

**Approval of Capital Cost and determination
of tariff for 220 kV D/C Charor-Banala
Transmission line for the Period from COD
to FY 2023-24
(FY20-FY24)
Himachal Pradesh Power Transmission
Corporation Limited (HPPTCL)**



**Himachal Pradesh Electricity Regulatory
Commission
August 12, 2021**

**BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION AT
SHIMLA
PETITION NO: 97/2020**

**CORAM
Sh. DEVENDRA KUMAR SHARMA
Sh. BHANU PRATAP SINGH**

In the matter of:

Approval of MYT petition for approval of capital cost and determination of tariff for the period starting from COD to FY 2023-24 for 220kV D/C Charor-Banala transmission line of Himachal Pradesh Power Transmission Corporation Ltd. (HPPTCL) under sections 62, 64 and 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') 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 the period starting from COD (24th July, 2019) to FY 2023-24 for 220 kV D/C Charor-Banala transmission line under Regulation 7(1)(n) of the Third Amendment to CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 and the Himanchal Pradesh Electricity regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulation, 2011 and subsequent amendments to the Tariff Regulations carried thereafter, under Section 62, read with Section 86 of the Electricity Act, 2003 (hereinafter referred to as "the Act").

The Commission having heard the applicant, interveners, consumers and consumer representatives through various representations and having had formal interactions with the officers of the HPPTCL and having considered the documents available on record, herewith accepts the application with modifications, conditions and directions specified in the following Tariff Order.

The Commission has determined the capital cost and Aggregate Revenue Requirement (ARR) for 220 kV D/C Charor-Banala 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 Tariff Regulations, 2019 and Regulations framed by the Commission. Details of prudence check and approach adopted by the Commission with regard to approval of capital cost and ARR for 220 kV D/C Charor-Banala transmission line are summarized in the detailed Order.

(BHANU PRATAP SINGH)

Member

(DEVENDRA KUMAR SHARMA)

Chairman

Shimla

Dated: 12 August, 2021

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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 11thSeptember,2008.

1.2.3 Through notification No. MPP-A-(1)-4/2006-Loose dated 3rdDecember, 2008 read with the GoHP's earlier notification dated 31stOctober, 2008, 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 provision of Section 61 of the Act.
- 1.3.2 The MYT framework is also designed to provide predictability and reduce regulatory risk. This can be achieved by approval of a detailed capital investment plan for the Petitioner, considering the expected network expansion and load growth during the Control Period. The longer time span enables the Petitioner to propose its investment plan with details on the possible sources of financing and the corresponding capitalization schedule for each investment.
- 1.3.3 The Commission had specified the terms and conditions for the determination of tariff in the year 2004, based on the principles as laid down under Section 61 of the Electricity Act 2003.
- 1.3.4 Thereafter, the Commission had notified the HPERC (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2011. The MYT Regulations notified in the year 2011 were amended as (First Amendment) Regulations, 2013 on 1st November, 2013 and (Second Amendment) Regulations, 2018 on 22nd November, 2018 (The Regulations and its subsequent amendments combined shall be herein after referred to as "HPERC MYT Transmission Regulations 2011").
- 1.3.5 The Commission issued the first Multi-Year Tariff (MYT) Order for HPPTCL for the period FY 2011-12 to FY 2013-14 on 14th July, 2011 and thereafter for the second Control Period (FY 2014-15 to FY 2018-19) on 10th June, 2014. The Commission has also issued the Tariff Order on True Up for the FY 2014-2015 to FY 2015-2016 and Mid Term Review for Third Control Period FY 2016-2017 to FY 2018-19. Thereafter, on 29th June, 2019, the Commission issued the MYT Order for the fourth Control Period (FY 2019-20 to FY 2023-24).

1.4 Interaction with the Petitioner

- 1.4.1 Since the submission of the Petition, there have been a series of interactions between the Petitioner 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.

- 1.4.2 Based on preliminary scrutiny of the petition, the Commission vide letter No. HPERC-F(1)-17/2020- 451-52 dated 12th June, 2020 directed the Petitioner to submit details regarding first set of deficiencies identified in the petition, which were submitted by the Petitioner vide MA No. 142/2020 dated 28th July, 2020. Subsequently, the Commission issued a second, third and fourth set of deficiencies vide letters No. HPERC-F(1)-17/2020- 1524-25 dated 21st September, 2020, HPERC-F(1)-17/2021- 2810-11 dated 19th January, 2021 and HPERC-F(1)-17/2020- 655 dated 16th June, 2021 respectively. Besides, Technical Validation Sessions were also held with the petitioner from time to time.
- 1.4.3 Based on the detailed scrutiny of the petition, various 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

Sl.	Submission of the Petitioner	Date
1	M.A. No 142/2020	28 th Jul, 2020
2	M.A. No. 172/2020	20 th Nov, 2020
3	M.A. No. 46/2021	25 th Mar, 2021
4	M.A. No. 144/2021	5 th Jul, 2021

1.5 Public Hearings

- 1.5.1 The interim order inter alia included direction to the Petitioner to publish the application in an abridged form and manner as per the "disclosure format" attached with the interim order for the information of all the stakeholders in the State. As per the direction, the Petitioner published the public notice in the following newspapers.

Table 2: List of Newspapers for Public Hearing

Sl.	Name of News Paper	Date of Publication
1.	Amar Ujala	2 nd Jan, 2021 and 5 th Feb, 2021
2.	The Tribune	3 rd Jan, 2021 and 12 th Feb, 2021

- 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 Commission

Sl.	Name of News Paper	Date of Publication
1.	The Tribune	16 th Jan, 2021
2.	Dainik Bhaskar	16 th Jan, 2021

- 1.5.3 The stakeholders were requested to file their objections by 15th February, 2021. HPPTCL was required to submit replies to the suggestions/ objections

to the Commission by 23rd February, 2021 with a copy to the objectors on which the objectors were required to submit rejoinder by 3rd March, 2021.

- 1.5.4 In view of ongoing lockdown and restrictions related to COVID-19, the Commission decided to conduct an online public hearing and therefore issued a public notice informing the public about the scheduled date of public hearing as 5th March, 2021. All the parties, who had filed their objections/suggestions, were also informed about the date, time and venue for presenting their case in the public hearing.
- 1.5.5 However, no specific comments were submitted by the stakeholders. Therefore, the Commission has undertaken detailed scrutiny of various submissions made by the Petitioner for 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 date for filing comments/ objections and date of public hearing as 5th March, 2021 for the Petition of approval of Capital Cost and determination of tariff for 220kV D/C Charor-Banala transmission line for the period from COD to FY 2023-24.
- 2.1.2 Accordingly, the public hearing was conducted through online mode on 5th March, 2021. However, no comments were received by the Commission on the petition prior to the public hearing.

3. APPROVAL OF CAPITAL COST

3.1 Introduction

3.1.1 HPPTCL has submitted a petition for determination of capital cost of 220kV D/C Charor-Banala transmission line and ARR for the Control Period FY 2019-20 to FY 2023-24 in line with the provisions of the HPERC MYT Transmission Regulations 2011.

3.1.2 As per the HPERC MYT Transmission Regulations 2011,

14. Capital cost of the project

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

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

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

(c) additional capital expenditure determined under regulation 16:

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

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

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

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

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

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

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

- 3.1.3 The Commission has reviewed the proposed capital cost for 220kV D/C Charor-Banala transmission line and ARR proposed for each year by the Petitioner from the date of COD until the end of the Control Period i.e. FY 2023-24. Multiple set of deficiencies in the petition were shared with the Petitioner to realistically validate the reasons for cost and time overrun, the data submitted, beneficiary details etc.
- 3.1.4 The original Petition for determination of capital cost and ARR for 220kV D/C Charor-Banala transmission line lacks significant detailing and supporting information to ascertain the capital cost for the line. Information provided in the Petition was inadequate for which the Commission sought additional submissions and supporting documents from the Petitioner through deficiency letters for the purpose of reviewing the capital cost and ARR for the 220kV D/C Charor-Banala transmission line. In some of the cases, the information provided by the Petitioner in response to the queries of the Commission remained incomplete and/or could not be validated through appropriate supporting documents. One of key requirement i.e. Auditor Certificate for the capital cost of the transmission line was awaited since long and was submitted by the Petitioner after several reminders in response to the third set of queries on 25th March, 2021. The Commission has undertaken detailed prudence check and adequate assumptions, wherever required, for approving the capital cost for 220kV D/C Charor-Banala transmission line. The scrutiny and prudence check undertaken by the Commission for approval of capital cost of 220kV D/C Charor-Banala transmission line has been discussed in the following paragraphs.

3.2 HPPTCL Current Infrastructure

- 3.2.1 During the unbundling of State power sector, only 15 numbers of Transmission Lines have been transferred to HPPTCL which were held by erstwhile Himachal Pradesh State Electricity Board (HPSEB). Whereas the line bays, substations, C&R Panel, metering arrangement and other transmission related infrastructure were retained within the distribution entity i.e. Himachal Pradesh State Electricity Board Limited (HPSEBL) which was formed post unbundling of HPSEB.
- 3.2.2 The Petitioner has provided the details of existing intra-state transmission infrastructure vested with HPPTCL as per notification no. MPP-A (3)-1/2001-iv dated 10th June, 2010 by the Government of Himachal Pradesh. In addition to the above, the transmission system of HPPTCL also has three inter-state transmission lines, the tariff of which is approved by Central Electricity

Regulatory Commission (CERC). The details of the existing Intra-state and Inter-state Transmission system of the Petitioner is tabulated as follows:

Table 4: Details of existing Transmission lines

Sl.	Name of Existing lines	Type	Type of line AC/HVDC	S/C or D/C	Line length (km)	Date of Commercial Operation
A	220 KV Lines					
1	220 kV D/C Bairasul - Pong Line (LILO portion at Jassure)	Intra-State	AC	D/C	0.24	09-1985
2	220 kV S/C Jassure-Thein Line	Inter-State	AC	S/C	25.60	03-2001
3	220 kV Dehar-Kangoo Line (S/C ckt. Line on D/C tower)	Intra-State	AC	S/C	3.18	06-1999
4	220 kV D/C Panchkula-Kunihar Line	Inter-State	AC	D/C	46.72	05-1989
5	220 kV D/C Kodari-Majri Line	Inter-State	AC	D/C	35.02	09-1989
6	220 kV D/C Nalagarh (PGCIL)-Nalagarh Line	Intra-State	AC	D/C	3.50	07-2010
B	132 KV Lines					
7	132 kV S/C Giri-Kulhal Line	Intra-State	AC	S/C	17.40	04-1978
8	132 kV D/C Giri-Abdullapur Line	Intra-State	AC	D/C	16.22	08-1982
9	132 kV S/C Kangra Tap Line	Intra-State	AC	S/C	0.14	02-1979
10	132 kV S/C Dehar-Kangoo Line	Intra-State	AC	S/C	2.99	12-1998
11	132 kV D/C Shanan-Bassi Line	Intra-State	AC	D/C	5.00	03-1970
C	66 KV Lines					
12	66 kV Shanan-Bijni Line	Intra-State	AC	S/C	35.00	10-1969
13	66 kV Pinjore-Parwanoo Line	Intra-State	AC	S/C	8.23	04-1956
14	66 kV Pong-Sansarpur Terrace Line	Intra-State	AC	S/C	6.30	10-1990
15	66 kV Bhakra-Goalthai-Rakkar Line	Intra-State	AC	S/C	16.72	12-1985

3.2.3 HPPTCL has further been undertaking various transmission schemes since its formation in 2008 for evacuation of upcoming generation and system strengthening of transmission infrastructure in the state.

