

**Multi-Year Tariff Order
for
BASPA II HEP
for
FY 2024-25 to FY 2028-29**



**Himachal Pradesh Electricity Regulatory
Commission**

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA
Petition No. 27/2024

CORAM

Sh. Devender Kumar Sharma
Sh. Yashwant Singh Chogal
Sh. Shashi Kant Joshi

IN THE MATTER OF:

Determination of Tariff for FY 2024-25 to 2028-29 for Sale of Power from Baspa II 300 MW HEP to Himachal Pradesh State Electricity Board Limited (HPSEBL)

AND

IN THE MATTER OF:

JSW Hydro Energy Limited
KarchamWangtoo H.E. Project
Sholtu Colony, PO, Tapri 172104
District Kinnaur (H.P.)

APPLICANT/ PETITIONER**ORDER**

The Applicant/Petitioner has filed the present Petition with the Himachal Pradesh Electricity Regulatory Commission for determination of tariff for sale of power from Baspa II, 300 MW Hydro Power Plant located on River Baspa (tributary of River Satluj), District Kinnaur (H.P.) to Himachal Pradesh State Electricity Board Ltd. for period FY 2024-25 to FY 2028-29.

The Commission, after considering the Petition filed by the Applicant (also referred to as the Generating Company), the facts presented in its various submissions/filings, objections/suggestions received by the Commission from various stakeholders, the responses of the Applicant to the objections/suggestions and documents available on record and in exercise of the powers vested in it under Section 62 and Section 86 of the Electricity Act, 2003 (Act No. 36 of 2003) read with HPERC (Terms & Conditions for Determination of Hydro Generation Supply Tariffs) Regulations 2011, along with its subsequent amendments, and in terms of the Power Purchase Agreement signed between the Himachal Pradesh State Electricity Board Limited (also referred to as the Distribution Licensee) and the Generating Company on 04th June, 1997, passes the following Order for determination of tariff for 300 MW Baspa II Hydro Power Plant for the fifth Control Period FY 2024-25 to FY 2028-29.

Sd/-
(SHASHI KANT JOSHI)
Member

Sd/-
(YASHWANT SINGH CHOGAL)
Member Law

Sd/-
(DEVENDRA KUMAR SHARMA)
Chairman

Shimla

Dated: 12.06.2024

CONTENTS

1. BACKGROUND	5
<i>Multi Year Tariff Regulations</i>	<i>5</i>
<i>Procedural Background.....</i>	<i>6</i>
<i>Admission of Petition.....</i>	<i>7</i>
<i>Public Hearing</i>	<i>8</i>
2. SUMMARY OF THE PETITION	9
<i>Details of the Project.....</i>	<i>9</i>
<i>Details of the Tariff Petition.....</i>	<i>10</i>
3. COMMENTS/ OBJECTIONS FILED BY STAKEHOLDERS.....	12
<i>General</i>	<i>12</i>
<i>Capital Cost exclusion of Karcham Wangtoo-Jhakri transmission line.....</i>	<i>12</i>
<i>Cost escalations</i>	<i>13</i>
<i>Scope/ period of tariff</i>	<i>14</i>
<i>Capital investment.....</i>	<i>15</i>
<i>O&M Expense.....</i>	<i>16</i>
<i>Outstanding Debt</i>	<i>16</i>
<i>Depreciation</i>	<i>16</i>
<i>Others.....</i>	<i>18</i>
4. ANALYSIS OF THE PETITION	20
<i>Introduction.....</i>	<i>20</i>
<i>Computation of Tariff.....</i>	<i>20</i>
<i>Energy Generation.....</i>	<i>21</i>
<i>Capital Cost.....</i>	<i>22</i>
<i>Interest on Loans</i>	<i>24</i>
<i>Depreciation</i>	<i>26</i>
<i>Operations and Maintenance Expenses.....</i>	<i>27</i>
<i>Return on Equity (RoE)</i>	<i>30</i>
<i>Interest on Working Capital</i>	<i>30</i>
<i>Incentive for Secondary Energy and Higher Plant Availability</i>	<i>31</i>
<i>Income Tax</i>	<i>32</i>
<i>Application fees.....</i>	<i>32</i>
<i>Annual Fixed Charge for BASPA II HEP</i>	<i>33</i>
<i>Revision in Design Energy of the Baspa HEP.....</i>	<i>34</i>
<i>Directives</i>	<i>35</i>

LIST OF TABLES

Table 1: Details of public notices in newspapers	7
Table 2: Communication with Petitioner	7
Table 3: Details of publications in newspapers	8
Table 4: 300 MW BASPA II - Project Details.....	9
Table 5: Summary of Tariff Petition filed by Petitioner for FY25 to FY29 (Rs. Cr.).....	11
Table 6: Net Saleable Energy from BASPA II HEP	21
Table 7: Annual Generation from BASPA II HEP, proposed by Petitioner	22
Table 8: Energy Generation and Plant Availability approved for fifth Control Period	22
Table 9: Capital Cost allowed by the Commission (Rs. Cr.)	22
Table 10: Gross Equity and Gross Debt allowed by the Commission (Rs. Cr.).....	22
Table 11: Normative Loan-3 Repayment and Interest approved for FY25 to FY29 (Rs. Cr.)	25
Table 12: Normative Loan-4 Repayment and Interest approved for FY25 to FY29 (Rs. Cr.)	25
Table 13: Total Interest and Repayments approved for FY25 to FY29 (Rs. Cr.)	26
Table 14: Depreciation proposed by Petitioner (Rs. Cr.).....	26
Table 15: Depreciation approved for the fifth Control Period (Rs. Cr.)	27
Table 16: WPI and CPI considered for calculation of O&M escalation factor	28
Table 17: O&M Expenses approved for fifth Control Period (Rs. Cr.)	29
Table 18: Return on Equity approved for fifth Control Period (Rs. Cr.)	30
Table 19: Interest on Working Capital approved for fifth Control Period (Rs. Cr.)	31
Table 20: Approved Income Tax for FY 25 to FY 29 (Rs. Cr.).....	32
Table 21: Annual Fixed Charge approved for BASPA-II HEP for fifth Control Period (Rs. Cr.)	33
Table 22: Approved Tariff for fifth Control Period.....	33
Table 23: Baspa II Energy Generation (based on monthly billing to HPSEBL)	34

1. BACKGROUND

- 1.1 M/s JSW Hydro Energy Limited (hereinafter referred to as the “Petitioner” or “Applicant”), which operates the Karcham Wangtoo H.E. Project Sholtu Colony, PO, Tapri 172104, District Kinnaur H.P. is a “generating company” falling within the definition of Section 2 (28) of the Electricity Act, 2003 (hereinafter referred to as the “Act”).
- 1.2 The Baspa-II Hydro-electric project is a 300 MW plant with three units each of 100 MW which was commissioned by M/s Jai Prakash Power Ventures Limited (JPVL) in the FY 2003-04. The COD of the last unit of the project was 08.06.2003.
- 1.3 On 04.06.1997, a Power Purchase Agreement (PPA) was executed between Jaiprakash Hydro-Power Limited and HPSEBL for sale of Power from Baspa-II HEP. Pursuant to a scheme of arrangement approved by Hon’ble High Court, Shimla, 300 MW Baspa II Hydroelectric Project located in Himachal Pradesh has been transferred by M/s. Jaiprakash Power Ventures Limited to the Petitioner w.e.f. 1.09.2015.
- 1.4 The applicant has now filed a Petition on 01.12.2023 with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as the “Commission”) under sections 62 and 86 of the Electricity Act, 2003 and Regulation 37 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 as amended from time to time, seeking determination of tariff for sale of electricity generated at Baspa II 300 MW hydro power plant on River Baspa, a tributary of River Satluj, District Kinnaur, Himachal Pradesh (hereinafter referred to as “Baspa II”) to the Himachal Pradesh State Electricity Board Limited (hereinafter referred to as the “HPSEBL”), a “deemed licensee” under the Act, engaged in generation and distribution of electricity in the State of Himachal Pradesh for FY 2024-25 to FY 2028-29.
- 1.5 In this Order, the Commission has reviewed the operational and financial performance of the Applicant based on the PPA for supply of power to the HPSEBL, analysis of the past records, information filed by the Applicant in the Petition and various other submissions in response to queries raised by the Commission and views expressed by the stakeholders.

Multi Year Tariff Regulations

- 1.6 As per Section 61 of the Electricity Act, 2003, the Appropriate Commission shall specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and also by the National Tariff Policy formulated under the said Act.

