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FORM-I

Application Form for Grant of Transmission licence

1.	**Particulars of the Applicant**	
i)	Name of the Applicant	JSW Hydro Energy Ltd (JSWHEL) (formerly known as Himachal Baspa Power Company Limited - HBPCL)
ii)	Status	Public Limited Company
iii)	Address	Sholtu Colony, P.O. Tapri, Kinnaur, H.P. 172104
iv)	Name, Designation & Address of the Contact Person	**Anurag Agarwal, General Manager,** NTH Complex, 4th Floor, A-2, Shaheed Jeet Singh Marg, Qutub Institutional Area, New Delhi- 110067
v)	Contact Tel. No.	+91-9004046998
vi)	Fax No.	+91-11-48178699
vii)	Email ID	agarwal.anurag@jsw.in
viii)	Place of Incorporation/Registration	Kinnaur, Himachal Pradesh
ix)	Year of Incorporation/ Registration	2014
x)	Following documents are to be enclosed	
	a) Certificate of registration	**Both in the name of HBPCL and after name change to JSWHEL**
	b) Original Power of Attorney of the signatory to commit the Applicant or its promoter	Board Resolution dt. 2.7.2021 is enclosed

JSW Hydro Energy Limited

2	**Particulars of the Project for which license is being sought**			
(a)	Transmission Lines			
S.No.	Name (end-points location)	Voltage Class (kV)	Length (Km)	Type (S/C or D/C)
1.	Wangtoo-Jhakri portion of Baspa Jhakri Transmission line	400 kV	35.22 K.M.	D/C

(b)	Sub-Stations				
S.No.	Name (location)	Voltage Level(s)(kV)	Transformer(Nos. and MVA capacity)	Reactive / capacitive compensation (devicewith MVAR capacity)	No. of bays
1		**Not applicable**			

(c)	Commissioning schedule	Transmission line COD 24.5.2003, along with COD of 1st unit of Baspa II (approval received from Chief Electrical Inspector, HP dt. 21.11.02)
(d)	Identified Long-term transmission customers of the Project (Agreements or status of discussion on Agreements to be submitted along with application)	Baspa II HEP i. Himachal Pradesh State Electricity Board, Vidyut Bhawan, Shimla-171 001 KWHEP i. Himachal Pradesh State Electricity Board, Vidyut Bhawan, Shimla-171 001 ii. Haryana Power Purchase Centre, Vidyut Sadan, IP No.: 3&4, Sector-14, Panchkula, Haryana -134113 iii. Punjab State Power Corporation Ltd, The Mall, Patiala-147001 iv. UP Power Corporation Ltd, Shakti Bhawan, 14, Ashok Marg, Lucknow-226001 v. Jaipur Vidyut Vitran Nigam Limited, Vidyut Bhawan, Janpath, Jaipur-302005 vi. Ajmer Vidyut Vitran Nigam Limited, Vidyut Bhawan, Panchsheel Nagar, Makarwali Road, Ajmer-305004 vii. Jodhpur Vidyut Vitran Nigam Limited, New Power House, Industrial Area, Jodhpur-342003



(e)	Any other relevant information	As per attached **Annexure 1**
3.	Levelised transmission charges in case of project selected through the transparent process of competitive bidding and estimated completion cost of the project in other cases *(The levelised transmission charges estimated cost should be indicated in INR, along with the base month and year in case of the estimated cost)*	
	Not applicable	
4.	In case applicant has been selected in accordance with the guidelines for competitive bidding, enclose	
(a)	Recommendation of selection by the Empowered Committee	**Not applicable**
(b)	Evaluation report made public by the Bid Process Coordinator	**Not applicable**
5.	List of documents enclosed	
	Name of document	
	a) Certificate of incorporation of the Company HBPCL and after name change to JSWHEL b) Board Resolution for authorization to file petitions/ appeals/ applications c) Annexure I for other details of the T/L asset, along with supporting annexures mentioned in Index table	

JSW Hydro Energy Limited

Dated: 16.8.2023
Place: New Delhi

(Signature of Applicant or the person Authorised)

006

प्रारुप 1
पंजीकरण प्रमाण-पत्र

कॉर्पोरेट पहचान संख्या : U40101HP2014PLC000681 2013 - 2014

मैं एतद्द्वारा संस्थापित करता हूँ कि मैसर्स

HIMACHAL BASPA POWER COMPANY LIMITED

का पंजीकरण कम्पनी अधिनियम 1956 (1956 का 1) के अंतर्गत आज किया जाता है और यह कम्पनी लिमिटेड है।

यह निगमन-पत्र आज दिनांक चौदह मार्च दो हजार चौदह को हिमाचल प्रदेश में जारी किया जाता है।

Form 1
Certificate of Incorporation

Corporate Identity Number : U40101HP2014PLC000681 2013 - 2014

I hereby certify that HIMACHAL BASPA POWER COMPANY LIMITED is this day incorporated under the Companies Act, 1956 (No. 1 of 1956) and that the company is limited.

Given at Himachal Pradesh this Fourteenth day of March Two Thousand Fourteen

Registrar of Companies, Himachal Pradesh
कम्पनी रजिस्ट्रार, हिमाचल प्रदेश

*Note: The corresponding form has been approved by SHYAM NARAYAN TIWARY, Assistant Registrar of Companies and this certificate has been digitally signed by the Registrar through a system generated digital signature under rule 5(2) of the Companies (Electronic Filing and Authentication of Documents) Rules, 2006.
The digitally signed certificate can be verified at the Ministry website (www.mca.gov.in).

कम्पनी रजिस्ट्रार के कार्यालय अभिलेख में उपलब्ध पत्राचार का पता :
Mailing Address as per record available in Registrar of Companies office:
HIMACHAL BASPA POWER COMPANY LIMITED
JUIT COMPLEX, WAKNAGHAT, P.O. DUMEHAR BANI,
KANDAGHAT - 173215.
Himachal Pradesh, INDIA

JSW Hydro Energy Limited

JSW Hydro Energy Limited
Regd Off: Karcham-Wangtoo H. E.
Project Sholtu Colony, P O. Tapri -
172104 District Kinnaur (Himachal
Pradesh)
CIN : U40101HP2014PLC000681
Phone: +91 9816507000, 9805002039
Fax : 01786-261258

Certified True Copy of the Resolution passed by the Finance Committee of JSW Hydro Energy Limited at the Meeting held on Friday, 2nd July, 2021

Authorization in connection with the legal matters of the Company

"RESOLVED THAT in supersession of the previous resolution passed by the Board of Directors on 2nd November, 2020 and the authority vested in the Finance Committee by the Board of Directors at its meeting held on 2nd November, 2020 in this regard, the following persons:

Mr. Prashant Jain, Chairman
Mr. Gyan Bhadra Kumar, Whole-time Director
Mr. Pritesh Vinay, Director
Mr. Perveen Puri, Head of Plant
Mr. Sanjeev Kango, Chief Financial Officer and Company Secretary
Mr. Kaushik Maulik, Head of Plant (Designate)
Mr. Ravi Sabharwal
Mr. Kunal Mehta
Mr. Ritesh Parshad
Mr. Tushar Borse
Mr. C.R. Lakshman
Mr. Jyotiprakash Panda
Mr. Anurag Agarwal
Mr. Sanjeev Kumar

be and are hereby severally authorised for and on behalf of the Company, to:

1. sign, file, declare, affirm, etc. any returns, declarations, undertakings etc. as may be required in connection with all statutory, taxation and legal matters of the Company.

2. institute, prosecute, defend, oppose, withdraw, appear, appeal, compromise, refer to arbitration, abandon, submit to judgement, proceed to judgement and execution or become non-suited in any legal proceedings and demands including matters on civil, criminal, labour, revenue, taxation, etc., generally or otherwise.

3. attend, to sign any petition, appeals, applications, forms, deeds and documents as may be required to be submitted / filed before Himachal Pradesh Electricity Regulatory Commission (HPERC) / Central Electricity Regulatory Commission (CERC) / Appellate Tribunal for Electricity (APTEL) / Supreme Court etc. or any other Regulatory Body, as also for filing of any other matters connected or incidental thereto.

4. declare, swear and affirm all plaints, petitions, counter affidavits, complaints and other documents and to file indemnity bonds, guarantees, warrants, etc. as may be necessary.

JSW Hydro Energy Limited

5. appear before any Judge, Magistrate, Tribunal Member or other officer or authority empowered by law in any suit or proceedings or any other inquiry relating to the Company or in which the Company may be interested.

6. to accept services of notice or processes.

7. give security or indemnities for costs, to pay money into Court and to obtain payment of money lodged in Court and also in connection with any such legal proceedings or demand as aforesaid.

8. appoint pleaders and to sign and give warrants, vakalatnamas and other necessary authorities and such retainer and authorisation as may be necessary, from time to time.

9. delegate / confer all or any of the powers, authorities and liberties hereinabove vested, to any other person(s) / Consulting Service Agency/ Advisors/ Law Firm, by way of a Power of Attorney / Letter of Authority or any other mode if required; and to appoint any substitute or substitutes limited to any one or more purpose or purposes as they shall, from time to time, deem fit.

RESOLVED FURTHER THAT certified true copy of the aforesaid resolution under the signature of any one Director or the Company Secretary be forwarded to such persons or authorities as may be required."

Certified True Copy
For JSW Hydro Energy Limited

Sanjeev Kango
Company Secretary
ACS 59939

JSW Hydro Energy Limited

JSW Hydro Energy Limited

Annexure-1

JSW Hydro Energy Ltd

Subject: Application for transmission license in respect of Karcham Wangtoo Jhakri portion of Baspa Jhakri D/C transmission line.

JSW Hydro Energy Ltd. (JSWHEL), the applicant herein (formerly known as Himachal Baspa Power Company Limited (HBPCL)) is a "generating company" as defined in Section 2 (28) of the Electricity Act 2003 (hereinafter referred to as the "**Act**") having its registered office at Sholtu Colony, P.O. Tapri, Kinnaur, H.P. 172104, inter-alia, owns operates and maintains

i. 300 MW (100 MW *3) Baspa II HEP and;

ii. 1045 MW (261.25 MW* 4) Karcham Wangtoo H.E.P (KWHEP) in the state of Himachal Pradesh.;

Background

1. Baspa II Hydro Electric Project:

Baspa II HEP is a 300 MW plant situated on River Baspa (a tributary of River Satluj, District Kinnaur, Himachal Pradesh) with three units each of 100 MW.

An MOU was executed between the Government of Himachal Pradesh (GoHP) and Jaiprakash Industries Ltd (JIL) on 23.11.1991 for the implementation of hydroelectric power generation project at Baspa-II (300MW) in Kinnaur district of Himachal Pradesh. After above MoU, GoHP and JIL has signed an agreement for implementation (IA) of the project on 01.10.1992.

JSW Hydro Energy Limited

The Central Electricity Authority has approved the said project including the construction of transmission line from the project to Naptha Jhakri Switchyard vide its TEC letter dated 29.04.1994.

JIL assigned the aforesaid IA dt 1.10.1992 to its subsidiary company named as Jaiprakash Hydro Power Limited (JHPL) with the consent of GoHP, vide a tripartite agreement dated 17.10.1995.

On 04.06.1997, a Power Purchase Agreement (PPA) was executed between JHPL and Himachal Pradesh State Electricity Board Ltd. (HPSEBL) for sale of Power from Baspa II HEP to HPSEBL.

Pursuant to a scheme of amalgamation sanctioned by the High Court of Himachal Pradesh vide its order dated 20.11.2009, Jaiprakash Power Ventures Limited (JPVL) amalgamated into JHPL effective on 01.04.2009, subsequent to the amalgamation, JHPL was renamed as "Jaiprakash Power Ventures Limited" (JPVL).

(Copy of the implementation agreement dated 1.10.1992, TEC dated 29.4.1994, supplementary implementation agreement dated 21.10.2019 and PPA dated 4.6.1997 is enclosed and marked Colly. as **Annexure A1**.)

2. Karcham Wangtoo Hydro Electric Project:

Jaypee Karcham Hydro Corporation Limited (JKHCL) has implemented the 1000 MW Karcham Wangtoo HEP comprising of 4 units of 250 MW each. JKHCL got amalgamated with Jaiprakash Power Ventures Limited vide scheme of amalgamation approved by the Hon'ble High Court of

JSW Hydro Energy Limited

Himachal Pradesh vide its order dated 25.7.2011 in Petition No. 19 of 2011.

3. Thereafter, pursuant to scheme of arrangement approved by Hon'ble High Court of Himachal Pradesh vide order dated 25.6.2015, all assets, liabilities, rights and privileges of JPVL pertaining to 1000MW KWHEP & 300MW Baspa II HEP stood transferred to Himachal Baspa Power Company Ltd. (HBPCL) with effect from 1.9.2015; and transfer of shareholding of HBPCL from JPVL to JSW.

4. The name of company Himachal Baspa Power Company Limited has been changed to JSW Hydro Energy Limited vide approval of Registrar of Companies dt. 11.09.2018.

5. Later, the installed capacity of the Karcham Wangtoo HEP has been uprated by CEA vide its approval dated 29.4.2021 from 1000 MW to 1045 MW (261.25 MW *4)

(Copy of Certificate of incorporation after name change from HBPCL to JSWHEL dated 11.9.2018 and CEA approval letter for capacity uprating of KWHEP dated 29.4.2021 is enclosed and marked Colly. as **Annexure A2**.)

FACTS REGARDING THE TRANSMISSION LINE:

6. Approval from Chief Electrical Inspector HP dated 21.11.2002 was received towards charging of 54.78 km long associated transmission line of Baspa II HEP. (**Annexure A3**)

JSW Hydro Energy Limited

7. Baspa II HEP achieved commercial operation (COD) on 8.6.2003. Since then, it has been supplying the power to HPSEBL and generation tariff for the same is being determined by Hon'ble HPERC. The associated transmission line of Baspa II HEP has been considered as part of the capital cost of the generating station since inception by the Hon'ble HPERC.

8. KWHEP achieved COD on 13.9.2011; and has been supplying the power generated to PTC India Ltd., which in turn, is supplying the same to HPPC, PSPCL, UPPCL & Discoms of Rajasthan. The generation tariff for KWHEP is being determined by this Hon'ble Commission.

9. Prior to COD of KWHEP, a LILO arrangement was made on the associated transmission line of Baspa II HEP, for evacuation of power from KWHEP, since Karcham Wangtoo Abdullapur 400 kV D/C transmission line was not ready.

10. The said arrangement was approved as an interim arrangement in the meeting dated 7.9.2011 held at CEA. (**Annexure A4**)

This LILO portion and Karcham Wangtoo Abdullapur 400 kV DC transmission line is owned by Jaiprakash Powergrid Limited (now Grid Controller of India).

11. This Hon'ble Commission has granted a transmission license to Jaypee Powergrid Ltd vide its order dated 01.10.2007 in petition no. 44/2007 for construction and maintenance of the transmission lines and facilities to be used for evacuation of power from Karcham Wangtoo HEP to the Central Transmission Utility's Abdullapur sub-station located in the state of Haryana, including the LILO on 400kV D/C Baspa-Nathpa Jhakri

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transmission line at Wangtoo. Later, transmission tariff for Jaypee Powergrid Ltd., including the LILO on the associated transmission line from Baspa II HEP, was approved by this Hon'ble Commission vide its order dt. 7.5.2015 in petition no. 37/TT/2011. (**Annexure A5**) As such, beyond the LILO at Wangtoo, up to Jhakri substation, inter-state power is being transmitted on the ~ 35 km portion of the line in question.

FACTS LEADING UP TO THE DIRECTION OF HPERC TO HAVE THE TRANSMISSION TARIFF DETERMINED FOR THE KARCHAM WANGTOO JHAKRI PORTION OF THE ASSOCIATED TRANSMISSION LINE OF BASPA II HEP, BY THIS HON'BLE COMMISSION:

12. HPSEBL filed a petition no. 29 of 2017 with HPERC:

    a. To get the portion of 400 kV Wangtoo Jhakhri D/C line declared as the inter-state transmission line, and approach the CERC, for determination of tariff, for the said portion.

    b. .....

    c. .....

13. Said petition was disposed by HPERC vide its order dated 8.12.2017 (**Annexure A6**), viz:

> *17. We are therefore, of the considered opinion that CTU, the CEA and NLDC are the necessary parties, the petition without inpleading them is not maintainable, and further in light of the foregoing discussion and the Hon'ble CERC order dated 7.5.2015, since the parties themselves have agreed as per the undertaking of M/s JPVL, for LILO of Baspa-Jhakhri 400 kV D/C transmission line at Wangtoo, final decision for metering arrangement for Baspa II HEP energy and payment of transmission charges etc. by the concerned agencies shall be taken by the Appropriate Regulatory Commission, accordingly, after decision of Appropriate Commission, a supplementary agreement is to be entered into between HPSEBL & M/s JPVL.*

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14. Later, during Tariff truing up and Multi Year Tariff proceedings of Baspa II HEP, HPERC in its orders dated 31.10.2018, 29.6.2019 & 7.7.2020 advised the Applicant & Respondent no. 1 to discuss and take future steps in this regard. (Colly. **Annexure A7**)

The Applicant vide its status report dated 27.7.2020 informed HPERC about the steps taken on the subject:

....

In compliance to the directions of the Hon'ble Commission, Petitioner had initiated meetings with HPSEBL on 2.9.2019 and 12.12.2019 to discuss the modalities and documentation. Communications and minutes in this regard are enclosed as Annexure 1 Colly. Due to the unprecedented outbreak of Covid 19 in the Nation, further meetings could not take place with HPSEBL.

The Petitioner humbly submits that upon study of the documents, related orders issued by this Hon'ble Commission, following issue arise which has a material impact on the Multi Year Tariff (MYT) being approved for Baspa II HEP:

i. *Hon'ble Commission in its order dated 8.12.2017 in petition no. 29 of 2017 has stated in para 9(4):*
The Baspa II HEP Tariff which is determined by HPERC since beginning is based on the integrated capital cost i.e. capital cost of the hydro-electric power generation assets and capital cost of transmission assets, shall need to be adjusted suitably .....

ii. *Comparison of tariff, pertaining to the transmission line which needs to be excluded from project cost of Baspa II HEP, between HPERC Tariff regulations and CERC Tariff regulations reveal that there is reduction in ARR of average Rs. 4-5 crores p.a. (Annexure 2)*

iii. *Since beginning of the proceeding related to capital cost exclusion of Karcham Wangtoo – Jhakhri transmission line, HPSEBL has apprehension that the ARR excluded from Baspa II HEP capital cost would be allowed almost same under the CERC Tariff regulation for the Transmission line and there would not be any revenue loss to the Petitioner.*

Based on the above submission, Petitioner requests this Hon'ble Commission to kindly advise methodology for the recovery of loss of ARR, if Tariff approved by CERC is substantially low as against the Tariff being allowed under HPERC Tariff regulations.

15. Now, vide its order dated 16.5.2023, HPERC has again advised the Applicant (**Annexure A8**) as under:

4.26 In regard to the Status Report provided by the Petitioner, the Commission observes that it is neither under the purview nor under the powers of this Commission

JSW Hydro Energy Limited

to comment on the impact of Order by any other Commission. Once the Order has been issued by the Appropriate Commission, the Commission may consider all the facts in the matter for appropriate adjustment of the cost

4.27 The Commission has already discussed the matter in detail in Orders dated 08.12.2017 and 31.10.2018(ibid).

4.28 The Commission further asked the Petitioner to clarify the reasons for not filing the Petition on the matter of Capital Cost exclusion of Karcham Wangtoo – Jhakri portion of Baspa Jhakri Transmission Line before the CERC. In response, the Petitioner in its reply dated 02.03.2023 stated that to the best of the Petitioner's understanding, the Commission in the earlier directions nowhere directed the Petitioner to file a Petition before the CERC. Further, the Petitioner stated that it has written a letter to Northern Regional Power Committee (NRPC) on 27.02.2023 to include the agenda for Capital Cost of Wangtoo Jhakri Transmission Line in the next OCC meeting and once the issue is taken up, the Commission shall be informed / approached for necessary orders/ directions in this respect

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. Inspite 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.*

It is the understanding of the Applicant, that without obtaining an Inter-State transmission license, the Petition for determination of tariff for a portion of the transmission line would not be considered by this Hon'ble Commission. Therefore, the Applicant is preferring the present application as a precursor to the filing of the transmission tariff petition.

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CAPITAL COST DETAILS OF THE PORTION FOR WHICH TRANSMISSION LICENSE IS SOUGHT:

16. The 400 kV Baspa-Jhakri D/C transmission line of 54.78 km is as depicted below:



---------- 54.78 km. Baspa-Jhakri 400 kV D/C transmission ----------

A line diagram of this Baspa-Jhakri transmission line is enclosed as **Annexure A9.**

As per the directions of HPERC in its order dt. 16.5.2023 as per Para 15 above, the Karcham Wangtoo – Jhakri portion of Baspa Jhakri Transmission Line is to be treated as ISTS and the applicant need to approach this Hon'ble Commission for the tariff of the said ISTS line (from Wangtoo to Jhakri CTU point).

17. Baspa II HEP project cost includes cost of power plant and a transmission line dedicated to the project from Baspa Power house to Nathpa Jhakri/ CTU Inter Connection Facility (ICF) at Jhakri. The capital cost of Baspa II HEP of Rs 1534 crore (inclusive of 54.78 km long transmission line) was first approved vide HPERC order dt. 24.2.2007.

The present capital cost of Baspa II HEP inclusive of additional capitalization allowed by HPERC is Rs. 1638.34 crore.

JSW Hydro Energy Limited

The prorata capital cost pertaining to Wangtoo Jhakri transmission line portion of Baspa Jhakri D/C transmission line, as extracted from HPERC tariff orders is Rs. 154.71 crore (Rs. 240.63 crore * 35.22 km/ 54.78 km)

18. It may also be noted that the carrying capacity of this transmission line has been reviewed at CEA in meeting dated 3.1.2020 wherein CTU & POSOCO had advised (while agreeing for an interim arrangement to Shongtong Karcham HEP) that SPS at planning stage may be avoided and termination at Wangtoo should be made reliable and planned without the implementation of SPS. (**Annexure A10**)

19. It is humbly requested to consider the above submission and grant a transmission license as advised by HPERC, for 35.22 km Wangtoo – Jhakri portion of 54.78 km Baspa -Jhakri D/C Transmission line.

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Annexure A 1



AGREEMENT BETWEEN THE GOVERNMENT OF HIMACHAL PRADESH AND M/S JAIPRAKASH INDUSTRIES LIMITED FOR THE IMPLEMENTATION OF 300 MW BASPA HYDRO ELECTRIC PROJECT STAGE-II IN KINNAUR DISTRICT OF HIMACHAL PRADESH.

This Agreement made on this 1st day of October in the year Nineteen hundred and Ninety two between the Governor of Himachal Pradesh, through the Secretary to the Government of Himachal Pradesh, Department of Multipurpose Projects and Power, having its office at Civil Secretariat, Shimla-171002, hereinafter referred to as "Government" which expression shall, unless repugnant to the context or meaning thereof, include its successors and assigns of the ONE PART,

AND

M/S JAIPRAKASH INDUSTRIES LIMITED, a Generating Company within the meaning of section 2 (4 A) of Electricity (Supply) Act, 1948 and registered under the Companies Act, 1956 with its registered office at 5 Park Road, Hazrat Ganj, Lucknow-226001, and Head Office at JA HOUSE, 63 Basant Lok, Vasant Vihar, New Delhi-110057, hereinafter referred to as "Company" which expression shall unless repugnant to the context or meaning thereof, include its successors and assigns of the OTHER PART.

WHEREAS the hydel potential of River Baspa, in the

विद्युत एवं सचिव
(बहुउद्देशीय परियोजना तथा विद्युत)
हिमाचल प्रदेश सरकार

JSW Hydro Energy Limited

State of Himachal Pradesh, which is a tributory of the river Satluj, is to be developed in stages; the Stage-I, which is presently under investigation by Himachal Pradesh State Electricity Board, is the development in the upper reaches of the river envisaging construction of a high dam to afford regulation of river waters. The Baspa Stage-II development envisages run of river type development of Baspa river in lower reaches. The installed capacity of Baspa Hydro Electric Project Stage-II has been envisaged as 300 MW. An increased power potential is likely to be available in these lower reaches after the execution of Baspa Hydro Electric Project Stage-I. This increased power potential is to be utilised by constructing a second parallel water conductor system and Power House which shall be named as Baspa Hydro Electric Project Stage-I (Phase-II) ;

AND WHEREAS the Himachal Pradesh State Electricity Board had prepared a Project Report for Baspa Hydro Electric Project Stage-II, in Kinnaur District of Himachal Pradesh, with an installed capacity of 300 MW, which was accorded techno-economic clearance by the Central Electricity Authority in 1990. This Project of 300 MW capacity (which hereinafter

वित्तायुक्त एवं सचिव
(ऊर्जा, पर्यावरण तथा विद्युत)
हिमाचल प्रदेश सरकार

JSW Hydro Energy Limited

referred to as "Project") has been defined in clause-1 of this Agreement;

AND WHEREAS the Government had decided to allow Hydro Electric Projects in the Private Sector and invited proposals for the same ;

AND WHEREAS the Company had submitted a proposal for setting up this Project ;

AND WHEREAS the Government had accepted in principle, the proposal of the Company for setting up of the Project and entered into a Memorandum of Understanding dated November 23, 1991 with them whereby they were to carry out interalia detailed techno-economic feasibility studies of the Project ;

AND WHEREAS the Company have carried out necessary detailed techno-economic feasibility studies of the Project and have satisfied themselves about the techno-economic feasibility of the Project and have submitted a Project Report (April,1992) to the Government and the Central Electricity Authority ;

AND WHEREAS M/S JAIPRAKASH INDUSTRIES LIMITED are registered as a Generating Company under section 2 (4 A) of the Electricity (Supply) Act, 1948 for establishing, operating and maintaining the Project at its own cost ;

AND WHEREAS both the parties to this Agreement have agreed that the Company shall establish, operate and maintain the Project at its own cost for an initial period of forty years from the date of commissioning of the project, extendable for a further period of twenty years ;

NOW THIS AGREEMENT BETWEEN THE PARTIES HERETO

JSW Hydro Energy Limited

WITNESSETH AS FOLLOWS :-

1. DEFINITIONS :

1.1 'Agent' means and includes the Himachal Pradesh State Electricity Board or such other authority as may be appointed by the Government for the purpose of this Agreement.

