:** Based on the submissions of the Petitioner, the cost as per the revised DPR for Asset-1 was Rs. 2.36 Cr. (Rs. 2.04 Cr. for Land acquisition and Rs. 0.32 Cr. for forest afforestation). Similarly for Asset-2 the cost as per the revised DPR was Rs. 1.36 Cr. Further, as on COD the cost claimed for Asset-1 was Rs. 2.14 Cr. (Rs. 2.04 Cr. for Land and Rs. 0.10 Cr. for forest afforestation) and for Asset-2 was Rs. 4.97 Cr. Additionally, the Petitioner has revised the cost post COD in 38th BOD meeting dated 30.06.2018. The Cost for Asset-1 as per the BOD MoM was Rs. 2.14 Cr. (Rs. 2.04 Cr. for Land and Rs. 0.10 Cr. for forest afforestation) and for Asset-2 was Rs. 4.15 Cr. The Commission observes that the Petitioner has not provided any rationale for the same. In response to the query of the Commission, the Petitioner has submitted that the cost revision in the 38th BOD meeting had inadvertently missed an amount of Rs. 1.04 Cr. against the private land acquisition for Asset-2. Therefore, the true value, after adding Rs. 1.04 Cr to Rs.4.15 Cr. will be approx. Rs. 5.19 Cr. Additionally, the Petitioner has submitted the copies of the payment proofs paid to Divisional Forest office Kullu.

3.6.8 The Petitioner has also provided a copy of the auditor certificate which includes costs against land and forest afforestation of Rs. 2.14 Cr. and Rs. 5.22 Cr. for Asset-1 and Asset-2, respectively. The Commission in view of the supporting documents and payment proofs has approved the same as per the auditor certificate, i.e., for Asset-1 Rs. 2.14 Cr. and for Asset-2 Rs. 5.22 Cr.

Table 14: Land and Forest Afforestation approved by the Commission (Rs. Cr.)

S. No.	Particulars	DPR Cost	Costas on COD	Cost approved in 38th BOD Meeting	Cost as per Auditor Certificate	Approved Cost

S. No.	Particulars	DPR Cost	Costas on COD	Cost approved in 38th BOD Meeting	Cost as per Auditor Certificate	Approved Cost
	Asset-1					
1	**Land Acquisition**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**
a	Cost of Private Land	1.93	1.93	1.93	1.93	1.93
b	Stamp Duty @ 5%, Registration fees, service charge, counsellor fee and miscellaneous charge	0.11	0.11	0.11	0.11	0.11
2.	**Forest Afforestation**	**0.32**	**0.10**	**0.10**	**0.10**	**0.10**
a	Cost of tree cutting	0.21	0.10*	0.10*	0.10*	0.10*
b	Cost of forest land diversion	0.09				
c	Cost of afforestation	0.02				
	Total (1+2) for Asset-2	**2.36**	**2.14**	**2.14**	**2.14**	**2.14**
	Asset-2					
1	Land Acquisition	1.36*	4.97*	1.04#	1.00	1.00
2	Forest Afforestation			4.15	4.22	4.22
	Total (1+2) for Asset-2	**1.36**	**4.97**	**5.19**	**5.22**	**5.22**

**Consolidate amount provided by the Petitioner*
#Amount of Rs 1.04 Crores (expenditure against cost of private land acquired for Transmission line) was inadvertently missed by the Petitioner in revised scheme.

3.6.9 **Other Expenses:** The Commission has noted that no provision was made against this head in the DPR and the Petitioner has not claimed any expense under this head as on COD. Further, the Petitioner has submitted a cost of Rs. 0.13 Cr. for Asset-1 and Rs. 0.004 Cr. for Asset-2through auditor certificate. The Commission has noted that the cost claimed is towards tender expense and testing charges. Accordingly, the cost has been approved in line with the auditor certificate submitted by the Petitioner.

3.6.10 In view of the above deliberations the tabulated costs as per the DPR, revised in BOD meeting, as on COD and as Approved by the Commission are as under:

Table 15: Preliminary, Land, Afforestation, Forest and Other Expense approved by Commission (Rs. Cr.)

S. No.	Particulars	As per DPR	Cost as on COD	38thBOD	Auditor Certificate	Approved Cost
	Asset-1:					
1	Preliminary Cost	1.93	3.82	3.79	3.82	1.93
2	Land, Afforestation and Forest Cost	2.36	2.14	2.14	2.14	2.14
3	Other expenses	0.00	0.00	0.00	0.13	0.13
	A-Sub-Total (Asset-1)	**4.29**	**5.96**	**5.93**	**6.09**	**4.20**
	Asset-2:					
1	Preliminary Cost	0.07	0.05	0.07	0.04	0.04
2	Land, Afforestation and Forest Cost	1.36	4.97	5.19	5.22	5.22
3	Other expenses	0.00	0.00	0.00	0.004	0.004
	B-Sub-Total (Asset-2)	**1.43**	**5.02**	**5.26**	**5.26**	**5.26**
	Total Cost (A+B)	**5.72**	**10.98**	**11.19**	**11.35**	**9.46**

3.7 Overheads (Interest During Construction and Departmental Charges)

Petitioner's submissions

3.7.1 With regard to IDC and Departmental Charges (DC) for both the assets, the Petitioner has submitted that no provision was considered in the original DPR. Further, in the revised DPR vide 14th BOD Meeting dated 29.03.2012, DC of Rs.6.73 Cr. for Asset-1 and Rs. 0.88 Cr. for Asset-2 has been considered, however, no provision for the IDC has been provided against both the assets. The actual IDC as on COD was claimed by the Petitioner as Rs. 5.48 Cr. and DC as Rs. 1.88 Cr. for Asset-1. In case of Asset-2, the Petitioner has claimed an amount of Rs. 0.91 Cr. as IDC and Nil amount against DC.

Commission's Analysis

3.7.2 The Commission has reviewed the IDC and DC claimed by the Petitioner as on COD with respect to DPR and Auditor certificate. The following table provides the IDC and Departmental Charges as claimed by the Petitioner as on COD, approved in the 38th BOD meetingand as per the Auditor certificate for Asset-1 and Asset-2:

Table 16: IDC and Departmental charges claimed by Petitioner (Rs. Cr.)