3.2.4 The Petitioner has now submitted this petition for Approval of Capital Cost and determination of tariff for 4thControl Period from COD to FY 2023-24 for 220kV D/C Charor-Banala Transmission line. Relevant technical details and configuration of the transmission line as submitted by the Petitioner is tabulated as follows:

Table 5: Detail of the Transmission Line

Name of Transmission line	Type of line (AC/HVDC)	S/C or D/C	No. of Sub-Conductors	Voltage level kV	Line length (Ckt. Km)	Line Length (Km)	COD
220kV D/C Transmission line from Charor to 400/220kV Banala Sub-Station of PGCIL	AC	D/C	Single Conductor	220	2x18	18	24 th July 2019

3.3 Summary of the Project

Petitioner Submission

- 3.3.1 The Petitioner submitted that the Board of Director's (BoD) of HPPTCL had approved the proposal for construction of 220 kV D/C Charor-Banala transmission line in the 15th Board Meeting held on 22nd May, 2012 vide agenda item No. 15.07. Thereafter, CEA accorded its approval on the Detailed Project Report (DPR) submitted vide letter dated 5th June, 2012.
- 3.3.2 The project was envisaged to evacuate 289 MW of power from Small Hydro Electric Plants (HEPs) in Parvati Valley and other HEP's such as Malana-II (100 MW), awarded to various IPP's by the HP Govt. The 220 kV D/C Charor-Banala line (Twin Moose) terminated at 220/400 kV pooling station of PGCIL at Banala. The arrangement in addition to the evacuation needs of new generating stations shall also improve reliability and redundancy of the system to evacuate power in case of outage of any transmission line because of unforeseen conditions.
- 3.3.3 The DPR of the project was approved on 5th June, 2012 post which the tender was invited on 18th January, 2014 and opened on 16th May, 2014. After evaluation of the bids, the work was awarded to M/s R. S. Infra Projects Pvt. Ltd. vide LOA No. HPPTCL/ADB/220KV D/C Charor-Banala/2014-15-6946-53 dated 22nd January, 2015 for supplies and LOA No. HPPTCL/ADB/220KV D/C Charor-Banala/2014-15-6954-61 dated 22nd January, 2015 for services and civil work. The scheduled completion time of the project - was 18 months from the effective date i.e. 1st August, 2015. However the line was completed only by May, 2019. The line was tested at no load on 24th July, 2019 after obtaining consent from the concerned parties.
- 3.3.4 The Petitioner also submitted that the implementation of the project got delayed on account of reasons purely beyond the control of the Petitioner. Some of the reasons highlighted by the Petitioner were the enhanced scope of work, delay in getting forest clearance, change in design, environmental factors, agitation of local population, etc. The reasons for delay and cost enhancement have been discussed in detail in the subsequent sections.
- 3.3.5 The following table provides the capital cost incurred by the Petitioner vis-à-vis the cost allowed in the DPR, as submitted in the original Petition:

Table 6: Abstract of Capital Cost (INR Cr.)

Particulars	Cost as per DPR	Capital Cost - Petition
Hard Cost	40.02	63.51
IDC	1.36	6.08
Departmental charges	3.48	4.38
Total	44.87	73.98

3.3.6 In reply to the deficiency letters, the Petitioner revised the capital cost of the project on account of factors such as increase in departmental charges and IDC. The following table provides the revised capital cost of the project submitted in subsequent correspondence by the Petitioner:

Table 7: Revised Capital Cost (INR Cr.)

Particulars	Capital Cost - Petition	Revised Capital Cost
Hard Cost	63.51	63.51
IDC	6.08	10.71
Departmental charges	4.38	4.42
Sub-Total	73.98	78.65
Expenditure incurred after COD till 31.03.2020	-	3.37
Total	73.98	82.02

3.3.7 The Petitioner submitted that a meeting was held between M/s AD Hydro Power Limited, M/s EPPL and HPPTCL on 27th April, 2019 wherein it was discussed that the instant transmission line is nearing completion and preparations for shifting of Malana-II HEP is needed to be planned accordingly. The Petitioner submitted that on 24th July, 2019, both the circuits were energised from the PGCIL Substation at Banala while keeping an open circuit at the Charor end. This had to be done due to non-availability of shut down that had to be provided by M/s EPPL.

3.3.8 The Petitioner submitted that subsequently the shutdown for the shifting of connectivity was discussed in the 162nd OCC meeting held on 13th August, 2019 and shutdown was scheduled for 16th September, 2019 subject to availability of telemetry. However, at the last minute, M/s EPPL intimated the incomplete status of telemetry at Charor Sub-Station through email and hence the shutdown could not be availed. The Petitioner again proposed the shutdown on 26th September, 2019 but M/s EPPL refused to allow the shutdown and transfer of connectivity got further postponed to 30th September, 2019.

3.3.9 The Petitioner submitted that since the responsibility of providing shutdown and telemetry lied with the beneficiary of the line, such delay is not on account of the Petitioner. Accordingly, the Petitioner has requested to consider 24th July, 2019 as the date of COD for the project.

Commission's Analysis

- 3.3.10 The Commission observed that 220 kV D/C Charor-Banala transmission line which terminates at 220/400 kV pooling station of PGCIL at Banala, was initiated by HPPTCL in 2012. The project was envisaged to evacuate 289 MW power from Small HEPs in Parvati Valley and other HEP's such as Malana-II (100 MW). HPPTCL has constructed an Integrated Transmission System in the area due to the limited corridor availability. Therefore, the developed system is expected to improve the reliability and redundancy of the system to evacuate power in case of outage of any transmission line because of unforeseen conditions. As per the DPR, the project cost was INR ~45 Cr. (with debt:equity ratio of 70:30).
- 3.3.11 It is observed that the contract for supply and services was awarded in January, 2015 to M/s. R.S. Infra, while the construction started from August, 2015 onwards. As per the award, the construction was scheduled to be completed within 18 months from the project initiation i.e. 1st August, 2015. However, the construction was delayed significantly on account of several factors and was finally completed in May, 2019.
- 3.3.12 The Petitioner has submitted a Petition for approval of capital cost of Charor-Banala line and ARR from the date of COD i.e. 24th July, 2019 to FY 2023-24. The Petitioner has claimed a total cost of INR 73.98 Cr. as on COD. In subsequent submissions, the Petitioner has revised the capital cost and also included additional expenditure incurred till 31st March, 2020 resulting in final capital cost of INR 82.02 Cr. as on 31st March, 2020.
- 3.3.13 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 auditors certificate, approvals of BOD, details of awards/ contracts, correspondences, payments made to contractors, and COD certificate etc.

3.4 Energy flow and Nature of Asset

Petitioner Submission

- 3.4.1 The Petitioner submitted that transmission line has been constructed with an anticipated evacuation capacity of 289 MW.
- 3.4.2 Complete details of beneficiaries for which planning was undertaken and present status of those generators along with their installed capacity is provided as follows:

Table 8: Status of projects connected to line

Sl.	Name of Project	Installed Capacity (MW)	Status
1	Sarsadi	9.6	Under construction
2	Parvati	14.0	Under construction
3	Parvati-II	10.0	Under construction

Sl.	Name of Project	Installed Capacity (MW)	Status
4	Sarsadi-II	9.0	Under construction
5	Shat Parvati	5.0	DPR under approval stage
6	Toss	10.0	Commissioned
7	Jigral	5.0	NOC/Clearance stage
8	Chakshi	2.0	Commissioned
9	Chakshi - II	3.0	NOC/Clearance stage
10	Balargha	9.0	Commissioned
11	Shilla	1.8	NOC/Clearance stage
12	Barthi	1.0	NOC/Clearance stage
13	Jirah	4.0	Commissioned
14	Jirah	3.5	NOC/Clearance stage
15	Tauhak	4.5	NOC/Clearance stage
16	Liptung Khor	3.0	DPR under approval stage
17	Piachkani	0.6	DPR under approval stage
18	Bakar Kiara	1.1	Cancelled
19	Garthi-II	1.5	NOC/Clearance stage
20	Garthi-III	3.0	NOC/Clearance stage
21	Garthi	1.0	NOC/Clearance stage
22	Gathi	0.8	NOC/Clearance stage
23	Upper Jirah	1.5	Under construction
24	Kungti	1.0	NOC/Clearance stage
25	Nazonga	0.9	NOC/Clearance stage
26	Bramganga	5.0	Under construction
27	Jari Hydrel	5.0	Under construction
28	Bramganga Top	5.0	NOC/Clearance stage
29	Jal	1.0	NOC/Clearance stage
30	Manikaran	4.0	NOC/Clearance stage
31	Raskat	0.8	Commissioned
32	Raskat-II	0.4	TEC accorded
33	ManikaranChoj	2.5	DPR under approval stage
34	Malana Top	5.0	NOC/Clearance stage
35	Malana-III	30.0	Project under allotment stage
36	Malana-IV	10.0	Commissioned
37	Thuchaning	1.0	NOC/Clearance stage