- 1.7 The Commission, in view of the principles and methodologies specified by the Central Electricity Regulatory Commission, had issued Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 vide notification dated 1.04.2011.
- 1.8 Subsequently, the Commission came out with amendments to these Regulations. The Commission in exercise of the powers conferred by clauses (zd), (ze) and (zf) of sub-section (2) of Section 181, read with sections 61, 62 and 86, of the Electricity Act, 2003 (36 of 2003) issued the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) (Second Amendment) Regulations, 2013 vide notification dated 1.11.2013 and HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) (Third Amendment) Regulations, 2018 vide notification 22.11.2018, determines the tariff for hydro generation projects.

Procedural Background

- 1.9 The Commission had passed an Order dated 24.02.2007, approving the capital cost of the Baspa II 300 MW Hydro Electric Project at Rs.1533.96 Cr. for the purpose of determination of tariff and had approved the tariff for the initial 5 years from FY 2003-04 to FY 2007-08. Subsequently, the Commission vide its Order dated 30.03.2009 and vide Review Orders dated 10.09.2009 and 23.06.2010 approved the tariff for the First Control Period FY 2008-09 to FY 2010-11 and true up the tariff for the period FY 2003-04 to FY 2007-08.
- 1.10 Thereafter, the Commission by an Order dated 24.01.2011, passed in Petition No. 11/2010, revised the Annual Revenue Requirement for the FY 2006-07 to FY 2010-11 on account of additional capitalization allowed due to Force Majeure event, expenditure on Inter-Connection facility and additional O&M Expenses on Inter-Connection facility.
- 1.11 Subsequently, the Commission issued the Second MYT Order dated 15.07.2011 approving the tariff for sale of power from 300 MW Baspa II HEP to the HPSEBL for each year of the Control Period i.e.FY 2011-12 to FY 2013-14.
- 1.12 The Petitioner, moved a Petition bearing No. 135/11 dated 08.02.2011 before the Commission to revise the tariff for the Control Period (FY2011-12 to FY2013-14) in compliance to the Order dated 21.10.2011 passed by Hon'ble Appellate Tribunal for Electricity in Appeal No. 39 of 2010 and re-compute the arrears payable by the HPSEBL to the Petitioner from FY 2003-04 onwards till date of actual payment by the HPSEBL to the Petitioner. The Commission issued an Order dated 06.09.2012 on the said Petition and revised the tariff for Second MYT Control Period taking into consideration new facts brought on record by the Petitioner, which were unavailable at the time of issuance of MYT Order dated 15.07.2011.
- 1.13 The Commission issued Third MYT Order dated 06.06.2014 approving the tariff for sale of power from 300 MW Baspa II HEP to the HPSEBL for each year of the Control Period i.e. FY 2014-15 to FY 2018-19. The Commission also undertook true-up of the ARR for

the first Control Period i.e. FY 2008-09 to FY 2010-11 vide its Order dated 23.04.2012, true-up for the second Control Period i.e. FY 2011-12 to FY 2013-14 vide its order dated 30.03.2015 and true-up for partial years of the third Control Period i.e. FY 2014-15 to FY 2016-17 vide its Order 'True Up for FY 2014-15 to FY 2016-17 and Mid Term Review for FY 2017-18 to FY 2018-19' dated 31.10.2018.

- 1.14 The Commission has also passed MYT Order for the control period FY2019-20 to FY2023-24, on 29-Jun-2019. True-up Order of FY2017-18 to FY2018-19 for BASPA II HEP was issued by the Commission on 07-Jul-2020. Further the Commission has passed order for True-Up of FY 2019-20 to FY 2021-22 and Mid Term Review (MTR) of FY 2022-23 and FY 2023-24 on 16-May-2023.

Admission of Petition

- 1.15 The Petitioner has filed the present Petition vide Filling No. 263/2023 on 01.12.2023, with the Commission for determination of tariff for the period FY 2024-25 to FY 2028-29.
- 1.16 The Commission admitted the Petition through vide Interim Order dated 12.02.2024 and directed the Petitioner to publish the salient features of the Petition on or before 16.02.2024 in the manner and as per the disclosure formats attached with the Interim Order. The Petition was registered as Petition number 27/2024.
- 1.17 The Petitioner published the salient features of the Petition in a public notice in the following newspapers:

Table 1: Details of public notices in newspapers

Sl.	Name of News Paper	Date of Publication
1.	Dainik Bhaskar	15.02.2024
2.	Dainik Bhaskar	16.02.2024
3.	The Tribune	15.02.2024
4.	The Tribune	16.02.2024

- 1.18 Detailed scrutiny of the Petition was made and clarifications/ information were sought by the Commission from the Petitioner. The submissions made by the Petitioner in response there to, as detailed hereunder, have been taken into consideration:

Table 2: Communication with Petitioner

Sl.	Letter from Commission	Response from Petitioner
1.	HPERC/-F(1)/-69/2023/3007 Dated 19.12.2023	Filling No. 263 of 2023 Dated 02.01.2024
2.	HPERC/-F(1)/-69/2023/3769 Dated 08.02.2024	Filling No. 27 of 2024 Dated 26.02.2024

Public Hearing

1.19 The Commission also invited suggestions and objections from the public on the Petition filed by the Petitioner in accordance with Section 64(3) of the Electricity Act, subsequent to the publication of salient features by the Petitioner. The public notice, issued by the Commission, inviting objections/ suggestions was published in the following newspapers:

Table 3: Details of publications in newspapers

Sl.	Name of News Paper	Date of Publication
1.	Hindustan Times	23.02.2024
2.	Amar Ujala	23.02.2024

1.20 Through the aforementioned publications, the interested parties/ stakeholders were asked to file their objections and suggestions on the Petition and rejoinders to the Replies filed by the Petitioner for which dates were specified by the Commission through the publications.

1.21 A public hearing was held in the Commission at Shimla on 23rd March, 2024 for providing adequate opportunity to all the stakeholders for expression of their opinions, suggestions and objections in the matter.

1.22 The objections, issues and concerns raised by the Stakeholders i.e. Consumer Representative and the HPSEBL, the responses along with the submissions of the Petitioner and the views of the Commission are detailed in Chapter 3 of this Order.

2. SUMMARY OF THE PETITION

- 2.1 This Chapter summarizes the Petition for determination of tariff for sale of power from the Baspa II, 300 MW Hydro Electric Project located on River Baspa, District Kinnaur (H.P.) for the fifth Control Period FY 2024-25 to FY 2028-29.

Details of the Project

- 2.2 The Baspa II Hydro-electric project is a 300 MW plant with three units of 100 MW each which was commissioned by M/s JPVL in the FY 2003-04 and transferred to the Petitioner in FY 2015-16.
- 2.3 It is a diurnal peaking plant with 4 hours of peaking supported by diurnal pondage. The power house is underground with static excitation. The Government of Himachal Pradesh receives 12% of energy generated as free energy. The details of the plant submitted by the Petitioner are as given below:

Table 4: 300 MW BASPA II - Project Details

Particular	Details
Name of the Company	JSW Hydro Energy Limited (Formerly Himachal Baspa Power Company Limited)
Name of the Station	Baspa II Hydro Electric Project
Installed Capacity (MW)	3 X 100 = 300
Free power to home state	12%
Date of Commercial Operation	
Unit-1	24.05.2003
Unit-2	29.05.2003
Unit-3	08.06.2003
Type of Station	
Surface/underground	Underground
Purely ROR/ Pondage/Storage	Diurnal Pondage
Peaking/non-peaking	Diurnal Peaking
No. of hours of peaking	4
Type of excitation	Static excitation
Design Energy	1213.18 MU
Transformation Losses (as per PPA)	0.50%
Auxiliary Losses	0.50%
Transmission Losses	0.65%

Details of the Tariff Petition

- 2.4 The Petition has been filed for the determination of Tariff for the Control period FY 2024-25 to FY 2028-29.
- 2.5 Salient features of the petition are as follows:
- a. No additional capital cost has been claimed by the petitioner for the fifth control period.
 - b. All the financial details have been compiled in the prescribed forms based on the approved capital cost of Rs.1638.34 crore comprising of:
 - capital cost as on COD Rs 1533.96 crore approved vide of Order dated 24.02.2007
 - additional capital cost of Rs 95.88 crore approved vide Order dated 24.01.2011
 - additional capital cost of Rs 2.57 crore approved vide Order dated 06.06.2014
 - additional capital cost of Rs 6.58 crore approved vide Order dated 29.06.2019
 - additional capital cost (net of decapitalization) of Rs -0.65 crore approved vide Order dated 16.05.2023
 - c. For the Interest on Loans, the Petitioner has continued with approach as per previous MYT order for Normative Loans 3 and 4. Interest Rate is taken as approved for in the last True-up order for FY2021-22
 - d. Application fee of Rs. 37,50,000 or Rs. 7,50,000 per annum paid by the petitioner towards fee specified in the 13th amendment to HPERC (Conduct of Business) regulations, 2005 dt. 31.3.2023
 - e. O&M Expense, ROE and Interest of Working Capital claimed as per norms specified under PPA or applicable regulations
 - f. No incentive for higher Plant Availability and Secondary Energy claimed by petitioner and to be claimed during respective year's true up
 - g. No publication expense claimed by the petitioner and to be claimed during respective year's true up
 - h. No Water Cess has been claimed by the petitioner
 - i. Income Tax has been claimed using per MAT rates
- 2.6 The details of the Total Annual Charges claimed by the Petitioner for period FY 2024-25 to FY 2028-29, are as under:

Table 5: Summary of Tariff Petition filed by Petitioner for FY25 to FY29 (Rs. Cr.)