S. No.	Particulars	As per DPR	Cost as on COD	Revised cost by BOD	Cost as per Auditor Certificate
	Asset-1:				
1	Interest During Construction (IDC)	0.00	5.48	0.00	5.49
2	Departmental Charges (DC)	6.73	1.88	8.31	1.38
	A-Sub-Total (Asset-1)	**6.73**	**7.36**	**8.31**	**6.87**
	Asset-2:				
1	Interest During Construction (IDC)	0.00	0.91	0.00	0.91
2	Departmental Charges (DC)	0.88	0.00	1.82	0.24
	B-Sub-Total (Asset-2)	**0.88**	**0.91**	**1.82**	**1.15**
	Total Cost (A+B)	**7.61**	**8.27**	**10.13**	**8.02**

3.7.3 Further, it was observed that the Petition lacked 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's claim also sought the detailed computation of IDC considering date of draw-down of debt, amount of debt, etc. However, despite several submissions, the Petitioner could not submit the detailed working of IDC as per the desired format.

3.7.4 The project was envisaged to be completed in 14 months for Asset-1 and 12 months for Asset-2 as per the contract awarded by the Petitioner. However, the actual time of execution of the project was higher by almost 25 months. From the submissions of the Petitioner, the following reasons were identified to be the major reasons for the time overrun:

Table 17: Reason for the delay in Project Commissioning

S. No.	Period of Delay	Duration (Months)	Description of Hindrances
Asset-1:			
1	May 2014 to June 2016	25	1. Change of civil and structural design from seismic zone IV to V. 2. Delay in supply of 220 kV GIS due to non-availability of access road to substation. 3. Delay in handing over of complete 33 kV bench. 4. Inclement weather condition 5. Additional Scope: a) Additional scope of retaining wall for approach road was awarded to L&T without any time extension as per original awarded work. For the same, resources were shifted for completion which affected other works. It is also brought under notice that 220 kV GIS materials could not have been shifted to site until the completion of the access road. b) Neutral Formation for transformers were not in L&T scope but on request of HPPTCL, L&T agreed to perform supply as well as erection work. c) As per the awarded contract LOA, the provision of 4 SF6 to Air Bushings for connecting the Bus Duct to the Power Transformer was initially not within L&T's scope. However, it was subsequently included in L&T's scope.
Asset-2:			
2	May 2014 to June 2016	25	1. Delay in acquiring of Private land and in getting Forest Clearance from the Forest Department. 2. The route of the transmission line was changed in April 2014 to connect to the second circuit of the AD Hydro to Charor line via LILO. Initially planned for both circuits, AD Hydro only permitted LILO for the second circuit. This required an additional tower and auxiliary cross arms on two towers, resulting in further delays. 3. Unfavourable working conditions (due to heavy snowfall)). 4. Delay due to increase in line length from 6 km to 6.87 km. 5. Delay due to construction of additional special tower required as per site requirement.

3.7.5 A detailed review of the Petitioner's submissions and supporting documents reveals that delays were caused by factors such as technical and commercial issues, non-availability of access roads, additional scope of work, changes in line length, and weather conditions. Given the Petitioner's extensive experience in constructing transmission lines and other assets, as well as their knowledge of standard practices and timelines, the delay of approximately 25 months (as detailed in Table 17, S. No. 1 & 2) could have been avoided with proper planning. The Petitioner should have incorporated all additional scopes of work during the first contract revision rather than at a later stage. Furthermore, delays due to non-availability of access roads and land acquisition could have been mitigated with better coordination and planning.

3.7.6 Accordingly, it would be unreasonable to consider that each individual activity led to overall delay of almost 25 months in project execution. Also, the Petitioner has neither provided specific dates for start and complete of each event resulting in the delay nor provided any supporting documents regarding the same. In absence of the specific details, it is difficult for the Commission to ascertain the period for the delay caused as a result of the event. The Commission is of the view that certain activities could have been undertaken in parallel, and the delay should have been shortened/averted by proper planning and follow up at the Petitioner’s end.

3.7.7 In addition, the details provided with respect to time overruns only mentions the duration 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 should have been avoided. Hence, post detailed review of each of the reasons of delay, the Commission has calculated the IDC as discussed below. Further, the Commission feels that the inefficiency of the Petitioner along with delayed decision making as well as improper planning during execution of the project cannot be passed on to the consumers.

3.7.8 The Commission noted that as on COD, the Petitioner has submitted the IDC charges as Rs. 5.48 Cr. and Rs. 0.91 Cr for Asset-1 and Asset-2 respectively. Further, no provision was there in the DPRs for the IDC for both the assets. The Petitioner has not submitted the Auditor certificate in support of its claim. In response to the deficiency letter, the Petitioner submitted the auditor certificate mentioning the IDC amount of Rs. 5.49 Cr. for Asset-1 and Rs. 0.91 Cr. for Asset-2.

3.7.9 The Commission noted that as on COD, the Petitioner has submitted the Departmental Charges (DC) as Rs. 1.88 Cr. for Asset-1 against the DPR approved DC of Rs. 6.73 Cr. Further, for Asset-2 the Petitioner has not claimed any DC against the DPR approved DC of Rs. 0.88 Cr. In response to the deficiency letter, the Petitioner has submitted the auditor certificate which included am amount of Rs. 1.63 Cr. for Asset-1 and Nil amount against Asset-2 against departmental charges. Also, the Petitioner has clarified that the combined departmental charges is recorded as a single entry for both the assets (substation &transmission line) amounting to Rs 1.63 Crores in the Auditor certificate.

3.7.10 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 REC Ltd. specifying the rate of interest as 12.25%. Accordingly, the Commission has considered the rate of interest in line with the Petitioner’s submissions.

3.7.11 In view of revision in hard cost as well as rate of interest as claimed on COD, the Commission has computed a revised benchmark for the IDC. A project duration of 14 months for Asset-1 and 12 months for Asset-2 has been considered to estimate the benchmark IDC.

3.7.12 Further, it is observed that the Petition lacks proper details, working and the basis for consideration of IDC and DC. Also, the allocation of DC has not been done across the two transmission assets. 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’s claim also sought the detailed computation of IDC (Excel) considered including date of draw-down of debt, amount of debt etc. However, despite several submissions, the Petitioner could not submit the detailed working of IDC as per the desired format.