1.2 'Agreement' means this Agreement together with any amendments thereto as may be made by mutual consent of both the parties in writing.

1.3 'Board' means the Himachal Pradesh State Electricity Board.

1.4 'Contractor' means any person, firm or body corporate engaged by the Company for the implementation of the Project.

1.5 'Effective Date' means the date this Agreement is signed by the parties hereto.

1.6 'Nathpa Jhakri Transmission System' means the transmission system associated with 1500 MW Nathpa Jhakri Hydro Electric Project.

1.7 'Permanent Works' means the permanent works forming part of the Project and shall include Housing facilities for staff to be engaged for operation and maintenance of the Project.

1.8 'Project' means Baspa Hydro Electric Project Stage-II of 300 MW capacity as may be finally approved by the Central Electricity Authority, including the transmission system upto Jhakri Sub Station of Nathpa Jhakri Project for evacuation of power from the

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Project.

1.9 'Site' means the site on which the "Project" shall be located.

1.10 'Temporary Works' means all temporary works of every kind required in or about the execution of the works and not forming part of permanent works.

1.11 'Works' means the sum of the temporary works and permanent works including design, engineering services, supplies and other works required and necessary for completion of the project.

1.12 Any term used in the Agreement and not defined under this clause shall have the same meaning as assigned to such term under the Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1948.

2. The Government hereby agrees to grant to the Company the right to establish, own, operate and maintain the Project and permission to generate and sell power from the Project for an initial period of forty years from the date of commissioning of the Project, extendable for a further period of twenty years.

3. The Government hereby agrees to grant to the Company all consents, permissions, statutory/non-statutory, within its purview as required by the Company to undertake, establish, operate and maintain the Project.

4. The Government shall co-operate with the Company for expediting the various statutory/ non-statutory clearances, required for the implementation of the Project, from various

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competent authorities of the State Government/ Central Government or the Board. The responsibility of obtaining these sanctions shall,however,rest with the Company only. However, as a special case, environment and forest clearances from the Government of India, Ministry of Environment and Forests shall be obtained by the Government and the Company shall fully cooperate and assist the Government in this regard.

5. The Company shall start the work on the Project within one year from the effective date, subject to timely availability of clearances from the Central Electricity Authority and Government of India, Ministry of Environment and Forests. If delay is caused in obtaining any of these clearances, the date of start of the Project shall be suitably extended. The Company shall complete the execution of the Project, including the essential works of the intake structure for Phase-II of Baspa Hydro Electric Project Stage-I, at its own cost and commission the Project within a maximum period of seven years from the effective date. In case the Company does not complete the Project even two years after the aforesaid period, the Government shall be free to revoke the Agreement and acquire the Project against payment of book value on the date of acquisition.

6. The Government shall acquire for the Company under the Land Acquisition Act, 1894 as in force at the expense of the Company such private lands within the State of Himachal Pradesh as may be required by the Company for the construction, operation and maintenance of the Project.

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7. The Government shall on such terms, conditions and rates, prescribed from time to time, grant long term lease of the Government land required for permanent works of the Project and as may be necessary for the operation and maintenance of the Project after its completion. The lease shall be granted for the duration of the establishment, operation and maintenance of the Project.

8. The Government shall also arrange for the short term lease upto ten years of the Government land, required for temporary works for the construction of the Project on such terms, conditions and rates as prescribed from time to time.

9. After the expiry of the periods referred to in Clause-2, the Government/Board shall have the option to purchase all the assets and works of the Project, at mutually agreed terms, failing which under the principles laid down for licensees under the Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1948.

10. The Government shall have the option to acquire at any time on payment of the depreciated book value, such buildings as may be constructed by the Company and such lands as may be surplus to the requirements of the Project.

11. The Company shall pay to the Forest Department of the Government, the price of the trees as are required to be felled or are damaged in the execution of the Project, at prevailing market rates as may be notified by the government from time to time. The responsibility of felling and removing of the trees shall be of the Government. The net sale proceeds

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of the trees will be made over to the Company.

12. The Company shall pay the cost of raising compensatory afforestation and its maintenance for a period of ten years over the extent of area, as may be determined by Government of India, Ministry of Environment and Forests.

13. The Company shall make suitable and adequate financial provisions in their Project estimates for the catchment area treatment plans, as may be determined by the Government of India, Ministry of Environment and Forests. The cost involved on this account shall be paid by the Company to the Government as per annual plans of the Forest Department of the Government for the catchment area treatment. The Government of India, Ministry of Environment and Forests shall be requested by the Government to apportion cost of the aforesaid catchment area treatment plans equitably to any other future project(s), which may be approved by the Government of India after the effective date, for which the catchment area is common.

14. The Government shall cause the Board to provide adequate construction power to the Project work sites at the cost of the Project including departmental charges as applicable to such category of consumers. The construction power shall be supplied at the Board's Bulk supply tariff as applicable from time to time.

15. The widening, strengthening, and construction of National Highways, State P.W.D. Roads and Bridges, if any required by the Company, shall be executed by the Government on

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payment of cost and departmental charges by the Company at the rates applicable from time to time.

16. The Government shall permit the Company to collect and use boulders, stones, shingles and limestone and other building materials, except precious and semi-precious minerals, from the river beds and/or from the land acquired for or transferred to or leased out to the Company for the purpose of construction and maintenance of the Project, on payment of royalty payable as per the Government rules/rates in force from time to time. In case any object of archeological importance is found by the Company or any of its employees/ contractors/ sub-contractors during the course of the construction/ operation of the Project, the Company shall arrange to hand over the same to Government, free of cost.

17. The Government shall prepare and implement at the cost of the Project a rehabilitation plan for people likely to be adversely affected or displaced due to establishment, operation and maintenance of the Project.

18. The Company shall provide employment to one member of each of the displaced families during the construction period of the Project, which shall form part of the rehabilitation plan referred to in Clause-17 above. During the operation and maintenance of the Project, the Company shall give preference for employment to the members of the displaced families employed during the construction period.

19. The Company agrees to re-imburse to the Board the money spent by it on the investigations and infrastructure

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works of the Project. The amount including interest during construction to be re-imbursed by the Company to the Board as it stood on the effective date shall be settled separately between the Company and the Board. The reimbursement of this money alongwith compound interest at the rate of sixteen percent per annum shall be effected by the Company to the Board by way of adjustment towards the sale of power by the Company to the Board starting immediately after commissioning of the Project.

20. In case any existing facilities such as irrigation, water supplies, roads, bridges, buildings, communication systems, power systems and water mills are adversely affected because of the establishment, operation and maintenance of the Project, the cost of the replacement thereof or of the remedial measures as the case may be, shall be borne by the Project.

21. Subject to availability, all the unskilled/ skilled staff and other non-executives as may be required for execution, operation and maintenance of the Project, after deployment of the surplus workers from other projects of the Company located within Himachal Pradesh, shall be recruited only through Employment Exchanges in Himachal Pradesh. In regard to the employment of the executives, other things being equal in terms of qualification, experience etc., the Company shall give preference to the residents of Himachal Pradesh.

22. The fishing, recreational and navigational rights in the river, water channels, reservoirs, lake etc. shall

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JSW Hydro Energy Limited

remain vested in the Government subject only to such restrictions as may be necessary for the operational requirements and safety and security of the Project.

23. The Company shall permit free use by the Government and the Board of all service roads constructed and maintained by it for the Project subject to such restrictions as the Company may consider appropriate for the safety and security of the Project.

24. Minimum flow of 5 Cusecs of water shall be ensured immediately downstream of the barrage.

25. The Company shall separately enter into an arrangement with the Fisheries Department of the Government regarding protection of fish culture broadly on the pattern followed for the agreement on "Chamera Hydro Electric Project Stage-I."

26. The Government, its Agent or any person authorised by the Government shall be entitled to survey, investigate and execute any river valley schemes upstream or downstream of the Project, provided that such activities shall not interfere with the establishment, operation and maintenance of the Project by the Company and shall not be detrimental to the Project.

27. The Government shall direct the authority, assigned with the Planning/Design/Construction of Bospa Hydro Electric Project Stage-I or any other Hydro Electric Project upstream of the Project that the annual energy generation at the Project is not adversely affected in the process.

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JSW Hydro Energy Limited

28. The Company shall be fully responsible for any damage or loss arising out of the construction, operation or maintenance of the Project to any property or person and also undertakes to indemnify the Government on such account.

29. The Company agrees to surrender, free of cost, twelve percent of the energy generated to the Government or the Board. Further, the Board shall have first option to purchase the whole or part of the remaining energy generated at rates which may be mutually agreed between Board and the Company and/or in accordance with the guidelines notified by the Government of India from time to time. The Company shall be free to sell the balance energy, which is not purchased by the Board, to any other agency. The energy including the twelve percent free energy shall be made available by the Company at Jhakri busbars.

30. (i) Power generated at the Project shall be transmitted upto Jhakri Sub-Station and from Jhakri onward, the power would be fed into the Northern Grid through Nathpa Jhakri transmission system which is being set up by National Power Transmission Corporation (NPTC) for evacuation of power from Nathpa Jhakri Project. The Government shall use its good offices with NPTC towards ensuring that the transmission system for Nathpa Jhakri Project is established by NPTC well in time before the date of availability of power supply from the Project.

30. (ii) The Project contains provisions for generation as well as transmission lines from the Project upto Jhakri

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Sub-Station (about 55 Kms) required for evacuation of power from the Project. The Project complete as such shall be established, owned, operated and maintained by the Company. As offered by the Board, the Company agrees to utilise the services and expertise of the Board for construction of 220 KV transmission lines between the Project and Jhakri, modalities for which will be separately worked out between the Company and the Board. The tariff to be calculated shall be worked out at Jhakri busbars. This transmission line (between the Project and Jhakri) can also be utilised for evacuation of power from any other generation project established or to be established in the area provided that the right of the Company shall always be recognised for evacuation of its own power from the Project, and authority controlling such generation Project shall bear proportionate wheeling charges and the same shall be paid to the Company by the beneficiary transmitting such power.

31. The tariff for the energy generated at the Project during the pre-commissioning stage shall be fixed as per the specific guidelines of Government of India for such energy for hydro electric projects.

32. The Company shall follow the directives of Northern Regional Electricity Board (NREB) and State Load Despatch Centre (SLDC) in the interest of the integrated grid operation. Any dispute with reference to the integrated operation will be referred to the Central Electricity Authority (CEA) whose decision shall be final. Pending the decision of the Central Electricity Authority, the NREB's or SLDC's

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directions shall prevail in the interest of smooth operation of the grid.

33. Save and except as provided aforesaid none of the parties hereto shall assign their respective rights and obligations hereunder without the prior consent in writing of the other party hereto.

34. Each party hereto agrees that it shall not divulge any trade, commercial or technical secrets or confidential matters of one another to any third party save and except for the purpose of implementation, operation and maintenance of the Project.

35. The Company shall be governed and bound by the guidelines as may be notified by the Government of India or the Government under the relevant Acts from time to time.

36. If the performance of this Agreement or of any obligation of any party hereto hereunder is prevented, restricted or interfered with any reason of fire, explosion, strike, accident, epidemic, cyclone, earthquake, flood, war, revolution, civil commotion, riots, embargo or any other cause beyond the reasonable control of the party affected, the party so affected, upon giving notice thereof to the other party setting out therein particulars thereof, shall be excused from performance of its obligations to the extent prevented, delayed or interfered with for the period force majeure conditions persist. The party so affected shall use its best efforts to remove such cause of force majeure as expeditiously as

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possible, and shall continue performance hereunder with due despatch whenever such cause(s) is removed.

37. For the smooth execution of this Agreement, the Government and the Company shall establish a Coordination Committee consisting of two nominees of the Company and one each from the Government and the Board.

38. All disputes or differences arising out of or relating to or in connection with this Agreement which cannot be settled amicably by the parties, shall be referred to and settled by arbitration in accordance with the provisions of Indian Arbitration Act, 1940. The Government and the Company shall continue performance of their obligations hereunder notwithstanding any arbitration proceedings unless the performance of such obligation itself is subject of such arbitration.

39. This Agreement shall be subject to the jurisdiction of the High Court of Judicator at Shimla.

40. Any notice required to be given to either party under this Agreement shall be deemed to be served if sent by

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cable or telex followed by a confirmation letter delivered by hand or sent by registered post to their respective addressees.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THESE PRESENTS TO BE SIGNED , SEALED AND DELIVERED BY THEIR DULY AUTHORISED REPRESENTATIVES ON THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

For and on behalf of
Governor of Himachal Pradesh

(B.B.Tandon)
Secretary (Multi Purpose Projects & Power) to the Government of Himachal Pradesh

Witnessed by:

1. (H.C.Bharadwaj)
   Member (Projects)
   Himachal Pradesh State Electricity Board

2. (J.R. [illegible])
   Joint Secretary (Multi Purpose Projects & Power) to the Government of Himachal Pradesh

For and on behalf of
M/s Jaiprakash Industries Limited

(Jaiprakash Gaur)
Chairman-cum-Managing Director

Witnessed by :

1. (J.N.Gaur)
   Advisor
   Jaiprakash Industries Limited

2. (S.D. Nailwal)
   General Manager (Corporate)
   Jaiprakash Industries Limited

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Annexure VI- 1A

Government of India
Central Electricity Authority
Sewa Bhawan, R.K. Puram
New Delhi - 110 066

No. 2/HP/1/87-PAC

Dated: 29th April, 1994

M/s Jaiprakash Industries Ltd.,
JA House,
63, Basant Lok, Vasant Vihar
NEW DELHI - 110 057

Sub: **Baspa Hydro Electric Project Stage-II (3x100 MW) with associated transmission system upto Jhakri (Himachal Pradesh) by M/s**

Sir,

Your above proposal submitted through HPSEB letter date 2nd June' 92 and as updated from time to time in accordance with the discussion/correspondence with CEA/CWC, was considered by CEA at its 122nd meeting held on 19th April' 94. The proposal is hereby accorded techno-economic clearance at an estimated cost of Rs. 949.23 crores (December' 93 price level) subject to :

i) Furnishing of final financial package by M/s. ;
ii) Signing of power purchase agreement between Govt. of Himachal Pradesh/HPSEB and M/s.
iii) entering into an agreement with M/s. NJPC for terminating the 400 KV transmission lines in Jhakri Switchyard.

2. The techno-economic clearance accorded by CEA is subject to review on furnishing of firm financial package which should be done in a period of six months from the date of issue of this letter.

3. The break-up of the estimated cost is indicated below:

GENERATION	Rs. Crores
- Civil Works	292.69
- Electrical/Mechanical Works	356.88
- IDC	218.13
Total (Generation)	867.70
TRANSMISSION	
- Transmission Works	68.89
- IDC	12.64
- Total transmission	81.53
Total (Gen. & Trans.) (incl. IDC)	949.23

Yours faithfully,
Sd/-
(V.V.R.K. RAO)
SECRETARY, CEA

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No. 2/HP/1/87-[illegible] Dated the 29th April, 1994

M/s Jaiprakash Industries Ltd.,
JA House,
63, Basant Lok,
Vasant Vihar,
New Delhi-110057.

Subject:-Baspa Hydro Electric Project Stage-II (3x100 MW) with associated Transmission system upto Jhakri (Himachal Pradesh) by M/s JIL.

Sir,

Your above proposal submitted through HPSEB letter dated 2nd June'92 and as updated from time to time in accordance with the discussion/correspondence with CEA/CWC, was considered by CEA at its 122nd meeting held on 19th April'94. The proposal is hereby accorded techno-economic clearance at an estimated cost of Rs.949.23 crores (December'93 price level) subject to:

i) Furnishing of final financial package by M/s JIL;

ii) Signing of power purchase agreement between Govt. of Himachal Pradesh/HPSEB and M/s JIL.

iii) JIL entering into an agreement with M/s NJPC for terminating the 400 KV transmission lines in Jhakri Switch Yard.

2. The techno-economic clearance accorded by CEA is subject to review on furnishing of firm financial package which should be done in a period of six months from the date of issue of this letter.

3. The break-up of the estimated costs is indicated below:

	Rs. crores
GENERATION	
- Civil Works	292.69
- Electrical/Mechanical Works	356.83
- IDC	218.13
Total (Generation)	867.70
TRANSMISSION	
- Transmission Works	68.89
- IDC	12.64
Total transmission	81.53
Total (Gen. & Trans.) (Incl. IDC)	949.23

Yours faithful

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SECRETARY,

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हिमाचल प्रदेश HIMACHAL PRADESH C 610829

SUPPLEMENTARY IMPLEMENTATION AGREEMENT

FOR

BASPA-II HYDRO-ELECTRIC PROJECT (300 MW)

This Supplementary Agreement is made on the 21st day of the month of October in the year **Two Thousand Nineteen** between the Governor of The Himachal Pradesh, through **Mrs. Manasi Sahay Thakur**, Director, Directorate of Energy, Government of Himachal Pradesh, having its office at Shanti Bhawan, Sector-06, Phase-III, New Shimla-171009 (HP), for itself and its instrumentalities (hereinafter referred as the "Government" or the "**First Party**" which expression shall, unless repugnant to the context or meaning thereof, include its successors and assigns) of the **FIRST PART**.

AND

M/s JSW Hydro Energy Limited, a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at Karchham Wangtoo H.E. Project, Sholtu Colony, P.O. Tapri Sholtu, Kinnaur HP-172104, India (hereinafter referred to as the "**Second Party**") which expression shall, unless repugnant to the context or meaning there of include its successor(s) administrator(s) and permitted assign(s) through **Sh. Sanjeev Kango**, Authorised Representative who has been duly authorised by the Second party vide their Board resolution dated 26.07.2018 to execute this agreement of the **SECOND PART**.

Director,
Directorate of Energy,
GoHP, Sector-6, Phase-III,
New Shimla-171009

JSW Hydro Energy Limited

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WHEREAS, the First Party signed a Memorandum of Understanding (MoU) on 23rd November, 1991 and an Agreement dated 01st October, 1992 with M/s Jaiprakash Industries limited (JIL) for implementation of Baspa-II Hydro Electric Project for an installed capacity of 300MW in District Kinnaur, Himachal Pradesh (hereinafter referred to as the "Project"); and

WHEREAS, an Agreement had been signed between the First Party: JIL and M/s Jaiprakash Hydro Power Limited (JHPL) on 17.10.1995 whereby all assets, obligations, liabilities, rights, privileges and benefits of the project were transferred to JHPL (now JPVL) under the Agreement dated 01.10.1992; and

WHEREAS, the Hon'ble High Court of Himachal Pradesh at Shimla has vide its order dated 25th June, 2015 approved the Scheme of Arrangement for transfer of Baspa-II HEP on a going concern basis from JPVL to its subsidiary, HBPCL wherein JPVL holds 99% shares; and

WHEREAS, the JPVL submitted a request for transfer of consents of the First Party for transfer of Baspa-II Hydro-Electric Plant from JPVL to its subsidiary HBPCL and sale of securities of HBPCL to JSW Hydro Energy; and

WHEREAS, after considering the request of JPVL, the First party vide CMM held on 30.06.2015 decided to accord in-principle consent for transfer of Baspa-II Hydro-electric Power Plant from JPVL, to its subsidiary HBPCL and to allow sale of securities of HBPCL/transfer of ownership of JSW Energy Limited with the condition that change of ownership and transfer of project will be allowed only subject to completion of all legal formalities/obligations and complete transfer of all liabilities to the new entity successor company, who shall have to give undertaking that they will take over all the liabilities of JPVL in Baspa-II Hydroelectric Power Plant and abide by all the conditionalities based on past Agreements and as per the Power policy of the State and also the outcome of disputes pending with various Authorities; and

WHEREAS, a Tripartite Agreement between the First Party, M/s Jaiprakash Power Ventures Limited and M/s Himachal Baspa Power Company Limited transferring all assets, liabilities, privileges, rights, obligations and benefits to M/s Himachal Baspa Power Company Limited in respect of Baspa-II HEP (300 MW) was signed on 29.08.2015; and

WHEREAS, the Second Party vide letter dated 15.09.2018 intimated the First party that the name of the Company has been changed from M/s Himachal Baspa Power Company Limited (HBPCL) to JSW Hydro Energy Limited and there is no change in the pattern of the shareholding, management of the Company or Registered Office address and it is simply a change of name; and

WHEREAS, the First Party after considering the request accorded in –principle approval for the change in name of the Company conveyed vide Directorate of Energy letter dated 14.08.2019 subject to signing of Supplementary Implementation Agreement (SIA); and

Director,
Directorate of Energy,
GoHP, Sector-6, Phase-III,
New Shimla-171009

JSW Hydro Energy Ltd.

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WHEREAS, in consequent upon the above approval accorded by the First party, the Second Party has agreed to sign Supplementary Implementation Agreement for effecting the change in the name of the Company.

NOW THIS SUPPLEMENTARTY IMPLEMENTATION AGRREMENT WITNESSES AS UNDER AMONG THE PARTIES HERE TO AS FOLLOWS:

This Supplementary Implementation Agreement shall become an integral part of the Agreement dated 01.10.1992, Agreement dated 17.10.1995 & Tripartite Agreement dated 29.08.2015 and unless affected by the provision of this Supplementary Implementation Agreement , other terms and conditions of the aforesaid mentioned Agreements shall remain unchanged.

IN WITNESS WHEREOF the parties hereto execute and set their hands on this Supplementary Implementation Agreement at Shimla, Himachal Pradesh on the date first written above.

FIRST PARTY

For and on behalf of Govt. Of Himachal Pradesh

Manasi Sahay Thakur
Director,
Directorate of Energy,
Govt. of HP, Phase-III,
New Shimla-171009

WITNESSED BY:

1. (Rajan Sharma SE(Amp))

2. (Anshul Sharma SE(AH-P))

SECOND PARTY

For and on behalf of M/s JSW Hydro Energy Limited

JSW Hydro Energy Ltd.

Sanjeev Kango
Authorised Signatory

WITNESSED BY:

1. Kanwar Bhanu Uday Singh
Asst. Manager
JSW Hydro Energy Ltd.

2. Rajender Singh
JSW Hydro Energy.

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POWER PURCHASE AGREEMENT

BASPA-II HYDRO-ELECTRIC PROJECT (300 MW)

BETWEEN

HIMACHAL PRADESH STATE ELECTRICITY BOARD

AND

JAIPRAKASH HYDRO-POWER LIMITED

Member (Electrical)
HPSEB Shimla-4

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Member (Electrical)
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Member (Electrical)
HPSEB Shimla-1

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BASPA-II H.E.P. (300 MW)

POWER PURCHASE AGREEMENT

THIS POWER PURCHASE AGREEMENT (P.P.A) entered into on this fourth day of the month of JUNE in the year, 1997 (One Thousand Nine Hundred and Ninety Seven) between Jaiprakash Hydro-Power Limited, a Generating Company within the meaning of Section 2(4A) of Electricity (Supply) Act, 1948, and registered under the Company Act, 1956, having its Registered Office at C-16, Sector-I, SDA Housing Colony, Shimla-171009 (Himachal Pradesh) and their Head Office at "JA Annexe", 54 Basant Lok, Vasant Vihar, New Delhi 110057, (hereinafter referred to as the "Company", which expression shall, unless repugnant to the context or meaning thereof, include their successors, permitted assigns and legal representatives), of the First Part;and

Himachal Pradesh State Electricity Board, having their office at Vidyut Bhawan, Shimla-171004, (hereinafter referred to as the "Board" which expression shall, unless repugnant to the context or meaning thereof include their respective successor, permitted assigns and legal representatives) of the Second Part;and

WHEREAS Jaiprakash Industries Limited (JIL) a Company registered under the Company Act, 1956 with their registered Office at 5, Park Road, Hazrat Ganj, Lucknow-226001, and Head Office at "JA House", 63 Basant Lok, Vasant Vihar, New Delhi-110057, (hereinafter referred to as JIL) has, in pursuance of a Memorandum of Understanding, entered into an Agreement dated 1st October, 1992, (hereinafter referred to as "BASPA-II AGREEMENT"), with the Government of Himachal Pradesh, Department of Multipurpose Projects and Power, having its

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Office at Civil Secretariat, Shimla-171002, (hereinafter referred to as the "SG") whereby the latter has agreed to grant to JIL the right to establish, operate and maintain at their cost BASPA-II Hydro Electric Power Project, (hereinafter referred to as "Project") for generation of electric power at Karcham on river BASPA, in District Kinnaur of Himachal Pradesh which envisages an installed capacity of 300 MW, in the Private Sector for an Initial period of forty years from the date of its commissioning, extendable for a further period of twenty years;and

WHEREAS in pursuance of the provisions of the MOU, a wholly owned subsidiary company of JIL namely, Jaiprakash Hydro-Power Ltd. ("the Company") was incorporated to build, own, operate and maintain the Project and to undertake the obligations of JIL as envisaged in BASPA-II Agreement; and

WHEREAS the Company vide the agreement executed amongst SG, JIL and the Company on the seventeenth day of the month of October of the year, One Thousand Nine Hundred and Ninety Five (17-10-1995) has agreed to accept and take over all the assets, liabilities, obligations, rights, privileges and benefits arising out of the Baspa-II Agreement dated 1-10-1992;and

WHEREAS Baspa-II Agreement envisages that twelve (12) percent of the energy generated shall be supplied free of cost to the SG or the Board at the interconnection point and that the Board shall have the first option to purchase the whole or part of the remaining eighty eight (88) percent of the energy generated, and the Company shall be free to sell the balance energy not purchased by the Board to any Agency;and

WHEREAS the Company has agreed that it shall complete the execution of the project, including the essential work of the intake structure for Phase-II of Baspa Hydro Electric Project Stage-I, at its own cost and commission the Project within 50 months of financial closure;and

WHEREAS the entire energy to be generated at Baspa-II Project shall be fed by the Company through a transmission line upto Jhakri and interconnection facilities (to be established or got established by the company as a part of the Project) at the interconnection point at Jhakri;and

WHEREAS the Company has agreed to sell and the Board has agreed to purchase the entire electric energy (excluding 12% free energy) generated by the Project to be delivered at the interconnection point at Jhakri.