Particulars	FY25	FY26	FY27	FY28	FY29
Capacity Charges					
Interest on Outstanding Loan	0.21	0.17	0.13	0.08	0.04
Depreciation + AAD	10.65	4.49	4.49	4.49	0.91
Application Fees	0.08	0.08	0.08	0.08	0.08
Publication Expense*	0.00	0.00	0.00	0.00	0.00
Total Capacity Charges	10.93	4.73	4.69	4.65	1.03
Primary Energy Charges					
O&M Expenses	56.94	59.55	62.28	65.14	68.12
Return on Equity	78.64	78.64	78.64	78.64	78.64
Interest on Working Capital	5.78	5.74	5.90	6.06	6.13
Sub- Total Primary Charges	141.36	143.94	146.82	149.84	152.89
Incentive and Taxes					
Income Tax	11.67	10.72	10.85	10.97	10.46
Water Cess	0.00	0.00	0.00	0.00	0.00
Incentive for Higher Plant Availability*	0.00	0.00	0.00	0.00	0.00
Incentive for Secondary Energy*	0.00	0.00	0.00	0.00	0.00
Sub-Total Incentive and taxes	11.67	10.72	10.85	10.97	10.46
Total Annual Charges	163.96	159.39	162.36	165.45	164.38
Net Saleable Energy (MUs)	1,117.60	1,117.60	1,117.60	1,117.60	1,117.60
Tariff for Total Energy (Rs./Kwh)	1.47	1.43	1.45	1.48	1.47

* To be claimed during respective year's true up

3. COMMENTS/ OBJECTIONS FILED BY STAKEHOLDERS

- 3.1 The Commission had published a Public Notice inviting the interested parties/ stakeholders to file their objections and suggestions on the Petition for fifth Control Period for BASPA II HEP by 20th March, 2024. Pursuant to the notice, written comments were received from the HPSEBL and from Sh. K.S.Dhaulta Consumer Representative, on the Petition filed by the Petitioner.
- 3.2 A public hearing was held on 23rd March, 2024 in the Commission at Shimla where the stakeholders made comments and gave observations on the Petition to which the Petitioner has submitted the response. The issues raised by Stakeholders along with response of the Petitioner and Commission's views on the issues are detailed in the subsequent paragraphs.

General

Stakeholder's Objections

- 3.3 The Consumer Representative has suggested that the Petition filed by JSW, in view of the HPERC approved capital cost and tariff orders since 2007 to 2023, issued from time to time, for generation of power in respect of Baspa-II (300 MW) HEP, in its present form is not a detailed Petition as required under the Commission's Regulations. It does not appear to be a Multi-Year Tariff Petition (MYT) as required under the HPERC Regulations.

Petitioner's Reply

- 3.4 The Petitioner has submitted that the petition for tariff determination for the control period 2024-29 has been filed in accordance with the prevailing HPERC Regulations and all the required details have been provided in the Petition and subsequent technical validations.

Commission's View

- 3.5 The Commission has undertaken a detailed analysis of the Petition and wherever required has sought additional information/ clarification from the Petitioner. From the careful perusal of the Petition and the response, the Commission is of the view that the objections raised by the Consumer Representative are without any basis.

Capital Cost exclusion of Karcham Wangtoo-Jhakri transmission line

Stakeholder's Objections

- 3.6 The HPSEBL has suggested that the cost of 35.22 Km line portion (Karcham Wangtoo – Jhakri) (which is serving as ISTS but still not declared ISTS by Hon'ble CERC) is included in the capital cost of BASPA II and HPSEBL has to bear the complete charges for this portion of line. Therefore, it is prayed that the charges for corresponding portion of the line may be excluded as and when declared as ISTS by Hon'ble CERC.
- 3.7 The HPSEBL also suggested that the ICF (Interconnection Facility) charges for NJHPS substation being claimed in ARR by BASPA II HEP, shall be made part of transmission line ARR of Wangtoo-Jhakri line from the date of COD of Karcham-Wangtoo Hydro Project as and when declared ISTS. As the system is used for evacuation of Karcham-Wangtoo HEP's power and ICF charges are only borne by HPSEBL in Baspa-HEP ARR.

Petitioner's Reply

- 3.8 The Petition with Hon'ble CERC was filed on 21.8.2023 and is pending. The Petitioner has sought grant of transmission license for the Wangtoo Jhakri portion of the original Baspa Jhakri transmission line. Declaration of status for this portion of the original line is a part and parcel of the transmission license proceedings. The Petition was last listed on 10.4.2024 has been admitted by the learned CERC. As such, the Petition is pending adjudication and disposal by the learned CERC.
- 3.9 Any exclusion of the capital cost for this portion of the line & denial of inter connection facility (ICF) charges can only be taken up after grant of the transmission license by the CERC and not before that. It is denied that the any moneys including ICF charges which already stand recovered, considering the entire line as an associated transmission line of the generation asset in the past can be recovered/ clawed back by this Hon'ble Commission. This is so as the declaration of the status of ISTS can only be prospective and not retrospective.

Commission's View

- 3.10 The Commission has taken cognizance of the stakeholder's comments and the fact that the Petition filed by Petitioner with Hon'ble CERC in this matter is still pending. Accordingly, the Commission has directed the Petitioner in this order to periodically inform the Commission of the progress in said Petition filed with Hon'ble CERC.

Cost escalations

Stakeholder's Objections

- 3.11 The Consumer Representative has suggested that the Petitioner has claimed tariff proposal to the tune of Rs.164.38 Cr. based on projections for control period for FY 2024-25 to 2028-29. The projections appear to be based on inflated costs/charges. Since the matter regarding water cess has been finally decided by the Hon'ble Court, the Petitioner needs to review the present Petition. A detailed tariff proposal along with category-wise tariff increase proposed should be submitted. Otherwise, the utility may not be allowed to increase the tariff.

Petitioner's Reply

3.12 The Petitioner has responded that water cess has not been claimed in the current MYT Petition for the Control Period 2024-29, in view of the ongoing Writ proceedings before the Hon'ble High Court of Himachal Pradesh, Shimla. Further, the Petitioner has updated that the said Writ no. 3130 of 2023 has been allowed and the HP Water Cess Act & Rules have been set aside by the Hon'ble High Court of Himachal Pradesh, Shimla.

Commission's View

3.13 The Commission has noted the submission of Stakeholder as well as the Petitioner with regard to water cess. It is observed that the Petitioner has not claimed any additional expense for water cess in view of the judgement of Hon'ble High Court of Himachal Pradesh, regarding applicability of the water cess. The GoHP has filed an appeal before Hon'ble Supreme Court against the judgement of Hon'ble High Court which is pending. Therefore the Commission not allowed any expense towards water cess in this Order, at this stage.

Scope/ period of tariff**Stakeholder's Objections**

3.14 The Consumer Representative has submitted that the Petitioner has not yet completed audit of the annual accounts for FY 2021-22 and FY 2022-23 and has claimed true-up for both years based on provisional accounts. The Commission may ask Petitioner to clarify and place on record the reasons for delay in finalization of audited accounts for the respective years.

3.15 Also, the Consumer Representative has highlighted that Petitioner should clarify if all financial details/ parameters claimed under true-up for FY23 and projections for the 5th Control Period are for distribution business only. In case of consolidated claim for hydro generation and not for distribution business, all information is required to be segregated between generation and distribution business. Further, the stakeholder has requested the Commission to direct the Petitioner to file proper Tariff Petition with cost and other parameters segregated in a proper manner.