3.7.13 For assessing the benchmark IDC with project duration of Asset-1, the Commission has assumed debt disbursement of 20% in each quarter as indicated in table below. In case of Asset-2, debt disbursement has been considered equally across the project duration of 12 months i.e., 25% in each quarter. Accordingly, the benchmark IDC for the Asset-1 and Asset-2 as computed is summarized as follows:

Table 18: Computation of benchmark IDC for Asset-1 (Rs. Lakh)

Particulars	Unit	Year I	Year I	Year I	Year I	Year 2	Total
		Qtr-1	Qtr-2	Qtr-3	Qtr-4	Qtr-1	
Debt disbursement	%	20.00%	20.00%	20.00%	20.00%	20.00%	**100%**
Opening Debt (a)	Rs. Cr.	0	11.18	22.35	33.53	44.71	
Addition during the year (b)	Rs. Cr.	11.18	11.18	11.18	11.18	11.18	
Closing Debt (c)	**Rs. Cr.**	**11.18**	**22.35**	**33.53**	**44.71**	**55.88**	
Average Debt (d=(a+c)/2)	Rs. Cr.	5.59	16.76	27.94	39.12	50.29	
Interest rate (e)	%	*3.06%*	*3.06%*	*3.06%*	*3.06%*	*2.04%**	
Total IDC (f=d*e)	**Rs. Cr.**	***0.17***	***0.51***	***0.86***	***1.20***	***1.03***	**3.76**

**Interest rate considered corresponding to two months in the last quarter*

Table 19: Computation of benchmark IDC for Asset-2 (Rs. Lakh)

Particulars	Unit	Year I	Year I	Year I	Year I	Total
		Qtr-1	Qtr-2	Qtr-3	Qtr-4	
Debt disbursement	%	25.00%	25.00%	25.00%	25.00%	**100%**
Opening Debt (a)	Rs. Cr.	0	3.55	7.11	10.66	
Addition during the year (b)	Rs. Cr.	3.55	3.55	3.55	3.55	
Closing Debt (c)	**Rs. Cr.**	**3.55**	**7.11**	**10.66**	**14.22**	
Average Debt (d=(a+c)/2)	Rs. Cr.	1.78	5.33	8.89	12.44	
Interest rate (e)	%	3.06%	3.06%	3.06%	3.06%	
Total IDC (f=d*e)	**Rs. Cr.**	***0.05***	***0.16***	***0.27***	***0.38***	**0.87**

3.7.14 Against the benchmark IDC of Rs. 3.76 Cr. for Asset-1, the Petitioner has claimed IDC of Rs. 5.48 Cr. as on COD. For Asset-2, the benchmark IDC was Rs. 0.87 Cr. and the Petitioner's claim as on COD has been Rs. 0.91 Cr. The Petitioner has submitted the computation and the auditor certificate in the regard.

3.7.15 As discussed in preceding paras, the Commission has allowed 50% of the excess IDC towards uncontrollable factors vis-à-vis claimed over and above the revised benchmark IDC computed assuming no time delay. The computation is provided as follows:

Table 20: IDC Approved by the Commission

Particular	Benchmark	Actual/Claimed	Difference	Approved = Actual -50% of difference
Asset-1	3.76	5.48	1.72	4.63
Asset-2	0.87	0.91	0.04	0.89

3.7.16 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). Also, in absence of segregation of departmental charges submitted by the Petitioner as mentioned in para no. 3.7.9, the Commission has allocated the combined DC in the ratio of the hard cost for the both the assets. Accordingly, the Departmental Charges for both the assets are approved as follows:

Table 21: DC approved by the Commission (Rs. Cr.)

Particular	DPR	As on COD	Auditor Certificate	Approved
Asset-1	6.73	1.88	1.63	1.39
Asset-2	0.88	0.00		0.24

3.7.17 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 22: Comparison of Claimed and Approved Hard Cost for Asset 1 and Asset 2 (Rs. Cr.)

S. No.	Particulars	DPR Cost	Cost as on COD	38th BOD meeting	Auditor Certificate	Approved
	Asset-1					
1	Land Acquisition	2.04	2.04	2.04	2.04	2.04
2	Tree Cutting, Afforestation and Forest Land	0.32	0.10	0.10	0.10	0.10
3	Preliminary Work	1.93	3.82	3.79	3.82	1.93
4	Other expenses (Tender and Testing)	0.00	0.00	0.00	0.13	0.13
5	***Sub-Total***	***4.29***	***5.96***	***5.93***	***6.09***	***4.19***
6	Cost of Supply	43.56	45.64	45.54	45.61	45.54
a	*Entry Tax Paid*	*0.00*	*1.83*	*1.86*	*1.83*	*1.83*
b	*Price Variation*	*0.00*	*0.93*	*0.97*	*0.93*	*0.93*
7	Cost of Service	6.04	9.19	7.58	9.08	7.58
a	*Price Variation*	*0.00*	*0.63*	*0.63*	*0.63*	*0.63*
b	*Provision for Staff quarter*	*0.00*	*0.00*	*4.00*	*0.00*	*0.00*
8	Contingency Charges	1.62	0.00	1.99	0.00	0.00
9	IDC	0.00	5.48	0.00	5.49	4.63
10	DC	6.74	1.88	8.31	1.39	1.39
11	**A-Total Asset-1 Cost**	**62.25**	**71.54**	**76.82**	**71.05**	**66.72**
	Asset-2					
1	Preliminary Survey Work	0.07	0.05	0.07	0.04	0.04
2	Cost Compensation for the Land Acquisition, Tree, Crop, and Forest Land	1.36	4.97	4.16	5.22	5.22
3	Other expenses (Tender and Testing)	0.00	0.00	0.00	0.004	0.004