NOW, THEREFORE, in consideration of the premises and mutual covenants and conditions set forth herein, it is agreed by and between the parties as follows:

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ARTICLE 2

DEFINITIONS AND INTERPRETATION

2.1 INTERPRETATION

2.1.1 The headings and paragraphs numbering are for convenience only and shall be ignored in construing this Agreement.

2.1.2 References to persons include bodies corporate and partnerships;

2.1.3 References to any agreement, enactment,ordinance or regulation include any amendment thereof or any replacement in whole or in part.

2.1.4 References to Articles, Sections and Schedules unless the context otherwise requires, shall refer to Articles, Sections and Schedules to this Agreement.

2.1.5 Singular shall include plurals and vice versa as may be necessary.

2.2 DEFINITIONS

The defined terms set forth in this Agreement will have the following meanings, unless repugnant in the subject or context.

2.2.1 ACTIVE POWER OUTPUT

Active Power during a demand period in kW (kilowatts) or multiple thereof, obtained by dividing the Active Energy produced in kWh (kilowatt - hours) or multiple thereof during that period by the time interval of the said demand in hours.

2.2.2 ACTIVE ENERGY

The Electrical Energy produced, flowing or supplied by an Electrical circuit during a time interval,measured in units of kilowatt-hours or standard multiples thereof.

2.2.3 ACTIVE POWER

The product of Voltage (volts) and the in-phase component of alternating current (Amperes), measured in units of watts or standard multiples thereof.

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2.2.4 AGREEMENT

This Power Purchase Agreement as the same may be amended from time to time in accordance with the terms and conditions hereof.

2.2.5 DESIGN ENERGY OF THE PROJECT

means the quantum of the energy which could be generated in a 90% dependable year with 95% availability of installed capacity of the station (based on 10 day discharge period of the year), which has been determined to be 1213.18 MU (corresponding to the year,1981-82 which has been determined as 90% dependable year) with monthly break up as given in Schedule IX. The annual design energy figure stated above shall, however, be revised by mutual agreement between parties due to any relaxation in the State Government/MOEF stipulation of a minimum down-stream discharge of 5 cusecs .

2.2.6 APPARENT POWER

Measured in kVA (kilovoltampere) is a vectorial sum of active power output measured in kilowatts and reactive power output measured in kilovars.

2.2.7 APPARENT POWER CAPACITY

The ability of a unit or the project to produce apparent power in accordance with conditions set forth in Schedule VIII.

2.2.8 APPROVED FINANCIAL PACKAGE

means the schedule as accepted by the Board and approved by the SG and Authority prior to Financial Closing, setting out all the relevant details regarding debt, lease and equity financing, the draw down and repayment schedules of the Project.

2.2.9 AUTHORITY

means the Central Electricity Authority referred to in Section 3 of the Electricity (Supply) Act, 1948, or any governmental successor entity entrusted with its functions and capacities.

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2.2.10 AUXILIARY CONSUMPTION

means energy consumed in the various auxiliaries of the Project during generation of electricity but shall exclude the power supply to colony and its water pumping system etc. Auxiliary consumption shall be deemed to be 0.5% of the energy generated for the purpose of computation of net design energy.

2.2.11 AVERAGE SECONDARY ENERGY –

Shall be average of the secondary energy available during the years 1977-78 to 1990-91 as per Schedule IX.

2.2.12 BILLING DATE

For monthly and supplementary bills, the date on which the bill is issued but not earlier than 5th day after the last day of that billing month.

2.2.13 BILLING MONTH
means each of following:-

(a) the period commencing on the Commercial Operation Date(COD) of unit(s)/Project and ending on (and including) the last day of the calendar month in which the COD of Unit (s)/Project occurs and

(b) each calendar month thereafter.

2.2.14 BUY-OUT

means the purchase of the Project by the Board pursuant to a Buy Out Notice.

2.2.15 BUY-OUT NOTICE

Any written notice by the Company to the Board that exercises the Company's option to cause the Board to purchase the Project from the Company; or by the Board to the Company that exercises the Board's option to cause the Company to sell the Project to the Board, in accordance with the terms of this Agreement.

2.2.16 BUY-OUT-PRICE

means an amount payable on a Buy-Out determined in accordance with Schedule II.

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2.2.17 CALENDAR YEAR

Each twelve (12) months period commencing on 2400 hours Indian Standard Time on December 31 and ending 2400 hours Indian Standard Time the following December 31 during the term of this Agreement.

2.2.18 CAPACITY

Shall mean capability of the unit, measured in MW and Mvar to produce and deliver active power and reactive power respectively.

2.2.19 CAPACITY CHARGE

bears the meaning set out in Section 8.6.

2.2.20 CAPITAL COST

bears the meaning set out in Section 8.4.

2.2.21 CHANGE-IN-LAW

shall have the meaning as specified in Section 20.21.

2.2.22 CHECK METER

Means any meter(s) or metering devices of accuracy class equivalent to main meter installed and maintained by the Board at the interconnection point to measure the delivery and receipt of electrical energy, and active and reactive power for checking the main meter owned and maintained by the Company at the interconnection point.

2.2.23 COMMERCIAL OPERATION

shall mean the state of a unit when it is capable of delivering Active Power and Reactive Power on a regular basis and on meeting requirement of Schedule V.

2.2.24 COMMERCIAL OPERATION DATE (COD) OF UNIT

The date as certified by an Independent Engineer and notified by the Company as per provisions contained in Section 6.6 for commencement of power supply from that unit on regular basis, which shall normally not exceed fifteen (15) days from the Date of Synchronization of that unit.

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2.2.25 COMMERCIAL OPERATION DATE (COD) OF THE PROJECT

means the date on which all the units of the Project have achieved commercial operation and all the units are capable of generating power simultaneously at full capacity subject to the availability of water.

2.2.26 CONSUMER PRICE INDEX (CPI)

means the All India Consumer Price Index number for Industrial workers (Base 1982=100), as published in Reserve Bank of India Bulletin or any amendment thereof.

2.2.27 CONTROL CENTRE

The Board's State Load Despatch Centre located at Shimla, or such other control centre designated by the Board from time to time (but not more than one at a time) from which the Board will issue Despatch Instructions to the Company at the Station.

2.2.28 CURRENT RATE OF EXCHANGE

means, with respect to

(a) any instalment of loan repayment or of any interest, with respect to any Foreign debt, the applicable market rate(s) of exchange as announced by the State Bank of India on the date on which such instalment or as the case may be, the amount becomes due.

(b) any payment on account of return on Foreign Equity the applicable market rate as announced by the State Bank of India on which such payment is made by the Board to the Company.

2.2.29 DAY

means the 24 Hour period beginning and ending at 2400 midnight Indian Standard Time.

2.2.30 DEBT/LOAN

means the amount of any loan, non convertible debenture or other similar obligation, contracted or raised or received by the Company under the Financing Documents and actually expended (or to be expended) on the Capital Cost of the Project in accordance with the approved financial package.

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2.2.31 DEBT/LOAN REPAYMENT

means the amount of any liability of the Company for the repayment of one or more instalments of the principal amount of any Debt, in accordance with the approved financial package.

2.2.32 DECLARED CAPACITY

means the level at which the Company sets the Active Power output in Megawatt that the Project will be capable of delivering continuously for each hour of the next day.

2.2.33 DEEMED GENERATION

Deemed generation shall mean as under:

(a) If the station has achieved the normative availability level in a tariff year/tariff period, but the actual energy generation falls short of design energy for reasons solely attributable to hydrology, the energy charges for generation upto design energy shall be payable for that tariff year /tariff period during the first seven years of operation, starting from COD of the first unit.

(b) In case of reduced generation during a tariff year/tariff period due to reasons beyond the control of the Company and non availability of Board's transmission system beyond the interconnection point or on receipt of backing down instructions from the control centre and it results in water spillage , the energy loss on account of such spillage shall be considered as deemed generation limited to design energy during that tariff year/tariff period during the term of this Agreement.

Explanation 1: The deemed generation benefit shall not cause the energy charges payment to exceed the design energy payment for the tariff year/tariff period.

Explanation 2: Any loss of generation, for reasons other than under (a) and (b) above shall be considered as the actual generation for working out the benefit of Deemed Generation.

Explanation 3: The deemed generation during any tariff year/tariff period shall not exceed the generation corresponding to the water spillage due to (b) above, in that tariff year/tariff period.

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2.2.34 DEEMED SALEABLE ENERGY

Shall have the meaning as per Section 8.12.1.

2.2.35 DELIVERED PRIMARY ENERGY

means the energy quantum actually delivered at the interconnection point at Jhakri subject to maximum of the net design energy for that month/year as the case may be.

2.2.36 DEMAND PERIOD

means, the period of time, over which the Active and Reactive Power Outputs are integrated to obtain the respective Active and Reactive Electrical outputs. In this Agreement the Demand Period shall be thirty (30) minutes.

2.2.37 90% DEPENDABLE YEAR

90% Dependable Year shall be the year, in which the annual energy generation has the probability of being equal to or in excess of 90% of the expected period of operation of the scheme. For the project, the 90% Dependable Year shall be represented by Hydrological year 1981-82,based on the available hydrological data for the years 1977-78 to 1990-91 as per Detailed Project Report approved by the Authority.

2.2.38 DEPRECIATION

means the sum of the amounts of Depreciation on land, buildings, equipment and other capital facilities of the Project at the rates presently specified by the GOI under the Electricity (Supply) Act, 1948 vide department of power notification dated 29/3/1994, and shall cease as soon as the net book value of assets equals the residual value i.e. 10 per cent of the Capital Cost of the project. The annual weighted rate of Depreciation on this basis shall be adopted as Four decimal three (4.3) percent of the capital cost for a period not exceeding twenty one (21) years from the date from which Depreciation is payable as per the provisions of this Agreement, whereafter the depreciation shall cease to be applicable.

In case leasing option is adopted as per approved financial package, depreciation rate will be reworked and depreciation shall be paid on the basis of capital cost excluding the component of leased assets.

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2.2.39 DESPATCH

To schedule and control the generation of the Project in order to commence, increase, decrease or cease the electrical output as delivered to the Grid system in accordance with the Board instructions from the Control centre in conformity with this Agreement and "Prudent Utility Practices".

2.2.40 DESPATCH INSTRUCTION

means an instruction issued by the Control Centre to the Company for the despatch of power by message to be confirmed in writing/fax by control centre in accordance with the operating procedure developed by the parties to operate the project in accordance with the terms of this Agreement, technical limits and prudent utility practices including;

(a) An instruction to target active/ reactive power output to be maintained by the Project.

(b) An instruction to synchronise or desynchronise a Unit at a particular time.

(c) An instruction to defer or cancel a scheduled outage or maintenance outage subject to provisions of Article 7.

(d) An instruction for backing down the active/reactive Power due to Grid conditions.

2.2.41 DEVELOPMENT COMMITTEE

bears the meaning set out in Section 4.5.

2.2.42 DISPUTE

means any material dispute or material difference of any kind whatsoever between the parties to the Agreement in connection with or arising out of this Agreement.

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2.2.43 DUE DATE OF PAYMENT

means with respect to any bill, the date by which the amount of such bill is required to be paid. This date shall :-

(a) in case of any monthly bill for any billing month, be 30 days from the billing date or from the date of presentation of the bill to the Bankers/designated officer of the Board, whichever is later.

(b) in case of any supplementary or any other bill, be 35 days from the date of presentation of bill to the designated officer of the Board or of the Company, as the case may be.

If the date as per (a)/(b) happens to be a holiday, the next working day shall be treated as due date of payment.

2.2.44 EFFECTIVE DATE

The date of signing of this Agreement.

2.2.45 ELECTRICAL OUTPUT

Energy/Power delivered by the company to the Board at the Interconnection point in kWh/MW.

2.2.46 EMERGENCY

A condition or situation that, in the reasonable opinion of the Board, does materially and adversely,or is likely to materially and adversely

(a) affect the ability of the Board to maintain safe, adequate and continuous electrical service to its customers, having regard to the then current standard of electrical service provided to its consumers or

(b) endanger the security of persons, plant or equipment.

2.2.47 ENERGY UNIT

means one kilowatthour of Electrical Energy.

Chairman
HPSEB Shimla

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2.2.48 EQUITY

means the amount of paid-up capital contributed by the promoters, public or others towards the share capital of the Company including premium thereon, if any, but only to the extent that the proceeds of such capital contributions are exclusively utilised on the Capital Cost of the Project including any other contribution by the promoter or any others, not forming part of Debt and not bearing any interest or other similar remuneration, the proceeds of which are exclusively utilised on the Capital Cost of the Project as per the approved Financial Package.

2.2.49 FINANCIAL CLOSING

means the signing of the Financing Documents after approval by the Authority, the SG and the Board, and the fulfilment of all conditions precedent to the initial availability of funds thereunder and receipt of commitment of such equity as is required by the company to satisfy the lenders. The scheduled financial closing date shall not exceed 12 months from the effective date.

2.2.50 FINANCIAL YEAR

means a period of 12 months beginning April 1, and ending March 31.

2.2.51 FINANCING DOCUMENTS

means the loan agreements, notes, indentures, security agreements, letters of credit and other documents relating to the construction and financing (including refinancing) and over run finance, if any, for the Capital Cost or any part thereof of the Project as the same may be amended, supplemented or modified from time to time, subject to the prior written approval of the Board.

2.2.52 FORCE MAJEURE

bears the meaning set out in Article 17.

2.2.53 FORCED OUTAGE

An interruption in the generating capacity of the Project that is not the result of

(a) request by the Board in accordance with this Agreement.
(b) A schedule outage or a maintenance outage.
(c) An event or occurrence of Force Majeure.
(d) A condition caused solely by the Board or by the Board Grid System.

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2.2.54 FOREIGN DEBT

shall mean any debt contracted and received by the Company after approval of Board/Government/Authority, in currency other than Rupees in cash or otherwise.

2.2.55 FOREIGN EQUITY

shall mean equity paid up or contributed in currency other than Rupees as per approved financial package.

2.2.56 GENERAL

Any word or expression used in this Agreement unless otherwise defined or construed in this Article, shall bear the meaning as assigned to it in the respective Article/Schedule and in case no such specific meaning has been assigned to such words or expression, the same shall bear its ordinary English meaning.

2.2.57 GENERATING UNIT /UNIT

means one turbine generator set and the equipment and associated ancillary thereto.

2.2.58 GOI

means the Government of India.

2.2.59 GOVERNMENT GUARANTEE

means the guarantee to be provided by the Government of Himachal Pradesh in the form as in Schedule VI.

2.2.60 GRID SYSTEM

Network of power system interconnecting different power generating stations, transmission lines and sub-stations for transmitting the generated power upto Main load centre(s).

2.2.61 INCENTIVES

bears the meaning set out in Sections 8.9 and 8.10

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HPSEBL Shimla-6

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2.2.62 INDEPENDENT ENGINEER

means the independent consulting Engineer or Engineering firm or group that is jointly qualified by the Company and the Board for purposes of this Agreement.

2.2.63 INFIRM ENERGY

means energy delivered by a unit after its synchronisation to the grid prior to the Commercial Operation Date (COD) of that unit.

2.2.64 INITIAL TARIFF YEAR

means the period commencing from the April Ist after the COD of the Project and ending on subsequent March 31st.

2.2.65 INSTALLED CAPACITY OF THE PROJECT

means summation of the name plate megawatt capacities of the generating units of the Project.

2.2.66 INTER CONNECTION FACILITIES

mean all the facilities which shall include without limitation switching equipment, protection, control and metering devices etc. for two nos. incoming bays from the Project to be installed and maintained by NJPC at Jhakri sub-station at the cost of Company to enable evacuation of power output from the Project in accordance with this Agreement.

2.2.67 INTER CONNECTION POINT

mean the physical touch point(s) where the project's 400 kV incoming bays are connected to 400kV busbars at Jhakri substation of NJPC.

2.2.68 INTEREST

All interest payable under this Agreement shall be calculated on the basis of a year of 365/366 days as applicable, for the actual no. of days involved.

2.2.69 INTEREST DURING CONSTRUCTION

means the amount of the progressive liability incurred by the company for the payment of Interest on Debt according to approved Financial Package upto the Scheduled COD of the unit(s)/ Project as capitalised and included in the Capital Cost.

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2.2.70 INTEREST ON DEBT/LOAN

means an amount equal to the liability for interest (but not including any liability for penal interest devolving on the Company) on the outstanding Debt of the Company, corresponding to the capital cost as determined as per Section 8.4 according to the approved Financial Package. The rate at which the interest is calculated and the margin if any allowed on the floating interest rate will be limited to the interest rates or the margin allowed as per the Financial Documents.

2.2.71 JOINT METER READING

bears the meaning set out in Article 9.

2.2.72 LAW

means the laws of India, and where applicable, any political subdivision thereof, and all rules, regulations and notifications made pursuant thereto.

2.2.73 LENDER

means provider of debt/ loan funds to the Company as per the Financing Agreements in accordance with the approved Financial Package.

2.2.74 MAIN METERS

means all meter(s) and metering devices owned by the company and installed at the interconnection point for measuring and recording the delivery and receipt of energy and active & reactive Power from the Project.

2.2.75 MAINTENANCE OUTAGE

An interruption or reduction in the generating capability of the Project that

(a) is not a Scheduled Outage;

(b) has been scheduled and allowed by Board in accordance with Article 7; and

(c) is for the purpose of performing work on specific components, which work could be postponed by atleast two (2) Days but should not, in the reasonable opinion of the Company, be postponed until the next Scheduled Outage.

Chief Electrical, CSPGCL

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2.2.76 MAXIMUM DEMAND

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means maximum active/reactive power (kW/kvar) recorded during the demand period.

2.2.77 METERING DATE

means
(a) the time at which Ist synchronisation of each unit occurs; and
(b) the midday of the first day of the calendar month thereafter;and
(c) the time at which C.O.D.of each unit occurs; and
(d) the time of replacement of any metering equipment.

2.2.78 MU/Gwh/MILLION UNITS
means, one Million kwh

2.2.79 MOEF

shall mean the Ministry of Environment and Forests of Govt. of India or any successor Authority.

2.2.80 MONITORING COMMITTEE

bears the meaning set out in Section 5.5

2.2.81 MONTHLY BILL

bears the meaning set out in Section 10.1.

2.2.82 NATHPA JHAKRI POWER CORPORATION (NJPC)

means the Government of India undertaking having its registered office at Shimla.

2.2.83 NET AVERAGE SECONDARY ENERGY

Means average secondary energy less 0.5% auxiliary consumption, 0.5% transformation losses and 0.65% transmission losses.

2.2.84 NET DESIGN ENERGY

means design energy less 0.5% auxiliary consumption, 0.5% transformation losses and 0. 65% transmission losses as detailed in Schedule IX,

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2.2.85 NET ELECTRICAL ENERGY

means, the Energy Units actually delivered by the Project at the Inter Connection Point and measured in kWh.

2.2.86 NET SALEABLE DESIGN ENERGY

means, eighty eight (88)percent of net design energy as detailed in Schedule IX.

2.2.87 NET SALEABLE ELECTRICAL ENERGY

means eighty eight (88)percent of Net Electrical Energy in kWh,for which Board shall pay energy charges as set out in Article 8.

2.2.88 NON-POLITICAL FORCE MAJEURE EVENT

means the event described in section 17.1(a)

2.2.89 NORMATIVE AVAILABILITY

of the project for a tariff year/tariff period shall be 90%, (ninety percent).

2.2.90 NOT LIMITED TO

wherever used in this Agreement means only elements of the same class or category to which this phrase is applied and the principle of ejusdem generis shall apply in each such case. The term "without limitation" shall also have the same meaning.

2.2.91 OPERATION AND MAINTENANCE EXPENSES

means all expenditure other than Interest on Debt, Depreciation, tax on income, Return on Equity and interest on working capital necessarily incurred by the Company, for the generation of power by the Project as per prudent utility practices and includes, but is not limited to, all staff related expenses, costs, royalties, insurance on Fixed Assets, taxes, duties and other Governmental charges, in respect of spares for Operation and Maintenance, and all other materials, contracts, labour and other payments for running, repair, maintenance, (including replacement of parts) and overhaul of plant, equipment and works necessary for generation in accordance with this Agreement. Operation and Maintenance Expenses will be determined as per Section 8.7.2.

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2.2.92 OPERATIONAL COMMITTEE

bears the meaning set out in Section 7.8.

2.2.93 PERMITS

means all formal and informal permits, licenses, visas, authorizations and approvals from all Government Agencies and Board necessary for construction and operation and maintenance of the Project in accordance with this Agreement.

2.2.94 PLANT AVAILABILITY/AVAILABILITY

for a tariff year/tariff period means the availability of the Project (including all the generating units) to generate power continuously subject to availability of water and shall be determined in accordance with schedule-I.

2.2.95 POLITICAL FORCE MAJEURE EVENT

means any event as described in Section 17.1 (b).

2.2.96 POWER GRID CORPORATION INDIA LTD.(POWERGRID)

means the Government of India undertaking having its registered office at New Delhi.

2.2.97 PRIMARY ENERGY CHARGE

bears the meaning set out in Article 8.

2.2.98 PRIMARY ENERGY

bears the meaning set out in Article 8.

2.2.99 PROJECT

The Project shall mean Baspa Hydro Electric Project Stage-II of 3X100 MW capacity, proposed to be established on River Baspa at Karcham in District Kinnaur in Himachal Pradesh, India, as approved by the Authority including complete Hydro Power Generating facility covering all components such as Dam, Intake Works, Water Conductor System,

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Power Station, Generating units and other connected facilities including essential works of intake structure for phase-II of Baspa Hydro Electric Project Stage-I and transmission system upto Jhakri Sub-Station of Naptha Jhakri Project and the entry facilities alongwith the metering, control and protection devices etc. at the inter connection point at Jhakri, for evacuation of Power.

2.2.100 PRUDENT UTILITY PRACTICES

means those practices, methods, techniques and standards as changed from time to time, that are generally accepted internationally for use in electrical utility industries (taking into account conditions in India) and commonly used in prudent electric utility engineering and operations to design, engineer, construct, test, operate and maintain equipment lawfully, safely, efficiently and economically as applicable to power stations of size, service and type of the project and that generally conform to manufacturers operation and maintenance guidelines.

2.2.101 RUPEE

The lawful currency of India.

2.2.102 REQUIRED CAPACITY

means the capacity and the technical parameters at which the Project is expected to run as per Despatch Instruction. Required Capacity will be less than or equal to the Declared Capacity.

2.2.103 RETURN ON EQUITY (ROE)

means return on the Equity at a per annum rate of 16% calculated from the COD of the Project (or, with respect to any portion invested on a later date, with the approval of the Board from the date such portion was invested). This will be calculated as per Section 8.7.3.The 16% return on equity in respect of the period from COD of the unit (s) to COD of the Project shall be calculated on the proportionate amount of the equity for the unit(s).

2.2.104 SALEABLE AVERAGE SECONDARY ENERGY

Shall be 88 percent of the net average secondary energy. It shall be 155 MU as per Schedule IX-B.

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2.2.105 SCHEDULED BANK

means any Bank, at Shimla indicated by the Board and reasonably acceptable to the Company and the parties providing financing for the Project.

2.2.106 SCHEDULED COMMERCIAL OPERATION DATE OF THE UNIT(S)/PROJECT

means the date by which the Company schedules to achieve commercial operation of the project in accordance with Article 6 and commence power supply from all the three units on regular basis and the same shall be last day of 50th month from the date of financial closure.

Scheduled commercial operation date(s) of the three unit(s) shall be last day of 48th, 49th, and 50th month from the date of financial closure respectively.

2.2.107 SCHEDULED OUTAGE

means a planned interruption of the Generating capability of the project or a Generating Unit

(a) for inspection, testing, preventive maintenance, corrective maintenance, repairs, replacements and improvement and

(b) which is not a maintenance outage and has been scheduled and allowed by the Board.

2.2.108 SCHEDULED SYNCHRONISATION DATE OF THE UNIT

means, the date by which the company schedules to synchronise each unit with the grid. The same for three units shall be, fifteenth day of 48th, 49th and 50th month from the date of financial closure respectively.

2.2.109 SECONDARY ENERGY

bears the meaning set out in Section 8.8.2.

2.2.110 SG

means the State Government of Himachal Pradesh.

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2.2.111 STATION

300 MW Baspa-II Hydro Electric Power Station under the Project.

2.2.112 SUPPLEMENTARY BILL

bears the meaning set out in Section 10.4.

2.2.113 SYNCHRONISATION

To cause paralleling of two A.C circuits/systems when they are within desired limits of frequency, phase angle and voltage.

2.2.114 SYNCHRONISATION DATE(S)

means with respect to each Unit, the date on which each such Unit is synchronised and connected to the grid transmission system.

2.2.115 TARIFF

means the rate for the purchase of energy under this Agreement, which shall comprise four components as set forth in Article 8, namely:

(a) the Capacity Charge
(b) the Primary Energy Charge
(c) Secondary energy incentive
(d) Incentive for plant availability.

2.2.116 TARIFF PERIOD

means the period beginning from COD of the Project and ending on 31st March, of the same financial year.