Petitioner's Reply

3.16 The Petitioner has responded that the current petition is for the Multi year tariff pertaining to the control period 2024-29 and not the true up of FY 21-22 & 22-23. Though not required during current MYT proceedings, it has submitted audited accounts and ITR for the FY 22-23 to the Commission vide its reply dt 27.12.23. This is to emphasize that true up for the FY 19-20 to 21-22 is already completed vide order dt. 16.5.23 in petition no. 2 of 2023.

3.17 Also, the Petitioner has submitted that as evident in the tariff forms S1, S3 & S4, the Petitioner is purely in Generation business. The Petitioner has reiterated that all the Tariff forms for the Control Period 2024-29 have been filed in accordance with the prevailing HPERC Regulations.

Commission's View

3.18 The Commission on careful consideration of the submission and records agrees to the view point of the Petitioner and has approved tariff for fifth Control Period FY 2024-25 to FY 2028-29 for BASPA II HEP (a Hydro generating plant) in this Order.

Capital investment

Stakeholder's Objections

3.19 The Consumer Representative has submitted that Regulation 9(4) of the MYT Regulations, 2011 requires the Petitioner to submit the investment plan with details of purpose of investment, capital structure, capitalization schedule, financing plan, cost-benefit analysis, improvement in operational efficiency envisaged in the Control Period. The Stakeholder has also highlighted that the Petitioner has not provided the following details:

- Purpose of investment,
- Work wise details of ongoing and new EHV schemes
- Break-up of scheme-wise financing plan; and
- Cost-benefit analysis, if any for the works being proposed

3.20 The Consumer representative has also emphasized that the Petitioner is required to provide the means of financing (break-up of debt, equity, grants/deposit works) for the proposed capitalization for FY24 and each year of the Control Period.

Petitioner's Reply

3.21 The Petitioner has responded that the contents of paragraphs mentioned by the Stakeholder pertain to the HPERC (Terms & conditions for determination of wheeling tariff & retail supply tariff) Regulations 2011 and are not applicable for generation business.

3.22 Further, the Petitioner has clarified that no capitalization / additional capitalization is proposed by the Petitioner in its current MYT petition.

Commission's View

3.23 The Commission agrees with the view point of the Petitioner and has approved tariff in this Order in accordance with HPERC (Terms & Conditions for Determination of Hydro Generation Tariff) Regulations 2011 (as amended from time to time) and PPA of BASPA II HEP with HPSEBL.

O&M Expense

Stakeholder's Objections

3.24 The Consumer Representative has suggested that the Petitioner's claim for O&M expense has increased from Rs. 52.07 Cr (FY 22-23) to Rs. 68.12 Cr ((FY 28-29), against actual approved of Rs. 49.44 (FY 21-22) in true up order dated 16.05.2023. There is a discernible increase/escalation of 4.48% and with respect to SJVN bills for ICF O&M to 9.43%. This may lead to increase in tariff.

Petitioner's Reply

3.25 Petitioner has provided details in respect of O&M costs in Annexure 3 to the Petition filed on 30.11.2023. Apart from this, the petitioner has provided explanations related to O&M costs in its replies dt. 27.12.23 and 22.2.24.

Commission's View

3.26 The Commission has considered the suggestions & response and has detailed its approach for approving Operation and Maintenance expense in subsequent chapter of this Order.

Outstanding Debt

Stakeholder's Objections

3.27 The Consumer Representative has suggested that the Petitioner should provide loan-wise details of the outstanding debt as on cut-off date as defined in the MoU along with the break-up of short-term and long-term loan details. The Petitioner must also clearly identify each loan which has been restructured.

Petitioner's Reply

3.28 There are no normative outstanding loans pending (except related to additional capex allowed by the Commission, as per tariff form F8C).

Commission's View

3.29 The Commission has detailed its approach for approving Interest on Loans in subsequent chapter of this Order.

Depreciation

Stakeholder's Objections

3.30 HPSEBL has suggested that the figure of Depreciation for the year 2024-25 has been listed as Rs. 10.65 Crore, which does not match with both previous and next year. The Depreciation should be as per the PPA.

- 3.31 The Consumer Representative has suggested that the Petitioner has mentioned in the MYT Petition that it has considered 4.49% as depreciation rate based on historical data. The detailed computation for depreciation rate considered for generation assets should be provided.

Petitioner's Reply

- 3.32 In response to the comment of HPSEBL, the petitioner has stated that it has worked out depreciation in accordance with the clause 8.6.5 of the Power Purchase agreement (PPA) dated 4.6.1997.

'8.6.5 Depreciation and advance against depreciation

8.6.5.1 During the period when the debt is outstanding as per the approved financial package, the payment on this account will be equal to the amount of principal required to be paid in the relevant tariff period / tariff year subject to the condition that the amount payable for a full tariff year shall not be more than an amount equal to 1/12th of the loan component of the capital cost as per the approved financial package.

Out of the amount as paid on account of depreciation / advance against depreciation for debt redemption period, an amount worked out @ 4.3% of the capital cost for each such full period of 12 months, shall be treated as payment made on account of depreciation and balance amount shall be treated as advance against depreciation.

After the expiry of debt redemption period, the total amount already paid/ payable by the Board to the Company on account of advance against depreciation shall be adjusted against the depreciation payable by the Board for the future period at a per annum rate of 4.3% of the capital cost.

No further payments on account of depreciation shall be made by the Board to the Company after the debt redemption period until the entire amount of advance against depreciation is fully adjusted against the amount that would have otherwise been payable by the Board on this account i.e. at a per annum rate of 4.3% of the capital cost.

After the full adjustment of the advance against depreciation, further payments on account of depreciation shall be made at an annual rate of 4.3% of capital cost as per the approved financial package, subject to the condition that the total payment on account of depreciation shall not exceed 90% of the capital cost as per the approved financial package.

For the purpose of computing the capital cost, the capital cost will be reduced by the value of leased assets as on the scheduled date for commercial operation of the unit (s)/ project as per the approved financial package. The amount of

depreciation/ advance against depreciation, for a part of the year shall be worked out, if necessary, on pro-rata basis.'

In accordance with the aforesaid PPA provisions, advance against depreciation has been fully recovered by the year 2019-20. Thereafter, depreciation is calculated @ 4.3% p.a. subject to condition that the total depreciation shall not exceed 90% of the capital cost. Depreciation on initial approved capital cost of 1533.96 crore is fully recovered in FY 2024-25 and on subsequent approved capital cost of 95.88 crore, it is fully recovered in FY 2028-29. This has resulted in different depreciation during the control period years.

- 3.33 In response to the comment by Consumer Representative, the petitioner has stated that it has not considered depreciation rate of 4.49%, rather Rs. 4.49 crore depreciation is claimed in FY 25-26, 26-27 & 27-28 in its current MYT petition.

Commission's View

- 3.34 The Commission on considering the suggestions and response, has detailed its approach for approving Depreciation expense in subsequent chapter of this Order.

Others

Stakeholder's Objections

- 3.35 HPSEBL has suggested that testing of pondage & performance for peaking power has been scheduled for 26-Mar-2024, results of which shall be intimated to HPERC. The Consumer Representative also suggested during the public hearing that the BASPA Plant should generate power during peak hours.
- 3.36 The Consumer Representative has suggested that the Hon'ble Commission may consider issuing guidelines for building up an accurate data base of administrative, financial and technical information. Further the Consumer Representative has suggested that the petitioner should renew focus on Energy Efficiency and Conservation measures so that power procurement cost gets reduced. Energy Audit should be made compulsory.

Petitioner's Reply

- 3.37 In response to the comment by HPSEBL, the Petitioner has replied that issue of testing pondage and performance for peaking power has no bearing on the tariff determination proceedings for Baspa II HEP. The petitioner has submitted that there was no performance test, in terms of the PPA, scheduled for 26.03.2024. The period in which the performance test is to be conducted, is to be indicated by the petitioner, where after the procedure prescribed in clause 3.3 of the Schedule V of the PPA is to be followed. Additionally, the performance test having been performed successfully in the previous year. Further, during the public hearing, the Petitioner has agreed that the

project shall continue to follow schedule provided by load dispatch centre for generation of power during peak hours.

- 3.38 In response to the comments of the Consumer Representative, the Petitioner has replied that the comments do not relate to the generation business.