S. No.	Particulars	DPR Cost	Cost as on COD	38th BOD meeting	Auditor Certificate	Approved
4	***Sub-Total***	***1.43***	***5.02***	***4.22****	***5.26***	***5.26***
5	Cost of Supply	3.55	4.77	4.73	4.71	4.71
a	*Entry Tax*	*0.00*	*0.00*	*0.06*	*0.06*	*0.06*
6	Cost of Service	2.08	4.47	4.51	4.48	4.48
a	*Price Variation*	*0.00*	*1.03*	*1.03*	*1.03*	*1.03*
7	Contingency Charges	0.21	0.00	0.44	0.00	0.00
8	IDC	0.00	0.91	0.00	0.91	0.89
9	DC	0.88	0.00	1.82	0.25	0.25
10	**B-Total Asset-2 Cost**	**8.15**	**16.20**	**16.82**	**16.70**	**16.69**
	Total Cost (A+B)	**70.40**	**87.74**	**93.63**	**87.75**	**83.40**

**Amount of Rs 1.04 Crores (expenditure against cost of private land acquired for Transmission line) was inadvertently missed by the Petitioner in revised scheme. Accordingly, the revised amount claimed by the Petitioner was Rs. 5.26 Cr.*

3.8 Additional Capital Expenditure (ACE)

Petitioner Submissions

3.8.1 The Petitioner has submitted that due to flash flood on 23rd and 24th September 2018, heavy silt and water entered into the switchyard and damaged the components. In this difficult situation the Petitioner restored the sub-station. An amount of Rs. 2.85 Cr. was incurred in FY 2018-19 for the restoration work. Further, for the remaining work the Petitioner has projected Rs. 5.30 Cr. during FY 2019-20 towards restoration work of the Phojal Sub-station which was damaged during the flash flood. The Petitioner in the 38th BOD Meeting dated 30.06.2018 proposed and approved an amount of Rs. 4.00 Cr. towards construction of office and residential building at Phojal sub-station. The Petitioner claimed the same amount as ACE for the FY 2020-21.

3.8.2 The Petitioner has submitted the following details for the additional capital expenditure:

Table 23: ACE Claimed by the Petitioner (Rs. Cr.)

Project Cost as on COD	ACE up to FY 2018-19	ACE up to FY 2019-20	ACE up to FY 2020-21	Total Project Cost up to 31.03.2021
87.75	2.85	5.30	4.00	99.90

Commission's Analysis

3.8.3 In accordance with Regulation 16 of the 'HPERC Transmission Tariff Regulations, 2011' as amended from time to time, the Commission has verified the claimed 'Additional Capital Expenditure'. Further, the Regulation provides for the same as follows:

"(1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of

commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check-

(a) undischarged liabilities;(b) works deferred for execution;

(c) procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 15;

(d) liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(e) change in law: Provided that the details of works included in the original scope of work, along with estimates of expenditure, undischarged liabilities and the works deferred for execution, shall be submitted along with the application for determination of tariff.

(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:-

(a) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;

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

(c) Any expenses to be incurred on account of need for higher security and safety of the capital asset as advised or directed by appropriate Government agencies or statutory authorities responsible for national security/internal security;

(d) Any liability for works executed prior to the Cut-off Date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(e) Any liability for works admitted by the Commission after the Cut-off Date to the extent of discharge of such liabilities by actual payments;

(f) Any additional capital expenditure, which has become necessary for efficient operation of the transmission system. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level; and

(g) Any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that any expenditure on acquiring the minor items or the assets including tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, computers, fans, washing machines, heat convectors, mattresses, carpets, etc., bought after the Cut-off Date shall not be considered for additional capitalization for determination of tariff:

Provided further that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M Expenses, the same expenditure cannot be claimed under this Regulation."

3.8.4 The Commission issued deficiency letters to seek details and nature of 'Additional Capital Expenditure' and its further classification as per the regulations. In response, the Petitioner has submitted that due to flash flood on 23rd and 24th September 2018, an amount of Rs. 2.85 Cr. has been incurred for the restoration work. Further, for the remaining work the Petitioner has claimed an amount of Rs. 5.30 Cr.as ACE for FY 2019-20. As per the submissions of the Petitioner, it was observed that the actual capital expenditure incurred upto December 2019 was Rs. 1.53 Cr. (Rs.1.09 Cr. for construction of counter fronts and road curves and Rs. 0.44 Cr. for repair of special tower) against the claimed amount of Rs. 5.30 Cr.

3.8.5 Additionally, the Petitioner has taken approval from the 38thBOD meeting dated 30.06.2018 with regard to construction of residential and official building amounting to Rs. 4.00 Cr.

3.8.6 In view of the above submissions, the Commission observes that against the claimed ACE of Rs. 5.30 Cr. only Rs. 1.53 Cr. have been incurred. Further, the Petitioner has not provided any further details and supporting documents with respect to the additional works being carried out with regard to the restoration works. Therefore, the Commission feels it appropriate to consider the same during subsequent filings when the actual expenditure details are available and the Petitioner is able to provide adequate supporting documents with respect to the same for prudence check.

3.8.7 The Commission has also not approved the amount of Rs. 4.00 Cr. proposed as ACE for the construction of residential and office building. The Petitioner is required to undertake prior approval for construction of residential building along with supporting documents substantiating the reasons regarding the same.

3.9 Project Funding

Petitioner Submission

3.9.1 The Petitioner has quoted the Regulation 18 of the HPERC MYT Transmission 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."

3.9.2 The Petitioner has submitted that they have secured domestic loan from REC (Rural Electrification Company Limited) amounting to Rs. 23.52 Cr. which is 26.81% of the project cost, Consumer Contribution of Rs. 1.00 Cr. which is 1.14% of the project cost and has infused equity amounting to Rs. 63.23 Cr. which corresponds to 72.05% of the project cost. However, for the purpose of tariff, the Petitioner has considered the normative debt-equity ratio excluding the consumer contribution as stated below:

Table 24: Debt-Equity submitted by the Petitioner

Particulars	Debt: Equity as per Actuals (Rs. Cr.)	Debt: Equity ratio as per Actuals	Normative Debt: Equity ratio (Rs. Cr.)	Normative Debt: Equity considered
Debt	23.52	26.81%	60.42	68.86%
Equity	63.23	72.05%	26.33	30.00%
Consumer Contribution	1.00	1.14%	1.00	1.14%
Total Project Cost	**87.75**	**100.00%**	**87.75**	**100.00%**

3.9.3 The Petitioner has further submitted the debt-equity (in the same ratio of 70% debt and 30% equity) including the additional capitalisation upto 31.03.2019 for 3rd Control period and upto 31.03.2024 for 4th Control period. The details for the same is tabulated below:

Table 25: Debt-Equity ratio along with ACE (Rs. Cr.)