2.2.117 TARIFF YEAR

means each successive period of 12 months starting from the end of Initial Tariff Year.

2.2.118 TAXES

shall mean any tax, charge, cess, impost, tariff, duty or fee of any kind charged, imposed or levied, by any Governmental Authority applicable to the Company or the Project but excluding any tax or penalty imposed on the Company by reason of Company's default.

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2.2.119 **TAX ON INCOME**

shall mean tax on income payable in India by the Company, related to generation and sale of electricity to Board in respect of this Agreement and imposed by the Government of India, but excluding any taxes or penalty imposed on the Company by reason of Company's default.

2.2.120 TECHNICAL LIMITS

The limits and constraints described in Schedule VIII hereto relating to the operation and maintenance of the Project.

2.2.121 TEST HOUSE

shall mean any Test House recognised by SG/GOI/BOARD having proper and adequate facilities for calibration of 0.5 accuracy class energy meters.

2.2.122 TESTED CAPACITY

In relation to a unit/Project means capacity as per the performance test, (or repeated performance tests) or periodic capacity tests, carried out in relation to the unit/project in accordance with Schedule V. This could be different from the name plate capacity i.e. 100 MW for a unit.

2.2.123 TRANSFORMATION LOSSES

means the difference between

(a) the no. of energy units supplied to the incoming terminals of step-up transformer(s) and

(b) the no. of energy units at the outgoing terminals of the step-up transformer(s).

The transformation losses shall deemed to be 0.5% of energy generated for the purpose of tariff determination and all other purposes.

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2.2.124 TRANSMISSION LOSSES

means the difference of the electrical energy measured at the sending end and receiving end of transmission lines (i.e. the Station and the Interconnection point). Transmission losses shall be deemed to be 0.65% of energy transmitted for the purpose of tariff determination and all other purposes.

2.2.125 UNCOMMISSIONED CAPACITY

Uncommissioned capacity on a date shall mean the installed capacity of the unit (s) which have not achieved Commercial Operation till that date.

2.2.126 UNIT OPERATING CHARACTERISTICS

The individual Generating Unit characteristics as set forth in Schedule V.

2.2.127 WATER AVAILABILITY

shall mean Water inflow measured in cumec at project site less water released for aquatic life as per environmental requirements.

2.2.128 WATER SPILLAGE

means the amount of water spilled downstream of barrage (without obtaining power generation benefits) on account of despatch instructions/grid conditions, but shall not include the minimum releases required to be ensured immediately downstream of the barrage and shall also not include the water which would have spilled otherwise also even in absence of such despatch instructions.

2.2.129 WHOLESALE PRICE INDEX (WPI)

means the Whole Sale Price Index number for All commodities in India (Month-end/Year-end data, base 1981-82=100) or any amendment thereof as published in Reserve Bank of India Bulletin or any amendment thereof.

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ARTICLE 3

CONDITIONS PRECEDENT

3.1 CONDITIONS PRECEDENT TO COMPANY'S OBLIGATIONS

Except as may be waived off by the Company, it shall be a condition precedent to the effectiveness of the Company's obligations under this Agreement, other than the obligations of the Company to use reasonable efforts to achieve Financial Closing which shall be achieved by the Company as long as the Company believes the Project is viable, that the following events shall have occurred:

(a) The Company shall have received valid, enforceable, unencumbered and insurable title to Site and such other real property rights as may be required to construct and operate the Project.

(b) The Company and the Project shall have received all Governmental Authorization listed in Schedule VII which can be applied for and received as of such date.

If due to the failure of one or more of the conditions set forth in this Section 3.1, the obligations of the Company do not become effective, then the obligations of the Board shall also not become effective.

3.2 CONDITIONS PRECEDENT TO BOARD'S OBLIGATIONS

Except as may be waived off by the Board, it shall be a condition precedent to the effectiveness of the Board's obligations under this Agreement other than the obligation of the Board to use reasonable efforts to assist the Company to achieve Financial Closing, that prior to the date of Financial Closing or such later date as the Parties hereto may agree that each of the following events shall have occurred:

(a) The Board shall have received copies of the charter documents from the Company, duly certified by its Company Secretary.

(b) The Board shall have received copies of resolutions adopted by the Company's Board of Directors authorising the execution, delivery and performance by the Company of this Agreement as certified by its Company Secretary.

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(c) The Board shall have received an undertaking from the Company supported by an opinion of legal counsel to the Company,reasonably satisfactory to the Board with respect to the Company's authority to enter into this Agreement and the enforceability of the provisions contained herein and that the Company has obtained all Governmental Authorizations required to be obtained prior to the date of Financial Closing.

(d) The Board shall have received copies of the Financial Package duly approved by Board, SG and Authority.

(e) The Board shall have received from the Company evidence satisfactory to the Board that the Company shall have received all necessary Governmental Authorizations in connection with the Company's execution and delivery of this Agreement and all Governmental Authorizations as per Schedule VII which are necessary as of such date.

(f) The Board shall have received approval of SG & GOI for this Agreement.

(g) The Financial Closure would have occurred within twelve (12) months from the effective date.

If due to the failure of one or more of the conditions set forth in this Section 3.2 the obligations of the Board do not become effective, then the obligations of the Company shall also not become effective.

3.3 The Company & the Board both shall use all reasonable efforts to achieve the fulfilment of the respective conditions precedents set out in Section 3.1 and 3.2.

3.4 Upon the date on which the company or the Board becomes aware that any of the conditions precedent set out in Section 3.1 and 3.2 has been satisfied in full, each party shall promptly give notice thereof to the other party together with full details of such satisfaction.

3.5 If the conditions precedent set out in Section 3.1 and 3.2 have not been fully satisfied or waived off within a period of 1 year from the effective date, earnest efforts shall be made to resolve the issues through good faith negotiations by the Development Committee/ respective managements. If the issues are not resolved even after such negotiations either party will have the right to terminate this agreement by giving three months notice to the other party and upon expiry of such notice in writing this Agreement will lapse and neither party shall have any liability to the other whatsoever as a result of such termination/cancellation.

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ARTICLE 4

DEVELOPMENT STAGE

COMPANY'S OBLIGATIONS

4.1 For the purpose of this Article, Development Stage means the period from the effective date until the Financial Closure or the Date of Termination of this Agreement if the Agreement is terminated pursuant to Section 3.5, whichever is earlier.

4.2 During the Development Stage the company shall use all reasonable endeavours at its own cost to carry out the work necessary to achieve development of the project and achieve Financial Closure. In particular the company shall use reasonable endeavours:-

(a) to identify, prepare applications for and liaison with all authorities in connection with and obtain all clearances necessary in connection with the construction, operation and maintenance of the project and the performance by the company of its obligations under this Agreement.

(b) to enter into Financing Agreements to the satisfaction of the Board for procuring finances for the project.

(c) to make all preliminary arrangements for the construction of the project so that the construction of the project can immediately commence after the Financial Closure.

BOARD'S OBLIGATIONS

4.3 During the development stage the Board shall use reasonable endeavours to assist the company to carry out the work necessary to achieve development of the project and achieve Financial Closure. In particular the Board shall use reasonable endeavours:-

(a) to assist the company to identify, prepare applications for and liaison with all authorities in connection with and obtain all clearances necessary in connection with the construction, operation and maintenance of the project.

(b) to assist the company enter into Financing Agreements for procuring finances for the project to the satisfaction of the Board.

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(c) to assist the company in obtaining the necessary guarantee from the SG towards payment obligation of the Board.

(d) to ensure completion of transmission facilities beyond interconnection point for evacuation of power well before the synchronisation date of the first unit.

4.4 The Board or the company shall not have any liability of any nature towards each other, in respect of any delay in achieving Financial Closure or anything omitted to be done during the Development Phase.

CO-ORDINATION DURING DEVELOPMENT STAGE

4.5 Within two months of the effective date, the Company and the Board will form a joint Development Committee for the purpose of co-ordinating the performance of the Board and the Company under this Article. The Development Committee shall be composed of two representatives of the company and two representatives of the Board. The Chairman of the Committee will be appointed by the Board. The Committee will hold its meetings at regular intervals until the Financial Closure. The Committee will monitor the progress towards Financial Closure, attempt to resolve any difficulty/differences that may arise and present a report on progress towards Financial Closure to the Board.

4.6 Neither the Board nor the Company will be liable to the other or to any other party for, or in any way bound by or responsible for, any review or action by, or decision of the Committee whether or not its representatives participated in or agreed to such review, action or decision. The Committee will not have the power to bind the Board or the Company to its decisions.

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ARTICLE 5

CONSTRUCTION STAGE

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5.1 For the purpose of this Article the construction period means a maximum period of fifty (50) months from the date of financial closure or until the termination of this Agreement if the Agreement is terminated prior to scheduled COD of the Project.

5.2 During the construction period, the Company shall procure finances for the Project and shall design, procure, construct, complete, test, commission and remedy defects in the Project in accordance with the approved Financial Package and the design parameters as per Schedule X and shall achieve commercial operation of the Project as stipulated in Section 5.1 above including 400 kV transmission line from Baspa to Jhakri and the Interconnection facilities at Jhakri to match with the scheduled synchronisation date of the Ist unit.

5.3 The Company shall provide the Board at the earliest with a detailed construction programme to match the scheduled COD of the Project.The Company shall also furnish quarterly construction schedules indicating targets for next quarter, achievements in the previous quarter and slippages and remedial action intended to be taken to cover up the slippages etc. Such quarterly schedules shall be submitted at least a week before start of relevant quarter upto commencement of operation and shall continue till COD of the Project.

5.4 During the construction period -

(a) the Board shall keep the Company apprised of the Construction Programme in respect of the transmission system for evacuation of power from the project beyond the interconnection point at Jhakri to match with scheduled synchronisation date of the Ist unit of the Project.

(b) the Board shall design,construct and install the Power System at the cost of the Project as mutually agreed between the Board and the Company for supply of construction power to the Project and shall supply construction power to the Project as applied by the Company from time to time at the tariff rates for the Board's Bulk Supply consumers as prevalent from time to time,as per availability.The Board shall however not be liable to pay any damage/compensation to the company on this account.

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5.5 Co-ordination during the Construction Period -

(a) During the Construction Period the designated Board Personnel will have access to the project for the purpose of inspection of the progress of work and the relevant technical documents/drawings. The Company shall take due cognizance of any comments/suggestions made by the designated representative of the Board.

(b) A Monitoring Committee as stipulated in the Baspa-II Agreement shall be in position during the construction period as well as during the implementation of this Agreement. The monitoring committee shall be composed of two representatives of the Company and one representative each of the Board and the SG. The Chairman of the Committee will be appointed by the SG. The concerned Party may replace any of its representatives with at least seven days Notice to the other Party. Similarly, the SG may also replace the Chairman of the Committee by giving a notice of at least seven days to the Company. The monitoring committee will have no power to bind either the Board or the Company but will be responsible for monitoring of Construction milestones and assessing the progress towards commissioning of the Project and shall also attempt to resolve any difficulties which may arise.

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ARTICLE 6

COMMISSIONING AND ACHIEVING COMMERCIAL OPERATION

6.1 SYNCHRONISATION

6.1.1 The Company shall give the Board at least sixty (60) days advance written notice of the date on which it intends to synchronise a Unit to the Grid System, which date shall be not earlier than the Scheduled synchronisation date for the Ist unit unless the Board otherwise agrees.

The Company shall give sixty (60) days prior intimation to the Board and Independent Engineer of the programme for synchronization, performance tests and operating characteristics tests as per Schedule V.

6.1.2 Subject to Section 6.1.1, the Company shall declare a Unit to be ready for synchronisation with the Grid System when:

(i) it has been installed in accordance with the required technical Specifications and prudent utility practices.

(ii) it meets all conditions prescribed in applicable Indian Standard(s)/Code(s) then in effect and otherwise meets the provisions of Indian Electricity Acts/Rules or any other requirements for synchronisation to the Grid System:

(iii) is capable of being operated safely and the Company has obtained the approval of the Chief Electrical Inspector of the SG for energisation.

6.1.3 The Company shall notify the Board, as soon as the requirement of Section 6.1.2 have been met and the unit is ready to be synchronised to the Grid System in accordance with this Agreement. The Company shall also inform POWERGRID,NJPC and other concerned authorities of the readiness of the unit(s) for synchronisation.

6.1.4 The Board, and its authorised representatives shall inspect any Unit which the Company intends to synchronise to the Grid System within five (5) days after being notified in writing by the Company pursuant to Section 6.1.3 to determine whether the requirements of Section 6.1.2 have been met. The Company shall provide the Board, with such access to the Station as is reasonably required to make such determination.

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6.1.5 If the Board, is satisfied that the Unit is ready to be synchronised in accordance with Section 6.1.2, it shall promptly notify the Company to that effect and provide the Company with all reasonable assistance in synchronising the Unit and conducting performance and unit characteristic tests as soon as reasonably practicable.

6.1.6 If the Board does not inspect the Unit when required pursuant to Section 6.1.4, or having inspected the Unit, it determines that the requirements of Section 6.1.2 are not met, the Company shall nevertheless be entitled to synchronise the Unit to the Grid System, with the prior concurrence of NJPC, if the Independent Engineer:

(i) certifies to Board in writing that, in its opinion, the Unit to be synchronised is ready for synchronisation in accordance with Section 6.1.2; and

(ii) gives in writing the reasons why,in its opinion, any objections raised by Board are not well founded.

6.1.7 The Company shall normally conduct Performance Test(s) within fifteen (15) days from the date of synchronisation.

In continuation to notice as per section 6.1.1 the Company shall further give atleast seven (7) days notice by fax to the Board and the Independent Engineer of the exact date(s) on which performance test(s) and/or Unit Operating Characteristic Tests will commence. The Company, the Board and the Independent Engineer shall each designate and make available qualified and authorised representatives to observe the performance test(s) and unit operating characteristic test(s) and to monitor the recording of measurements.

In case any test(s) are required to be repeated, two (2) days notice by fax shall be given to the Board and the Independent Engineer.

Testing and measuring procedures used in performance test(s) and unit operating characteristic(s) Test(s) shall be in accordance with prudent utility practices and the International/Indian Standards. Company shall supply the procedures and test data sheets Sixty (60) days in advance to the Board and the Independent Engineer.

In case Board's representative does not attend the test as per notice by the Company, the Company shall proceed with the test(s) in the presence of Independent Engineer, after giving a further notice of atleast two (2) days to the Board.

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6.1.8 The procedure laid down in Section 6.1 shall also apply for declaring a unit ready for synchronisation in the event of transmission system beyond the Interconnection Point, not being ready.

6.2 PERFORMANCE TEST(S)

6.2.1 A Unit shall have passed its Performance Test(s), if it successfully meets the requirements and objectives of the performance tests specified in Schedule V.

6.2.2 DEFERMENT OF PERFORMANCE TEST(S)

If the Interconnection and the Grid System cannot evacuate the Power that would be generated during testing, the tests shall be performed in accordance with the existing conditions to the extent possible. These results shall be adopted for the interim period till such time the actual performance test is conducted. If the performance test(s) are deferred due to the fact that full power can not be evacuated, the respective unit(s) and the Project, as the case may be will be deemed to have achieved commercial operation on the date of synchronisation or the date on which Performance Tests (to the extent possible) have been performed as per existing grid conditions or the scheduled COD of the project whichever is later. Energy generated from synchronisation date upto deemed COD shall be treated as infirm energy. However the actual performance test shall be conducted at the earliest available opportunity when power upto rated load i.e. 100 MW for each generating unit and 300 MW for the project can be evacuated. The energy generated by that Unit/project from the date on which performance tests are commenced upto the date on which that Unit/project achieves actual commercial operation on the basis of actual performance tests, shall also be treated as infirm energy.

From the date of deemed COD till actual performance tests for the unit(s) are commenced, shortfall in generation due to non evacuation of power or generation equivalent to water spillage whichever is lower but upto design energy for the tariff period/tariff year shall be considered for computation of deemed generation as per Section 2.2.33. Only capacity charges shall be payable in case the deemed commissioning is on account of non-commissioning of transmission system beyond interconnection point. No deemed generation shall be payable in this case.

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6.3 UNIT OPERATING CHARACTERISTICS TESTS

Not later than one hundred eighty (180) days after the date of synchronisation of any unit, the Company will conduct unit operating characteristic tests for such unit. Such tests may, at the Company's option, be conducted concurrently with the Performance Tests. The unit operating characteristic Tests shall be conducted as per Schedule V.

6.4 NOTICE OF RESULTS

(a) Within seven (7) Days after the conclusion of each Performance Test(s) and Unit Characteristics Test(s), for each Unit/project, the Company shall submit a written notice to the Board with a copy submitted to the Independent Engineer, stating that;

(i) in the case of a Performance Test, whether the Unit passed or failed such test(s), accompanied by sufficient test data to demonstrate the level of performance with respect to each of the tested parameters; or

(ii) in the case of a unit operating characteristic Test(s), the levels of performance achieved with respect to each of the tested parameters and sufficient test data to demonstrate such level of performance.

(b) Within seven (7) Days of receipt of such notice, the Board shall submit a notice to the Company with a copy submitted to the Independent Engineer, stating either:

(i) that the Board concurs with the information provided in the Company's notice or

(ii) that the Board disputes some or all of the information in the Company's notice, which areas are being disputed, and what levels of performance the Board believes were established for those areas being disputed.

(c) If the Board concurs with the information in the Company's notice,the Independent Engineer shall within seven (7) Days of receipt of the Board's Notice,provide written notice to the Company and the Board, certifying the results of the tests.

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(d) If the Board disputes any or all of the results contained in Company's notice, representatives of the Company, the Board and the Independent Engineer shall meet within seven (7) Days of the Company's receipt of the Board Notice at a mutually acceptable location to review and discuss the dispute. Within seven (7) days of the meeting the Independent Engineer shall decide the level of any disputed performance. Such decision shall be certified in a notice to the Company and the Board, and shall be binding on the Parties.

6.5 RETESTING

Upon giving appropriate notice to the Board and the Independent Engineer as per Section 6.1.7, the Company shall be entitled to repeat performance test(s) and/or unit operating characteristic test(s).

6.6 ACHIEVEMENT OF COMMERCIAL OPERATION

The Commercial Operation of a Unit shall have occurred as on the date such Unit successfully completes Performance Test(s) and unit operating characteristic test(s) as per Schedule V, as certified by the Independent Engineer as per Section 6.4.

The date of Commercial Operation of the Project shall be deemed to have occurred as on the date on which all the units of the Project have achieved Commercial Operation and all the units are capable of generating power simultaneously at full capacity subject to availability of water.

6.7 FAILURE TO MEET CAPACITY PERFORMANCE TESTS

If the results, as certified by the Engineer, of the Capacity Performance Test for a Unit/Project do not meet the performance levels, the Company shall within One hundred eighty (180) Days of the achievement of Commercial Operation, make good all the defects that prevented the Unit from achieving the required performance levels as per Schedule V. When the Unit has been repaired and modified, the Company shall give the Board, notice of its readiness to repeat the test(s) outlined in Section 6.2 above. If after the retesting(s) the Unit still does not achieve the required performance levels as per Schedule V, the Company shall bear the liquidated damages stated as per Article 11 for any short fall in the capacity.

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6.8 PERIODIC CAPACITY TEST

Periodically, capacity of the units/project shall be tested during second tariff year and every alternate tariff year thereafter as per programme proposed by the company and agreed by the board. In case tested capacity of the unit/project is less than the name plate capacity/ installed capacity the Company shall declare the maximum available capacity upto the tested capacity only.

Company at the earliest will take appropriate steps to restore the capacity and demonstrate the same to the Board. From the day following the demonstration the maximum available capacity shall be revised as capacity so demonstrated.

6.9 COMMENCEMENT OF COMMERCIAL OPERATION AHEAD OF SCHEDULED COD

The company shall commission the Project within 50 months from the date of financial closure as per Section 5.1. The Company shall also keep apprised the Board of the progress of various works from time to time as per provisions under Article 5. The Company shall make all efforts to complete the Project ahead of the scheduled COD of the Project. Company shall intimate any revision in synchronization and COD dates of the units /Project at least 180 days in advance to the Board. Board shall communicate its acceptance or otherwise within 30 days of the proposal. On acceptance, scheduled COD shall stand preponed by the proposed period, for all purposes of this Agreement.

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ARTICLE 7

PLANT OPERATION AND MAINTENANCE

7.1 Subject to the provisions of this Agreement, the Company shall operate and maintain, and if required, effect improvement (within the overall scope of Project Implementation) in the Project in accordance with :

(i) Prudent Utility Practices
(ii) All applicable laws and directives
(iii) The manuals, instructions and manufacturer's guidelines supplied by Construction Contractors, manufacturers of equipments/suppliers etc.
(iv) The grid technical parameters as described in Schedule VIII.
(v) Despatch Instructions.

7.2 SCHEDULED OUTAGES

(a) Atleast 45 Days prior to the Scheduled Synchronisation date of the first unit of the Project, the Company shall submit to the Board proposed schedule of planned outage periods for the initial tariff period. Thereafter, by 15th February preceding each tariff year, the Company shall submit to the Board its proposed schedule of planned outage period for the following year.

(b) Within 45 days of submission of schedule by the Company, the Board shall notify the Company in writing whether the proposed planned outage periods are acceptable. If the Board cannot accept any of the requested planned outage periods, the Board shall advise the Company of a period when Board determines such acceptable planned outage period can be rescheduled. Such rescheduled period shall be as close as reasonably practicable to the proposed period, shall comply with the Technical limits and Prudent Utility practices and shall be of equal duration as the requested period. The Company shall review the scheduled plant outage proposed by the Board and communicate its acceptance. If the proposed schedule is not acceptable, Company will propose alternate schedule taking into account Board's view to the extent possible. Board shall consider and communicate its acceptance.

A single scheduled outage for a unit shall not be split into two or more period without concurrence of the Company.

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(c) Commencing with commercial operation date, the Company may not normally schedule more than a total of 30 days of planned outages for any Unit in a tariff year/tariff period. Company shall normally not be permitted to schedule planned outages during the maximum generation months except for short duration for planned maintenance in conformity with plant equipment manufacturer's maintenance and inspection Schedule.

(d) Board may, upon fifteen days prior written notice, require the Company to reschedule a planned outage, provided however, that the Board shall not request that such planned outage be rescheduled in a manner or time outside the Technical limits and Prudent Utility Practices. Any preponement of planned outage shall be with the consent of the Company.

Company may prepone or postpone a scheduled outage giving 30 days notice to the Board. The rescheduled dates shall be mutually agreed between the parties.

(e) The Board and the Company shall also use their reasonable efforts to co-ordinate the maintenance programme for the interconnection facilities and transmission system with the approved planned outages so as to minimise any disruptions to the operation of the Project.

7.3 **MAINTENANCE OUTAGES**

When the circumstances warrant a maintenance outage, the Company shall advise the Board of such circumstances and of the proposed commencement and estimated duration of maintenance outage. The Board may grant the Company the right to schedule and conduct such maintenance outage at a time acceptable to the Board.

7.4 **OPERATION**

The Control Centre may issue Despatch Instructions directing the Project's operator to vary active and reactive electrical output from the Project in accordance with Prudent Utility Practices, the Technical Limits of the Project and availability of water and the Company shall follow such Despatch instructions.

7.5 FORCED OUTAGES

In case of forced outage, the Company shall take all reasonable steps to bring back the equipment into service that is under forced outage as early as may be reasonably practical.

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7.6 EMERGENCY PLANS

The Company shall coordinate with the Board to establish agreed Emergency plans for the Project as per prudent utility practices at least one hundred and twenty (120) Days before the scheduled COD of the Project including, without limitation the contingency for recovery from a electrical blackout and voltage/frequency reduction.

7.7 SUPPLY OF POWER IN EMERGENCY

The Company shall, during an Emergency, as soon as possible after receipt of a request from the Board, supply such power as the Project is able to generate consistent with prudent utility practices and availability of water, provided, however, that the Company shall not be obligated to operate beyond the Technical Limits and if the Company reasonably believes that as a result of such operation there is a serious likelihood that a set or unit may trip. If a Scheduled Outage or Maintenance Outage occurs or would occur coincident with an Emergency, the Company shall make all reasonable efforts to reschedule the Scheduled Outage or Maintenance Outage with the approval of the Board or, if the Scheduled Outage or Maintenance Outage has begun, expedite the completion of the work to restore generation as soon as possible.

7.8 OPERATIONAL COMMITTEE MEMBERSHIP AND DUTIES

(a) Atleast six months before the scheduled COD of the project, the parties shall establish an Operational Committee comprising six (6) members. The Company and the Board shall each appoint two (2) members each while NJPC and POWERGRID will have one member each. The chairman of the committee will be appointed by the Board. The operational Committee shall be responsible for the co-ordination of the operation of the Project and the Grid System. Without limiting the generality of foregoing, the duties of such committee shall include:

(i) the discussion on the steps to be taken on the occurrence of any event of Force Majeure, or the shutdown or reduction in capacity or any other event of concern, relating to the interconnection facilities, transmission facilities or the Project;

(ii) the co-ordination of scheduled maintenance programmes;

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(iii) the co-ordination of forecast or any other requirements from the Project;

(iv) the development of operating procedures and their periodic review. The company shall put up to the Committee draft for such operating procedure for the project at least 120 days before the scheduled COD of the Project.

(v) safety matters affecting both the Parties or their Contractors;

(vi) Monitoring of implementation of emergency plans developed by the Board for recovery from an electrical blackout; in so far as it relates to the Project

(vii) Review of protection schemes and devices, including relay settings etc., and

(viii) any other mutually agreed matter affecting the operation of the Project with the Grid System..

(b) The Committee may agree upon timing and procedures for the holding of meetings, the records of meeting and the appointment of sub-committees.

(c) In case of matters not resolved by consensus (unanimous agreement of the Parties), the Committee or either party may refer such matters to the chief executives of the Board and the Company for further consideration.