Sl.	Name of Project	Installed Capacity (MW)	Status
38	Chharor	0.8	DPR under approval stage
39	Chharor	3.0	NOC/Clearance stage
40	Sharni	9.6	Under clearance
41	Malana-II	100.0	Commissioned
	TOTAL	288.9	

- 3.4.3 As per the submission of Petitioner, currently power of only M/s Everest Power Private Limited operating the Malana-II Hydro Electric project (100 MW) is being evacuated through the line and the Petitioner has issued NOC to M/s EPPL as required under CERC (Grant of connectivity, Long Term Access and Medium Term Open Access in Inter-State Transmission and related matters) Regulations, 2009 and subsequent amendments thereof for entering into LTA with CTU. Against the NOC, the generator has agreed to pay transmission charges for utilizing the said transmission line.
- 3.4.4 The Petitioner has also made submissions in NRPC meeting regarding giving the inter-state status for the line in view of its inherent nature and provide certification in an expedited manner to enable the Petitioner to file petition for recovery of transmission charges.
- 3.4.5 In order to validate its claim, the Petitioner submitted a copy of minutes of meeting of 43rd Technical Transmission Sub-Committee (TCC) meeting and 46th Northern Regional Power Committee (NRPC) meeting held on 23rd September, 2019 and 24th September, 2019 respectively, where HPPTCL had placed the agenda before NRPC for declaration of 220kV Charor-Banala Transmission line as deemed ISTS. As per the minutes of the meeting, TCC had advised HPPTCL to submit the request for certification with relevant data after the commissioning of line.
- 3.4.6 The Petitioner further submitted that reminder to NRPC has already been sent and the study to ascertain the nature of the asset is awaited.

Commission's Analysis

- 3.4.7 It is observed that 220 kV D/C Charor-Banala transmission line was planned to evacuate 289 MW power from Small HEPs in Parvati Valley and other HEP's including Malana-II (100 MW). However, the line is currently being utilized by M/s Everest Power Private Ltd. (EPPL) for evacuation of power of Malana-II HEP.
- 3.4.8 In response to one of the queries, the Petitioner has submitted the details of various beneficiaries along with the status of their projects. It is observed that various other projects such as Toss, Chakshi, Balargha, Jirah, Raskat, Malana IV are also commissioned. However, due to non-availability of HPPTCL system (132/33kV Barsaini Substation and 132kV Charor-Barsaini Transmission line), these projects are evacuating their power through HPSEBL system. They will be able to evacuate their power through Charor-

Banala Transmission line after commissioning of the above mentioned assets by HPPTCL.

- 3.4.9 It is also observed that the Petitioner has mentioned Regulation 7(1)(n) of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 which states as follows:

"(n) For the computation of transmission charges at each node as per Hybrid Methodology, cost of ISTS transmission licensees whose lines feature on the Basic Network shall be considered.

Provided that in case of STU lines which are physically inter-State lines and whose tariff is approved by the Commission, such tariff shall be considered for computation of PoC charges:

Provided further that in case of non-ISTS lines (lines owned by STUs but being used for carrying inter-State power as certified by respective RPCs), the asset-wise tariff as approved by the respective State Commission shall be considered. Where asset-wise tariff is not available, the tariff as computed by the Commission based on the ARR of the STUs (as approved by respective State Commissions) by adopting the methodology similar to the methodology used for ISTS transmission licensees shall be considered. The transmission charges received by the concerned STU on this account shall be adjusted in its approved Annual Revenue Requirement."

- 3.4.10 The Petitioner further informed that it had filed a Petition No. 550/TT/2014 in the matter of approval of tariff for 220/33 kV Karian substation and transmission line from Karian to Chamera-II. The proposed line was incidental to inter-State transmission network and covered under the definition of inter-state transmission system as provided in Section 2(36) of the inter-state transmission lines. However, CERC in its Order dated 23rd September, 2015 had directed the Petitioner to approach State Commission for determination of ARR and thereafter to CERC for inclusion of line for PoC computation. The relevant abstract of the said CERC order is as under:-

"7. The petition has been filed in response to the Commission's directions for determination of tariff of transmission lines owned or controlled by the STU which carry inter-state power. This line is not an ISTS line as Karian as well as Chamera-II are in the State of Himachal Pradesh. However, Section 2(36) of the Act defines the ISTS as under:-

"2(36) inter-State transmission system includes-

(i) Any system for the conveyance of electricity by means of main transmission line from the territory of one State to another state;

(ii) The conveyance of electricity across the territory of any intervening State as well as conveyance within the State which is incidental to such inter-State transmission of electricity;

(iii) The transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by a Central Transmission Utility"

8. The petitioner has submitted that the instant line is incidental to inter-State transmission network and it is covered under the definition of inter-State transmission system as provided in Section 2(36) of the inter-State transmission lines. STU lines carrying inter-State power or lines incidental to ISTS can be considered for inclusion in the computation of PoC charges if it is certified by RPC as carrying inter-state power in terms of para 2.1.3 of the Annexure-I to the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations) which is extracted overleaf:-

"xxx

xxx

(g) Overall charges to be allocated among nodes shall be computed by adopting the YTC of transmission assets of the ISTS licensees, deemed ISTS licensees and owners of the non-ISTS lines which have been certified by the respective Regional Power Committees (RPC) for carrying inter-State power. The Yearly Transmission Charge, computed for assets at each voltage level and conductor configuration in accordance with the provisions of these regulations shall be calculated for each ISTS transmission licensee based on indicative cost level provided by the Central Transmission Utility for different voltage levels and conductor configuration. The YTC for the RPC certified non-ISTS lines which carry inter-State power shall be approved by the Appropriate Commission."

9. These assets can be considered for inclusion in the PoC only if they are certified by NRPC that these lines are used for evacuation of inter-state power. The tariff of such lines is determined by respective State Commissions by way of ARR. The Commission has worked out a methodology for the purpose of calculation of PoC charges and apportionment of transmission lines and charges to the transmission system of different configurations of the STU and this methodology has adopted in case of all the natural inter-state transmission lines. Similar procedure will be adopted in the instant case. The Commission in its order dated 18.3.2015 in Petition No. 213/TT/2015 has observed as follows:-

"17. We have not carried out any due diligence of the tariff of these lines (for consideration of PoC calculations) as the jurisdiction to determine the tariff of the lines owned by STU rests with the State Regulatory Commission. We have considered the ARR of the STU as approved by the State Regulatory Commission and have adopted the methodology as discussed in paras 15 and 16 of this order for the purpose of calculation of PoC charges and apportionment of transmission lines and charges to the transmission system of different configurations of the STU. This methodology shall be adopted uniformly for the lines owned by other STUs used for inter-State transmission of power duly certified by respective RPCs for the purpose of inclusion in the PoC mechanism."

10. We have considered the submissions of the petitioner. As the instant assets are likely to be commissioned only after December, 2015, the instant petition is disposed of with a liberty to the petitioner to file fresh petition for

inclusion of line in PoC computation after the commercial operation of the lines and approval of the tariff of the instant asset by the State Commission. The petitioner is further directed to obtain the necessary certificate from the NRPC to the effect that the instant assets are being used for inter-state transmission of power. The petition filing fees deposited along with this petition will be adjusted towards the fees to be deposited by the petitioner in future petitions."

- 3.4.11 In subsequent clarifications raised by the Commission, the Petitioner submitted that it has approached NRPC for certification of 220 kV D/C Charor-Banala Transmission line as Deemed ISTS asset vide discussions at 42ndTCC & 45thNRPC Meetings held on 7th& 8thJune , 2019 and 43rdTCC & 46thNRPC Meetings held on 23rd& 24thSeptember, 2019 before commissioning of the asset stating that there shall be no drawl points or interfaces of distribution network and other intra-state transmission system at Charor substation. However, HPPTCL was advised to submit the request for certification with relevant actual data for two quarters after the commissioning of line. Accordingly, HPPTCL has sent request to NRPC to carry out necessary studies for certification of asset as ISTS vide its letter dated 6thAugust, 2020.
- 3.4.12 In view of the above mentioned, the Petitioner has approached the Commission with the current petition for approval of Capital Cost and determination of tariff for the Period from COD to FY 2023-24. It has further been submitted that depending upon whether the system is certified by NRPC as Intra or Inter System, HPPTCL shall approach Appropriate Commission for recovery of the tariff.
- 3.4.13 The Commission observed that the MoM of the 43rdTCC and 46thNRPC Meeting held in the month of September, 2019 provides for consideration of the said asset under ISTS upon validation of the energy flow. The relevant extract of the MoM is provided as follows:

"B.23 Certification of 220KV DIC Chhaur-Banala line under construction by HPPTCL as Deemed ISTS (Agenda by HPPTCL)TCC Deliberations

B.23.1 HPPTCL representative informed that 220kV Chhaur-Banala line will have the injection of only Malana II and other end at Banala. He informed that line will be commissioned by 30.09.2019 having simple network with 2 nodes and no intrastate linkages.

B.23.2 He requested for certification of 220KV D/C Chhaur-Banala line of HPPTCL as Deemed ISTS without waiting for data of four/two quarters and requested for ISTS certification at the earliest as HPPTCL has to file petition in CERC for tariff.

B.23.3 M/s NRPC informed that studies need to be carried out after commissioning of the line before certifying the lines as ISTS as per the CERC regulations and approved procedure of NR. He stated if ISTS flow is more than 50%, the line is certified as ISTS for one year. NRLDC representative agreed with comments of M/s NRPC and informed that data for 2 quarters is required to carry out the studies.

B.23.4 TCC advised HPPTCL to submit the request for certification with the relevant data after the commissioning of line. Further, studies may be carried out according to regulations and issue may be discussed in next TCC/NRPC meetings.”