Particulars	Debt: Equity as on COD	Normative Debt: Equity as on COD	Debt: Equity as on 31.03.2019	Debt: Equity as on 31.03.2024
Debt	23.52	60.42	62.41	69.23
Equity	63.23	26.33	27.19	29.67
Consumer Contribution	1.00	1.00	1.00	1.00
Total Project Cost	**87.75**	**87.75**	**90.60**	**99.90**

Commission's Analysis

3.9.4 The Commission has observed that the Petitioner has not provided the copy of the approved DPR to verify the original debt and equity funding ratio. In response to the Commission's query, the Petitioner submitted the DPR, indicating that the scheme was envisaged at a 70% debt and 30% equity ratio.

3.9.5 Further, in response to a query raised by Commission, the Petitioner submitted a copy of loan agreement corresponding to the transmission asset. The Commission noted that the loan agreement between the Petitioner and REC Ltd. was executed on 10.01.2013 for the two schemes of Palchan as well as Karian.

3.9.6 According to the loan agreement, it is observed that M/s REC had sanctioned term loan assistance as a common loan for the two projects i.e. Palchan and Karian

Substations along with the associated transmission line. The total project cost envisaged for both the schemes was Rs. 128.33 Cr., for which REC had sanctioned a loan of Rs. 115.49 Cr., representing 90% of the total project cost. Based on the change of the site of the sub-station from Palchan to Phojal, the project cost was revised for the Project (i.e., Phojal Substation along with transmission line). Against the assets, a revised loan amount of Rs. 43.93 Cr. (reflecting 90% of the revised project cost) was approved by REC.

3.9.7 Further, it is observed that the actual loan drawl by the Petitioner as on COD was only Rs. 23.52 Cr. against the sanctioned loan of Rs. 43.93 Cr. The Petitioner post the 38th BOD meeting dated 30.06.2018 had approached the REC vide letter dated 27.07.2018 and 19.06.2019 for obtaining revised sanction and additional loan amount against the Phojhal project. It is observed that while the loan availability against the project was available to the extent of 90%, the Petitioner had not utilized the entire amount of debt and had relied on funds available from other sources. Therefore, the Commission feels that it would be incorrect to consider the submission of the Petitioner for allowing 70% as debt against the project and put higher burden of RoE on the users of the system when the Petitioner post the commissioning of the project had approached REC to avail additional loan corresponding to the enhanced cost as well as unutilized amount. This would also be contradictory to the claim of the Petitioner for allowing 70:30 debt:equity when the actual loan being availed is to the extent of 90%. Also, the Petitioner has been unable to provide any supporting document with respect to the equity portion of the transmission asset and the final audited certificate does not provide any details of debt and equity corresponding to the substation and transmission line.

3.9.8 In view of the above, the Commission has considered the debt equity corresponding to the loan as 90% (debt):10% (equity) as per the loan amount sanctioned by the bank for the purpose of funding of the project. Also, the amount of Rs. 1.00 Cr. received as consumer contribution has been deducted for arriving the debt:equity. The same is tabulated below:

Table 26: Approved Project Funding as on COD (Rs. Cr.)

Particulars	Capital Cost	% of Funding
Asset-1		
A-Total Cost	**66.72**	
Less: Consumer contribution	1.00	
Balance Cost	**65.72**	
Debt	59.14	90%
Equity	6.57	10%
Consumer contribution		
Asset-2		
B-Total Cost	**16.69**	
Debt	15.02	90%
Equity	1.67	10%

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 Regulations, 2011as 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 by the Petitioner in response to the deficiency letters for the purpose of approving the elements of ARR for the period from COD to FY 2023-24. The Commission has also considered the provisions of HPERC Transmission 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 2023-24for 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO 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 Submissions

4.2.1 The Petitioner has computed the Operation and Maintenance Expenses in accordance with the HPERC Transmission Tariff Regulations, 2011.

4.2.2 The following table provides the O&M expenses claimed by the Petitioner for the 3^{rd} and 4^{th} control period:

Table 27: O&M Expenses claimed by the Petitioner (Rs. Lakh)

Particular	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Employee Expense	24.35	61.45	63.82	66.51	69.31	72.23	75.28	78.45

Particular	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
A&G Expense	16.98	20.42	22.21	69.27	51.83	52.53	53.26	54.00
R&M Expense	152.71	161.75	157.23	161.91	166.73	171.70	176.81	182.07
Total O&M Expense	**194.04**	**243.62**	**243.26**	**297.69**	**287.88**	**296.47**	**305.34**	**314.53**

***Commission's* Analysis**

4.2.3 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, 2014 and 2019'. As the CERC Regulations provide for O&M expense based on voltage, circuit and conductor, the following norms have been considered as per the technical details of the Project for the computation of O&M expenses as per 'CERC Tariff Regulations, 2014 and 2019':

Table 28: Normative O&M Expenses

Financial Year (FY)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Double Circuit (Single Conductor)	0.32	0.33	0.35	0.38	0.39	0.40	0.42	0.43
220 kV (Rs Lakh per bay)	45.06	46.55	48.10	22.51	23.30	24.12	24.96	25.84
132 kV and below (Rs Lakh per bay)	32.18	33.25	34.36	16.08	16.64	17.23	17.83	18.46

4.2.4 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.