7.9 **MAINTENANCE OF RECORDS**

Each Party shall keep complete and accurate records and all other data required by each of them for the purposes of proper administration of this Agreement. Among other records and data required hereby or elsewhere in this Agreement, the Company shall maintain an accurate and up-to-date operating log at the Project as per prudent utility practices including records of:

(a) Active and reactive power production for each hour at all times and the Energy generated on hourly basis. The Company shall make provision for recording of the power/energy data on appropriate magnetic media or equivalent.

(b) scheduled outages, maintenance outages and forced outages; and

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(c) any unusual conditions found during operation/inspections.

All such records shall be maintained for a minimum of sixty (60) months after the creation of such record or data; provided, however, that the parties shall not dispose of or destroy any such records after such sixty (60) month period without thirty (30) days' prior written notice to the other party.

Either party shall have the right, upon reasonable prior notice to the other party, and at reasonable times, to examine the records and data maintained by the other party relating to this Agreement for the operation and despatch from the Project at any time during normal office hours, during the period such records and data are required hereunder to be maintained.

7.10 DOCUMENTS TO BE PROVIDED BY THE COMPANY

The Board as a purchaser of power shall have a right to see any record that is necessary for ascertaining detailed specifications of the equipments that may be procured for the project. Notwithstanding any other provisions of this agreement requiring the Company to obtain the Board's approval to any document/ agreement the company shall provide the following documents for information purposes to the Board:-

(a) Documents regarding selection of site for construction of the Project.

(b) General layout drawings of the project including equipment layout and protection schemes adopted.

(c) Copies of the purchase orders for generating units for the project and such other equipments as may be required by the Board.

(d) Copies of all permits, licences, approvals and other Government authorizations issued to the Company from time to time for the design, financing, construction operation and maintenance of the Project.

(e) Copy of the Company's plan for operation and maintenance of the Project.

(f) Copy of start up and test schedule of the Project.

(g) Copy of all test results in respect of tests performed on various components of the Project.

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ARTICLE 8

SALE AND PURCHASE OF THE ENERGY

8.1 From and after the date of synchronisation of the first unit of the Project with the grid, the Company shall sell and the Board shall purchase at the interconnection point at Jhakri, for the consideration set forth hereinafter, 88% of the Electrical Energy delivered by the project. The balance 12% of Electrical energy shall be delivered by the Company to the Board at the interconnection point at Jhakri, free of cost.

During such period as may occur from time to time, as the Project is partially or totally unable to operate, the company may draw energy required for startup and maintenance of the Project from the Board's system metered at the station and paid for at the same tariff at which the Board purchases the energy from the Company and adjust the same in corresponding month's bill accordingly. For this purpose overall rate of energy shall be calculated on the basis of capacity charges, primary energy charges and saleable design energy for that tariff year/tariff period.

8.2. The saleable portion of the energy generated by each unit of the Project from the date of synchronisation of the unit with the grid to the Commercial operation date of that unit shall be paid for by the Board to the Company at the overall per unit rate applicable for the initial tariff period. This overall per unit rate shall be arrived at after taking into consideration the capacity charges,the primary energy charges and saleable design energy for the initial tariff period. Pending determination of this per unit rate, the payment shall be made on provisional basis at the Bulk supply tariff of the Board. The adjustment shall be done after COD of the Project. The capital cost shall however be reduced by an amount equal to the value of the saleable infirm energy on the above basis.

8.3 SUPPLY OF ACTIVE AND REACTIVE POWER

The Company will produce and supply to the grid, active and reactive power in accordance with the despatch schedule/instructions from time to time within the technical parameters of the Units,declared capacity, water availability and grid conditions.

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8.4 CAPITAL COST

8.4.1 CAPITAL COST OF THE PROJECT

The Capital Cost shall mean the cost of development, financing, engineering, procurement, construction, cost of initial inventory of spares and other costs and shall be equal to the net sum of the following components (a) to (h):

(a) Basic Cost of project shall be Rupees seven hundred two decimal seven seven(702.77) crores (December 1993 Price Level) with break-up as under:-

(i)	Civil Works		Rs. 272.85 crores
(ii)	Electrical Works		Rs. 348.15 crores
(iii)	Transmission		Rs. 81.77 crores
(iv	Inventory Spares included in above		
	- Civil	0.50	
	- Electrical	15.00	
	- Transmission	0.50	
		16.00	
	Total		**Rs. 702.77 crores**

This basic cost does not include Rs.1.36 Crores on account of expenditure incurred by the Board as included in the Detailed Project Report.

The above cost shall be treated as the sealed cost.

However, the basic cost and the sealed cost as per above will be referred by the Board to the Authority for their approval.

No additional cost on basic sealed cost shall be admissible on any account except on account of geological surprises and uncertainties which shall be subject to satisfactory proof by the Company and verification by the Board and shall be limited to maximum of Rupees eight decimal eight (8.8) Crores.

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(b) The escalation on the unspent amount of basic cost as per the approved financial package @ six (6) percent per annum (compounded annually) from January, 1994 up to the Commercial Operation date of the Unit(s)/Project or the Scheduled commercial operation date of the Project, whichever is earlier, without any reference to indices.

(c) In case the escalation on the basis of Weighted Price Index as per Schedule XI, for any year exceeds 8% per annum, the escalation for that year shall be allowed at a rate by which the escalation so determined for that year exceeds 8% per annum. This shall be in addition to escalation @ 6% per annum as per clause (b) above.

Note:-

(i) Any escalation in excess of 6% per annum and up to 8% per annum as per the Weighted Price Index determined in accordance with Schedule XI in respect of any year/escalation period shall be absorbed by the Company and not added to the Project Cost.

(ii) Escalation on above lines shall be worked out separately for each financial year (or relevant portion thereof) and only on the unspent portion of the cost in accordance with the approved Financial Package.

(iii) In the case of broken periods which do not constitute a full financial year, Weighted Price Index shall be worked out on the basis of indices for that period only.

(d) Interest during construction on the outstanding loan and financing charges as per approved financial package up to the Scheduled commercial operation date of the Project or actual commercial operation date of the Unit/Project, whichever is earlier.

(e) The escalation, interest during construction and financing charges in respect of the proportionate basic sealed cost of the unit(s) which may achieve commercial operation date before the Scheduled commercial operation date of the Project, shall cease to be included in the Capital Cost from such respective dates on which such unit(s) achieve commercial operation.

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(f) In the event of extension in the Scheduled commercial operation date of the Project on account of Force-Majeure events, provisions under Article 17, shall apply.

(g) Any change in cost on account of changes in law as per Article 20.

(h) The cost worked out on above lines shall be reduced by the following:-

i) Amount of reduction, if any, on the Capital Cost in accordance with Section 11.3.
ii) Any revenue from sale of infirm energy.

(i) No other additional cost/charges shall be allowed on any account, whatsoever.

Explanation 1 : The capital expenditure shall not include the margin money for working capital.

Explanation 2 : The capital cost shall also not include any payments by the Company for delays beyond the scheduled COD of the Project - or any extension thereof.

Explanation 3 : Foreign Exchange component, shall not exceed 33% of total Capital cost on completion.However if the foreign component is more than 33%, as per approved financial package, Board's liability to bear the foreign exchange rate variation shall be limited to 33% of the total capital cost as per provisions under Section 8.13. As far as possible no equity shall be subscribed in foreign currency.

8.4.2 CAPITAL COST OF ONE GENERATING UNIT

Capital Cost in respect of one unit shall be equal to one third of the capital cost of the Project, as worked out upto the scheduled COD of the Project on the basis of approved financial package. The capital cost of the first unit as determined on this basis shall be treated as capitalised on COD of the first unit for determining the capital cost of the Project and no IDC and escalation etc. shall be included in the capital cost of the Project for the period thereafter.

8.4.3 CAPITAL COST OF TWO GENERATING UNITS

Capital Cost in relation to two units shall be summation of the Capital Cost for each of the two units, which shall be determined separately for each of the two units in accordance with Section 8.4.2. The capital cost of the second unit shall also be capitalised on the COD of the second unit in the same manner as for the first unit as per Section 8.4.2.

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8.5 TARIFF

The Tariff for 88% of the energy generated by the Project and delivered to the Board will comprise of four parts namely

(i) Capacity charges
(ii) Primary Energy Charges
(iii) Incentive for Secondary Energy
(iv) Incentive in case the Plant availability level as determined in accordance Schedule I is greater than 90%.

These charges shall be determined as per the following provisions.

8.6 CAPACITY CHARGES

8.6.1 The capacity Charge component of the Tariff for a Tariff Year shall be a lumpsum amount equal to sum of the following amounts:

(i) Interest on outstanding loan, becoming due during that tariff year as per the approved Financial Package.

(ii) Depreciation/Advance against Depreciation for tariff year as per Section 8.6.5.

(iii) Leasing Charges: In case the Company takes any assets on lease, the leasing charges as per the approved financial package, shall be payable.

8.6.2 Full capacity charges for a tariff period/tariff year shall be recoverable if the availability level for that tariff period/tariff year as determined in accordance with Schedule I equals or exceeds the normative availability level of 90%. In case the availability level in a tariff period/tariff year is less than 90% capacity charges shall be reduced on pro-rata basis. There shall not be any payment of capacity charges for availability level of more than 90 percent in a tariff period/tariff year.

8.6.3 (a) Capacity charges in case of a tariff period under this Agreement shall be sum of following amounts:-

(i) Interest due for payment as per approved financial package for that tariff period.

(ii) Depreciation/Advance depreciation on prorata basis for that tariff period as calculated as per Section 8.6.5 for that tariff year.

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(iii) Leasing charges for that tariff period as per approved financial package.

(b) Capacity charges for a month or part of the month shall be worked out on prorata basis proportionate to capacity charges for the tariff period worked out as above.

(c) Capacity charges payable by the Board as above shall be recoverable for 90% availability of the units during tariff period. If availability as per Schedule I during tariff period is less than 90%, the above charges shall be reduced prorata. If availability during tariff period is more than 90%, no additional capacity charges shall be payable.

(d) Where COD of the project has not been achieved and only one or two units have been commissioned, interest, depreciation and leasing charges shall be calculated based on capital cost of the respective units at the applicable rate.

(e) In case of last tariff year in which loan repayment is completed:-

(i) Capacity charges shall be calculated as per Section 8.6.3(a).

(ii) Capacity charges for a month or a part of the month shall be worked out as per section 8.6.3(b).

(iii) Plant availability shall be reckoned on the basis of the corresponding tariff year.

(f) In case of any proportionate reduction in the capacity charges on account of Plant availability level being less than 90% as per the Schedule I for any tariff year/tariff period, the amount of such reduction shall be deemed as paid by the Board towards respective components of the capacity charges.

8.6.4 Interest on outstanding debt shall be calculated on the debt outstanding during that Tariff Year/tariff period as per the capital cost and the approved Financial package.

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

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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 (one twelfth) 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 the payment made on account of depreciation and the balance amount shall be treated as advance against depreciation. After the expiry of the 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.

8.6.5.2 In case the Company takes any assets on lease, the leasing charges, as per approved Financial package, shall be considered in lieu of interest and depreciation charges under Section 8.6.4 and 8.6.5 above for such assets.

8.6.6 The Capacity charges would be payable by the Board to the Company on monthly basis at a uniform monthly rate for the tariff year/period i.e. by dividing the Capacity charges for that tariff year/tariff period by the number of months contained in that tariff year/tariff period. The proportionate reduction in the capacity charges as per Section 8.6.2 shall be worked out at the end of each Tariff year/Tariff period and the same shall be adjusted in the next energy bill, provided that if the plant availability level for any month as per Schedule I falls below 90%, the capacity charges for that month would be reduced on pro-rata basis in monthly bill of that month.

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8.7 PRIMARY ENERGY CHARGES

8.7.1 The per unit rate of primary energy shall be determined for each tariff year/tariff period by dividing the summation of the operation and maintenance charges for that tariff year/tariff period as per Section 8.7.2 and 16% (sixteen percent) return on equity as per Section 8.7.3 and the interest on working capital for that tariff year/tariff period as per Section 8.7.4 and other miscellaneous charges for that tariff year/tariff period as per Section 8.7.5 with the energy quantum equivalent to the net saleable design energy for the tariff year/tariff period. The components shall be determined as per the following provisions.

8.7.2 OPERATION AND MAINTENANCE CHARGES

(a) 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 percent) 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 first ten tariff years. Thereafter the escalation for each year shall be computed as per the formula given in Schedule XI.

(b) For the tariff period, the O&M charges shall be worked out on pro-rata basis for actual number of days falling in such period, at the rate of 1.25% of the capital cost for 365 days. Similarly, the operation and maintenance charges for the last tariff year shall also be determined on proportionate basis.

8.7.3 RETURN ON EQUITY

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.

Explanation I: For the purpose of this sub paragraph of Section 8.7.3, the Company shall, in regard to subscribed equity brought in foreign exchange, have the option to compute the return on equity not exceeding 16% in US Dollars as per provision under Article 10. The option in this regard shall be exercised in the approved Financial package.

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Explanation II: Premium raised by the Company while issuing share capital, for the funding of the project, shall also be reckoned as paid up capital for the purpose of computing the return on equity, provided such premium amount is actually utilised for meeting the capital expenditure on the project as set out in the approved Financial package.

8.7.4 INTEREST ON WORKING CAPITAL

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 capitalised. 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.

8.7.5 OTHER MISCELLANEOUS CHARGES

Any other miscellaneous charges as may be specifically applicable to the generating unit/station which would include cess for the use of water for power generation, if levied after the effective date in addition to the 12% free power.

8.7.6 Not later than thirty (30) days prior to beginning of the tariff period/initial tariff year and each tariff year, the Company will submit the calculations for the per unit Primary Energy Rate for the next Tariff Year/period for verification by the Board. The net saleable design energy to be adopted for the purpose of determination of per unit tariff in respect of the Tariff period and the Last Tariff Year, each of which may comprise of less than 12 months, shall be worked out on proportionate basis i.e. by dividing the total saleable design energy for the full year with 365 and multiplying the same with the actual number of days in such periods. Similarly, the amount of other charges shall also be worked out on proportionate basis for the purpose of determination of tariffs for such periods.

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8.8 **QUANTIFICATION OF PRIMARY ENERGY**

8.8.1 The primary energy charges payable by the Board for any tariff year shall be worked out by multiplying the energy quantum equivalent to 88% of the sum of the delivered primary energy for the tariff year and the deemed energy (projected at the interconnection point) for the tariff year, with the per unit rate for that tariff year as per Section 8.7.1 above. The total quantum of energy on which the primary energy charges are payable shall however not exceed 88% of the quantum of net design energy for that tariff year. The primary energy charges for the tariff period and the initial tariff year shall also be determined on similar basis.

8.8.2 Apportionment of the annual design energy amongst the calendar months on the basis of 90% dependable year shall be as per Schedule IX-A. The energy delivered at the interconnection point at Jhakri during any month shall be provisionally segregated as primary energy and secondary energy on the basis of this apportionment (the energy to the extent of net design energy shall be treated as primary energy and the energy in excess of primary energy shall be treated as secondary energy). Final determination of primary and secondary energy shall however be made at the end of the relevant tariff year/tariff period. The saleable energy delivered at Interconnection Point (after excluding infirm energy) to the extent of net saleable design energy shall be treated as saleable primary energy and energy in excess of the same shall be treated as net saleable secondary energy during the tariff year/ tariff period.

8.9 **INCENTIVE FOR SECONDARY ENERGY**

8.9.1 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. The above energy figures take into account the release of five cusec of water to be ensured by the company immediately down stream of the barrage, auxiliary consumption and losses upto Jhakri as well as the 12% free energy on the component of Secondary energy. In case of tariff period/last tariff year the annual ceiling of 10% ROE shall be reduced on pro-rata basis.

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8.9.2 Monthly payments for 88% of secondary energy actually delivered at interconnection point at Jhakri, as determined in accordance with section 8.8.2 shall be made at the rate determined under section 8.9.1 on provisional basis.In case the maximum limit of payments on this account for any tariff year/period is achieved before the close of that tariff year/period, the monthly payments in respect of that year shall be stopped from such month in which such limit is achieved. Annual adjustments shall be made at the end of relevant year when the total energy delivered at interconnection point during that year shall be apportioned as Primary and secondary energy. The corresponding saleable portions of these two components shall be worked out by deducting 12% free energy out of each of these components.

8.9.3 The Company shall continue to generate energy at the Project to the maximum possible extent and supply the same to the Board, even if the saleable secondary energy for that tariff year/tariff period has exceeded the limit which would entitle the Company to the maximum permissible incentive in that tariff year/tariff period as per the provisions of this Article.

8.10 INCENTIVE ON ACCOUNT OF HIGHER PLANT AVAILABILITY

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.

8.11 TAX ON INCOME

8.11.1 Tax on income in accordance with explanation given below will be payable as an expense to the company. If any advance tax shall be payable by the Company in any month based on income relating to the Project, the Company shall submit a tax bill to the Board at least 30 days prior to the required date of payment of such tax/advance tax by the Company reflecting the detailed calculations for such tax/advance tax. Each bill for tax/advance tax shall be supported by

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a certificate of the Auditors of the Company. The Board shall pay to the Company an amount equal to the amount of such tax/advance tax after 30 days from the receipt of such bills or ten days prior to the last date of payment by the Company, whichever is later. After the tax assessment is completed for any tariff year/tariff period the excess/shortfall so determined will be reflected in the regular monthly bill for the Billing Month in which such assessment is completed.

Explanation :-

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 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 the Income tax law. Rebate on account of depreciation and any other rebate/exemption admissible under law shall be considered for purposes of calculation of tax liability of the Board.

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

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

The Company shall maintain separate record in respect of income tax liability of the Board. These shall be reconciled with the Board annually.

8.11.2 MINIMISING INCOME TAX LIABILITY

The Company shall take all reasonable steps to ensure that its tax liability in respect of its income from the Project is minimised, by availing all permissible benefits, rebates, concessions and the like, in accordance with law.

8.12 DEEMED SALEABLE ENERGY

8.12.1 Deemed Saleable Energy shall be equal to 88% of the energy quantum worked out by deducting the following from deemed generation as per Section 2.2.33 :-

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

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The deemed generation and the deemed saleable energy shall be jointly determined by the authorised representatives of two parties at the end of tariff period/tariff year in accordance with section 9.22.

8.12.2 DEEMED ENERGY IN CASE OF NON-EVACUATION OF POWER

a) In case of deemed generation on account of transmission system beyond interconnection point not ready or not capable to evacuate the total power which can be generated by the Project as per water availability, the deemed generation shall be calculated as under:-

(i) If the transmission system beyond interconnection point is not ready and the unit(s)/Project are ready and cannot be synchronised with the grid, the date as determined by the Independent Engineer for synchronisation shall be treated as the date of synchronisation and deemed COD. Only capacity charges shall be payable from deemed COD till the transmission system is ready and units can be synchronised. The energy generated from the date of transmission system, being ready for synchronisation as certified by the Independent Engineer till the actual COD of the Unit(s)/Project is achieved, will be treated as infirm energy.

(ii) In case transmission system is ready and the units can be synchronised but the grid system cannot evacuate the total power that can be generated, the infirm energy will be computed from the date of synchronisation till the date on which performance tests, as per existing grid conditions, have been performed as certified by the Independent Engineer. After the Board notifies transmission system to be ready and requires the Company to complete the remaining performance tests, the Company shall do the needful and notify the date of tests to the Board and Independent Engineer. Any generation during the period of conducting performance tests shall be considered as infirm energy till the machine achieves COD.

b) Deemed generation as per (a) (ii) above and deemed generation after COD of the Project shall be computed corresponding to actual water spillage on account of non-evacuation of power and limited up to design energy as per Section 2.2.33 but no deemed generation shall be payable in case of (a) (i) above.

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8.13 FOREIGN EXCHANGE RATE VARIATION

Extra Rupee liability on account of foreign exchange variation towards interest payment and loan repayment incurred in the relevant year, shall be payable subject to limits specified hereinafter on the basis of current exchange rate between the US$ and Indian Rupee, on the date on which the remittance is due, provided it directly arises out of the foreign exchange rate variation and is not attributable to the Company or its Suppliers or Contractors.

The total foreign exchange variation during a year shall be on the basis of interest and debt repayment during that year in respect of outstanding foreign debt and maximum of sixteen percent return on foreign equity provided that total amount on which foreign exchange variation is to be borne by the Board in a year shall not exceed 33% of summation of total outstanding loan, outstanding amount of the lease rentals and a maximum of sixteen percent return on equity.

8.14 TARIFF COMPUTATION

Tariff in terms of Article 8 shall be computed by the Company thirty (30) days prior to each tariff year/tariff period commencing the date of commercial operation of the first unit, strictly in accordance with the terms of this Agreement and made available to the Board for their verification. The rate of exchange between US Dollar and Indian Rupees as applicable on Fifteenth February of the year preceding the tariff year for which tariff is to be computed, shall be adopted for converting the tariff component which are to be computed in US Dollars as per the provision of this Agreement. In the event of any discrepancy, the Board shall intimate the same to the Company within fifteen (15) days of receipt of the tariff computations. The Company shall intimate its views relating to the discrepancies within fifteen (15) days of receipt thereof. Notwithstanding the aforesaid, the payment shall be made by the Board to the Company at notified rates subject to future adjustments along with interest on the amount over billed by the Company at interest rates as per Section 10.15.

8.15 RECORDS

For the purposes of this Agreement, the records regarding the assets, liabilities, equity, revenue and expenses of the Company incurred in foreign currency as per approved financial package shall be maintained by the Company based on the original source of the funds, on the date of accrual of such liability. Respective foreign currencies shall be converted and denominated in US Dollars on the date of its accrual.

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8.16 TARIFF FOR THE PERIOD COMMENCING FROM THE COD OF THE FIRST UNIT TO COD OF THE SECOND UNIT

8.16.1 CAPACITY CHARGES

Capacity charges for the period from COD of the first unit to COD of the second unit shall be worked out on the same lines as applicable for the period after COD of the Project as per Section 8.6. For the purpose, the various components of capacity charges shall be computed on the basis of the capital cost of one unit only, which shall be computed as per Section 8.4.2.

8.16.2 PRIMARY ENERGY CHARGES AND INCENTIVE FOR SECONDARY ENERGY

i) The per unit rate for the net saleable primary energy during the period with commercial operation of one unit shall be worked out by taking into account the components of Primary energy charges as per Section 8.7 for a full year based on the capital cost of one unit as per Section 8.4.2 and the net saleable design energy of the project for a full year with one unit commissioned. The Annual Design Energy of the Project with one unit having achieved commercial operation shall be 698.00 MU as per details in Schedule IX and the corresponding net saleable design energy shall be 604.22 MU.

ii) The per unit rate applicable for the net saleable secondary energy during this period shall be equal to the per unit rate for the net saleable secondary energy for the initial tariff year as per Section 8.9.1. The amount payable on this account shall however, not exceed the proportionate amount of the ceiling, which shall be worked out for the actual number of days comprising this period on the basis of ceiling of 10% Return on Equity for a full year of 365 days. For this purpose the amount of equity shall be equal to the equity component of the capital cost for the first unit as per Section 8.16.1.

iii) For the purpose of monthly billing, the energy delivered at the interconnection point during that month/period shall be segregated into 12% free energy, net saleable infirm energy, net saleable primary energy and net saleable secondary energy. The quantum of saleable energy (i.e.after excluding the 12% free energy and infirm energy) to the extent of net saleable Design energy for that period/month shall be treated as net saleable primary energy and the remaining part will be treated as net saleable secondary energy. Design Energy for a part of the month shall be taken on proportionate basis for the actual number of days on the basis of monthwise segregation given in Schedule IX-A.

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iv) Final adjustment for the energy delivered at interconnection point during the period from COD of the first unit to COD of the second unit shall be made when the second unit achieves COD. The total energy delivered at the interconnection point during this period shall be segregated into 12% free energy, net saleable infirm energy, net saleable primary energy and net saleable secondary energy on the same lines as applicable for the monthly billing as per the preceding paragraph, but the energy quantum for the period as a whole shall be taken for this purpose.

8.17 TARIFF FOR THE PERIOD COMMENCING FROM THE COD OF THE SECOND UNIT TO THE COD OF THE PROJECT

The tariff for the period starting from the COD of the second unit to COD of the project shall be calculated on the basis of similar lines as applicable for the period from COD of the first unit to COD of the Second unit as per Section 8.16. The annual design energy of the project with two units having achieved COD shall be 993.88 MU as per Schedule IX and the corresponding net saleable design energy shall be 860.25 MU. The capital cost to be adopted for this purpose shall be computed as per Section 8.4.3. Final adjustments of the energy delivered at the interconnection point during this period shall be done on COD of the Project.

8.18 In case the COD of two or more units fall in the same billing month, the adjustments/billing shall be made on above lines by considering the different portions of the month under respective periods as per Section 8.16 & 8.17. The consolidated bill for the month prepared on these lines shall however be raised on or after the billing date only.

8.20 In case where the charges are to be worked out for a part of the month, the same shall be worked out on proportionate basis for actual number of days.

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ARTICLE 9

METERING STANDARDS AND TESTING

9.1 Two Circuits of 400 kV Transmission Line from the Station to the interconnection point at NJPC's 400 kV Switchyard at Jhakri shall be constructed by the Company for evacuating power from the Project. An agreement for providing interconnection facilities at Jhakri at the cost of the Company will be entered into by the Company separately with NJPC. For measuring the energy received at the interconnection point, one set of main meters and check meters (pair of Export and Import energy meters) of 0.5 Accuracy class shall be provided, operated and maintained by the Company and the Board respectively.