- 3.4.14 Since the Petitioner has already approached NRPC for ascertaining the nature of the asset, the same would help the Petitioner in resolving the issue of recovery of the cost from respective beneficiaries in an appropriate manner.
- 3.4.15 In view of the fact that the Charor-Banala line has been capitalized and is being utilized for energy flow, the Commission recognizes the financial difficulties of the Petitioner. Also, considering the responsibility of determination of ARR for such incidental inter-state assets, the Commission has undertaken detailed prudence check of the capital cost of Charor-Banala line and determination of ARR for the Control Period.
- 3.4.16 **The Petitioner is directed to take up the matter with NRPC in an expedited manner and provide a status update to the Commission within 30 days of issuance of this Order.**
- 3.4.17 **Further, the Petitioner is also directed to enter in connection agreement and LTOA with the beneficiaries of the transmission asset in a time bound manner and provide an update within six months of issuance of this Order.**

3.5 Commissioning Date (COD)

Petitioner Submission

- 3.5.1 The Petitioner has requested to the Commission to consider the COD of the line as 24th July, 2019 claiming that due to various technical constraints, which were not on account of the Petitioner, the actual energization of the line got delayed.
- 3.5.2 The Petitioner submitted that a meeting was held between M/s AD Hydro Power Limited, M/s EPPL and HPPTCL on 27th April, 2019 wherein it was discussed that the instant transmission line is nearing completion and preparations for shifting Of Malana-II HEP need to be planned accordingly. M/s EPPL was also informed that it needed to apply for LTA for the HPPTCL system. HPSLDC was also intimated vide letter dated 29th May, 2019 regarding commissioning of the instant asset. However, due to non-availability of shut down for the removal of LILO of 220 KV ADHPL transmission line and shifting of connectivity of Charor Sub-Station to 220 kV Charor-Banala transmission line, both the circuits were energised from the PGCIL Substation at Banala while keeping an open circuit at the Charor end on 24th July, 2019.
- 3.5.3 Also, the Petitioner submitted that it had requested ADHPL and EPPL to provide the shut down so that Malana -II HEP can be connected to Charor-Banala 220 kV Transmission line. The shutdown was approved for 16th September, 2019 in 162nd OCC meeting held on 13.08.2019. However, at the last moment shutdown was cancelled due to non-availability of telemetry at Charor Sub-Station of M/s EPPL. Subsequently, the Petitioner proposed

connectivity for 26th September, 2019 but M/s EPPL refused to allow shutdown and transfer of connectivity got postponed to 30th September, 2019.

- 3.5.4 The Petitioner submitted that the delay was primarily on account of unavailability of shutdown and due to incomplete status of telemetry which was to be provided by M/s EPPL. Hence, the Petitioner cannot be held accountable for such delay. Accordingly, the Petitioner has requested to consider the 24th July, 2019 as the COD of the project.

Commission's Analysis

- 3.5.5 With reference to the COD for the Charor-Banala line, the following dates are included as part of the Petition:

Table 9: Timeline of events of COD

Sl.	Description	Date
1	E-mail intimation to SLDC regarding energization of both circuits of the transmission line on 24.07.2019 from PGCIL Banala Substation at open circuit condition at Charor end	24 th Jul, 2019
2	Initial date proposed for shutdown and transfer of connectivity as per 162 nd OCC meeting	16 th Sep, 2019
3	Minutes of Meeting (MoM) of the 46 th meeting of NRPC held on 24 th September, 2019 and 43 rd meeting of TCC held on 23 rd September, 2019 approving shutdown for shifting of connectivity	Initial date: 26 th Sep, 2019 Revised date: 30 th Sep, 2019
4	Electrical Inspectorate certificate for grant of COD to the line	1 st Oct, 2019
5	Date of energy flow	5 th Dec, 2019

- 3.5.6 Based on the submission of the Petitioner it is observed that the line was tested on 24th July, 2019. However, due to absence of telemetry and delay in shut down, the actual flow of power could take place in December 2019. In support of the justification for delay in commissioning when the line was ready in July 2019, the Petitioner submitted the following:

"It is humbly submitted that meeting was held between M/S AD Hydro Power Limited, M/S EPPL and HPPTCL on 27.04.2019 wherein it was stated that instant Transmission line is nearing completion and preparations for shifting of Malana-II HEP need to be planned accordingly. M/S EPPL was also informed that it need to apply for LTA for HPPTCL system. HPSLDC was intimated vide letter dated 29.05.2019 regarding commissioning of said asset. However, due to non availability of shutdown for the removal of LILO of 220kV ADHPL Transmission line and shifting of connectivity of the Charor Sub-station to 220kV Charor-Banala Transmission line, both circuits were energised from Banala Substation by keeping open circuit at Charor end on dated 24.07.2019. After taking necessary confirmation from ADHPL and EPPL, shutdown for the shifting of connectivity was discussed in 162nd OCC meeting held on 13.08.2019 and was scheduled for 16.09.2019 subject to availability of telemetry. However, at the last minute, EPPL intimated the

incomplete status or telemetry at Charor substation through email and hence due to non-availability of telemetry, shutdown could not be availed. HPPTCL, again proposed shutdown on 26.09.2019 but EPPL refused to allow shutdown and transfer of connectivity got postponed to 30.09.2019 as per request/confirmation of the EPPL. Meanwhile, Himachal Pradesh Electrical Inspectorate vide its letter dated 01.10.2019 accorded approval to energise installations. Finally vide email dated 21.11.2019, M/s EPPL intimated regarding establishment of telemetry and M/s ADHPL vide email dated 22.11.2019 also conveyed its consent for taking shutdown on ADHPL Transmission line on dated 03.12.2019. Finally power flow through Transmission line started on 05.12.2019.

3.5.7 CERC (Indian Electricity Grid Code) (Fourth Amendment) Regulations, 2016 Regulation (5) clause (4) stipulates the following with respect to commissioning of a transmission asset:

"4. Date of commercial operation in relation to an inter-State Transmission System or an element thereof shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from the sending end to the receiving end:

Provided that:

- (i) In case of inter-State Transmission System executed through Tariff Based Competitive Bidding, the transmission licensee shall declare COD of the ISTS in accordance with the provisions of the Transmission Service Agreement.*
- (ii) Where the transmission line or substation is dedicated for evacuation of power from a particular generating station and the dedicated transmission line is being implemented other than through tariff based competitive bidding, the concerned generating company and transmission licensee shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement in accordance with relevant provisions of Central Electricity Regulatory Commission(Terms and Conditions of Tariff) Regulations, 2014 or any subsequent amendment or re-enactment thereof. In case the transmission line or sub-station dedicated to a generator is being implemented through tariff based competitive bidding, then matching of commissioning of the transmission line/sub-station and generating station shall be monitored by Central Electricity Authority.*
- (iii) Where the transmission system executed by a transmission licensee is required to be connected to the transmission system executed by any other transmission licensee and both transmission systems are executed in a manner other than through tariff based competitive bidding, the transmission licensee shall endeavour to match the commissioning of its transmission system with the transmission system of the other licensee as far as practicable and shall ensure the same through an appropriate Implementation Agreement. Where*

either of the transmission systems or both are implemented through tariff based competitive bidding, the progress of implementation of the transmission systems in a matching time schedule shall be monitored by the Central Electricity Authority.

- (iv) *In case a transmission system or an element thereof is prevented from regular service on or before the Scheduled COD for reasons not attributable to the transmission licensee or its supplier or its contractors but is on account of the delay in commissioning of the concerned generating station or in commissioning of the upstream or downstream transmission system of other transmission licensee, the transmission licensee shall approach the Commission through an appropriate application for approval of the date of commercial operation of such transmission system or an element thereof."*

3.5.8 While the Petitioner has submitted that the commissioning of the project was delayed on account of non-availability of telemetry at generator end, it is observed that there is no long-term transmission agreement or connectivity agreement entered between the Petitioner and beneficiaries specifying a mutually agreed date for commissioning of the Charor-Banala line. Based on the submission of the Petitioner, it is observed that an agreement dated 28th June, 2019 has been entered between the Petitioner and M/s EPPL wherein the Petitioner has agreed to provide NOC to M/s EPPL which enables M/s EPPL to enter into LTA with Central Transmission Utility. However, the agreement does not mention anything regarding date of initiation of LTA and connectivity issues. As per the MoM of the TCC and the NRPC meeting dated 23rd and 24th September 2019, respectively, HPPTCL representative confirmed that the COD will be achieved by 30th September, 2019. The relevant extract has been reproduced as follows:

"B.23 Certification of 220KV DIC Chhaur-Banala line under construction by HPPTCL as Deemed ISTS (Agenda by HPPTCL)

TCC Deliberations

B.23.1 HPPTCL representative informed that 220kV Chhaur-Banala line will have the injection of only Malana II and other end at Banala. He informed that line will be commissioned by 30.09.2019 having simple network with 2 nodes and no intrastate linkages."

3.5.9 As confirmed by the Petitioner, M/s EPPL has entered into an LTA with CTU for which an NOC was provided by the Petitioner. In absence of any implementation agreement of the Petitioner in support of its claim of COD as 24th July, 2019 and absence of any LTA with the beneficiaries, the Commission feels it appropriate to consider the date confirmed by HPPTCL representative during the TCC and the NRPC meetings for considering the date of commissioning of the line by 30th September 2019. This date was mutually decided and agreed during the TCC/ NRPC meeting as well as considering the fact that Electrical Inspectorate certificate was also granted to the line on 1st October, 2019, which is an important aspect before charging a transmission asset. The Commission, therefore, considers 1st October, 2019 as the date of commissioning for the Charor-Banala line.

3.6 Capital Cost

Petitioner's submission

3.6.1 The Petitioner submitted that as per award, the project execution was to start from 1st August, 2015 and works were to be completed within 18 months. The preliminary work survey of the line was started during the month of May, 2013 and completed in the month of August 2013. While the case for approval from forest department was initiated during the month of October 2013, forest clearance to commence the work was received after 31 months in May, 2016.