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

Table 29: O&M Expenses approved by Commission (Rs. Lakh)

Financial Year (FY)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
220 kV (Rs Lakh per bay)	45.06	46.55	48.10	22.51	23.30	24.12	24.96	25.84
132 kV and below (Rs Lakh per bay)	32.18	33.25	34.36	16.08	16.64	17.23	17.83	18.46
No. of 220 kV bays	2	2	2	2	2	2	2	2
No. of 132 kV bays	6	6	6	6	6	6	6	6
O&M Expenses for Sub-Station	**231.99***	**292.60**	**302.36**	**141.50**	**146.44**	**151.62**	**156.90**	**162.44**
Double Circuit (Single Conductor)	0.32	0.33	0.35	0.38	0.39	0.40	0.42	0.43
Line Length	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88
O&M Expenses for Transmission Line	**1.82***	**2.30**	**2.38**	**2.59**	**2.69**	**2.78**	**2.88**	**2.98**
Total O&M Expense	**233.82**	**294.90**	**304.74**	**144.09**	**149.13**	**154.40**	**159.78**	**165.42**

**O&M Expense pro-rated for FY17 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 3rd and 4thControl Period has been estimated as shown in the following tables:

Table 30: Depreciation claimed by Petitioner for 3rd Control Period (Rs. Lakh)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening GFA	8,674.80	8,674.80	8,674.80
GFA Addition during the year	0.00	0.00	285.10
Average GFA	8,674.80	8,674.80	8817.35
Freehold Land	492.21	492.21	492.21
Rate of depreciation	5.28%	5.28%	5.28%
Depreciable Value	7,807.32	7,807.32	7885.57
Balance useful life at the beginning of the period (Years)	35	34	33
Depreciation (for the period)	**333.32**	**405.54**	**415.72**

Table 31: Depreciation claimed by Petitioner for 4th Control Period (Rs. Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening GFA (Less Grant)	8959.90	9489.96	9889.96	9889.96	9889.96
GFA Addition during the year	530.06	400.00	0.00	0.00	0.00
Less: Grant	0.00	0.00	0.00	0.00	0.00
Closing GFA	9489.96	9889.96	9889.96	9889.96	9889.96
Depreciation	**437.24**	**457.91**	**464.59**	**464.59**	**464.59**

***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, 2011which 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. Further, the Commission has adjusted the GFA amount with consumer contribution of Rs. 100 lacs and Freehold land of Rs. 304 lacs as no depreciation is applicable on the same as per the provisions of the tariff regulations.

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

4.3.6 The depreciation expenses approved for 3rd and 4th Control period are summarized in the table below:

Table 32: Depreciation approved by Commission (Rs. Lakh)

Financial Year (FY)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Approved GFA	8,340.52	-	-	-	-	-	-	-
Less: Consumer Contribution	100.00	-	-	-	-	-	-	-
Less: Freehold Land	308.00	-	-	-	-	-	-	-
Net Opening Depreciable GFA	**7,936.52**	**7,936.52**	**7,936.52**	**7,936.52**	**7,936.52**	**7,936.52**	**7,936.52**	**7,936.52**
Add: Addition during the year	-	-	-	-	-	-	-	-
Closing GFA	7,936.52	7,936.52	7,936.52	7,936.52	7,936.52	7,936.52	7,936.52	7,936.52
Rate of Depreciation (%)	4.67%	4.67%	4.67%	4.67%	4.67%	4.67%	4.67%	4.67%
Depreciation	**309.43**	**370.64**	**370.64**	**370.64**	**370.64**	**370.64**	**370.64**	**370.64**

**Depreciation Expense pro-rated for FY17 based on approved COD*

4.4 Interest on Loan

Petitioner Submissions

4.4.1 The Petitioner has submitted that the interest on loan is computed in accordance with the Regulation 20 of the HPERC Transmission Regulations, 2011 and its subsequent amendments.

4.4.2 The actual loan from REC Ltd. availed by the Petitioner was amounting to Rs. 23.52 Cr. and the excess equity infused by the Petitioner has been considered as Normative loan of Rs. 36.90 Crore. The total loan considered by the Petitioner is amounting to 68.86% of the total project cost i.e., Rs. 60.42 Cr. and based on that the Interest on loan has been computed. The Petitioner has considered the weighted average interest rates of 12.23% for FY 2016-17 and 11.46% for FY 2017-18 &FY 2018-19 as per the REC Loan Agreement. The Computation of Interest on Loan for 3rd Control Period is shown as under.

Table 33: Interest on Loan for 3rd Control Period (Rs. Lakhs)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Opening Balance	6042.26	5838.50	5434.01
Addition	0.00	0.00	199.57
Repayment	203.55	404.49	410.70
Closing Balance	5838.50	5434.01	5222.87
Rate of Interest	12.23%	11.46%	11.46%
Interest	**726.22**	**655.15**	**619.72**

4.4.3 Further, for 4th Control Period the Petitioner has submitted that Rs. 5.30 Crore additional capital expenditure was proposed in FY 2019-20 for the restoration work for the damages that has been caused by the flash flood on 23rd and 24th of September, 2018.Further, Rs. 4.00 Crore was proposed by the Petitioner during FY 2020-21 for the construction of Residential Building. Therefore, the Interest on loan has to be computed on the basis of actual weighted average interest on actual loan outstanding for the project. In accordance with the above, the year wise interest on loan claimed for the 4th control period is as shown below:

Table 34: Interest on Loan for 4th Control Period (Rs. Lakhs)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening Loan	5222.87	5170.07	5013.60	4573.05	4132.50
Loan Addition during the Year	371.04	280.00	0.00	0.00	0.00
Less: Repayment of Loans during the year	423.85	436.47	440.55	440.55	440.55
Closing Loan	5170.07	5013.60	4573.05	4132.50	3691.95
Interest on loan	**583.33**	**576.55**	**558.39**	**507.89**	**457.40**
Weighted average Rate of Interest on Loans	*11.46%*	*11.46%*	*11.46%*	*11.46%*	*11.46%*

***Commission's* Analysis**

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

4.4.5 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."

4.4.6 The Commission has approved the Interest on Loan in accordance with the HPERC Transmission 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.

4.4.7 The Commission has considered the debt amount as per the approved funding as discussed in Chapter 3 earlier.

4.4.8 Based on the loan document submitted by the Petitioner, it is observed that the annual interest rate was 12.25% at the time of sanction of loan and the Petitioner has opted for 03 years reset option. Further, in response to the query of the Commission, the Petitioner has submitted the following details of loan disbursed against the project:

Table 35: Loan Disbursement Amount (Rs. Cr.)