9.2 Main and check meters as per Section 9.1 above shall be capable of measuring and recording the following data:-

i) Active, (kWh) and reactive (kvarh) energy
ii) Instantaneous Voltage,Current and power factor
iii) Frequency
iv) Maximum demand in MVA /MW for each demand period and for the total period since last reset.
v) kWh/kvarh since last reading.
vi) Real time and time of day metering
vii) Number of Resets

Meters will have facilities, for reset when desired, and for data Communication with hand held instrument and to remote devices. The metering system shall be independent of phase sequence reversal, C.T. polarity reversal and shall also give an indication in case of missing P.T. potential. The metering system shall also be capable to record export and import data separately. Accuracy class for Active Energy measurement shall be 0.5 as per applicable IEC/Indian Standard and for all other values as per the prudent utility practices.

9.3 The Company and the Board shall provide the copies of certified results of the factory calibration tests for the main meters and the check meters to the other party in accordance with prudent utility practices. The Company as well as the Board shall keep requisite sets of metering equipment, duly tested/calibrated, as spares for replacement as and when required. Main meter or check meter shall be replaced by spare set of meter when ever it is required to be removed with mutual consent of the parties.

Meter installed after replacement shall be treated as Main Meter/Check Meter as applicable.

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9.4 Monthly joint meter readings of both main meters and check meters at the interconnection point shall be taken on the date of synchronisation of the first unit as well as at 12.00 hours on the first day of the next month in which the first unit is synchronised and subsequently also at 12.00 hours on the first day of each month. Separate joint meter readings of all main and check meters shall be taken at the time of commencement of commercial operation of the each unit/Project. The Joint Meter Readings shall be recorded and signed by the authorised representatives of both the parties on each of the above instances. If the representative of the Board and the Company are not available at the said hour, the meter(s) shall be read jointly at 12.00 hours on the following day; failing which the meter(s) shall be read by the party present at the site, who shall certify the meter readings. Registers shall be maintained by the Company and the Board separately for the joint meter readings recorded at Jhakri. Separate joint meter readings shall also be taken at the time of removal/replacement of any meter.

9.5 The readings and calculations performed by the metering system shall be kept by the Company in a media suitable to be interpreted by Computers for minimum period of 60 months in accordance with Section 7.9 of the Agreement.

9.6 All meters installed at interconnection point and the meters for measurement of Infirm Energy at the station, shall be jointly inspected and sealed on behalf of the parties concerned and shall not be interfered with by either Party except in the presence of the other party or its accredited representatives.

9.7 The main meters and check meters shall be test checked for accuracy at least fifteen (15) days before synchronisation of first unit and every six month thereafter insitu. Each such meter shall be deemed to be working satisfactorily so long as the errors are within the limits prescribed in the relevant Indian standard (or I.E.C where Indian standard is not existing) for meters of the said Class. The consumption registered by the main meter alone will hold good for the purpose of the billing as long as the error in the main meter is within the permissible limits.

9.8 If during the half yearly test checks, any of the main meters is found to be within the permissible limits of errors and the corresponding check meter is found to be beyond the permissible limit then billing will be as per the main meter as usual. The check meter shall however be calibrated or replaced with spare meter, as necessary.

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9.9 If during the half yearly test checks the main meter is found to be beyond permissible limits of error but the corresponding check meter is found to be within permissible limits of error then the billing for the month upto the date and time of the calibration of the main meter shall be as per the check meter. The main meter shall be immediately calibrated or replaced with the spare tested/calibrated meter as necessary whereafter billing shall be on the basis as per main meter.

9.10 If during the half-yearly test checks, both the main meter and the check meter are found to be beyond the permissible limits of error then both the meters shall be immediately replaced with spare calibrated meters and the correction applied to the consumption registered by the main meter to arrive at the correct consumption of energy for billing purposes for the period of two billing months prior to the month in which test check has been done upto the time of calibration / replacement of the meters. Billing for the period thereafter until the next monthly meter reading shall be as per the calibrated/replaced main meter.

9.11 Corrections in billing, wherever necessary, shall be for the full value of the absolute error. For the purpose of the correction to be applied, the main meter shall be tested at (a) 100, (b) 50, (c) 20 and (d) 10 percent load at unity power factor as well as 0.9 power factor. Of these eight values, the error at the load and power factor nearest to the average monthly load served at the Station during the period shall be taken as the error to be applied for correction.

9.12 If, when the monthly meter readings are taken, the difference between consumption as per the main meter and check meter exceeds the maximum error for such meters then both meters shall be tested in turn.

Pending the result of such calibration of main meter, billing and payment shall be based on the energy recorded by the check energy meter.

If on such testing, the error in both the main meter and the check meter is found to exceed the maximum permissible error for the meters of that accuracy Class (0.5), the energy figure recorded by the main energy meter for the previous billing month shall be corrected by applying correction factor as per Section 9.11.

If on testing, main meter error is within accuracy limit and check meter is beyond the accuracy limit, the main meter reading shall be used for billing and check meter shall be recalibrated. Also if the main meter and the check meter are both within the accuracy limits, the main meter readings shall continue to be adopted for billing purposes.

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If check meter is within the accuracy limit, and main meter is beyond accuracy limit, then check meter shall be used for billing purposes for the billing month and the main meter shall be recalibrated. Till calibration of main meter is done, check meter reading shall continue to be used for billing purposes.

9.13 If both the main and check meters fail to record or if any of the PT fuses are blown out then the energy will be computed on a mutually agreeable basis between the Company and the Board for that period of defect. In case, there is no mutual agreement, then the matter will be referred to the Chief Electrical Inspector to the Government of Himachal Pradesh whose decision would be final and binding on both the Parties.

For the purpose of test and calibration, the sub-standard meter shall be got calibrated and sealed by the National Test House or any other mutually agreed Test House of repute by the Company. This sub-standard meter shall be got calibrated once every year. These test results shall be made available to both the parties. The Company shall inform the Board atleast fifteen (15) days before sending the Sub-standard meter for calibration so that Board can also depute its representative if it so desires.

9.14 All the tests on the main and check meters shall be conducted in the presence of the authorised staff of the parties and the results and correction so arrived at will be applicable and binding on both the parties.

9.15 Any dispute regarding measurement of energy excepting disputes under Section 9.13, which does not get resolved through mutual negotiations, shall be resolved in accordance with provisions of Article 18.

9.16 The Board and the Company shall mutually agree for telemetering arrangements required to transmit data from the Project to the interconnection point and vice versa and finalize the same within twelve (12) months of the effective date.

9.17 The Board may require the Company at any later date after the COD of the Project,at Board's expense, to install such additional remote monitoring equipment as may be reasonably required for the purpose of measuring or monitoring the performance of the Project.

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9.18 For measurement of Infirm Energy, the calibrated meters installed by the Company, for each generating unit at the station of not less than Accuracy. Class (1.0) shall be used. Joint meter readings for each generating unit shall be taken on the date of synchronisation of that unit and at the time of commencement of commercial operation of that unit and at all other metering date(s) upto COD of the Project.

Saleable Infirm energy shall be equal to 88% (eighty eight percent) of difference of the readings recorded at the time of synchronisation and date of Commercial operation of that unit, less 0.5% auxiliary consumption, 0.5% transformation losses and 0.65% transmission losses.

Till COD of the project, Saleable energy at interconnection point shall be equal to difference of the 88% of the energy recorded at interconnection point and Saleable Infirm energy as above.

9.19 For the purpose of taking joint meter readings and other activities in pursuance of this Article :

(i) Board will designate one official atleast two weeks prior to the metering date and communicate the same to the company. In addition Board may also nominate one official of NJPC/Powergrid as its nominee and communicate the same to the Company.

(ii) Company will designate one official atleast two weeks prior to the metering date and communicate the same to the Board.

(iii) Till COD of the Project, the Board and the Company shall designate one official each for taking the joint meter readings at the station also.

9.20 After jointly recording the meter readings, the designated officer of the Board and the Company shall work out the total energy delivered, the quantum of 12% free energy and balance 88% saleable energy. The saleable energy so worked out shall also be bifurcated into infirm energy if any, primary energy and secondary energy on the basis of quantum of net saleable design energy for that period as depicted in the Schedule IX-A. Joint statement showing free energy, primary saleable energy and secondary saleable energy for the month shall be prepared and signed by the designated officers of the Board and the Company. This shall form the basis for preparation of monthly energy bills by the Company.

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On 1st April of each year, the Company shall prepare a statement indicating infirm, primary, secondary and free energy for the proceeding tariff period/tariff year. This statement shall be reconciled and signed by the designated Officers of the Board and the Company and shall form basis for annual adjustment if any.

9.21 On the first day of each month, the Company shall prepare statement of plant availability, determined in accordance with Schedule I. The duly signed statement of availability by the designated Officer of the Company along with copies of relevant log books, records, despatch instructions, messages and other data shall be made available to the designated Officer of the Board.

A meeting shall be held at the station between the designated Officers of the two parties on second day of each month for reconciliation and verification of the Plant Availability in which the aforesaid statement shall be verified and signed by the designated officers of the Board and the Company.

The plant availability for the preceding tariff period/tariff year as a whole shall also be determined by third (3rd) day of April following each such tariff period/tariff year in accordance with Schedule I and the above provisions.

The plant availability so determined on monthly basis shall be adopted for raising monthly bills for capacity charges.

Annual Plant availability for the preceding year shall be used for adjustment of Annual capacity charges and working out incentive for plant availability.

9.22 On the first day of each month, the Company shall prepare a statement in respect of loss of generation at the station to be considered for determination of the deemed generation and the quantum of water spilled, if any, during the preceding month together with the copies of relevant log book and records. The above statement duly signed alongwith all supporting data shall be supplied to the designated officers of the Board in the meeting to be held on second (2nd) day of each month at the station for verification. This statement shall be reconciled and signed by the designated Officers of the Board and the Company.

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In case the loss of generation to be considered for determination of deemed generation is due to more than one reason, the loss of generation attributable to each reason shall be determined and brought out separately.

The jointly signed statement shall form basis for determining the deemed generation for the tariff year/ tariff period. At the end of each tariff period/tariff year, the designated Officer of the Company shall prepare a statement showing deemed generation for the preceding tariff period/tariff year. This statement shall be reconciled and signed by the designated Officer of the Board and the Company. This statement shall form the basis for annual adjustments and billing for deemed generation at the end of the tariff year/ tariff period, as per the provisions of this Agreement.

9.23 Monthly bill shall be based on joint meter readings as per Section 9.4 and jointly signed statement by the designated Officers of the Board and the Company as per Section 9.20. In case designated representative of the Board does not turn-up for the purpose as per Section 9.4 and 9.20, the statement duly certified by the Company and supported by meter reading statement and the reconciled plant availability statement shall form the basis for monthly billing. If the parties fail to reconcile the joint statement as per section 9.20 and 9.21 fully, the company shall raise the bills in two parts for the reconciled and disputed portion separately and the payment for both these bills shall be made in accordance with relevant provision of Article 10.

Supplementary bill for plant availability and deemed generation shall be raised at the end of tariff period/tariff year supported by the reconciled statements as per Section 9.21 and 9.22 respectively.

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ARTICLE-10

BILLING AND PAYMENT

10.1 MONTHLY BILLS

The Company shall prepare the monthly bills in triplicate in accordance with the jointly signed statement referred to in Section 9.20 and furnish one copy of the same alongwith jointly signed meter readings as per Section 9.4 and the said jointly signed statement to each of the following, on or after each billing date commencing with the first billing date following the COD of Unit No. 1:

(i) To designated bank where the Board has established Letter of Credit as per Section 10.8.

(ii) Chief Accounts Officer,HPSEB, Vidyut Bhawan, Shimla-171004.

(iii) Chief Engineer (Commercial), HPSEB, Vidyut Bhawan, Shimla - 171004.

The bills shall be prepared on the basis of joint statements and at the tariff for the month for capacity charges, for saleable primary energy and saleable secondary energy as per Article 8 in a format mutually agreed between the Company and the Board.

10.2 PAYMENTS FOR INFIRM ENERGY

The Board shall pay to the Company for the saleable portion (i.e.after adjusting the auxiliary consumption, transformation losses, transmission losses and 12% free energy) of the infirm energy generated by the unit i.e. of the energy generated prior to COD of the respective unit at the tariff as per Article 8. Each monthly payment shall be made within the due date of payment as applicable for monthly bill under Section 2.2.43. The capital cost shall however be reduced by an amount equal to the total amount of bill(s) for infirm energy subject to payment by the Board.

10.3 BILLING FOR INCENTIVE FOR AVAILABILITY AND SALEABLE SECONDARY ENERGY

(a) Billing for Incentive for Availability

Billing for Incentive for Availability shall be done at the end of each tariff period/tariff year at the tariff applicable as per Article 8. The Company shall submit supplementary bills(s) to the Board in this regard together with the supporting reconciled data. Bills shall be paid within the due date as per Section 2.2.43.

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(b) **Billing for Incentive for Saleable Secondary Energy**

Billing for Incentive for Saleable Secondary Energy shall be done monthly at the tariff as per Article 8 and this amount shall be included in the monthly bills as per Section 10.1.

10.4 SUPPLEMENTARY BILLS

10.4.1 Supplementary bill for the amounts payable by the Board towards adjustments for variation in foreign exchange rate as per Section 10.7 and Change in Law as per Section 20.21 shall be raised by the Company and the same shall be payable by the Board within the due date as per Section 2.2.43.

10.4.2 Supplementary bills for tax on income shall be submitted to the Board as per provisions contained under Section 8.11. Proof of payment to GOI (Income Tax Deptt.) shall be submitted by the Company with the monthly bill for the following month, failing which it will be the Board's discretion to deduct the said income tax amount from the next monthly bill. Refund of income tax, if any, to the Company by the Income Tax Department shall be passed on by the Company to the Board through adjustment in the next monthly bill.

10.5 ANNUAL ADJUSTMENT FOR CAPACITY CHARGE, PRIMARY ENERGY CHARGES AND INCENTIVES.

10.5.1 Not later than thirty (30) days after the end of each tariff period/tariff year, the Company shall deliver to the Board a jointly reconciled statement of the calculations of the Capacity, Primary Energy and other charges for the year, as per the provisions of this Agreement and indicating the amount due, if any, which the Board owes to the Company or which the Company owes to the Board. This statement shall inter-alia, include the following information with respect to each tariff period/tariff year.

(a) Calculation for Availability as per Section 9.21.

(b) Capacity charges including adjustment on account of Availability as per Article 8 and due to foreign exchange rate variation.

(c) Calculation for net saleable primary energy (including deemed generation if any as per Section 9.22) and net saleable Secondary energy.

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(d) Primary energy charges.

(e) Incentive for Plant Availability.

(f) Incentive for Secondary Energy.

10.5.2 To the extent that the actual amounts of any of above elements as payable for the tariff period/tariff year, in accordance with the Agreement, are different from the amounts included in the monthly bills, an amount equal to the difference resulting there from shall be payable by either party to the other party, as due. The Company will submit supplementary bills to the Board for any such amounts payable to it or adjust the amount in next monthly bill if payable by it to the Board, based on the above statement.

10.6 The charges as per Article 11 shall be payable by either party as per the provisions contained therein.

10.7 VARIATION IN EXCHANGE RATE

Notwithstanding anything to the contrary contained herein, with regard to payment of interest on Foreign Debt converted in US Dollars and Foreign Debt repayment, amount of Rupees paid to the Company by the Board as a component of capacity charges for the respective billing months shall be deemed converted into US Dollars by the Company on the day the payment is made by the Board.

On the day, interest on Foreign Debt and Foreign Loan repayment is due to be remitted by the Company in accordance with the approved Financial Package, the Company shall compute the difference between the amount payable by the Company in US Dollars and actual amount deemed converted into US Dollars paid by the Board to the Company towards interest on Foreign Debt and Foreign Debt Repayment. As soon as practicable after the Company makes any such payment, the Company shall submit to the Board (i) in the event such difference is a positive number, a supplementary bill of an amount equal to such difference or (ii) in the event that such difference is negative, statement setting forth the amount of such difference. The amount in Indian Rupees shall be

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calculated on the basis of Foreign Exchange Rate applicable on the due date of remittance by the Company as per the approved financial package. The amount of any supplementary bill submitted in accordance with (i) of the preceding sentence shall be paid by the Board within thirty five (35) days of receipt of supplementary bill by the Board and the amount of any statement described in (ii) of the preceding sentence shall be reflected as credit in the next monthly b of the Company to the Board. The foreign exchange variation shall further be governed by provisions of Section 8.13.

10.8 LETTER OF CREDIT

Payment of monthly bills shall be made by the Board to the Company for the energy purchased in accordance with the tariff as per this Agreement by and through a confirmed, irrevocable, without recourse to the drawer, revolving Letter of Credit in favour of the Company. The said confirmed, irrevocable, without recourse to the drawer, revolving Letter of Credit shall be established in favour of the Company by the Board within fifteen (15) days after the Commercial Operation date of Unit I for the amounts mentioned hereinafter for regulating the payment of energy purchased on monthly basis through a Scheduled Commercial Bank of India located at Shimla. Letter of Credit shall remain valid for the duration of the Agreement. The amount of Letter of Credit shall however vary on year to year basis in accordance with the provisions hereinafter.

The amount of Letter of Credit shall be for one month billing in respect of following sums:

(a) Capacity charges for one month billing.

(b) Energy charge for Saleable Design Energy for the month of September as per Schedule IX at applicable tariff forthe year.

The Company shall present the monthly bill as per Section 10.1 and 10.3(b) for payment under Letter of Credit mechanism. Bills shall be payable upon the execution and presentation of the following documents against the Letter of Credit by the due date of payments:-

(i) Monthly bill in mutually acceptable format indicating Capacity Charges, Saleable Primary Energy Charges and Saleable Secondary Energy incentive at applicable tariff.

(ii) A copy of tariff for primary and secondary energy as well as capacity charges payable by the Board to the Company, duly verified by the Board in accordance with Section 8.13.

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(iii) Jointly signed meter reading statement as per Section 9.4.

(iv) Jointly signed statement of primary and secondary energy as per Section 9.20.

Rebate as applicable will be indicated separately. In case the amount of any monthly bill exceeds the amount of Letter of Credit opened for the purpose, the balance amount shall be paid by cheque/draft by the Board within the due date of payment.

10.9 The Board shall within 25 days of any draw down by the Company restore the letter of credit to the full amount for the relevant following month established in accordance with the provision of Section 10.8.

10.10 ASSIGNING OF LETTER OF CREDIT

The Board acknowledges that the Company may transfer or assign the Letter of Credit only to or for the benefit of the Financial Institutions/ Lenders as per approved financial package.

10.11 In case the Board does not make the payment of any bill within the due date of payment, the outstanding amount of such bill shall bear interest accrued for the number of days between the due date of payment and actual date of payment at a rate equal to the rate being charged from time to time by State Bank of India for 90 days unsecured loans to commercial borrowers plus three (3) percent per annum plus interest tax subject to the provisions contained in Section 10.16.

10.12 In case the Board does not make payment of an undisputed bill within two months from the date of receipt of the bill, the Company shall be at liberty to invoke the provisions of the SG Guarantee after giving a notice of atleast fifteen days to the Board.

10.13 PAYMENT AGAINST SUPPLEMENTARY BILLS

The Board shall pay Supplementary Bills within due date of payment as per Section 2.2.43.

10.14 DUE DATE OF PAYMENT AND REBATE

(a) For payment of the monthly bills as per Section 10.1 and 10.3 (b) for each billing month made in full via the Letter of Credit, or Bank Draft/Certified cheque within seven (7) days from the presentation of the monthly bill, the Board shall be given rebate at the rate of two point five percent (2.5%) of the amount billed. For any part payment of monthly bills in the above manner, the 2.5% rebate as indicated on the bill shall be reduced by an amount

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equal to 2.5% of the amount equal to the difference between the net amount of the bill and the amount paid within 7 days from the presentation of the bill.

(b) To the extent the Board makes payment after 7 days but within thirty (30) days from the presentation of the bill via a Letter of Credit or Bank Draft/Certified cheque, the Board shall be entitled to a discount of one percent(1%) of the amount so invoiced by the Company.

(c) In case of supplementary bills also, the Company shall allow rebate at the above rates for payments within 7 days and within thirty five (35) days from the presentation of the supplementary bill to the Board.

10.15 BILLING DISPUTES

(a) Notwithstanding any dispute as to all or any portion of monthly bill/supplementary bill submitted by the Company to the Board, the Board shall pay the undisputed amount of the bill by the due date, provided that the amount of the bills is based on joint meter reading and applicable tariff.

(b) In case of dispute on any of the bills, the Board shall notify the Company of any disputed amount within 15 days of receipt of bill, and the Company shall rectify the error/shortcoming or otherwise notify its rejection of the disputed amount, with reasons, within 5 days of the reference by the Board, failing agreement on which the provisions of Article 18 shall apply with respect to the disputed amount of such bill. If the resolution of any dispute requires the Company or the Board to reimburse to the Board or the Company, the amount to be reimbursed shall bear interest, for the number of days from the date of payment, by the Board or by the Company upto the date of reimbursement, at a rate equal to the rate being charged from time to time by State Bank of India for 90 days unsecured loans from the commercial borrowers plus three (3) percent plus interest tax per annum.

10.16 Following observation of Auditors to the Board/Company any error or discrepancy in any bill shall be referred to the other party within a maximum period of three years from billing date. Company/Board shall rectify the error/shortcoming or otherwise notify its rejection of the claim with reasons within fifteen (15) days of reference by the Board/Company. Failing agreement on such claims, provisions of Article 18 shall apply.

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ARTICLE 11

LIQUIDATED DAMAGES

11.1 Upon the occurrence of any of the events described below, the Company shall pay to the Board the liquidated damages, as per Section 11.2.1 and the Board shall pay to the Company charges as per Section 11.2.4.

11.2 Delay in meeting the scheduled date of commercial operation/completion of transmission facilities for evacuation of power beyond interconnection point.

11.2.1 DELAY IN MEETING THE SCHEDULED DATE OF COMMERCIAL OPERATION

If the Project does not enter into commercial operation on or before the Scheduled commercial operation date of the Project, due to reasons other than as mentioned in Section 11.2.5, the Company will pay to the Board Liquidated Damages for the delay at the following rate(s):

(i) Rs. 1000.00 (One thousand) per day per mega watt of the uncommissioned capacity of the Project in respect of each day from (and including) the scheduled COD of the Project upto the earlier of the expiry of 180 days from the scheduled COD of the Project or COD of the Project.

(ii) If the COD of the Project has not been achieved on or before the expiry of 180 days from scheduled COD of the Project,as referred above, then the liquidated damages will be paid by the Company @ Rs.2000.00 (Two thousand) per day per mega watt of the uncommissioned capacity of the Project in respect of each day from the date of expiry of such period (i.e. after expiry of 180 days from scheduled COD of the Project) until COD of the Project (but excluding the day on which COD is achieved). The liquidated damages as per this paragraph shall be paid in addition to the liquidated damages for first 180 days as per paragraph (i) above.

(iii) The total liquidated damages as per (i) and (ii) above for the Project shall, however, be limited to Rupees Eighteen (18) crores only.

11.2.2 The liquidated damages, payable by the Company in accordance with Section 11.2.1 above shall be paid as per Section 11.6(a) and shall be the Board's exclusive remedy for the Company's failure to secure the COD of the Project within the scheduled COD of the Project.

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11.2.3 **For the purpose of clarification, it is stated that the liquidated damages payable under Section 11.2.1 will not be included in the capital cost as defined and shall have no affect on the capital structure.**

11.2.4 DELAY IN COMPLETION OF TRANSMISSION FACILITIES FOR EVACUATION OF POWER BEYOND THE INTERCONNECTION POINT

The Board shall be ready for evacuation of power beyond the interconnection point at Jhakri by the date falling 15 days prior to the scheduled date of synchronisation of the first unit. If the Board fails to comply with its obligation and the Company has obtained and furnished a certificate of Independent Engineer in accordance with Section 6.1.8, to the effect that a Unit/Project is ready for synchronisation and can achieve COD within 15 days from the date of synchronisation, then the Board will make payment of capacity charges only in respect of Unit(s)/project as the case may be on the basis of Approved Financial Package, to the Company with effect from the certified date of readiness of synchronisation of that unit/project by the Independent Engineer, worked out as per Section 6.1.8. These charges shall continue to be paid till the date on which the Board is ready as certified by Independent Engineer or date of synchronisation of the first unit, whichever is earlier. The energy delivered by the Unit/project from the date of readiness of the board to receive power as certified by Independent Engineer or date of synchronisation of the first unit, whichever is earlier to COD of the Unit(s)/project shall be treated as infirm energy.

11.2.5 (a) No liquidated damages or the Charges as the case may be shall be payable by either party under Section 11.2.1 and 11.2.4 so long as both the parties are not ready to deliver/receive power.

(b) In case Scheduled date of commercial operation of the unit(s)/Project shall stand extended due to any Force Majeure event as per Article 17, then liquidated damages shall be applicable from such extended date only.

11.2.6 Board shall give atleast Seven (7) days notice by fax to the Company and Independent Engineer of the readiness of transmission of power beyond the interconnection point and obtain a certificate of readiness from the Independent Engineer. On expiry of notice period, Independent Engineer will inspect and issue certificate of readiness as

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well as date of readiness. The Board shall forward the certificate of readiness from Independent Engineer to the Company. The liquidated damages shall become payable by the Company from the date of readiness as certified by the Independent Engineer, subject to the condition that no liquidated damages shall be payable by the company in respect of the period prior to scheduled COD of the project. In case the certified date of readiness is after the scheduled COD of the project, the liquidated damages shall be payable by the company after 15 days from the date of readiness certified by the Independent Engineer. The levy of liquidated damages/charges shall cease as soon as other party also gets ready and sends notice alongwith Independent Engineer's certificate to the other party.