3.6.2 The relevant extract from the Petition with respect to date-wise activities reflecting the delay in forest clearance is provided below:

"4.5.3 Detail of the events of the forest clearance are as under:

- *Forest land diversion case of the said transmission line was submitted to the forest department during the month of October, 2013. Copy of the submission letter is attached hereto as Annexure 8.*
- *As this transmission line projects en-route through the jurisdiction of three forest divisions and two forest circles, for the early processing of the forest land diversion case and coordination with HPPTCL, DFO Parvati and Conservator forest Kullu were nominated as the nodal officers for this case during the month of November-2013. Copy of the notification is annexed hereto as Annexure-9.*
- *Joint Inspection of the area under Kullu District was carried out on 13.01.2014. Copy of the joint Inspection Report is annexed hereto as Annexure-10.*
- *Joint Inspection of the area under Mandi District was carried out on 04-02-2014. Copy of the Joint Inspection report is annexed as Annexure-11.*
- *During the month of October, 2014 forest case which was complete in all respects was forwarded by the Conservator forest to Nodal officer (FCA) Shimla. Copy of the forwarding letter is annexed hereto as Annexure- 12.*
- *As the forest land diversion case was at the final stage, hence in anticipation of the forest clearance, work of the construction of 220 kV D/C transmission line from Charor to PGCIL Substation Banala was awarded by the HPPTCL to M/s R S Infra Projects Ltd. on turnkey basis on 22.01.2015. Copy of the award letters of supply and services are annexed hereto as Annexure-13 and 14.*
- *However, forest clearance case was further delayed mainly due to delay in receiving of the Forest Right Act (FRA), 2006, Certificate as this transmission line en-routes through the jurisdiction of six Gram panchayats, 6 Village level Forest Rights committees, 2 Sub Division level Forest rights Committees and 2 Division level forest rights committees."*

- 3.6.3 Other reasons cited by the Petitioner for the delay in construction include:
- Elimination of Tower No. 33 due to heavy rains in 2016 resulting in massive landslides. Consequently, this tower was eliminated and special towers with 12 meter full body extension were proposed for tower no. 32, 34 and 35.
 - Elimination of Tower no. 62 - termination of the Charor to Banala Transmission line at the PGCIL 220 kV Gantry was very difficult due to the fact that location for termination was in front of the 220 kV Gantry of the Banala Substation where there were series of houses and shops. On account of technical issues and delay in approval with PGCIL, works on the tower number 60 and 61 were delayed.
 - Switchyard drawings by PGCIL: HPPTCL has to do all the shifting work required in the switchyard of PGCIL for which necessary drawings had to be issued by the PGCIL. Certain drawings have been received from PGCIL as late as 6th December, 2018 and same has been issued to the contractor on 7th December, 2018.
 - Delay due to accidents and agitation of local People: several reasons such as fatal accident of tipper in the month of January 2018, local agitation, expectations for higher compensation for land, shifting of ropeways, etc. caused significant delay in construction.
 - Delay in felling of Trees by HPSFC: Work of felling trees started in August month due to change in procedures and inspite of necessary direction for the felling of trees was issued by the DFO Kullu to HPSFC on 6th May, 2016.

3.6.4 With regards to the cost overrun, the Petitioner submitted that enhanced scope of work due to increase in line length and increase in cost of material combined with cost towards acquisition of private land, crop compensation, increased IDC and Departmental Charges etc. resulted in cost overrun of the project. The relevant submission of the Petitioner with regard to cost overruns has been provided as follows:

"4.6 Reasons for Cost Over Run

- *In DPR the provision for length of the line was kept as 15 km, but the actual line length of 220 kV D/C Charor-Banala line is 18 km which is 20% more from the provision made in DPR, which resulted in the increase of the cost.*
- *Further, as per the DPR, the weight of the tower was supposed to be 1223 ton, whereas, the actual weight of the tower comes out to be 1810 ton, which is 48% more as projected in the DPR, which have contributed in the over-run of cost from that in DPR.*
- *Due to the increase in line length from 15 km to 18 km, and increase in weight of steel for tower construction, the cost of supply increased around 48% from Rs. 21.54 Crore (provision in the DPR) to actual cost of supply of Rs. 30.35 Crore. Additionally, there was no provision of Entry*

Tax in the DPR, whereas, in actual Entry Tax of Rs. 1.20 Crore has been incurred.

- In the DPR, the cost of erection and cost of type testing had a provision of Rs. 9.94 Crore, whereas the actual cost incurred on this comes out to be Rs. 21.94 Crore, which is around 121% more than the provision in the DPR. The main reason for the increase in the cost of erection is due to increase in the transmission line length (stated above), increase in the Number of special towers from the provision made in the DPR and difficult terrain. The impact of GST has also factored in this as at the time of preparing of the DPR the provision for the impact of the GST was not considered.
- In the DPR, the provision for crop compensation was kept as Rs. 0.13 Crore but in actual it comes out to be Rs. 0.73 Crore which is around 462% higher from the provision set in the DPR.
- In the DPR submitted, the provision for private land acquisition was not kept but in the actual Rs. 3.24 Crore has been incurred on the private land acquisition.”

3.6.5 The Petitioner submitted that project cost envisaged in DPR was INR 44.87 Crore, which due to time and cost overrun attributable to various force majeure conditions, increased to INR 73.98 Cr. as on date of energization i.e. 24th July 2019.

Table 10: Capital Cost claimed by Petitioner (INR Cr)

Particulars	Cost as per DPR	Actual Cost as on date of energisation
Hard Cost	40.02	63.51
IDC	1.36	6.08
Departmental charges	3.48	4.38
Total	44.87	73.98

Commission's Analysis

3.6.6 The Commission observed that the project cost as per DPR is INR 44.87 Cr. which included INR 7.60 Cr. towards forest clearance, right of way, etc.; INR 31.48 Cr. towards material and erection cost and INR 5.79 Cr. towards overhead cost including departmental charges, IDC, etc. From an initial scrutiny, the Commission observed a significant increase in actual cost vis-à-vis the DPR cost. Accordingly, a detailed scrutiny of the increase in hard cost of the transmission line was undertaken.

3.6.7 In its various discrepancy letters, the Commission sought additional information and supporting documents including auditor certificate, approvals of BOD, details of awards/ contracts, correspondences, payments made to contractors, COD certificate, etc. The Petitioner was also asked to submit the relevant approvals taken for the project from the Commission/CEA/Board.

- 3.6.8 On initial scrutiny significant difference was observed in the DPR Cost vs awarded cost and Petitioner was asked to provide justifications for the same. The Petitioner submitted that bids for construction of Charor-Banala line were invited three times. However, in response only one bid was received. In spite of request to over ten firms for participation, no new responses were received. Finally, as per applicable ADB procedures, the single bidder was awarded the contract.
- 3.6.9 Also, the Petitioner clarified that DPR cost was based on price levels of 2011, whereas the tender was floated during January, 2014. In addition, originally in the DPR the line length of the line was envisaged as 15 km which afterwards was increased to approx. 18 km post detailed survey of line. The Petitioner confirmed that the competitive bidding mechanism was followed which is in line with the applicable ADB procedures and accordingly the prices were discovered for supplies and civil works contracts.
- 3.6.10 Accordingly, on account of increase in line length and enhanced base price, substantial increase was observed in the awarded cost vis-à-vis the DPR Cost. Further, the Petitioner also submitted that the awarded contract was amended three times owing to factors such as change in design, enhancement in scope, implementation of GST etc..
- 3.6.11 Based on the submissions of contract and subsequent amendments, it is observed that the hard cost increased from INR 47.41 Cr. to INR 56.97 Cr. Three amendments were issued against the contracts awarded. The increase in the awarded cost as per the amendments appears to be on account of increased scope of work and implementation of GST.
- 3.6.12 The following table summarizes the awarded cost and revisions thereafter:

Table 11: DPR vs Awarded Cost (INR Cr.)

Particulars	Original Award	Revised Cost (1)	Revised Cost (2)	Revised Cost (3)
Date of Contract / amendment	22 nd Jan, 2015	8 th Nov, 2017	1 st Feb, 2018	23 rd May, 2020
Material Cost	28.50	30.09	30.29	31.61
Civil Works	18.91	18.91	19.62	25.37
Total	47.41	49.00	49.92	56.97
<i>Reason for amendment</i>		<i>Increased quantity on account of change in design</i>	<i>Enhancement due to GST implication</i>	<i>Enhancement in cost due to quantity variation</i>

- 3.6.13 The Petitioner has stated that enhanced scope of work on account of increase in line length and additional material, GST, etc. have been major reasons for revision /amendment of contract value. In one of the responses to the Commission's clarification, the Petitioner submitted that the quantity of material has changed with respect to that considered at the time of preparing

the DPR/award, which also led to increase in project cost. Based on the scrutiny of the contracts and amendments it is observed that the increased hard cost was primarily towards the reasons such as increase in line length, increased weight of towers and levy of Entry tax, etc.

3.6.14 With respect to a clarification, the Petitioner submitted that no variation in cost was allowed to the contractor and payments have been done strictly in accordance to the awarded contract and its subsequent amendments.

3.6.15 In one of the response to the queries, the Petitioner submitted that capital cost of the Project as per the petition is excluding the liabilities of INR 4.33 Cr. booked as on 24th July, 2019 and an expenditure of INR 3.37 Cr. is incurred after COD till the end of FY 2019-20. Subsequently, the Commission sought details of the additional expenditure of INR 3.37 Cr. undertaken for which the Petitioner provided the following details:

Table 12: Break-up of Additional Expenditure post Commissioning

Sl.	Particulars	Amount (INR Cr)
1	Provision for civil work tower footing	2.57
2	Provision for land registrations for tower footing	0.05
3	Provision for compensation of damaged fruit trees	0.62
4	Provision for compensation for damaged crops	0.05
5	Provision for miscellaneous expenditure	0.02
6	Provision for GST of supply part	0.06
7	Total	3.37

3.6.16 The Petitioner also clarified that these liabilities have been cleared upto FY 2019-20 and supporting documents against the same were provided. The Petitioner has also provided a Company Auditor certificate clarifying that an amount of INR 82.02 Cr. has been incurred towards 220kV D/C Transmission line from Charor to Banala up to 31st March, 2020. The major reasons for increased cost reflected in the CA certificate were on account of higher IDC and Departmental charges.

3.6.17 A comparison of total cost against the awarded cost along with subsequent amendments was undertaken as detailed below:

Table 13: Cost towards supplies and civil works (hard cost) approved by the Commission (INR Cr.)

Particulars	As per Contract (including amendments)	Actual cost as on COD	Additional Capitalization	Total Cost
Material Cost	31.61	30.35	0.06	30.41
Erection, Stringing & Civil works including foundation	25.37	21.94	2.77	24.71

Particulars	As per Contract (including amendments)	Actual cost as on COD	Additional Capitalization	Total Cost
Entry Tax	-	1.20	-	1.20
Total	56.97	53.49	2.83	56.32

3.6.18 The Commission observes that the overall cost towards material and erection claimed by the Petitioner (including additional expenditure for discharge of liabilities) was lower than the total cost as per awarded contract including amendments. Therefore, the Commission approves the hard cost of INR 56.32 Cr. as claimed by the Petitioner and also reflected in the auditor certificate.