S. No.	Disbursement Date	Disbursement Amount	Interest Rate (%)
1	13.03.2014	39.84	12.25
2	06.08.2018	34.55	10.50
3	02.12.2019	40.00	10.50

4.4.9 In view of the above para no 4.4.7, it is observed that the rate of interest during subsequent loan disbursals have been lower. As per the loan agreement, loan reset occurs every three years with revised interest rate. As per the loan disbursal in specific years, the interest rate prevailing during FY14 was 11.50%, 10.50% in FY19 and 10.50% during FY20. In absence of actual weighted average rate of interest details submitted by the Petitioner, the Commission has provisionally computed the weighted average rate of interest rate for each year. Also, in view of the terms and conditions of the loan agreement which prescribed reset of loans in every three years, the Commission has considered revised rate of 10.50% after completion of three years for the loans drawn during the earlier period i.e. 13.03.2014. This rate is in line with the rate of interest corresponding to the loans disbursed prior to the reset date. Accordingly, the interest on loan for 3rd and 4th control period has been computed considering the amount of loan disbursed and interest rate of 10.50%. The Commission shall revisit the weighted average rate of interest based on the actual details during truing-up and subsequent tariff determination. The following table provide the detailed calculation for the weighted average rate.

Table 36: Calculation for Weighted Average rate of interest

Particulars	Date of Disbursement	FY14	FY15	FY16	FY17	FY18	FY19
Loan D1 (Cr.)	13.03.2014	39.84	39.84	39.84	39.84	39.84	39.84
Rate%		12.25%	12.25%	12.25%	12.25%	11.50%	11.50%
Loan D2 (Cr.)	06.08.2018						34.55
Rate%							10.50%
Loan D3 (Cr.)	02.12.2019						
Rate%							
Total Loan amount			**39.84**	**39.84**	**39.84**	**39.84**	**74.39**
Weighted Avg Rate of Loan			**12.25 %**	**12.25 %**	**12.25 %**	**11.50 %**	**11.04 %**

Particulars	Date of Disbursement	FY20	FY21	FY22	FY23	FY24
Loan D1 (Cr.)	13.03.2014	39.84	39.84	39.84	39.84	39.84
Rate%		11.50%	10.50%	10.50%	10.50%	10.50%
Loan D2 (Cr.)	06.08.2018	34.55	34.55	34.55	34.55	34.55
Rate%		10.50%	10.50%	10.50%	10.50%	10.50%
Loan D3 (Cr.)	02.12.2019	40.00	40.00	40.00	40.00	40.00
Rate%		10.50%	10.50%	10.50%	10.50%	10.50%
Total Loan amount		**114.39**	**114.39**	**114.39**	**114.39**	**114.39**
Weighted Avg Rate of Loan		**10.85%**	**10.50%**	**10.50%**	**10.50%**	**10.50%**

4.4.10 Further, the following table provides the Interest on Loan approved by the Commission for each year:

Table 37: Interest on Loan approved by the Commission (Rs. Lakh)

Financial Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Opening Loan Balance	7,416.47	7,110.64	6,737.30	6,363.96	5,990.62	5,617.28	5,243.94	4,870.60
Addition	-	-	-	-	-	-	-	-
Repayment	309.43	370.64	370.64	370.64	370.64	370.64	370.64	370.64
Closing Balance	**7,107.04**	**6,736.40**	**6,365.76**	**5,995.13**	**5,624.49**	**5,253.86**	**4,883.22**	**4,512.59**
Rate of Interest	*12.25%*	*11.50%*	*11.04%*	*10.85%*	*10.50%*	*10.50%*	*10.50%*	*10.50%*
Interest on Loan	**728.71**	**796.00**	**722.95**	**670.47**	**610.03**	**571.11**	**532.20**	**493.28**

**Interest on Loan pro-rated for FY17 based on approved COD*

4.5 Interest on Working Capital (IWC)

Petitioner Submissions

4.5.1 The Petitioner has computed interest on working capital as per Regulation 21 and 22 of the HPERC Transmission Regulations, 2011 and its subsequent amendments thereof.

4.5.2 The Petitioner has submitted the Interest on Working Capital for 3rd and 4th Control period in the following tables:

Table 38: IWC claimed by Petitioner for 3rd Control Period (Rs. Lakh)

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
O&M expenses for 1 month	16.17	20.30	20.27
Maintenance spares @40% of R&M expenses for 1 month	5.09	5.39	5.24
Receivable for 2 months	301.16	328.80	317.80
Total Working capital	322.42	354.50	343.32
Interest on Working Capital	**40.46**	**44.49**	**43.09**

Table 39: IWC claimed by Petitioner for 4th Control Period (Rs. Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Annual O&M Expenses	297.69	287.88	296.47	305.34	314.53
O&M Expenses for 1 month	24.81	23.99	24.71	25.45	26.21
Maintenance Spares (at 15% monthly O&M Expenses)	3.72	3.60	3.71	3.82	3.93
Receivables for 2 months	328.55	334.41	336.16	329.10	322.10
Total Working Capital	**357.07**	**361.99**	**364.57**	**358.37**	**352.24**
Interest Rate	11.55%	11.55%	11.55%	11.55%	11.55%
Interest on Working Capital	**41.24**	**41.81**	**42.11**	**41.39**	**40.68**

***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 the 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, rates 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 40: Interest on Working Capital (WC) approved by Commission (Rs. Lakh)

Financial Year (FY)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Operation & Maintenance Expenses for 1 Month	23.79	24.57	25.39	12.01	12.43	12.87	13.32	13.78
Maintenance Spares Equivalent to 15% monthly of O&M	3.57	3.69	3.81	1.80	1.86	1.93	2.00	2.07
Receivable Equivalent of 2 Months of Fixed Cost	286.46	270.35	259.71	223.39	213.67	207.69	202.01	196.92
Total Working Capital Requirement	**313.81**	**298.61**	**288.91**	**237.20**	**227.96**	**222.48**	**217.32**	**212.77**
Interest on Working Capital %	*12.20%*	*11.00%*	*11.15%*	*11.55%*	*10.75%*	*10.00%*	*10.00%*	*11.50%*
Interest on Working Capital	**31.36***	**32.85**	**32.21**	**27.40**	**24.51**	**22.25**	**21.73**	**24.47**