Commission's View

- 3.39** The Commission takes cognizance of the stakeholder comments and response of the Petitioner in this regard. In view of the rising energy requirements during the peak hours, the Commission feels that it is appropriate for the Petitioner to undertake necessary steps for supplying maximum energy from its project during peak hours as per the requirement of HPSEBL. Also, the Petitioner is directed to submit to the Commission a copy of performance/ periodic tests reports undertaken in accordance with the provisions of the PPA, within a month of the issuance of this order or the conduct of test, whichever is earlier.

4. ANALYSIS OF THE PETITION

Introduction

- 4.1 This Chapter deals with the analysis of the Petition filed by the Petitioner for the period from FY 2024-25 to FY 2028-29 for sale of energy from BASPA II HEP to HPSEBL.
- 4.2 The Commission has finalized this Order based on the analysis and prudence check of the Petition/additional submissions/clarifications submitted by the Petitioner in response to the queries, suggestions and comments raised by the stakeholders during the public hearing and response submitted by the Petitioner. Various parameters and their computation have been undertaken after giving due consideration to the Power Purchase Agreement (PPA) for sale of power from BASPA-II to HPSEBL. The following sections contain the detailed analysis of various components of tariff, based on the various submissions of the Petitioner.

Computation of Tariff

- 4.3 As per the PPA, the tariff for the energy generated by Baspa II HEP comprises of five parts:
- (a) Capacity Charges
 - (b) Primary Energy Charge
 - (c) Incentive for Secondary Energy
 - (d) Incentive for Higher Plant Availability
 - (e) Tax on Income

Capacity Charge

- 4.4 The capacity charge as per Section 8.6 of the PPA is a sum of:
- (a) Interest on outstanding loan due during the tariff year, as per the loans approved by the Commission while approving the project cost;
 - (b) Depreciation and Advance Against Depreciation for the tariff year as per the Section 8.6.5 of the PPA; and
 - (c) Leasing Charges.

Primary Energy Charge

- 4.5 The primary energy charge as per Section 8.7 of the PPA is a sum of:
- (a) Operations and maintenance charges computed as per Section 8.7.2 of the PPA;
 - (b) Return on equity computed as per Section 8.7.3 of the PPA on the equity component approved by the Commission;
 - (c) Interest on working capital as per Section 8.7.4 of the PPA; and

(d) Other miscellaneous charges as defined under Section 8.7.5 of the PPA.

Incentive for Secondary Energy

4.6 The incentive for secondary energy shall be calculated as per Section 8.9 of the PPA and has been detailed in relevant section of this Order.

Incentive for Higher Plant Availability

4.7 The incentive for higher plant availability shall be calculated as per the Section 8.10 of the PPA and has been detailed in relevant section of this Order.

Tax on Income

4.8 The tax on income shall be computed as per Section 8.11 of the PPA and has been discussed in detail in the relevant section of this Order.

Energy Generation

4.9 Schedule IX-A of the PPA provides the details of design energy of the plant which is at 1213.18 MU per annum. As per the Section 8.12 of the PPA, the net saleable energy from the plant shall be equal to 88% (after excluding 12% of free energy to the Government of Himachal Pradesh) of the energy worked out by deducting:

- (a) 0.5% auxiliary consumption
- (b) 0.5% transformation losses
- (c) 0.65% transmission losses

4.10 The net saleable energy has been considered by the Commission in accordance with the PPA as shown below:

Table 6: Net Saleable Energy from BASPA II HEP

Particulars	Unit	
Design Energy	MU	1213.18
Auxiliary Consumption	%	0.50%
Transformation losses	%	0.50%
Transmission loss to grid	%	0.65%
Share of Available Power	%	88.00%
Net Saleable Energy	MU	1050.06

4.11 The Petitioner has proposed in its petition, annual energy generation of 1,117.60 MUs from the plant based on actual gross generation (net of Aux. consumption) for the last 3 years as follows:

Table 7: Annual Generation from BASPA II HEP, proposed by Petitioner

Particulars	Unit	Gross Generation
2021-22	MU	1,149.18
2022-23	MU	1,177.50
2023-24 (Estimated)	MU	1,026.11
Average of 3 years	MU	1,117.60

4.12 The Commission has considered the generation of primary energy as 1050.06 MUs for each year of the Control Period from FY 2024-25 to FY 2028-29. Secondary energy has been considered as nil, and the Plant availability has been considered at normative availability of 90% for the Control Period. The same shall be trued-up as per actual plant availability and actual generation of secondary energy.

Table 8: Energy Generation and Plant Availability approved for fifth Control Period

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Generation of Energy (MUs)					
Primary Energy	1050.06	1050.06	1050.06	1050.06	1050.06
Secondary Energy (Saleable Energy minus primary energy)	-	-	-	-	-
Plant Availability (%), normative	90%	90%	90%	90%	90%

Capital Cost

4.13 No additional capital cost has been claimed by the petitioner for the fifth control period.

4.14 Accordingly, the Commission has taken closing balance of capital cost for FY2023-24 approved in previous MTR Order dated 16.05.2023 as opening balance of capital cost for FY2024-25, with no additional capitalization/ de-capitalization during the control period, as follows:

Table 9: Capital Cost allowed by the Commission (Rs. Cr.)

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Opening Capital Cost	1,638.34	1,638.34	1,638.34	1,638.34	1,638.34
Additional Capital Expenditure	-	-	-	-	-
Capital cost as on 31 st March of year	1,638.34	1,638.34	1,638.34	1,638.34	1,638.34

4.15 Based on the capital cost approved above, the gross debt and equity approved for the period FY2024-25 to FY2028-29 is as summarized below:

Table 10: Gross Equity and Gross Debt allowed by the Commission (Rs. Cr.)

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Equity	491.50	491.50	491.50	491.50	491.50

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Gross Debt	1,146.84	1,146.84	1,146.84	1,146.84	1,146.84

Capital Cost exclusion of Karcham Wangtoo-Jhakri transmission line

4.16 Along with the BASPA-II project, a transmission line from BASPA II HEP to Nathpa Jhakri HEP of 55 kms, was built to evacuate power from BASPA II HEP. At the time of commissioning of another generation project in the region – Karcham Wangtoo HEP, a LILO was made on this Baspa-Jhakri Transmission line at Karcham Wangtoo with the approval of CEA & CTU, to evacuate power of Karcham Wangtoo HEP, till the time its own Wangtoo–Abdullapur transmission line was made ready. Accordingly, the Commission in its earlier orders has discussed that the capital cost of this portion of Karcham Wangtoo-Jhakri Transmission line may be excluded from the Capital Cost of BASPA II HEP, once it is included in the calculation of ISTS Transmission charges as determined by Hon’ble CERC. The direction issued to the Petitioner in Commission’s order dated 16.05.2023 is as follows:

‘4.29 Until the matter is clarified and an Order is issued by the Appropriate Commission, the Commission feels that at this stage it is inappropriate to exclude the Capital Cost of Baspa Jhakri LILO transmission line at Wangtoo from the overall Capital Cost of Baspa II HEP. In spite of several observations of the Commission made in the previous Orders, the Petitioner has failed to undertake suitable measures to resolve the issue and file a separate Petition with the Appropriate Commission for determination of capital cost and tariff against the said Transmission Line. It is made clear that the responsibility of filing of the separate Petition against the Karcham Wangtoo – Jhakri portion of Baspa Jhakri Transmission Line before the CERC rests solely with the Petitioner as the asset is owned by the Petitioner. Therefore, the Commission directs the Petitioner to file the requisite Petition with Appropriate Commission (i.e. CERC in this case) within three months of issuance of this Order else the Commission shall be constrained to disallow the cost of this transmission asset on notional basis from the next financial year i.e. FY 2024-25 onwards. Also, the Commission shall ensure that cost recovered through tariff from HPSEBL over the period since declaration of the asset as interstate would be adjusted in the next tariff order with carrying cost as applicable from time to time. The Petitioner is directed to update the Commission regarding the filing of the Petition with the Hon’ble CERC.’

4.17 The Commission in order dated 16.05.2023, as well in its earlier orders, had directed the Petitioner to file a petition with Hon’ble CERC for determination of capital cost and tariff against the said Transmission Line. In its reply to clarifications sought by the Commission, the Petitioner stated that it has already filed a petition (No. 262/TL/2023) with CERC for grant of transmission license in respect to Karcham Wangtoo – Jhakri portion of BASPA II – Jhakri Transmission line.