11.3 DUE TO INABILITY TO MEET THE RATED CAPACITY OF THE UNIT(S)/PROJECT

If the Company fails to meet after synchronisation and before COD of the unit (s)/project or within the time allowed under Section 6.7, the capacity requirement during the performance test i.e. 100 MW for each unit and 300 MW for the project in accordance with Article 6 and Schedule V, then the Capital Cost of the unit/ Project shall stand reduced in the proportion of the reduced capacity of the Project and capacity, energy and other charges shall be reworked out accordingly for the computation of tariff with retrospective effect from the COD of the unit(s)/ project. The Company shall however not be entitled to any bonus if the tested capacity is more than the required capacity of 300 MW.

11.4 DUE TO INABILITY TO MEET THE RATED EFFICIENCY REQUIREMENT

While ordering the plant equipment, the company shall ensure that overall efficiency of the turbine and generator unit is not below 89%. There will be provision in the contract with plant supplier to conduct field efficiency test on one generating unit under the supervision of an Independent Engineer within 180 days of the COD of the first unit. During such tests if the efficiency is below the guaranteed efficiency, then liquidated damages recoverable from the supplier of the plant equipment manufacturer, shall be adjusted towards reduction in the capital cost of the Project.

It is, however, well known that there are difficulties in conducting field efficiency tests on hydro units. The Company shall make all efforts to conduct the efficiency test. In case the efficiency tests can not be performed due to prevailing site conditions and othe reasons, Company shall inform the Board accordingly giving detailed reasons for the same.

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11.5 REDUCTION IN PLANT AVAILABILITY

During the period when capacity charges are not payable to the Company by the Board, the Plant Availability in any tariff year as determined in accordance with Schedule I falls below the normative level of 90%, the Company shall compensate the Board on annual basis for Reduced Availability for each such year @ 0.35% of the equity amount for each percentage point by which the Plant Availability for that year as determined in accordance with Schedule I is less than the normative level of 90% for each tariff year. Compensation on this account shall be limited to 1% of Equity during a tariff year. Such compensation for a part of the year shall be worked out on proportionate basis.

11.6 ADJUSTMENT/PAYMENT OF LIQUIDATED DAMAGES

(a) The amount of the liquidated damages payable by the Company as per Section 11.2.1 shall be paid by them to the Board, on the monthly basis for which the Board shall raise monthly bills on the Company. The payments for such bills shall be made by the Company within 30 days from the date of each such bill raised on them by the Board. In case of delay in payment by the Company, the Company shall also pay interest charges, at the same rates as applicable for the delay in payments of the bills by the Board, in accordance with Article 10.

(b) The payment of liquidated damages payable by the company shall not increase the Capital Cost or the tariff payable by the Board in any manner.

(c) As regard the capacity charges payable by the Board as per Section 11.2.4, the same shall be paid by the Board in the same manner in which monthly bills are payable by the Board. Such payment shall be deemed as paid and adjusted against the respective component of capacity charges.

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ARTICLE 12

INSURANCES

12. INSURANCES

12.1 INSURANCE DURING THE CONSTRUCTION PERIOD

The Company shall effect and maintain or cause to be effected and maintained during the construction period insurances as specified in Schedule IV and also against such risks which are normally encountered during construction stage together with;

(a) Such insurances as may be required under:
  (i) any of the Financing Agreements; and
  (ii) the laws of India; and
(b) such other insurances as may be necessary in accordance with prudent utility practices.

12.2 INSURANCE DURING THE OPERATION PERIOD

Not later than thirty (30) days prior to the scheduled synchronisation date of the first Unit, the Company shall effect and maintain during the operation period insurances as specified in Schedule IV and also against such risks as may be associated with Operation and Maintenance of the Project alongwith,

(a) Such insurances as may be required under:
  (i) any of the Financing Agreements and
  (ii) the laws of India; and
(b) such insurances as may be necessary in accordance with prudent utility practices.

12.3 EXCUSE IN FAILING TO INSURE

12.3.1 The Company shall not be in breach of its obligations to procure an insurance under Section 12.1 and 12.2 to the extent and only for that period that:

(a) the particular insurance is not available to it in the International and Indian Insurance Market for reasons other than any negligence or default by, or condition (financial or otherwise) of the Company or the Company's Contractors; and
(b) the Company effects and maintains for the period referred to in Section 12.3.1(a) complimentary insurance cover having regard to the Capacity of the International and Indian Insurance markets.

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12.3.2 In the event of any dispute between the Company and the Board as to the capacity of any insurance or reinsurance markets for the purposes of this Section 12.3, the matter shall be resolved in accordance with the provisions of Article 18.

12.4 NON PAYMENT OF PREMIUMS

The Company shall ensure that each policy of insurance contains an endorsement providing that it may not be cancelled (except for non-payment of premiums) or reduced without at least thirty (30) days prior written notice being given by the insurer to the Board provided that each such endorsement shall also provide that the insurer may not cancel the coverage for non-payment of premium without first giving Board ten (10) days written notice that the Company has failed to make timely payment of the premium (including details of the amount owing). The Board shall thereupon have the right to pay such premium directly to the relevant insurer and get reimbursement of the same from the Company by deduction from monthly bills.

12.5 EVIDENCE OF INSURANCE COVER

12.5.1 The Company shall obtain/renew the required policies of the insurances as soon as due.The Company shall furnish to the Board copies of the proofs of insurance and insurance policies as soon as they are effected/renewed. The Company shall at the request of the Board, also furnish evidence that all relevant premium have been paid and that the relevant policy or policies remained in existence.

12.5.2 Failure by the Company to obtain the insurance coverage or certificates of insurance required pursuant to Article 12, shall not relieve the Company of its obligations herein or in any way relieve or limit the Company's obligations or liabilities under any other provisions of this Agreement.

12.5.3 If the Company shall fail to effect and/or maintain any of the insurances, the Board may effect such insurances during the period in which the Company does not, at the full cost and expense of the Company. These expenses shall be payable by the Company within thirty (30) days of a Notice from the Board to the Company.

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12.6 APPLICATION OF INSURANCE PROCEEDS

12.6.1 Save as expressly provided in this Agreement or under the insurance covers, the proceeds of any insurance claim made due to loss or damage to the Project or any part thereof shall be applied to reinstatement, replacement or renewal of such loss or damage or shall be used for reimbursement of expenses already incurred for reinstatement, replacement or renewal of such loss or damage.

12.6.2 If a Force Majeure Event or a similar natural event or circumstance, renders the Project no longer economically and technically viable, and agreement terminates, buy out price of the Project by the Board shall stand reduced by the amount of insurance proceeds. If there is any surplus after adjusting the buy out price, the amount shall be shared between the Board and the Company in the ratio of depreciation/advance depreciation payable by the Board vis-a-vis equity.

12.6.3 Any dispute or difference between the Parties as to whether the Project is no longer economically and technically viable, due to a Force Majeure Event or a similar natural event or circumstance or whether that event was adequately covered in accordance with this Agreement by the insurances shall be determined in accordance with Article 18.

12.6.4 Notwithstanding any liability or obligation that may arise under this agreement, any loss, damage, liability, payment, obligation, or expense for which compensation is due to the Company under any insurance shall not be charged to or payable by the Board/SG.

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ARTICLE 13

UNDERTAKINGS

13.1 **COMPANY UNDERTAKING**

The Company hereby covenants to and agrees with the Board to:

(a) use all reasonable efforts to obtain financing for construction and operation of the Project as contemplated hereby;

(b) use all reasonable efforts to negotiate and execute financing documents on terms and provisions which are agreeable to the Board.

(c) work with and co-operate in good faith with the Board with respect to all of the Board's obligations and rights hereunder;

(d) use all reasonable efforts to obtain all Governmental Authorizations;

(e) use all reasonable efforts to obtain the insurance coverage as set forth in Schedule IV;

(f) provide periodic reports to the Board on the physical and financial progress of the development and construction of the Project;

(g) engage only such advisors, representatives and experts as are experienced in the development, construction and financing of power stations similar to the Project;

(h) operate and maintain the Project in accordance with the despatch instructions and prudent utility practices;

(i) design, construct and complete the Project in a good workman-like manner, only with materials and equipment that are new and of international utility-grade quality, in such a manner that useful life of the Project will be at least equal to the term of this Agreement and in accordance with
   (i) the plans and specifications prepared in accordance with this Agreement,
   (ii) all applicable laws, rules, regulations, permits and licenses, and
   (iii) sound engineering and construction practices, and prudent utility practices;

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(j) Make arrangement with NJPC for the interconnection facilities at the 400 kV switchyard at Jhakri of NJPC, so that these facilities are completed before the scheduled date of synchronization of the first unit of the Project.

(k) engage only such Contractors of repute that are internationally/nationally recognised and that have significant experience in the engineering, procurement and construction of hydel power generating stations of similar capacities.

(l) shall not without prior written consent of the Board change the terms of the project as stipulated in the approved financial package. JIL shall continue to hold atleast fifty one percent of the share holding of the Company. The Company shall execute only Baspa-II Project. Any change in the share holding of M/s JIL in the Company and taking up any other project by the Company at a later date, if any, shall be with prior approval of the Board/SG.

(m) make available to the Board not later than the scheduled date of commercial operation 300 MW active power capacity and ensure electrical system Operating Characteristics of each Unit, as per Schedule V.

(n) operate and maintain the Project so as to provide the Board active power capacity and electrical system operating Characteristics of the Units as per Schedule V over the Term of this Agreement.

(o) obtain specific written approval of the Board of all financial agreements.

(p) at the end of the Term of this agreement, transfer the Project in good working condition to the Board as per provisions of this Agreement.

(q) not to transfer/dispose off or otherwise alienate any asset of the Company without prior approval of the Board.

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13.2 THE BOARD's UNDERTAKINGS

The Board hereby covenants to and agrees with the Company to:

(a) make all arrangements to evacuate power beyond the inter connection point.

(b) provide such assistance and support as the Company may reasonably require in identifying and preparing the applications for Governmental authorizations and in interfacing with Governmental Authorities in connection with obtaining Governmental authorizations for the construction, completion and operation of the project.

(c) provide the Company Government Guarantee for payment to be made by the Board to the Company.

(d) provide all reasonable cooperation and assistance in connection with the public offering of any of the Company's securities (in India or elsewhere) and the listing of the Company's securities on any public stock exchange;

(e) provide all reasonable cooperation and assistance to the Company in connection with the Company's negotiation and execution of the financing documents;

(f) work with and cooperate in good faith with the Company with respect to all of the Company's obligations and rights hereunder;

(g) provide adequate construction power to the Project work site at the cost of the Project including departmental charges as applicable to such category of consumers. The construction power shall be supplied at the Board's bulk supply tariff as applicable from time to time. The Board shall not be liable to pay any damage/Compensation to the Company on this account.

(h) make arrangement for establishing (by themselves/through other agencies) a suitable transmission system for transmission of power beyond the inter connection point not later than the scheduled synchronization date of the first unit.

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13.3 **MUTUAL COVENANTS**

Each party will duly pay all rents, taxes, cess, fees, revenues, assessments, duties, other outgoings and other amounts owing by it and will observe all the rules and regulations pertaining to the same, and will not do or omit to do or suffer to be done anything which could reasonably be expected to adversely affect or prejudice the interest and rights of the other party in any manner whatsoever.

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ARTICLE 14

TERM, EVENTS OF DEFAULT AND TERMINATION

14.1 TERM OF AGREEMENT

This Agreement shall become effective upon execution and delivery by the Parties hereto and unless earlier terminated pursuant to provisions of this Agreement, shall have a term from the date hereof until forty (40) Years after the COD of the project extendable for a further period of twenty years.

14.2 In case the Government agrees to grant to the Company further extension by 20 years in terms of Baspa-II Agreement, the Board shall have the first right to continue purchasing power from this Project during this extended period(s) also on the same terms and conditions.

14.3 The Board shall have the option exercisable at any time within the period beginning 540 days before and ending 180 days before the expiry date of the agreement (or before the expiry of extension if any, as per Section 14.2) to purchase the Project on the expiry date of the agreement (or of the extension period if any as per Section 14.2) in accordance with Schedule II, where upon, subject to Schedule-II neither party shall have any liability to other party in relation to the Project.

14.4 COMPANY DEFAULT

The occurrence and continuation of any of the following events, unless any such event occurs as a result of Force Majeure event or a breach by the Board of its obligations under this Agreement, shall constitute a "Company Event of Default"

(a) the failure of the Company to achieve Financial Closing before the expiry of 180 days after the scheduled financial closing date unless this period is extended by mutual agreement between the Parties;

(b) the failure to achieve COD of the Project before the expiry of 180 days after the scheduled Commercial Operation Date for the Project plus the period by which the construction, commissioning and testing of the Project has been delayed because of Force Majeure or any failure by the Board under this Agreement, provided the total extension of time for delay attributable to Force Majeure does not exceed twelve (12) months;

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(c) if the Company abandons the Project or the major works on the Project for more than three months (other than by reason of Force Majeure) and within 21 Days of the Company's receipt of a notice from the Board stating in reasonable detail the facts that form the basis for Board's assertion that the Company has abandoned the Project works thereto and clearly stating the Boards intent to terminate this Agreement pursuant to this Section 14.4(c) and if the Company does not explain the reasonable and appropriate measures that it intends to take to proceed with the Project (which measures may include an investigation into the facts surrounding such interruption and the methods that may be used to overcome the impediments to recommencement) and/or in the event of the explanation being considered satisfactory by the Board, the company does not begin and thereafter does not continue to take such measures until such measures are no longer required;.

(d) if the Project is designed, constructed or completed;

(i) in a manner that materially deviates from the provisions of the Techno-Economic Clearance of the Authority, or

(ii) in violation of any applicable Law of India, or

(iii) in a manner which deviates materially from prudent utility practices;

and within 21 days of the Company's receipt of a notice from the Board stating in reasonable detail the facts that form the basis for the Board's assertion that the Company has committed an act referred to in this paragraph and, the Company does not explain the reasonable and appropriate measures that it intends to take to cure any such material violation or deviation (including, in the case of (i) above, by seeking any applicable waiver of or amendment to the Techno-Economic Clearance) and/or in the event of the explanation being considered satisfactory by the Board, the Company does not begin and thereafter does not continue to take such measures until such measures are no longer required.

(e) if the Company wilfully or recklessly fails in material respect to operate and maintain the Project in accordance with prudent utility practices or as per the requirements of this Agreement and

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within 21 days of the Company's receipt of a notice from the Board stating in reasonable detail the facts that form the basis for the Board's assertion that the Company has committed an act referred to in this paragraph, the Company does not explain the reasonable and appropriate measures that it intends to take to cure any such material failure and/or in the event of the explanation being considered satisfactory by the Board, the company does not begin and thereafter does not continue to take such measures until such measures are no longer required;

(f) if the Company, taking in to account prevalent grid conditions, regularly refuses to comply with Despatch Instructions, and within 21 Days of the Company's receipt of a notice from the Board stating in detail the facts that form the basis for the Board's assertion that the Company has, without justification, regularly refused to comply with Despatch Instructions, the Company does not reasonably establish to the satisfaction of the Board that such refusals were not in wilful or reckless disregard of the Company's obligations under this Agreement;

(g) the insolvency and/or the dissolution of the Company pursuant to law, except for the purpose of a merger, consolidation or reorganisation that does not affect the ability of the resulting entity to perform all its obligations under this Agreement and provided that such resulting entity expressly assumes all such obligations

(h) the transfer, pursuant to law, of either
(i) the rights and/or obligations of the Company hereunder or

(ii) all or a substantial portion of the assets or undertakings of the Company, except where such transfer does not affect the ability of the transferee to perform all its obligations under this Agreement in the opinion of the Board and provided that such transferee expressly assumes all such obligations;

(i) the failure of the Company, subject to force majeure, to commence procurement and construction activities with respect to the Project within 6 months of financial closing;

(j) The Company commits material breach of the Agreement.

(k) the Company assigns or purports to assign its rights and transfer its obligations under this Agreement or transfer or change its assets in violation of Section 20.10.

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(l) the share holding of M/s JIL in the Company reduces below fifty one percent and/or the Company undertakes any other project without prior approval of the Board/SG.

14.5 BOARD DEFAULT

The occurrence and continuation of any of the following events, unless any such event occurs as a result of Force Majeure event or a breach by the Company of its obligations under this Agreement, shall constitute the "Board Event of Default".

(a) the dissolution, pursuant to law, of the Board except for purposes of a merger, consolidation, privatisation or reorganisation that does not effect the ability of the resulting party to perform all its obligations under this Agreement and provided that (i) the Government Guarantee (if it has not previously expired in accordance with the terms thereof) is in place and is effective as to the Board's successor under this Agreement, and (ii) The Board's successor under this Agreement expressly assumes the obligation of the Board under this Agreement,

(b) the transfer, pursuant to law, of either the rights and/or obligations of the Board hereunder or all or a substantial portion of the assets or undertakings of the Board except when such transfer does not affect the ability of transferee to perform all its obligations under this Agreement and provided that (i) the Government Guarantee (if it has not previously expired in accordance with the terms thereof) is in place and is effective as to the transferee under this Agreement, and (ii) such transferee expressly assumes the obligations of the Board under this Agreement,

(c) The SG materially breaches its obligations under the Government Guarantee, or the Government Guarantee ceases to be a legal or binding obligation of the SG for reasons attributable to the Board.

(d) If the Board fails third time in a Tariff year to make payment for undisputed monthly bill exceeding maximum amount of monthly bill in a tariff year, submitted by the Company as per Article 10, by the due date of payment under this Agreement and the Board fails to pay within 21 days of receipt of written notice by the Board from the Company for such non-payment.

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(e) It commits material breach of Agreement.

(f) the Board assigns or purports to assign its rights and transfer its obligations under this Agreement or transfer or change its assets in violation of Section 20.10.

14.6 NOTICE OF DEFAULT

(a) Upon the occurrence of a Company's Event of Default or a Board's Event of Default as the case may be, the Board or the Company, as the case may be, shall deliver a Notice to the other party ("Notice of Default") which shall specify in reasonable detail the Company Event of Default or the Board Event of Default, as the case may be, giving rise to the Notice of Default to the other party.

(b) Following the giving of a Notice of Default the Parties shall consult each other for a period upto one hundred twenty (120) days (or such longer period as may be mutually agreed) as to what steps shall be taken with a view to mitigating the consequences of the relevant event having regard to all the circumstances. The Parties may also mutually decide the cure period within which the defaults shall be remedied provided that if no mutual agreement is arrived at with regard to the duration of cure period, the defaulting party shall be entitled to get a cure period of three months from the date on which the consultation period expires.

14.7 NOTICE OF TERMINATION

(a) At the expiry of the cure period as per Section 14.6 (b) and unless the parties shall have otherwise agreed or in the event of default giving rise to the Notice of Default shall have been remedied, the party having given Notice of Default may give a termination Notice to the other party stating that the Agreement shall stand terminated on the expiry of the notice period if the default is not remedied within that period. The period of notice in case of defaults shall be 120 days. The notice period(s) can however be extended with mutual Agreement.

(b) If at any time after the Company is entitled to deliver a Company termination notice but has not done so, the Company shall be entitled to deliver to the Board a notice (a "Company termination notice") informing the Board that a "Board Event of Default" has

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occurred. The Company's right to deliver to the Board a Company termination notice shall not be prejudiced by the delivery of any prior Company Termination Notice or the subsequent sale of Net Electrical Energy pursuant to Article 8.

(c) If at any time after the Board is entitled to deliver a Board termination notice but has not done so, the Board shall be entitled to deliver to the Company a notice (a "Board Termination Notice") informing the Company that a "Company Event of Default" has occurred. The Board's right to deliver to the Company a Board Termination Notice shall not be prejudiced by the delivery of any prior Board Termination Notice or the subsequent purchase of Net Electrical Energy pursuant to Article 8.

(d) Following the delivery of a Company Termination Notice in respect of the Board Default described in Section 14.5(c) and/or Section 14.5(d), the Company shall have the right to enter into agreements, with the approval of the Board (which permission will not be unreasonably withheld), to sell any portion of the Net Saleable Electrical Energy of the Project (ensuring 12% free power to SG/Board)to any third party for as long as Board default continues. Company shall make arrangement with Powergrid/Board or other utilities to wheel the power to third parties at mutually agreed wheeling charges. In case Company does not enforce its right under this clause, provisions of Section 14.9 shall apply.

14.8 CONSEQUENCES OF TERMINATION

14.8.1 TERMINATION ON ACCOUNT OF DEFAULT ON THE PART OF BOARD

If this Agreement is terminated in accordance with Section 14.7 on account of Board's Event of Default as per Section 14.5, the Company shall have the following options:-

(a) to enter into a Power Sale Agreement with any other utility ensuring, however, supply of 12% free power to the SG/Board. For this purpose, the Company shall be entitled to sell power to any other Electricity Board/Utility or consumers to the extent permitted by law at the rates agreed by the Company and the respective Electricity Board/Utility/consumer. Power shall be wheeled through the transmission system of Powergrid/Board or other utilities on payment of mutually agreed wheeling charges. The term of such agreement for sale of power shall not, in any case, exceed the balance term of this Agreement.

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(b) In case the Company fails to enter into an Agreement for sale of power with third party, the Company may require the Board to purchase the Project at a price determined as per Schedule II.

14.8.2 TERMINATION ON ACCOUNT OF DEFAULT ON THE PART OF THE COMPANY

(a) If this Agreement is terminated in accordance with Section 14.7 on account of Company's event of default as per Section 14.4, the Company shall, at the Board's option, sell the Project to the Board at the sale price as determined pursuant to Schedule II.

(b) The Board may exercise such option, subject to the Lender's rights under the Agreement, at any time within 120 days after the Board delivers the Board Termination Notice to the Company.

14.8.3 TERMINATION ON ACCOUNT OF FORCE MAJEURE EVENTS

(a) In the event the Company exercises its option in writing pursuant to Section 17.6, to sell the Project to the Board due to the occurrence and continuation of a Force Majeure Event, during construction and operation period, the Company shall sell the Project to the Board at a purchase price as determined pursuant to Schedule II.

(b) In the event the Board exercises its option in writing pursuant to Section 17.6 to purchase the project due to occurrence and continuation of any Force Majeure Event, the Company shall sell the Project to the Board at a purchase price as determined pursuant to Schedule II.

14.8.4 BUY OUT NOTICE

(a) Any notice delivered by the Company pursuant to Sections 14.8.1, and/or 14.8.3(a); or delivered by the Board pursuant to Section 14.3, 14.8.2 and/or 14.8.3(b) that exercises an option shall be referred to as a "Buy-out Notice".

(b) If this Agreement terminates or expires but the Board or the Company does not exercise their respective options to issue a Buy-out Notice within the permitted time frame, then this Agreement shall be deemed to be in force subject to the rights of lenders and the SG till such time the concerned party issues

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the buy out notice and the Project is transferred to the Board or acquisitioned by the Government. in terms of Baspa-II Agreement,as the case may be. During such period both the parties shall continue to perform their respective obligations in the same manner as if this Agreement would have been in force, subject to the rights of the Lenders and the SG under this Agreement and Baspa-II Agreement.

14.8.5 PROCEDURES FOR DETERMINING PURCHASE PRICE AND TO EFFECT TRANSFER OF PROJECT TO THE BOARD

Once a Buy-Notice has been issued by any party under the provisions of this Agreement, the parties will follow the procedures described in Schedule II to determine the purchase price for the buy-out and to effect the sale of the Project to the Board.

14.9 CONTINUING POWER GENERATION AND PURCHASE

Notwithstanding provisions of Section 14.8, the Company shall continue to operate and maintain the Project as per provisions of this Agreement and the Board shall pay for the entire energy delivered by the Project as per provision of this Agreement till;

i) Power Sale Agreement with a third party and Despatch as per Section 14.8.1(a) comes into effect.

ii) Date of payment of purchase price by the Board and assignment of the Project to the Board as per Section 14.8.4.

In case of default for non-payment as per Section 14.5(c)&(d), Company shall have the option to continue generation of electrical output or otherwise.

14.10 RIGHTS PRESERVED

(a) The duties and obligations imposed by this Agreement and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by Law.

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(b) No action or failure to act by any Party shall constitute a waiver of any right or duty afforded to any of them under this Agreement, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

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ARTICLE 15

REPRESENTATION AND WARRANTIES

15.1 REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company represents and warrants that as of the date hereof;

(a) the Company is a company duly registered and validly existing under the laws of India and has all requisite legal power and authority to execute this Agreement and carry out the terms, conditions and provisions hereof;

(b) this Agreement constitutes the valid, legal and binding obligation of the Company, enforceable in accordance with the terms hereof except as the enforceability may be limited by applicable bankruptcy, insolvency, reorganisation, moratorium or other similar laws affecting creditors rights generally and to the extent that the remedies of specific performance, injunctive relief and other forms of equitable relief are subject to equitable defence, the discretion of the court before which any proceeding therefor may be brought, and the principles of equity in general;

(c) there are no actions, suits or proceedings pending or, to the Company's knowledge, threatened, against or affecting the Company before any court or administrative body or arbitral tribunal that might materially or adversely affect the ability of the Company to meet and carry out its obligations under this Agreement;

(d) The Company has duly paid all rents, royalties and all public demands, including provident fund dues, gratuity dues, employees State Insurance dues, income tax, sales tax, corporation tax and all other taxes and revenues due and outstanding and that no attachments or warrants have been served on the company in respect of sales tax, income tax, Government Revenue and other taxes and

(e) the execution and delivery by the Company of this Agreement has been duly authorised by all requisite corporate or partnership action, and will not contravene any provision of, or constitute a default under any other agreement or instrument to which it is a party or by which it or its property may be bound.