**WC pro-rated for FY17 based on approved COD*

4.6 Return on Equity

***Petitioner* Submissions**

4.6.1 The Petitioner has submitted that it had claimed the Return on Equity as per Regulation 19 of Transmission Tariff Regulation, 2011 and its amendment thereof. Hence the Return on Equity claimed by the Petitioner for 3rd and 4th Control Period is as below:

Table 41:RoE claimed by Petitioner for 3rd Control Period (Rs. Lakh)

Particular	FY 2016-17	FY 2017-18	FY 2018-19
Equity as on COD/ Admitted Equity	2632.54	2632.54	2632.54
Additions during the Year	0.00	0.00	85.53
Average Equity	2632.54	2632.54	2718.07
Return on Equity*	**512.89**	**624.02**	**585.03**

**Return on Equity pro-rated for FY17 based on COD*

Table 42: RoE claimed by Petitioner for 4th Control Period (Rs. Lakh)

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening Equity	2718.07	2877.09	2997.09	2997.09	2997.09
Net Equity Addition during the year	159.02	120.00	0.00	0.00	0.00
Closing Equity	2877.09	2997.09	2997.09	2997.09	2997.09
RoE (%)	21.87%	21.87%	21.87%	21.87%	21.87%

Particulars	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Return on Equity	**611.77**	**642.28**	**655.40**	**655.40**	**655.40**

***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 Equity corresponding to the capital cost has been approved by the Commission in the previous Chapter under the Section 'Project funding'. The Commission has considered the approved equity against the scheme for approving the return on equity.

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 43: RoE approved by Commission (Rs. Lakh)

Financial Year (FY)	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Opening Equity	824.05	824.05	824.05	824.05	824.05	824.05	824.05	824.05
Addition	-	-	-	-	-	-	-	-
Closing Equity	824.05	824.05	824.05	824.05	824.05	824.05	824.05	824.05
Equity Value	**824.05**	**824.05**	**824.05**	**824.05**	**824.05**	**824.05**	**824.05**	**824.05**
RoE (%)	*15.50%*	*15.50%*	*15.50%*	*15.50%*	*15.50%*	*15.50%*	*15.50%*	*15.50%*
Annual ROE	127.73	127.73	127.73	127.73	127.73	127.73	127.73	127.73
RoE	**104.63**	**127.73**	**127.73**	**127.73**	**127.73**	**127.73**	**127.73**	**127.73**

**ROE pro-rated for FY17 based on approved COD*

4.7 Aggregate Revenue Requirement

***Petitioner* Submissions**

4.7.1 The table given below summarizes the proposed Aggregate Fixed Charges for the 3rd and 4thControl Period as claimed by the Petitioner.

Table 44: Summary of ARR claimed by Petitioner (Rs. Lakh)

Particulars	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
O&M Expenses	194.04	243.62	24326	297.69	287.88	296.47	305.34	314.53
Interest on Loan	726.22	655.15	619.72	583.33	576.55	558.39	507.89	457.4
Interest on Working Capital	40.46	44.49	43.09	41.24	41.81	42.11	41.39	40.68
Depreciation	333.32	405.54	415.72	437.24	457.91	464.59	464.59	464.59
Return on Equity	512.89	624.02	585.03	611.77	642.28	655.4	655.4	655.4
Annual Transmission Charges	1806.94	1972.82	1906.82	1971.27	2006.44	2016.96	1974.62	1932.6

**ARR pro-rated for FY17 based on proposed COD*

***Commission's* Analysis**

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

Table 45: Summary of ARR approved by Commission (Rs. Lakh)

Particulars	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
O&M expense	233.82	294.90	304.74	144.09	149.13	154.40	159.78	165.42
Depreciation	309.43	370.64	370.64	370.64	370.64	370.64	370.64	370.64
Interest Expense	728.71	796.00	722.95	670.47	610.03	571.11	532.20	493.28
IOWC	31.36	32.85	32.21	27.40	24.51	22.25	21.73	24.47
Return on equity	104.63	127.73	127.73	127.73	127.73	127.73	127.73	127.73
Aggregate Revenue Requirement	**1,407.95 ***	**1,622.10**	**1,558.26**	**1,340.32**	**1,282.03**	**1,246.12**	**1,212.07**	**1,181.53**

**ARR pro-rated for FY17 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 the project.

4.8.2 The Petitioner has submitted that the project was in use from COD (i.e., 05.06.2016). However, in absence of Commission approved tariff, the Petitioner had requested the Commission to approve an interim tariff at 90% of the proposed annual transmission charges for FY 2019-20 till the final tariff is determined by the Commission.

4.8.3 The Petitioner has submitted that due to the delayed recoveries, it is facing financial hardship and is under strain in arranging the working capital for ensuring smooth operations. Therefore, the Commission has been 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 August 2019, as against the COD of the asset as 05.06.2016, which is a delay of almost 03 years. Also, a significant delay was on account of the ongoing legal matters with the beneficiaries pending at the Hon'ble APTEL. Further, the Petitioner has also taken considerable time in responding to the various queries raised by the Commission resulting in further delays. Given the concerns regarding the status of transmission assets which led to the significant delays, the Commission feels it appropriate to allow recovery to the extent of ARR and corresponding tariff determined against the transmission assets.

4.9 Transmission Charges

***Petitioner* Submissions**

4.9.1 The Petitioner has submitted that Kanchanjunga Power Company Private Limited (KPCPL) and HPSEBL are the sole beneficiaries of the project. Further, the project was envisaged for the evacuation of approx. 100MW of power from the upcoming small hydroelectric power generating stations in the Kullu region.

***Commission's* Analysis**

4.9.2 In the para no 3.4 of this order, it is observed that the transmission assets was primarily planned to cater to the evacuation needs of approx. 100 MW of power from upcoming small hydroelectric power generating stations in the Kullu region and as per the submission of the Petitioner, M/s KPCPL and HPSEBL are the current beneficiaries of the transmission assets.

4.9.3 Also, an interim power transfer agreement has been executed between the Petitioner and the two beneficiaries. Therefore, the Commission is of the view that the key beneficiaries of the project 33/220kV, 80/100MVA GIS Sub-Station at Phojal along with 220kV D/C LILO Transmission Line are KPCPL and HPSEBL and the ARR determined above is required to be recovered 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: 10 September, 2024