4.18 As per the submissions of the Petitioner, it is observed that the initial steps for seeking necessary approvals and inclusion of this transmission asset under inter-state

transmission network is still in process. However, the capital cost against this asset would only be available when the CERC grants the license and issues the corresponding Tariff Order against this transmission line. Therefore, the Commission does not find it appropriate to exclude capital cost of the said transmission line at this stage. The Petitioner is directed to periodically inform Commission of the progress in this matter, and also file a Petition for tariff determination of Karcham Wangtoo – Jhakri portion of BASPA II – Jhakri Transmission line with Hon'ble CERC at appropriate stage.

Interest on Loans

- 4.19 For determination of interest on loans, the Petitioner has continued with the approach followed by the Commission in previous MYT Orders.
- 4.20 The loan balances corresponding to the approved loans have been continued for the purpose of interest approval and the Commission has considered the outstanding loan balances for FY2023-24 as approved in the Mid-Term Review (MTR) Order dated 16.05.2023 of the Petitioner. The methodology considered for approving the interest for each loan is detailed in the subsequent sub-sections.
- 4.21 Repayment of all Domestic and Foreign Loans for Baspa II HEP (except for Normative Loan 3 and Normative Loan 4) had been completed before the start of fifth control period of FY2024-25 to FY 2028-29.
- 4.22 The Petitioner in the MYT Petition has submitted rate of interest of 8.07% for FY 2024-25 to FY2028-29, as approved by the Commission for True-up of FY2021-22 in its order dated 16.05.2023.
- 4.23 Regulation 17(2) of HPERC Generation MYT Tariff Regulation 2011 (as amended from time to time) states as under:-

"(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 generating station, does not have actual loan, then the weighted average rate of interest of the generating company as a whole shall be considered:

Provided further that if the generating company 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.”;

- 4.24 Accordingly, the Commission has used the rate of interest proposed by the Petitioner, for calculation of tariff in this Order, subject to true-up later.
- 4.25 The repayments and interest charges on the remaining normative loans considered by the Commission for determination of tariff for FY 2024-25 to FY 2028-29 are discussed in the following paragraphs.

Normative Loan – 3

- 4.26 The Commission had approved a normative loan of Rs. 1.11 Crore with loan repayment tenure of 11 years, in the MYT Order dated 29.06.2019 for meeting the debt requirement of implementing FGMO/ RGMO.
- 4.27 The Commission has continued with the loan scheduled approved for this normative loan in its previous True-up and MTR Order dated 16.05.2023, and allowed the repayment and interest charge as follows:

Table 11: Normative Loan-3 Repayment and Interest approved for FY25 to FY29 (Rs. Cr.)

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Opening balance	0.63	0.54	0.45	0.36	0.27
Addition	-	-	-	-	-
Principal Repayment	0.09	0.09	0.09	0.09	0.09
Closing Balance	0.54	0.45	0.36	0.27	0.18
Interest Rate	8.07%	8.07%	8.07%	8.07%	8.07%
Approved Interest	0.05	0.04	0.03	0.03	0.02

Normative Loan– 4

- 4.28 The Commission had approved a normative loan of Rs. 4.61 Crore with loan repayment tenure of 11 years, in the MYT Order dated 29.06.2019 for meeting the debt requirement towards additional capitalization of Rs. 6.58 Crores approved by Arbitral Tribunal vide Order dated 21.06.2018.
- 4.29 The Commission has continued with the loan scheduled approved for this normative loan in its previous True-up and MTR Order dated 16.05.2023, and allowed the repayment and interest charge as follows:

Table 12: Normative Loan-4 Repayment and Interest approved for FY25 to FY29 (Rs. Cr.)

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Opening balance	2.20	1.78	1.36	0.94	0.52
Addition	-	-	-	-	-
Principal Repayment	0.42	0.42	0.42	0.42	0.42

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Closing Balance	1.78	1.36	0.94	0.52	0.10
Interest Rate	8.07%	8.07%	8.07%	8.07%	8.07%
Approved Interest	0.16	0.13	0.09	0.06	0.03

Total Interest and Repayment

4.30 The following table depicts the total interest and repayment approved for the fifth Control Period.

Table 13: Total Interest and Repayments approved for FY25 to FY29 (Rs. Cr.)

Rs. Cr.	FY25	FY26	FY27	FY28	FY29
Interest Payments	0.21	0.17	0.13	0.08	0.04
Principal Repayments	0.51	0.51	0.51	0.51	0.51

Depreciation

4.31 In the previous Tariff/ True-up orders, the Commission has allowed depreciation and advance against depreciation for the plant, in accordance with the provisions under clause 8.6.5.1 of the PPA between BASPA-II HEP and HPSEBL, at a depreciation rate of 4.30% per annum. Only Rs. 27.78 Crores of depreciable value of the plant is remaining as on closing of FY 2023-24, which is less than 4.30% of plant’s GFA.

4.32 The Petitioner has suggested to calculate the depreciation in future years, by taking depreciation of each additional capitalization separately from its respective year of capitalization, at a depreciation rate of 4.30% per year, as follows:

Table 14: Depreciation proposed by Petitioner (Rs. Cr.)

Capital cost allowed	Total depreciation @ 90%	Depreciation till 31.3.24	Balance depreciation on 31.3.24	FY25	FY26	FY27	FY28	FY29
1533.96 cr.	1,380.56	1,374.41	6.15	6.15	-	-	-	-
95.88 cr.	86.29	69.27	17.02	4.12	4.12	4.12	4.12	0.54
2.57 cr.	2.31	1.46	0.86	0.11	0.11	0.11	0.11	0.11
6.58 cr.	5.92	1.66	4.27	0.28	0.28	0.28	0.28	0.28
De-capitalisation of (-) 0.65 cr.	-0.59	-0.09	-0.50	-0.03	-0.03	-0.03	-0.03	-0.03
Total 1638.34	1,474.51	1,446.70	27.80	10.64	4.49	4.49	4.49	0.91

4.33 It is observed that the remaining depreciation amount of the plant as on closing of FY2023-24, is primarily due to the additional capitalizations allowed in the previous orders. Taking cognizance of submissions made by the Petitioner and the Stakeholders

in this regard, the Commission has decided to spread the remaining depreciable value equally over the next five (5) years. This shall ensure an unvarying depreciation in the future years using a straightforward adjustment of the balance depreciation during the control period, in the interest of consumers.

Table 15: Depreciation approved for the fifth Control Period (Rs. Cr.)

Particular	FY24	FY25	FY26	FY27	FY28	FY29
Depreciable Value	1,474.51	1,474.51	1,474.51	1,474.51	1,474.51	1,474.51
Depreciation + AAD	70.45	5.56	5.56	5.56	5.56	5.56
Cumulative Depreciation + AAD	1,446.73	1,452.29	1,457.84	1,463.40	1,468.95	1,474.51
Remaining Depreciable value	27.78	22.22	16.67	11.11	5.56	0.00

- 4.34 The Advance Against Depreciation (AAD) provided in previous years as per provisions of the PPA has already been recovered back before FY2023-24 and hence does not impact depreciation in future years.

Operations and Maintenance Expenses

- 4.35 Clause 8.7.2 of the PPA, allows for O&M escalation at weighted average of WPI and CPI indices, 11th year onwards after COD. Clause 8.7.2 of the PPA states that:

"Operation and maintenance charges including Insurance expenses for the initial tariff year shall be calculated at the rate of 1.25% (one and a quarter percentage) of the capital cost. These charges shall be escalated for each year subsequent to the initial tariff year, every year by 6% (compounded annually) for the first ten tariff years. Thereafter the escalation for each year shall be computed as per the formula given in Schedule XI"

- 4.36 The Part B of the Schedule XI of the PPA which deals with escalation in O&M charges reads as under:

"The rate of Escalation in operation and maintenance charges shall be worked out for each tariff year after the expiry of first ten year, as per the following formula in terms of section 8.7.2

$$\text{Percentage rate of annual escalation} = 0.3 \times \frac{W_1 - W_2}{W_0} + 0.7 \times \frac{L_1 - L_2}{L_0}$$

Where

W_1 = Index Number of wholesale prices in India (All Commodities) (1981-82 = 100) , as published by reserve bank of India (R.B.I) , for the month of march of the financial year for which annual escalation to be worked out

W_0 = Index Number of wholesale prices in India (All Commodities) (1981-82 = 100) , as published by reserve bank of India (R.B.I) , for the month of march immediately preceding the financial year for which annual escalation is to be determined

L_1 = Consumer price index for Industrial Workers (All India) (1981-82 = 100), as published by reserve bank of India (R.B.I) , for the month of march of the financial year for which annual escalation to be worked out

L_0 = Consumer price index for Industrial Workers (All India) (1981-82 = 100), as published by reserve bank of India (R.B.I) , for the month of march immediately preceding the financial year for which annual escalation is to be determined

Note: i) Pending determination of annual rate of escalation for such tariff years for which annual escalation is to be allowed on actual basis as per section 8.7.2 on the basis of above formula, the rate of escalation worked out for the 12 months period ending on last day of the month of December immediately preceding the relevant tariff year on similar basis shall be adopted on provisional basis for purpose of section 8.14. Final adjustment on this account shall be made as soon as the published indices for the month of March of that tariff year become available.”