3.6.19 With regard to expenditure towards preliminary investigation, right of way, forest clearance, PTCC, general civil works, line land, etc., the auditor certificate provides the following break-up:

Table 14: Details of preliminary, forest clearance, land, other expenses (INR Lakh)

Sl.	Delay	Amount
1	Land acquisition expenses	328.88
2	Forest clearance expenses	626.30
3	Damaged tree/ crop compensation	73.29
4	Utility shifting expense	9.01
5	Survey work, designs and Miscellaneous	12.53
6	Testing charges	0.21
7	Other expenses	4.05
8	Tender expense/ advertisement	1.26
9	GPS system	0.45
10	Miscellaneous expense	0.15
11	Total	1056.13

3.6.20 The Commission observes that the Petitioner has claimed an amount of INR 1056.13 lacs as against the DPR cost of INR 760.14 lacs. In response to a query, the Petitioner submitted that while the cost of forest clearance remained lower than the DPR cost, the overall higher cost was on account of higher than envisaged crop compensation, other costs such as acquisition of land for construction of tower, survey/ design / utility shifting works which were not envisaged in the DPR.

3.6.21 Considering land acquisition cost of INR 328.88 lacs was amongst the largest factor for increased cost, the Commission approves the overall cost of INR 1056.13 lacs towards preliminary expenses, forest clearance, land acquisition, etc.

3.6.22 Based on the above, the total hard cost approved by the Commission is summarized below:

Table 15: Preliminary and Hard cost approved by Commission (INR Cr)

Sl.	Particulars	Amount
1	Preliminary expenses, forest clearance, land cost, etc.	10.56
2	Material cost and erection cost	56.32
3	Total	66.88

3.7 Overheads (IDC and Departmental Charges)

Petitioner's submission

3.7.1 The Petitioner submitted that due to various unavoidable reasons of time and cost overruns, actual IDC and departmental charges was higher than the cost envisaged in the DPR. The Petitioner submitted that actual IDC should not be compared with the provision of the IDC made in the DPR as IDC was computed based on the ADB loan interest rate of 4.84% as against the actual interest rate payable to GoHP@10%. Also, considering the actual hard cost being higher than the DPR due to time and cost overrun attributable to various force majeure conditions, IDC amount for the project has increased.

Commission's Analysis

3.7.2 The actual IDC and departmental charges claimed in the petition vis-à-vis the DPR are detailed below:

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

Sl.	Particulars	As per DPR	As per Actual (as on 24 th Jul, 2019)
1	IDC	1.37	6.08
2	Departmental charges	3.48	4.38
3	Total	4.84	10.46

3.7.3 In response to subsequent queries with respect to the IDC amount, the Petitioner revised the amount of IDC to INR 10.71Cr and departmental charges to INR 4.42 Cr without assigning any justification for the same. The Commission sought further details including working and reasoning for the increased amounts. In response, the Petitioner submitted that the earlier IDC was based on assumption that COD of transmission line as 24thJuly, 2019. Since the power flow did not start due to reasons beyond the control of Petitioner, the IDC amount has been calculated upto FY 2019-20. Also, the Petitioner submitted that the Commission may allow IDC computed as on 24thJuly, 2019 in case the transmission charges are recoverable from beneficiaries. Further, the Petitioner has failed to provide the detailed working consisting of date of draw-down of debt, amount of debt, IDC etc., despite repeated reminders.

3.7.4 It is observed that even if the power flow was undertaken in December 2019, the computation of IDC for entire FY 2019-20 is unjustified. Therefore, the Commission feels it appropriate to compute its own IDC based on the COD considered i.e. 1stOctober, 2019.

3.7.5 Before computation of IDC, it is important to understand the reasons for time delay as claimed by the Petitioner. As per the submission of the Petitioner, the major reasons of time overrun included the following:

Table 17: Reasons for time overrun as claimed by Petitioner

Sl.	Delay	Description
1	Forest Clearance	Delay in receiving of Forest Right Act (FRA), 2006, Certificate on account of the following: <ul style="list-style-type: none"> - Lack of jurisdictional authorities en-route the transmission line for approval - Reluctance of forest rights committee to issue FRA certificate due to ignorance of FRA, 2006 - Administrative procedures and delay in payment of compensation
2	Elimination of Tower No. 33	Land under the tower was washed away due to massive landslides and heavy rains. As a result, the tower was eliminated and full body extension of other towers in the vicinity was proposed. The same lead to a delay on account of revised design submissions, field surveys etc.
3	Elimination of Tower No. 62	Modification in design on account of limited site provisions and local agitation
4	Switchyard drawings	Delay on account of shifting work to be done by HPPTCL and approvals to be granted by PGCIL
5	Accidents and agitation of local people	Delay on account of local accidents and agitation of people during construction period and advent of fruit season that halted construction
6	Felling of Trees by HPSFC	Delay in getting the site ready for construction, administrative procedures etc.

3.7.6 While the project was envisaged to be completed in 18 months as per the contract awarded by the Petitioner, the actual time taken was over 4 years (from the date of award of contract) which is significantly higher. The details provided with respect to time overruns only mentioned various dates when issues emerged or activities were completed. However, it could not be established that how each activity had impacted the overall timeline of the project and whether other activities could have been planned in a manner where the delay could have been avoided.

3.7.7 Based on reasons stated by the Petitioner, part of the delay could be considered under force majeure or delay not attributable to the Petitioner, however, it would be unreasonable to consider that each individual activity led to the overall delay of more than two and half years in project execution. The Commission is of the view that other activities could be undertaken in

parallel and the delay could have been shortened/ averted by proper planning and follow up at the Petitioner end. Accordingly, the Commission feels it appropriate to allow sharing of excess amount of IDC and DC between the Petitioner and beneficiaries in equal ratio (50:50).

3.7.8 In view of revision in hard cost as well as rate of interest, the Commission has computed a revised benchmark for the IDC. For the purpose, the schedule for debt disbursement has been considered as 40% during first year and 60% in second year as per the funding requirement envisaged in the approved DPR. Project duration has been considered as 18 months as per awarded contract and for computation of benchmark IDC interest rate of 10% is considered. The benchmark IDC as computed is summarized below:

Table 18: Revised Benchmark IDC

Particulars	Unit	Year 1 (9 months)	Year 2 (9 months)	Total
Debt disbursement	%	40%	60%	100%
Opening Debt (a)	Cr	-	18.73	
Addition during the year (b)	Cr	18.73	28.09	
Closing Debt (c)	Cr	18.73	46.82	
Average Debt (d=(a+c)/2)	Cr	9.36	32.77	
Interest rate (e)	%	10%	10%	
Total IDC (f=d*e*0.75)	Cr	0.70	2.46	3.16

3.7.9 For computing the actual IDC for the project the following has been considered:

- COD of 1stOctober, 2019
- Actual drawal of loans as per submission of Petitioner
- Interest rate of 10%

3.7.10 Accordingly, the actual IDC is computed in table below:

Table 19: Actual IDC upto date of COD considered by Commission

Date of draw down	Draw down (INR Lacs)	No. of Days	Interest Rate (%)	IDC (INR Lakh)
27-Jan-16	285.04	1,343	10.00%	104.88
29-Mar-17	1,375.50	916	10.00%	345.19
30-Jun-17	852.17	823	10.00%	192.15
20-Nov-17	153.01	680	10.00%	28.51
3-Feb-18	217.00	605	10.00%	35.97
28-Mar-18	594.60	552	10.00%	89.92
20-Aug-18	87.72	407	10.00%	9.78
25-Sep-18	364.01	371	10.00%	37.00

Date of draw down	Draw down (INR Lacs)	No. of Days	Interest Rate (%)	IDC (INR Lakh)
7-Dec-18	165.99	298	10.00%	13.55
29-Mar-19	128.98	186	10.00%	6.57
20-Apr-19	121.19	164	10.00%	5.45
3-May-19	146.85	151	10.00%	6.07
15-Jun-19	6.53	108	10.00%	0.19
15-Jul-19	182.64	78	10.00%	3.90
14-Jan-20	374.18	-	10.00%	-
13-Feb-20	172.88	-	10.00%	-
23-Jun-20	347.54	-	10.00%	-
	5,575.84			879.14
Less: Interest Earned				75.02
Net Interest				804.12

3.7.11 As discussed in preceding paras, the Commission has adopted the following approach in approving the IDC and Departmental charges:

- Departmental Charges: 50% of the excess Departmental charges claimed by the Petitioner vis-à-vis departmental charges in DPR
- Interest During Construction (IDC): 50% of the excess IDC allowed over and above the revised benchmark IDC computed assuming no time delay

3.7.12 Based on the above, the approved IDC and DC for the Charor-Banala line is provided in table below:

Table 20: Approved IDC and DC (INR Cr)

Particular	Benchmark	Actual	Difference	Approved = Actual -50% of difference
IDC	3.16	8.04	4.88	5.60
Departmental charges	3.48	4.42	0.95	3.95
Total				9.55

3.7.13 In line with the project cost and IDC amount approved in preceding sections, the approved project cost as on COD along with the additional expenditure vis-à-vis the project cost claimed by the Petitioner towards 220 kV D/C Charor-Banala transmission line is summarized in the following table:

Table 21: Approved Capital Cost (INR Cr)

Sl.	Cost Heads	Proposed	Approved*
1	Land Acquisition	3.29	3.29

Sl.	Cost Heads	Proposed	Approved*
2	Forest Clearance Expenses	6.26	6.26
3	Preliminary works	0.47	0.47
4	Material and Supplies	30.41	30.41
5	Entry Tax	1.20	1.20
6	Civil Works	21.88	21.88
7	Departmental Charges	4.42	3.95
8	Interest During Construction (IDC)	10.71	5.60
9	Additional expenditure incurred upto 31.03.2020	3.37	3.37
10	Total	82.02	76.43

*including additional capitalization

3.8 Project Funding

Petitioner Submission

3.8.1 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."

3.8.2 As per the DPR, the scheme was originally envisaged to be funded with the debt equity ratio of 70:30 in the conceptualisation stage.

3.8.3 As per the petition, the Petitioner submitted that for the construction of the transmission line, the Petitioner has secured loan from Asian Development Bank (ADB) amounting to INR 52.49 Cr. which is 70.95% of the project cost and has infused equity amounting to INR 21.49 Cr., which corresponds to 29.05% of the project cost. As the equity infused by the Petitioner is well within the normative equity limits of 30% allowed under the Tariff Regulations, the Petitioner has considered actual debt-equity ratio for computing the components of ARR.