4.37 As per the provision of PPA, the CPI and WPI index to be considered for computation of escalation rate should be of 1981-82 series as published by the RBI. However, since 1981-82 series of CPI and WPI indices have been discontinued, the Commission has considered the latest available series of CPI and WPI index in line with approach followed in previous orders.

4.38 The table below summarizes the computation of escalation factor as per the provisions of the PPA:

Table 16: WPI and CPI considered for calculation of O&M escalation factor

Particulars	2021-22	2022-23
WPI All Commodities (base year 2011-12)		
For the month of March	148.9	151.0
Change		1.41%
CPI for Industrial Workers (Base year 2001)		
For the month of March	126.0	133.3
Change		5.79%
Escalation factor		4.48%

- 4.39 The Commission has computed the O&M expense as per the provisions of the PPA using the escalation factor calculated above and the approved capital cost (including additional capitalization). Further, O&M expenses on account of decapitalization of assets during FY2019-20 to FY 2021-22 have been adjusted in the respective year's O&M expenses and additional O&M expenses towards the new assets have been accounted. The O&M expense towards additional capitalization has been considered @1.25% of the approved capitalization in the first year. Thereafter, O&M expense for subsequent years is calculated using the approved escalation factor of 4.48% as discussed above.
- 4.40 The Commission in MYT Order dated 06.06.2014 had approved additional O&M expenses of 0.25% towards ICF facility, from Petitioner to SJVNL, from the date of commissioning of the project. In this respect, the Commission has continued with the methodology used in previous Orders. Also, service tax (18% GST) on the O&M cost for ICF has been considered as per the practice adopted in previous Orders.
- 4.41 Further the Commission observed that while calculating the O&M expense for base year of FY2023-24, the Petitioner used a higher escalation rate for O&M towards ICF facility. In its reply to the clarification sought by the Commission, the Petitioner stated that in true-up of FY2021-22, ICF O&M of Rs. 2.42 Crores was allowed by the Commission, while actual expenditure incurred was Rs. 2.62 Crores. The Petitioner added this additional amount in FY 2022-23, leading to higher escalation. The Commission has not considered this additional expenditure in its calculation of ICF O&M, as this expenditure does not pertain to the period under review and True-up of FY2021-22 has already attained finality.
- 4.42 The total O&M expenses approved for the Control Period FY 2024-25 to FY 2028-29 are detailed in table below:

Table 17: O&M Expenses approved for fifth Control Period (Rs. Cr.)

Particulars	FY 25	FY 26	FY 27	FY28	FY29
Base O&M Expenses (adjusted for de-capitalization)	50.41	52.67	55.03	57.49	60.07
Add: O&M expense towards additional capitalization of Rs. 94.08 Cr.	2.61	2.73	2.85	2.98	3.11
Add: O&M expense towards additional capitalization of Rs. 67.23 Cr. (for ICF facility)	2.96	3.14	3.33	3.52	3.73
Add: Service Charge on ICF O&M Expenses	0.53	0.56	0.60	0.63	0.67
Add: O&M expense towards additional capitalization of Rs. 1.59Cr.	0.02	0.02	0.02	0.02	0.03
Add: O&M expense towards additional capitalization of Rs. 6.58 Cr.	0.08	0.09	0.09	0.10	0.10
Total O&M Expenses Approved	56.63	59.21	61.92	64.75	67.71

Return on Equity (RoE)

4.43 As per the Section 8.7.3 of the PPA:

"Return on Equity for each tariff year from the initial tariff year onwards will be calculated at a per annum rate of 16% (sixteen percent) of the equity component of the capital cost as per approved financial package. The return on equity for the tariff period and the last tariff year shall be worked out on proportionate basis for actual number of days for which such return on equity is to be determined."

4.44 The Commission has approved the Return on Equity (RoE) as per Section 8.7.3 of the PPA and has computed the same at 16% per annum on the approved equity base.

Table 18: Return on Equity approved for fifth Control Period (Rs. Cr.)

Rs. Cr.	FY 25	FY 26	FY 27	FY 28	FY 29
Closing Balance of Equity	491.50	491.50	491.50	491.50	491.50
Rate Of Return	16%	16%	16%	16%	16%
Return on Equity	78.64	78.64	78.64	78.64	78.64

Interest on Working Capital

4.45 As per clause 8.7.4 of the PPA:

"Interest on working capital shall be accounted for at the SBI lending rate as applicable from time to time for the secured loans. For this purpose the working capital shall consist of:-

- i) *The Operation and Maintenance (O&M) charges for one month:*
- ii) *Maintenance spares at actual but not exceeding one year's requirement less value of one fifth of initial spares already capitalized. The value of maintenance spares for one year requirement shall be taken as 12% of the O&M charges for that tariff period/ tariff year.*
- iii) *Receivables equivalent to two months of average billing for sale of electricity*

4.46 The rate of interest for calculating the interest on working capital has been taken as per the SBI PLR of 15.00% as on 1st April 2024 for the entire Fifth Control Period. The interest on working capital shall be trued up based on the actual SBI PLR applicable as on 1st April of each year.

Table 19: Interest on Working Capital approved for fifth Control Period (Rs. Cr.)

Rs. Cr.	FY 25	FY 26	FY 27	FY 28	FY 29
1/12th of O&M Expenses	4.72	4.93	5.16	5.40	5.64
Maintenance Spares 12% of O&M Expenses	6.80	7.11	7.43	7.77	8.13
Receivables equivalent to 2 months average billing	26.28	26.75	27.24	27.75	28.29
Total Working Capital	37.80	38.79	39.83	40.92	42.05
<i>Rate of Interest</i>	15.00%	15.00%	15.00%	15.00%	15.00%
Interest on Working capital	5.67	5.82	5.97	6.14	6.31

Incentive for Secondary Energy and Higher Plant Availability

4.47 As per the Section 8.9.1 of the PPA:

"The per unit rate for saleable secondary energy (i.e. 88% of the secondary energy available at interconnection point at Jhakri) shall be calculated by dividing 10% return on equity with normative saleable Secondary energy amounting to 155 MU at Jhakri. The charges for the saleable Secondary energy for any tariff year shall not exceed 10% Return on Equity..."

4.48 Further, as per the Section 8.10 of the PPA, the incentive towards higher plant availability factor is required to be computed as below:

"In case the Plant Availability level in a Tariff year, as determined in accordance with Schedule I, exceeds the normative level of 90%, the Company shall be entitled to an incentive at the rate of 0.35% of Equity component of the capital cost as per the approved financial package for each percentage increase in plant availability above 90% normative level during the year when plant availability is more than 90%. The amount of this incentive payable for any tariff year shall not exceed 2% Return on Equity. The ceiling for the initial and last tariff period shall be worked out on pro-rata basis. Incentive shall be payable at the end of each tariff year/ tariff period."

4.49 The Petitioner has claimed no incentive for higher Plant Availability and Secondary Energy, stating that same shall be claimed during respective year's true up based on actual plant availability and secondary energy achieved.

4.50 Accordingly, the Commission has not considered any secondary energy generation or higher than normative plant availability for the purpose of approval of the ARR/ Tariff for the fifth Control Period. The incentives shall be billed by the Petitioner to HPSEBL as per the actual generation and plant availability in the applicable tariff for each year in accordance with the provisions of the PPA and the Commission shall true up the same.

Income Tax

- 4.51 As per Clause 8.11 of the PPA, the Tax on Income is payable as an expense to the Petitioner by the HPSEBL. Clause 8.11.1 states:

“Income Tax payable by the Board shall be determined by considering the income to the company on account of ROE (not exceeding 16%), depreciation/ advance against depreciation as applicable, and 50% of income on account of incentives as per Section 8.9 and 8.10, in respect of the project as per income tax law. Rebate on account of depreciation and any other rebate/ exemption admissible under law shall be considered for the purpose of calculation on tax liability of the Board.

Under no circumstances tax liability payable by the Board shall be more than income tax actually payable by the Company.

No Income tax shall be payable by the Board on any other income accrued to the Company.”

- 4.52 The Petitioner has filed computation of income tax on the basis of prevalent MAT Rate of 17.47%, as approved by the Commission in its MTR Order for FY2023-24 dated 16.05.2023.
- 4.53 The Commission feels appropriate to continue with the MAT Rate for calculation of income tax in view of the Petitioner’s submissions. The actual tax paid by the Petitioner would be considered at the time of true-up of fifth Control Period based on the submissions of the Petitioner and prudence check.
- 4.54 The income tax approved by the Commission for fifth Control Period is provided in table below:

Table 20: Approved Income Tax for FY 25 to FY 29 (Rs. Cr.)

Rs. Cr.	FY 25	FY 26	FY 27	FY 28	FY 29
Return on Equity	78.64	78.64	78.64	78.64	78.64
Incentive for secondary energy	0.00	0.00	0.00	0.00	0.00
Incentive for higher plant availability	0.00	0.00	0.00	0.00	0.00
Add: Depreciation	5.56	5.56	5.56	5.56	5.56
Subtract: Income Tax Depreciation	21.74	21.03	20.35	19.69	19.06
Taxable Income	62.45	63.16	63.85	64.50	65.14
Tax Rate	17.47%	17.47%	17.47%	17.47%	17.47%
Income Tax	10.91	11.04	11.16	11.27	11.38

Application fees

- 4.55 The Commission has allowed an Application Fees of Rs. 7.5 lacs per annum in line with the HPERC Conduct of Business Regulations, 2005, as amended from time to time.

Annual Fixed Charge for BASPA II HEP

4.56 The total Annual Fixed Charges for the BASPA-II, with the components of the capacity charges, primary energy charges and incentives and taxes approved for the Control Period and detailed in the previous sections in this chapter, are summarized below:

Table 21: Annual Fixed Charge approved for BASPA-II HEP for fifth Control Period (Rs. Cr.)

Particulars	FY 25	FY 26	FY 27	FY 28	FY 29
Capacity Charges					
Interest on outstanding loans	0.21	0.17	0.13	0.08	0.04
Depreciation	5.56	5.56	5.56	5.56	5.56
Application fee	0.08	0.08	0.08	0.08	0.08
Sub-total Capacity Charges	5.84	5.80	5.76	5.71	5.67
Primary Energy Charges					
O&M Charges	56.63	59.21	61.92	64.75	67.71
Return on Equity	78.64	78.64	78.64	78.64	78.64
Interest on Working Capital	5.67	5.82	5.97	6.14	6.31
Sub-total Primary Charges	140.94	143.67	146.54	149.53	152.66
Incentives and Taxes					
Incentive for Secondary Energy	0.00	0.00	0.00	0.00	0.00
Incentive for Higher Plant Availability	0.00	0.00	0.00	0.00	0.00
Tax	10.91	11.04	11.16	11.27	11.38
Sub-total Incentives and Taxes	10.91	11.04	11.16	11.27	11.38
Total Annual Fixed Charges	157.69	160.51	163.45	166.52	169.72

4.57 The Approved Tariff for the BASPA-II for the Fifth Control Period is given in the table below:

Table 22: Approved Tariff for fifth Control Period

Particulars	Units	FY 25	FY 26	FY 27	FY 28	FY 29
Energy Generation						
Saleable Primary Energy	MU	1050.06	1050.06	1050.06	1050.06	1050.06
Saleable Secondary Energy	MU	0	0	0	0	0
Total Generation	MU	1050.06	1050.06	1050.06	1050.06	1050.06
Total Annual Fixed Charges	Rs. Cr.	157.69	160.51	163.45	166.52	169.72
Tariff for Total Energy	Rs./Kwh	1.50	1.53	1.56	1.59	1.62

Revision in Design Energy of the Baspa HEP

4.58 The Commission has noted that the actual power generation from the Baspa HEP since COD of the Plant has been significantly higher, barring initial few years, as compared to the design energy of the Plant. The detail of the actual energy generation for the last 20 years from the Baspa HEP, based on the monthly billing to the HPSEBL, has been as under:

Table 23: Baspa II Energy Generation (based on monthly billing to HPSEBL)

Year	Total Energy at delivery point (ICF Jhakri)	GoHP Energy (@12%)	Saleable Energy (@88%)	Saleable Design Energy (Primary Energy)	Secondary Energy beyond Design Energy	Excess to Secondary Energy limit of 155MUs (free of cost)
	(in MU)	(in MU)	(in MU)	(in MU)	(in MU)	(in MU)
2003-04	1125.85	135.10	990.75	1050.06	0.00	0
2004-05	1184.01	142.08	1041.93	1050.06	0.00	0
2005-06	1168.75	140.25	1028.50	1050.06	0.00	0
2006-07	1274.48	152.94	1121.54	1050.06	71.48	0
2007-08	1274.16	152.90	1121.26	1050.06	71.20	0
2008-09	1285.75	154.29	1131.46	1050.06	81.40	0
2009-10	1294.35	155.32	1139.03	1050.06	88.97	0
2010-11	1467.74	176.13	1291.61	1050.06	241.55	86.55
2011-12	1391.30	166.96	1224.34	1050.06	174.28	19.28
2012-13	1226.54	147.18	1079.36	1050.06	29.30	0
2013-14	1330.69	159.68	1171.01	1050.06	120.95	0
2014-15	1242.40	149.09	1093.31	1050.06	43.25	0
2015-16	1295.76	155.49	1140.27	1050.06	90.21	0
2016-17	1327.69	159.32	1168.36	1050.06	118.30	0
2017-18	1322.00	158.64	1163.36	1050.06	113.30	0
2018-19	1261.47	151.38	1110.09	1050.06	60.03	0
2019-20	1338.17	160.58	1177.59	1050.06	127.53	0

Year	Total Energy at delivery point (ICF Jhakri)	GoHP Energy (@12%)	Saleable Energy (@88%)	Saleable Design Energy (Primary Energy)	Secondary Energy beyond Design Energy	Excess to Secondary Energy limit of 155MUs (free of cost)
2020-21	1296.49	155.58	1140.91	1050.06	90.85	0
2021-22	1305.89	156.71	1149.18	1050.06	99.12	0
2022-23	1338.07	160.57	1177.50	1050.06	127.44	0

4.59 From the above Table, it has been quite evident that the Baspa HEP has generated more energy than the design energy for the seventeen (17) years out of the last twenty (20) years. Also, it can be seen that the lesser energy generation to that of the design energy was only for the initial three years of the operation of the Plant. From the year 2006-07 onwards, there has not been even a single year when the actual generation has been less than the design energy. This clearly shows that hydrological series computed for generation of energy needs review. Therefore, the Commission is of the firm view that the design energy of the Plant needs to be studied based on the latest details/data available. Accordingly, the Commission hereby directs the Directorate of Energy to constitute a Committee of experts familiar with the subject matter (hydrology and hydropower) for the same. The mandate for the Committee shall be to analyse the hydrological data and based on such analysis, compute the design energy generation from the Project. This Committee shall submit its report, within three months from the issuance of this Order, to the Directorate of Energy, with a copy to the Commission. The Directorate of Energy based on the recommendations in report of the said Committee shall review the design energy of the Baspa-II HEP and submit the same to the Commission.

Directives

4.60 The Commission issues following directives to the Petitioner:

1. The Petitioner shall supply power to HPSEBL as per tariff approved for fifth control period in this order.
2. The Petitioner shall take necessary steps required for generating power during peak period.
3. The Petitioner shall periodically inform Commission of the progress in the matter of Petition filed with Hon'ble CERC for grant of transmission license in respect to Karcham Wangtoo – Jhakri portion of BASPA II – Jhakri Transmission line. Also,

the Petitioner shall take all necessary steps to promptly file a Petition for tariff determination of Karcham Wangtoo – Jhakri portion of BASPA II – Jhakri Transmission line with Hon'ble CERC, at appropriate stage.

4. Submit to the Commission a copy of performance/ periodic tests reports undertaken in accordance with the provisions of the PPA, within a month of the issuance of this order or the conduct of test, whichever is earlier.

Sd/-
(SHASHI KANT JOSHI)
Member

Sd/-
(YASHWANT SINGH CHOGAL)
Member Law

Sd/-
(DEVENDRA KUMAR SHARMA)
Chairman

Shimla

Dated: 12.06.2024