- 3.8.4 In the subsequent submissions, the Petitioner revised the capital cost of the project which had an impact on the debt-equity ratio considering fixed loan borrowing.
- 3.8.5 The following table provides the project funding of the project as proposed by the Petitioner:

Table 22: Funding detail proposed by Petitioner (INR Cr.)

Particulars	Debt-Equity ratio as per DPR	Capital cost- Petition	Capital cost- Revised claim	Claimed debt-equity ratio
Debt	70.00%	52.49	52.28	66.47%
Equity	30.00%	21.49	26.37	33.53%
Total Project Cost	100.00%	73.98	78.65	100.00%

Commission's Analysis

- 3.8.6 The Commission has examined the information and various documents submitted by the Petitioner with regards to the funding of the Charor-Banala transmission line. It is observed that although the loan for the line was secured from ADB, GoHP acts as the nodal agency. The loan granted by ADB to GoHP has been transferred to the Petitioner which is the designated implementing agency for the transmission projects.
- 3.8.7 Therefore, as per the submissions of the Petitioner viz. loan agreement, sanction letter, actual disbursement, etc., the Commission has finalised the debt-equity ratio for the project. As per submission of the Petitioner, there is no grant/consumer contribution corresponding to this project.
- 3.8.8 It is observed that the Petitioner had submitted a loan drawal amounting to INR 52.49 Cr. from ADB which corresponded to 70.95% of the project cost. However, based on submissions it was observed that the amount of INR 55.76 Cr. was drawn from ADB towards this transmission line. As per auditor certificate an amount of INR 52.28 Cr. was reflected as debt as on 31st March, 2020.
- 3.8.9 Clarifications were sought from the Petitioner in this regard. In reply to the subsequent deficiency letter, the Petitioner confirmed that the total debt borrowed against the line is INR 55.76 Cr with certain disbursements happening post COD of the project. However, the Petitioner in its subsequent responses continues to claim an amount of INR 52.28 Cr. as loan towards the Charor-Banala line.
- 3.8.10 The Commission has considered the total amount of loan undertaken by the Petitioner as INR 55.76 Cr. towards debt and balance amount as equity for funding of the project. The approved funding towards the Charor-Banala line is summarized below:

Table 23: Funding approved as on COD by Commission

Particulars	Claimed		Approved	
	Total Cost (INR Cr)	% of Funding	Total Cost (INR Cr)	% of Funding
Capital Cost as on COD	78.65	-	73.07	-
Additional Capitalisation	3.37	-	3.37	-
Total Project Cost as on 31st March 2020	82.02	-	76.43	-
<i>Debt</i>	<i>52.28</i>	<i>63.75%</i>	<i>55.76</i>	<i>72.95%</i>
<i>Equity</i>	<i>29.73</i>	<i>36.25%</i>	<i>20.67</i>	<i>27.05%</i>

3.8.11 Accordingly, based on the project financing approved in the table above, the Commission has determined the Annual Revenue Requirement (ARR) for each year of the control period starting from COD as discussed in the next chapter.

4. APPROVAL OF ARR AND TARIFF

4.1 Background

4.1.1 The Petitioner has proposed projections for FY 2019-20 to FY 2023-24, the 4th Control Period as per the HPERC MYT Transmission Regulations 2011 and its subsequent amendments. As per the submission 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 considered the provisions of HPERC MYT Transmission Regulations 2011, Audited Annual Accounts, CERC Tariff Regulations, 2019 and approved capital expenditure and funding plan for 220kV D/C Charor-Banala transmission line 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 220kV D/C Charor-Banala transmission line of HPPTCL including O&M expenses, interest on loan, depreciation, return on equity, working capital requirement, etc. for approving the total ARR for each year of the Control Period from COD till FY 2023-24. The methodology followed and approved values for each component of the ARR is detailed in the subsequent sections.

4.1.4 Further, the Petitioner has not provided the revised submission of various component of ARR in light of submission of revised capital cost. In absence of the same the Commission has approved the various components of ARR based on the approved cost.

4.2 O&M Expenses

Petitioner Submission

4.2.1 The Petitioner submitted that as per HPERC MYT Transmission Regulations 2011, Operation and Maintenance Expense is computed considering the following methodology:

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

$$O\&M_n = R\&M_n + EMP_n + A\&G_n : \text{Where -}$$

$'EMP_n' = [(EMP_{n-1}) \times (1+G_n) \times (CPI_{inflation})] + Provision (Emp);$

$'A\&G_n' = [(A\&G_{n-1}) \times (WPI_{inflation})] + Provision(A\&G);$

$'R\&M_n' = K \times (GFA_{n-1}) \times (WPI_{inflation}) ;$

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

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

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

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

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

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

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

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

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

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

- 4.2.2 The Petitioner has further submitted that the project has achieved commercial operation in FY 2019-20 and therefore there is no reliable cost data available for the project, post COD. Accordingly, the Petitioner has relied on the actual O&M expense of FY 2018-19 for the purpose of O&M projections. As component wise details of the actual O&M Expenses is not available as HPPTCL is making lump sum payment to HPSEBL towards O&M of

its infrastructure, the projection for the control period has been made for O&M Expense as a whole.

4.2.3 The Petitioner has benchmarked the O&M expenses per km of line length of existing lines of HPPTCL to arrive upon the O&M projections for each year.

4.2.4 Further, the Petitioner has also considered cost towards insurance, training of manpower, petition filing and consultancy as part of the O&M expenses.

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

Table 24: O&M Expenses claimed by Petitioner (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expense	34.70	52.27	54.22	56.24	58.33
Insurance	-	22.19	22.19	22.19	22.19
Manpower Training	-	1.96	1.96	1.96	1.96
Total O&M Expenses	34.70	76.42	78.37	80.39	82.48

1. O&M Expense pro-rated for FY2019-20 based on proposed COD (24th July, 2019)

2. Expense towards Petition filing and consultancy included in O&M Expense

Commission's Analysis

4.2.6 The Commission has reviewed the submissions of the Petitioner. In absence of actual audited O&M expenses for sufficient years to ascertain the O&M trends, the Commission has relied upon the normative O&M expenses prescribed in the CERC Tariff Regulations, 2019. As the regulations provide for O&M expense based on voltage, circuit and conductor, the following norms have been considered as per the technical details of Charor-Banala line for computation of O&M expense as per CERC Tariff Regulations, 2019:

Table 25: Normative O&M Expenses

Item	Unit	FY20	FY21	FY22	FY23	FY24
Double Circuit (Single Conductor)	INR Lakh/Km	0.38	0.39	0.40	0.42	0.43

4.2.7 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.

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

Table 26: O&M Expenses approved by Commission (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Normative O&M Expense (INR Lakh/Km)	0.38	0.39	0.40	0.42	0.43
Line Length (km)	18	18	18	18	18
O&M Expenses	3.38	7.04	7.27	7.54	7.82

O&M Expenses pro-rated for 182 days for FY 2019-20 based on COD (i.e. 1st October, 2019)

- 4.2.9 The CERC norms for O&M expenditure doesn't provide for any additional provision for expenditure towards insurance and manpower training. Hence, no additional expense towards these aspects have been considered.
- 4.2.10 The Petitioner is further directed to undertake necessary insurance cover for the transmission line at the earliest. Any additional expenditure on account of the same shall be reviewed at the time of true-up as per the submissions of the Petitioner and prudence check.

4.3 Depreciation

Petitioner Submission

- 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 MYT Transmission Regulations 2011 and its subsequent amendments.
- 4.3.2 In accordance to Tariff Regulations, the depreciation for the Control Period has been estimated as shown in the following table:

Table 27: Depreciation claimed by Petitioner (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening GFA	7,397.63	7,397.63	7,397.63	7,397.63	7,397.63
GFA Addition during the year	-	-	-	-	-
Average GFA	7,397.63	7,397.63	7,397.63	7,397.63	7,397.63
Freehold Land	324.22	324.22	324.22	324.22	324.22
Depreciable Value	7,073.41	7,073.41	7,073.41	7,073.41	7,073.41
Balance useful life at the beginning of the period (Years)	35	34	33	32	31
Depreciation	227.58	330.53	330.53	330.53	330.53

Depreciation expense pro-rated for FY2019-20 based on proposed COD (24th July, 2019)

Commission's Analysis

- 4.3.3 The Commission has approved the depreciation in line with provisions of the Regulation 23 of the HPERC MYT Transmission Regulations 2011 pronounced 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 on Gross Fixed Assets (GFA) for each year based on the approved capitalization for each year in the previous Chapter.
- 4.3.5 It is observed that the Petitioner has provided an overall depreciation rate but has not provided the asset-wise depreciation rate to estimate the weighted average depreciation rate. The Petitioner has however claimed that the rate prescribed in Tariff Regulations have been used in computing the effective weighted average depreciation rate. In absence of the asset wise breakup, the Commission has considered the same rate as proposed by the Petitioner. Also, cost of land has been reduced while applying depreciation.
- 4.3.6 The actual depreciation shall be allowed at the weighted average depreciation rates as per norms approved in the HPERC MYT Transmission Regulations 2011 at the time of true-up.
- 4.3.7 The depreciation expenses approved from FY 2019-20 to FY 2023-24 is summarized in table below:

Table 28: Depreciation approved by Commission (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening GFA	7,306.65				
Less: Freehold Land	328.89				
Net Opening GFA (A)	6,977.76	7,314.33	7,314.33	7,314.33	7,314.33
GFA Addition during the year (B)	336.57	-	-	-	-
Depreciable Value (A+B)	7,314.33	7,314.33	7,314.33	7,314.33	7,314.33
Rate of Depreciation (%)	4.67%	4.67%	4.67%	4.67%	4.67%
Depreciation	166.40	341.58	341.58	341.58	341.58

Depreciation expense pro-rated for 182 days for FY 2019-20 based on COD (i.e. 1st October, 2019)

4.4 Interest on Loan

Petitioner Submission

- 4.4.1 The Petitioner has submitted the interest on loan in accordance with the Regulation 20 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments.
- 4.4.2 The Petitioner has claimed the interest on loan as per the actual loan against the line. The Petitioner has considered the interest rate of 10% as per the terms and conditions of loan agreed between GoHP and HPPTCL of the ADB Loan. The Petitioner has considered repayment of loan in 15 equal instalments. The computation of Interest on Loan has been provided as follows:

Table 29: Interest on Loan claimed by Petitioner (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Balance	5,248.75	5,248.75	4,898.83	4548.92	4199.00
Addition	-	-	-	-	-
Repayment	-	349.92	349.92	349.92	349.92
Closing Balance	5,248.75	4,898.83	4548.92	4199.00	3849.08
Rate of Interest (%)	10%	10%	10%	10%	10%
Interest on Loan	361.39	524.88	489.88	454.89	419.90

Interest on Loan pro-rated for FY 2019-20 based on proposed COD (24th July, 2019)

Commission's Analysis

- 4.4.3 The Commission has considered the loan amount in line with the project funding approved for Charor-Banala in the previous chapter.
- 4.4.4 Regulation 20 of the HPERC MYT Transmission Regulations 2011 stipulates the following:

"20. Interest and Finance Charges

(1) Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment in accordance with the terms and conditions of relevant agreements of loan, bond or non-convertible debentures. Exception can be made for the existing or past loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable and approved projects.

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

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

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

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

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

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

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

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

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

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

(5) The transmission licensee shall make every effort to refinance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such refinancing shall be borne by the transmission customers and any benefit on account of refinancing of loan and interest on loan shall be shared in the ratio of 2:1 between the transmission licensee and the transmission customers. Refinancing may also include restructuring of debt.

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

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

- 4.4.5 The Commission has approved the Interest on Loan in accordance with the Regulations. Further, normative repayment equivalent to the depreciation worked out for the respective year has been considered in line with the provisions of HPERC MYT Transmission Regulations 2011 for computing the opening and closing loan balances for each year.
- 4.4.6 The rate of interest has been considered based on the Petitioner's submission and interest rates agreed upon by ADB/GoHP with HPPTCL based on the loan documents shared.
- 4.4.7 It is observed that the rate of interest charged from the Petitioner by the GoHP is 10% which is higher than the rate of interest agreed with the ADB. The Petitioner was questioned on the terms and conditions of the loan and the applicable rate of interest. In response, the Petitioner submitted that the GoHP levies interest rate at 10% on all loans funded by ADB as per the agreement entered by the GoHP with HPPTCL. Since, the ADB provides loan to GoHP which is transferred to the Petitioner for implementation, the rate of interest of 10% is applicable as per the agreement of the Petitioner with GoHP. The Commission is of the view that the rate of 10% is competitive as compared with the rates applicable on other transmission assets of HPPTCL and borrowings by similar utilities in other states from various sources and therefore approves the same for tariff determination.
- 4.4.8 However, considering that the lending agency may be charging at lower rate, the Commission directs the Petitioner to negotiate with GOHP and align the interest rate in line with the rate of interest agreed by GoHP with ADB. Any efforts in this direction will not only lead to better cost optimisation in the form of lower interest costs, but also benefit the consumers of Himachal Pradesh as a whole.
- 4.4.9 The following table provides the Interest on Loan approved by the Commission for the Control Period:

Table 30: Interest on Loan approved by Commission (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Balance	5,239.27	5,409.44	5,067.86	4,726.28	4,384.70
Addition	336.57	-	-	-	-
Repayment	166.40	341.58	341.58	341.58	341.58
Closing Balance	5,409.44	5,067.86	4,726.28	4,384.70	4,043.12
Rate of Interest (%)	10.00%	10.00%	10.00%	10.00%	10.00%
Interest on Loan	265.49	523.86	489.71	455.55	421.39

Interest on Loan pro-rated for 182 days for FY2019-20 based on COD (i.e. 1st October, 2019)

4.5 Interest on Working Capital

Petitioner Submission

- 4.5.1 The Petitioner has computed interest on working capital as per Regulation 21 and 22 of the HPERC MYT Transmission Regulations 2011 and its subsequent amendments thereof.
- 4.5.2 The Petitioner has calculated the interest on working capital considering prevalent SBI MCLR as on 1st April, 2020 plus 300 basis points. In accordance with the above Regulations the interest on working capital claimed is shown as follows:

Table 31: Interest on Working Capital claimed by Petitioner (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses for 1 month	2.89	6.37	6.53	6.70	6.87
Maintenance Spares (at 15% monthly O&M Expenses)	0.43	0.96	0.98	1.00	1.03
Receivables for 2 months on projected Annual Transmission Charges	160.81	238.02	232.42	226.82	221.24
Total Working Capital	164.13	245.34	239.93	234.53	229.15
Interest Rate (%)	10.75%	10.75%	10.75%	10.75%	10.75%
Interest on Working Capital	17.64	26.37	25.79	25.21	24.63

Interest on Working Capital pro-rated for FY 2019-20 based on proposed COD (24th July, 2019)

Commission's Analysis

- 4.5.3 Based on the approved O&M expenses and expected receivables, the Commission has approved the working capital requirements and interest on working capital for the Control Period in accordance with regulations 21 & 22 of the HPERC MYT Transmission Regulations 2011.

- 4.5.4 The relevant clause of the regulation is pronounced as follows:

"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 @ 40% 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 of each year plus 300 basis points for FY 2019-20 and FY 2020-21. From FY 2021-22 onwards SBI MCLR as on 1st April, 2021 plus 300 basis points has been considered. The same shall be trued-up based on the actual rates as on 1st April of relevant financial year and the HPERC MYT Transmission Regulations 2011. The computation for approved working capital requirement and interest on working capital is shown in the table as follows:

Table 32: Interest on Working Capital approved by Commission (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses for 1 month	0.282	0.59	0.61	0.63	0.65
Maintenance Spares (at 15% monthly O&M Expenses)	0.04	0.09	0.09	0.09	0.10
Receivables for 2 months on projected Annual Transmission Charges	101.13	202.46	196.45	190.71	184.97
Total Working Capital	101.45	203.13	197.15	191.43	185.72
Interest Rate (%)	11.55%	10.75%	10.00%	10.00%	10.00%
Interest on Working Capital	11.72	21.84	19.71	19.14	18.57

Interest on Working Capital pro-rated for 182 days for FY 2019-20 based on COD (i.e. 1st October, 2019)

4.6 Return on Equity

Petitioner Submission

- 4.6.1 The Petitioner has submitted that an equity amounting to INR 21.49 Cr has been utilised as on CoD of the project. The Petitioner has considered prevalent Corporate Tax Rate of 29.12% and has grossed up allowable RoE of 15.50% to derive at the pre-tax RoE of 21.87%. The RoE proposed by the Petitioner for the Control Period is summarised in the table as follows:

Table 33: RoE claimed by Petitioner(INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Equity	2148.88	2148.88	2148.88	2148.88	2148.88
Equity Addition during the year	-	-	-	-	-
Closing Equity	2148.88	2148.88	2148.88	2148.88	2148.88
RoE (%)	21.87%	21.87%	21.87%	21.87%	21.87%
Return on Equity	323.55	469.92	469.92	469.92	469.92

Return on Equity pro-rated for FY2019-20 based on proposed COD (24th July, 2019)

Commission's Analysis

4.6.2 Regulation 19 of the HPERC MYT Transmission 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 The Petitioner has claimed rate of return @21.87% considering the base rate as 15.50% grossed up for corporate tax rate for the purpose of claiming RoE. It is observed that the Petitioner has submitted tax liability of zero during past periods.

4.6.5 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.

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

Table 34: RoE approved by Commission (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
Opening Equity	2,067.38	2,067.38	2,067.38	2,067.38	2,067.38
Equity Addition during the year		-	-	-	-
Closing Equity	2,067.38	2,067.38	2,067.38	2,067.38	2,067.38
RoE (%)	15.50%	15.50%	15.50%	15.50%	15.50%
Return on Equity	159.78	320.44	320.44	320.44	320.44

Return on Equity pro-rated for 182 days for FY 2019-20 based on COD (i.e. 1st October, 2019)

4.7 Aggregate Revenue Requirement

Petitioner Submission

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

Table 35: Summary of ARR claimed by Petitioner (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses	34.70	76.42	78.37	80.39	82.48
Depreciation	227.58	330.53	330.53	330.53	330.53
Interest on Loan	361.39	524.88	489.88	454.89	419.90
Interest on Working Capital	17.64	26.37	25.79	25.21	24.63
Return on Equity	323.55	469.92	469.92	469.92	469.92
Aggregate Revenue Requirement	964.86	1428.12	1394.49	1360.94	1327.46

ARR pro-rated for FY2019-20 based on proposed COD (24th July, 2019)

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 36: Summary of ARR approved by Commission (INR Lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses	3.38	7.04	7.27	7.54	7.82
Depreciation	166.40	341.58	341.58	341.58	341.58
Interest on Loan	265.49	523.86	489.71	455.55	421.39
Interest on Working Capital	11.72	21.84	19.71	19.14	18.57
Return on Equity	159.78	320.44	320.44	320.44	320.44
Aggregate Revenue Requirement	606.78	1,214.76	1,178.72	1,144.26	1,109.80

4.8 Transmission Charges

Petitioner Submission

4.8.1 The Petitioner has submitted that currently M/s EPPL is the only beneficiary of the transmission line and accordingly the Petitioner has proposed the recovery of entire transmission charges from M/s EPPL.

4.8.2 The Petitioner has further submitted that as and when other generators are connected to the transmission line in the future, the recovery may be governed under the POC mechanism.

4.8.3 The Petitioner, therefore, has submitted to approve the Transmission charges and allow recovery of the entire ARR/Transmission charges from M/s EPPL.

Commission's Analysis

4.8.4 As discussed in the section 'Energy Flow and Nature of the Asset' above, it is observed that the final status update from NRPC is still awaited with respect to the nature of the asset. The Petitioner itself has submitted that the final approval to establish the nature of asset is expected from NRPC. Therefore, it cannot be established currently whether the Charor-Banala line is inter-state or intra-state. Therefore, the Commission directs the Petitioner to follow-up with NRPC in an expeditious manner as power is already being wheeled since December 2019 and the requisite information has already been submitted as per the submission of Petitioner.

4.8.5 The Petitioner is directed to take up the matter of recovery of the line under PoC mechanism with CERC in case the Charor-Banala line is declared as inter-state by NRPC. In case of denial of inter-state status, the recovery of the approved ARR is required to be undertaken as per Clause 33 of HPERC MYT Transmission 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."