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15.2 **REPRESENTATIONS AND WARRANTIES OF THE BOARD**

The Board represents and warrants that as of the date hereof:

(a) The Board is a statutory body duly constituted under the Electricity (Supply) Act of 1948, and validly existing under the Laws of India and has all requisite legal power and authority to execute this Agreement and to carry out the terms, conditions and provisions hereof;

(b) this Agreement constitutes the valid, legal and binding obligation of the Board, enforceable in accordance with the terms hereof except as the enforceability may be limited by applicable bankruptcy, insolvency, reorganisation, moratorium or other similar laws affecting creditors' rights generally and to the extent that the remedies of specific performance, injunctive relief and the reforms of equitable relief are subject to equitable defence, the discretion of the court before which any proceeding therefor may be brought, and the principles of equity in general;

(c) there are no actions, suits or proceedings pending or, to the Board's knowledge, threatened, against or affecting the Board before any court or administrative body or arbitral tribunal which might materially or adversely affect the ability of the Board to meet and carry out its obligations under this Agreement; and

(d) the execution and delivery of this Agreement by the Board has been duly authorised by all requisite action, and will not contravene any provision of, or constitute a default under, any other agreement or instrument to which it is a party or by which it or its property may be bound.

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ARTICLE 16

LIABILITY AND INDEMNIFICATION

16.1 LIMITATION OF LIABILITY

Except as required by Section 16.2, neither Party shall be liable to the other Party in contract, tort, warranty, strict liability or any other legal theory for any indirect, consequential, incidental, punitive or exemplary damages. Neither Party shall have any liability to the other Party except pursuant to, or for breach of, this Agreement; provided, however, that this provision is not intended to constitute a waiver of any rights of one party against the other with regard to matters unrelated to this Agreement or any activity contemplated by this Agreement.

16.2 INDEMNIFICATION

(a) The Board shall bear responsibility for loss of or damage to property, death or injury to person (or any claim against the Company and/or its Contractors in respect thereof) and all expenses relating thereto (including without limitation reasonable legal fees) suffered by the Company and/or its Contractors in connection with the Project resulting from any negligent act or omission of the Board, without recourse to the Company and/or its Contractors. The Board will hold the Company and/or its Contractors fully indemnified in respect thereof. The indemnity shall not extend to any loss, damage, death or injury (or any claim in respect thereof) or any expenses relating thereto to the extent that it was caused by any act or omission of the Company and/or its Contractors or the failure of the Company and/or its Contractors to take reasonable steps in mitigation thereof. Notwithstanding anything to the contrary contained in the preceding sentence, nothing in this Section 16.2(a) shall apply to any loss, damage, cost or expense in respect of which, and to the extent that, the Company and/or its Contractors are compensated pursuant to the terms of any insurance, or other contracts such as the Construction Contract or the O&M Contract.

(b) The Company shall bear responsibility for loss of or damage to property, death or injury to person (or any claim against the Board and/or its Contractors in respect thereof) and all expenses relating thereto (including without limitation reasonable legal fees) suffered by the Board in connection with the Project resulting

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from any negligent act or omission of the Company and/or its Contractors, without recourse to the Board. The Company will hold the Board fully indemnified in respect thereof. The said indemnity shall not extend to any loss, damage, death or injury (or any claim in respect thereof) or any expenses relating thereto to the extent that it was caused by any act or omission of the Board or the failure of the Board to take reasonable steps in mitigation thereof. Notwithstanding any thing to the contrary contained in the preceding sentence, nothing in this Section 16.2(b) shall apply to any loss, damage, cost or expense in respect of which, and to the extent that the Board is compensated pursuant to the terms of any insurance, agreement or through any other means.

(c) In the event such injury or damage results from the joint or concurrent negligent or intentional acts of the Parties, each shall be liable under this indemnification in proportion to its relative degree of fault.

16.3 ASSERTION OF CLAIMS

Neither Party shall be entitled to assert any claim for indemnification until such time as all claims of such Party for indemnification under this Agreement exceed an amount in Rupees equal to Rs.10.0 lakhs in the aggregate, at which time all claims of such Party for indemnification under this Agreement may be asserted; provided, however,that when such claims have been asserted the same rule shall apply in respect of future claims. Notwithstanding the preceding sentence, either Party may assert a claim for indemnification regardless of amount upon the expiry or earlier termination of this Agreement or if such claim would otherwise be barred by the applicable statute of limitations.

16.4 DEFENCE OF CLAIMS

The indemnified Party shall have the right, but not the obligation, to contest, defend, and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such indemnified Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and the reasonable costs and expenses thereof shall be subject to the indemnification obligations of the indemnifying Party hereunder.

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provided, however, that if the indemnifying party acknowledges in writing its obligations to indemnify the indemnified Party in respect of loss to the full extent provided by Section 16.2, the indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding liabilities, payments and obligations at its expense and through counsel of its choice if it gives prompt notice of its intention to do so to the indemnified Party and reimburses the indemnified Party for the reasonable costs and expenses incurred by the indemnified Party prior to the assumption by the indemnifying Party of such defence. The indemnified Party shall not be entitled to settle or compromise any such claim, action, suit or proceeding without the prior written consent of the indemnifying party, which consent shall not be unreasonably withheld or delayed. The indemnified Party shall have the right to employ its own counsel and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of such indemnified Party, when and as incurred, unless;

(a) the employment of counsel by such indemnified Party has been authorised in writing by the indemnifying Party,

(b) the indemnified Party shall have reasonably concluded that there may be a conflict of interest between the indemnifying Party and the indemnified Party in the conduct of the defence of such action,

(c) the indemnifying Party shall not in fact have employed independent counsel reasonably satisfactory to the indemnified Party to assume the defence of such action and shall have been so notified by the indemnified Party, or

(d) the indemnified Party shall have reasonably concluded and specifically notified the indemnifying Party either that there may be specific defence available to it which are different from or additional to those available to the indemnifying Party or that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement.

If clause (b), (c) or (d) of the preceding sentence shall be applicable, then counsel for the indemnified Party shall have the right to direct defence of such claim, action, suit or proceeding on behalf of the indemnified Party and the reasonable fees and disbursements of such counsel shall constitute legal or other expense hereunder.

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ARTICLE 17

FORCE MAJEURE

17.1 DEFINITION OF FORCE MAJEURE

Force Majeure shall mean any event or circumstances or combination of events or circumstances referred to in this Clause 17.1 that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only if and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the affected Party and could not have been avoided even if the affected party had taken reasonable care. Force Majeure includes the following events and circumstances to the extent they, or their consequences, satisfy the above requirements:

(a) Non Political Force Majeure Events

(i) any material effect of the natural elements or other acts of God, including lightning, fire, earthquake, volcanic eruption, floods, landslide, storms, cyclones, typhoons, tornado.

(ii) Explosion, accident, chemical contamination (other than resulting from an act of war, terrorism or sabotage), caused by a person not being the affected Party or one of its contractors or subcontractors or any of their respective employees or agents, and not being due to inherent defects of the affected facility or the failure to properly operate the affected facility as per prudent utilities practices.

(iii) epidemic, plague or quarantine effecting the project.

(iv) air crash, shipwrecks or failures,train wrecks or delays of transportation that were not reasonably foreseeable;

(v) any failure or delay of a Contractor, but only to the extent caused by another Non Political Event and which does not result in off setting compensation being payable to the Company by or on behalf of such a Contractor.

(vi) any failure or delay of NJPC/Powergrid in completion of interconnection facility/transmission facilities for evacuation of power beyond the interconnection point at Jhakri, but only to the extent caused by non political Force Majeure

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(b) **Political Force Majeure Event**

The following Force Majeure events which occur inside or directly involve India comprising:

(i) Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, civil commotion, communal violence, act of terrorism or politically motivated sabotage or kidnapping.

(ii) Act or the threat of chemical, Radioactive contamination or ionising radiation originating from a source in India or resulting from another Force Majeure Event.

(iii) Strikes, work to rule actions, go-slows or similar labour difficulties that are a part of nationwide or regional strike.

(iv) the making of, or any change in any Laws of India after the date hereof, materially and adversely affecting the performance by the concerned parties of its obligations or the enjoyment by the concerned party under any of the Agreements.

(v) With respect to the Company only:-

(aa) the expropriation, requisition, nationalisation or compulsory acquisition by any Governmental Authority of any shares in the Company if the result would be to acquire ownership or control of the Company in respect of the Project,

(bb) the expropriation, requisition, nationalisation or compulsory acquisition by any Governmental authority of any assets or rights of the Company in respect of the Project.

(cc) any other act or default of any Governmental authority, materially and adversely affecting the enjoyment by the Company of any of its respective rights under or the performance by the Company of any of its obligations pursuant to, any of the Financing Documents or contracts in connection with

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the project; unless, in any such case, the action taken by the relevant Government authority is permitted by this Agreement or is a lawful sanction in response to an act of default by the Company;

(dd) inability despite due diligence to obtain, renew or maintain required licenses, permits or Governmental approvals, provided such adverse action or inaction did not result from the Company's or any of its Contractor's non-compliance with any applicable Law;

The events and circumstances described in Sections 17.1.b(i) to 17.1.(b)(iv) are referred to in this Agreement as Indirect Indian Political Events and those described in Sections 17.1.(b).(v) are referred to as Direct Indian Political Events.

17.2 None of the following conditions shall constitute an event of Force Majeure unless the existence of such condition is the result of an event of Force Majeure

(i) late delivery of plant, machinery, equipment, materials, spare parts or consumables for the Project; or

(ii) a delay in the performance by any Contractor.

17.3 NOTIFICATION OBLIGATIONS

(a) The party claiming Force Majeure shall give notice in writing to the other Party of the occurrence of the Force Majeure event as soon as reasonably practicable, but not later than seven days after the time on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. Notwithstanding the above if the event of the Force Majeure results in a breakdown of communications rendering it not reasonably practicable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after the reinstatement of communications, but not later than forty eight hours after such reinstatement. Such notice shall include full particulars of the event of Force Majeure, of its effects on the Party claiming relief and the remedial measures proposed; and that Party shall give the other Party regular reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the situation.

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(b) If the Party in receipt of Force Majeure Notice disputes the degree to which the Force Majeure Event has affected the construction or operation of the Project, as the case may be, such dispute shall be settled as per Article 18.

(c) The Party claiming Force Majeure shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure, and (ii) the cessation of the effects of such event of Force Majeure on the enjoyment by such Party of its rights or the performance by it of its obligations under this Agreement within seven days after becoming aware of each of (i) and (ii) above.

17.4 DUTY TO MITIGATE

The Party affected by the event of Force Majeure shall use its reasonable efforts to mitigate the effects of any event of Force Majeure as soon as practicable; provided, however, that no Party shall be under obligation under this provision to settle any strike or other labour dispute it considers to be unfavourable to it.

17.5 FAILURE OR DELAY CAUSED BY FORCE MAJEURE - GENERAL CONSEQUENCES

(a) Neither party shall be liable for any failures or delays in complying with its obligations under or pursuant to this Agreement to the extent that such failure or delay has been caused, or contributed to by one or more events of Force Majeure or its or their effects or by any combination thereof. The period allowed for the performance by such party of its obligations hereunder shall be extended by one day for each day for such failures or delay, provided, however, such extension may be for a greater duration to the extent necessary, if applicable to compensate for the delay or failure, taking into account as appropriate, the demobilisation and remobilisation of personnel and the restoration of the work, as the case may be, to the pre-delay condition (assuming diligent compliance by such party with the requirements of this Agreement). If an event of Force Majeure causes delay of the COD of the Project, then the Scheduled synchronisation dates of units/project and the Scheduled COD of the Project shall be extended for such period of delay, provided, however, that such dates shall not be extended to the extent that such delay would have even otherwise occurred had such event of Force Majeure not occurred and further provided that total extension of time in the Scheduled COD of the Project for the delays attributable to Force Majeure shall not exceed twelve months.

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(b) In case Scheduled date of commercial operation of the unit(s)/project shall stand extended due to any Force Majeure event as per the Article 17, then liquidated damages shall be applicable from such extended date only.

(c) The parties shall co-operate, negotiate in good faith and develop and implement a plan of remedial and reasonable alternative measures to remove/remedy Force Majeure Event to enable the performance of the affected party.

(d) Upon the occurrence and during the pendency of any Force Majeure Event, none of the parties shall be relieved of their liabilities/obligations as per this Agreement.

(e) In case the Force Majeure Event necessitates the extension of time for project implementation, it will be duly accepted by both the parties, subject to the other provisions of this Section 17.5.

(f) Notwithstanding anything contained in this Agreement during any Non-political Force Majeure and indirect Political Force Majeure Event as per Section 17.1(a) and 17.1(b)(i) to (iv), if the Company cannot operate the station at all or cannot operate the Station at declared Capacity, the Board shall pay to the Company the Capacity charges calculated on the basis that the Unit or Station shall be deemed, during such period, to be operating at 90% of the rated capacity or the declared capacity, whichever is less, from the date of commencement of Force Majeure Event, till the effect of Force Majeure Event is completely over.

The deemed availability during the Force Majeure period will however not be considered for any purpose other than payment of the capacity charges viz for determining the availability level for plant availability incentive or for deemed generation.

(g) Notwithstanding anything contained in this Agreement during any direct Political Force Majeure Event as per Clause 17.1(b)(v), if the Company cannot operate the station at all or cannot operate the Station as per declared capacity, the Board shall pay to the Company capacity charges and deemed energy generation charges considering plant to be operating at 90% of the rated capacity or declared capacity whichever is less, and upto design energy till end of Force Majeure Event or takeover whichever is earlier. The deemed energy generation for the Force Majeure period shall be considered as equal to lower of the following:

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(i) Difference between the net saleable design energy apportioned to this period of Force Majeure as per Schedule IX and the actual saleable energy delivered at Jhakri in that period.

(ii) The energy quantum by which the summation of the net electrical energy for the relevant tariff year/period and the net saleable deemed generation for the remaining part of the tariff year/tariff period falls short of the net saleable design energy for the tariff period/tariff year.

(h) In case where Force Majeure period as per sub para (f) and (g) of the Section 17.5 falls under two different tariff year periods, the adjustment on above lines shall be done separately for each tariff year/ tariff period.

17.6 OTHER CONSEQUENCES OF FORCE MAJEURE CONDITIONS UNDER SECTION 17.1(b),

(a) Prior to the COD of the Project, if the construction of the Project is seriously and adversely affected for a continuous period of 180 Days or greater due to the occurrence of a Direct Indian Political Force Majeure Event, under Section 17.1.(b)(v), or for a continuous period of 365 days or greater due to the occurrence of other Force Majeure events under Section 17.1(a) or 17.1(b) (i to iv), the Company may, for so long as such an event is continuing, deliver a notice to the Board informing the Board in reasonable detail of the nature, duration, and impact on the Company (including a description of the delay in construction) of the Force Majeure Event.

(b) Prior to the COD of the Project,if the construction of the Project is seriously and adversely affected for a continuous period of 180 Days or greater due to the occurrence of a Direct Indian Political Force Majeure Event under Section 17.1.(b)(v), or for a continuous period of 365 days or greater due to the occurrence of other Force Majeure events under Section 17.1(a) or 17.1(b) (i to iv), the Board may, for so long as such an Event, is continuing, deliver a notice to the Company informing the Company in reasonable detail of the nature, duration, and impact (including a description of the delay in construction) on the Board of such Force Majeure Event.

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(c) After the COD of the Project, if the operation of the project is seriously and adversely affected for a continuous period of 180 Days or greater due to the occurrence of a Direct Indian Political Force Majeure event under Section 17.1.(b)(v), or for a continuous period of 365 days or greater due to the occurrence of other Force Majeure events under Section 17.1(a) or 17.1(b) (i to iv), the Company may, for so long such any of the Political Force Majeure Event is continuing, deliver a notice to the Board informing the Board in reasonable detail of the nature, duration, and impact on the Company of the Force Majeure Event.

(d) After the COD of the Project, operation of the Project is seriously and adversely affected for a continuous period of 180 Days or greater due to the occurrence of a Direct Indian Political Force Majeure Event under above Section 17.1.(b)(v) or for a continuous period of 365 days or greater due to the occurrence of other Force Majeure events under Section 17.1(a) or 17.1(b) (i to iv), the Board may, for so long as such Force Majeure is continuing, deliver a notice to the Company informing the Company in reasonable detail of the Board's understanding of the nature, duration, and impact on the Board of the Force Majeure Event.

(e) Any notice delivered in accordance with Section 17.6(a), 17.6(b), 17.7(c) or 17.6(d) shall be referred to as a Force Majeure (FM) Notice".

(f) If the Party in receipt of the FM Notice, within thirty (30) Days of its receipt, disputes the degree to which the Force Majeure Event has affected the construction or operation of the Project, as the case may be, such dispute shall be dealt as per provisions of Article 18. Party issuing the FM Notice shall have the option, but not the obligation, within 120 Days of the other Party's receipt of the FM Notice, subject to the Lenders' rights, to deliver a Buy-out Notice. Upon receipt of the Buy-out Notice under this para (f), the Board shall purchase the Project from the Company pursuant to Article 14 and Schedule II. Until such time as such final payment is received by the Company, notwithstanding anything to the contrary contained herein, this Agreement shall remain in full force and effect.

Executive Director (Electrical)
SJVN Shimla-4

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(g) The additional cost for completion of project due to any Force Majeure Event including inter-alia the additional or extra work required to be done, interest and escalation during the extended period of project completion shall be worked out after deducting receivables from the insurance proceeds. The net additional amount shall be added to the Project completion cost for all purposes including, but, not limited to the tariff calculation, subject to provisions of Section 17.7.

(h) In case of Force Majeure Event after the completion of any unit(s)/project, the parties shall take action as per Sub-para (d) above and in such a situation the additional capital cost required for remedial and alternative measures to remove/remedy the Force Majeure Event shall be added to the project completion cost for all purposes including, but, not limited to tariff calculation for subsequent period of operation. Additional capital cost shall be worked out after deducting receivables from insurance proceeds from the total cost of additional works, subject to provisions of Section 17.7.

17.7 PROCEDURE TO SETTLE FORCE MAJEURE CLAIMS

17.7.1 Neither party shall raise any claim on account of Force Majeure for value of less than Rupees ten lacs at any instance, during construction period. Any claim exceeding Rupees ten lacs shall be referred to a committee comprising one representative each from the Board and the Company and one more representative nominated jointly by the parties.

17.7.2 The aforesaid committee shall verify/examine and decide such claims and its decision/award shall be final and binding on both the parties.

17.7.3 During the total construction period of the project, any excess expenditure on Force Majeure as admitted and allowed by the committee over and above Rupee five crores shall form part of the capital cost of the project, for computation of the tariff and other purposes of this Agreement.

17.7.4 During operation of the project, each individual claim above only Rupees one crore after adjustment of receivables from insurance at a time shall be referred to the committee and any excess expenditure by the Company over Rupees one crore to overcome the Force Majeure event and as agreed by the committee shall be added to the capital cost of the project for the subsequent period of operation for the purpose of computation of tariff and other purposes of this Agreement.

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17.7.5 **Committee shall also decide the extent to which the additional cost on account of Force Majeure shall be considered for the purposes of computation of O&M charges.**

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ARTICLE 18

RESOLUTION OF DISPUTES

18.1 **GOOD FAITH NEGOTIATIONS**

In the event of a dispute, disagreement or difference (a "Dispute"), arising out of or relating to this Agreement between the Parties, in respect of which a procedure for the resolution of the Dispute is not otherwise provided for in this Agreement, the following provisions shall apply:

(a) the Dispute shall not be subject to the provisions of Section 18.2 dealing with resolution of disputes through Dispute Resolution Board or to any litigation unless and until the provisions of Section 18.1(b) are fulfilled and the Parties have failed to execute a written settlement agreement in accordance with Section 18.1(c) and 18.1(d);

(b) either Party shall give to the other a written notice setting out the material particulars of the Dispute and requiring an authorised senior executive officer each from both the Board and the Company to meet personally at Shimla, Himachal Pradesh, India or at any other mutually agreed place within ten (10) working Days of the date of receipt of such notice by the relevant Party to attempt in good faith negotiation, and using their best endeavours at all times, to resolve the Dispute; and

(c) if the Dispute is not resolved as evidenced by the terms of the settlement being reduced to writing and signed by the senior executive officers of both the parties within 20 (Twenty) working Days (settlement period) after the date of receipt of the notice described in Section 18.1(b), then the provisions of Section 18.1(d) shall apply (unless the settlement period is mutually extended).

(d) The Chief Executive officers of both the parties shall meet at Shimla or at any other mutually agreed place within ten (10) working days after the expiry of the 20 days (Twenty) period as mentioned in 18.1(c) to attempt in good faith negotiation and using their best endeavour at all times to resolve the dispute within a further period of 20 (Twenty) days and if the dispute is still not resolved as evidenced by the terms of the settlement being reduced to writing and signed by both the Chief Executive Officers, then the provisions of Section 18.2 shall apply unless the settlement period is mutually extended.

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18.2 **DISPUTE RESOLUTION BOARD**

(a) All disputes relating to the Agreement which cannot be settled as per Section 18.1 shall be referred to the Dispute Resolution Board hereinafter referred to as DRB.

(b) DRB shall consist of one nominee each of the Board and the Company. Nominees shall agree to one umpire who will preside over DRB.

(c) DRB shall use settlement/mediation/conciliation/other procedure for fast settlement of the dispute.

(d) The decision of DRB shall be final and binding on both the parties in respect of disputes having total financial implication of upto Rs. Five (5) Crores.

For disputes involving financial implication of more than Rs. Five (5) Crores, parties may mutually agree to the award. In case of non-agreement, matter shall be referred to Arbitration as per Section 18.3.

(e) DRB can obtain assistance of an expert in specific technical/financial/insurance or other field.

(f) Expenses of DRB shall be shared equally between both the parties.

(g) The DRB shall give its decision on the dispute within a period of 60 days from the date of reference of the dispute to it or such extended period as may be agreed between the parties.

18.3 ARBITRATION

(a) Except as otherwise provided in this Agreement, all disputes arising out of or relating to this agreement shall be referred to arbitration if the dispute is not resolved during the settlement period as per Sections 18.1 and 18.2.

(b) Arbitration Rules: The arbitration shall be conducted in accordance with "The Arbitration and Conciliation Act, 1996" or amendments thereof.

(c) Number of Arbitrators: For each arbitration the arbitral tribunal shall consist of three (3) arbitrators. Each party shall appoint one arbitrator, and, the two appointed arbitrators shall appoint the

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third arbitrator who shall act as a presiding arbitrator or if the two arbitrator cannot agree the third arbitrator shall be appointed, on request of a party by the Hon'ble Chief Justice of the High Court of Himachal Pradesh or by any person or institution designated by him. No arbitrator shall be present or former employee or Agent of, or consultant or counsel to, either party or any affiliate of either party, or in any way related to or closely connected with promoters, partners, or beneficiaries of the parties.

(d) The Arbitration tribunal so constituted may use settlement/mediation, Conciliation or other procedure at any time to encourage settlement of the dispute. The parties agree that Arbitration tribunal may appoint an expert to determine any specific issue.

(e) **Place of Arbitration and Governing Law:** The arbitration shall be conducted in Shimla, India. The laws of India shall govern the validity, interpretation, provisions contained in this Agreement.

(f) **Language of Arbitration:** The language to be used in the arbitration shall be the English Language.

(g) Judgement upon the award rendered in such Arbitration and/or for any interim relief or direction or otherwise, during the pendency of arbitration proceedings and upto the date of making of the award in such Arbitration may be entered in any court of competent jurisdiction, at Shimla, having jurisdiction in respect of any application made for the filing of the Arbitration agreement.

18.4 This Agreement shall be subject to the jurisdiction of High Court of Judicature at Shimla.

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ARTICLE 19

19.1 ADDRESSES AND ADDRESSEES

Except as otherwise provided in this agreement, all notices or other communications which are required or permitted hereunder shall be in writing and considered as adequately served if delivered personally or sent by registered or certified mails, telecopier, fax, telex or telegram addressed as follows:

(a)	If to the Company:	
	Attention:	Name & Designation of the Officer concerned
	Telephone No:	011- 6141540
	Address:	M/s. Jaiprakash Hydropower Limited 54,Basant Lok,Vasant Vihar,New Delhi-110 057.
	Fax No:	011 688 4170/5379, 687 3591.
	Telex No.:	031 72250 JAPE IN
(b)	If to the Board:	
	Attention:	Name & Designation of the Officer concerned
	Address:	Vidyut Bhawan, Shimla - 171004, Himachal Pradesh
	Telephone No:	0177 256022
	Fax No:	0177 258984
	Telex No.:	
(c)	If to the State Govt.	
	Attention:	Name & Designation of the Officer concerned
	Address:	Govt. of Himachal Pradesh, Secretariat
	Telephone No:	0177 221813, 221154
	Fax No:	0177 4517
	Telex No.:	391-210-HPSS IN

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All notices or communications given by telecopier, fax, telex or telegram shall be confirmed by depositing a copy of the same in the post office in an envelope properly addressed to the appropriate party for delivery by registered or certified mail. All notices shall be deemed delivered upon receipt. In case, where Board/Company have designated its officers for specific purposes, either party shall also serve the notice(s) to such other designated officers of the other party

19.2 CHANGE OF ADDRESS

Any party may by notice of at least fifteen (15) days to the other party change the addresses and/or addressees to which such notices and communications are to be delivered or mailed.

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ARTICLE 20

MISCELLANEOUS PROVISIONS

20.1 **AMENDMENT**

This agreement cannot be amended except by written consent of both the parties.

20.2 **HEADINGS**

The headings contained in this agreement are used solely for convenience and shall not be construed to assign any meaning to this agreement nor shall such headings be used in any manner to aid in the construction of this agreement.

20.3 **THIRD PARTIES**

This agreement is intended solely for the benefit of the parties hereto. Nothing in this agreement shall be construed to create any duty, to standard of care with reference to, or any liability to, any person not a party to this agreement.

20.4 **NO WAIVER**

(a) No waiver by either party of any default or defaults by the other party in the performance of any of the provisions of this Agreement:

(i) shall operate or be construed as a waiver of any other or further default or defaults whether of a like or different character, or

(ii) shall be effective unless duly executed in writing by a duly authorised representative of such party;

(b) Neither the failure by either party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement nor time or other indulgence granted by one party to the other shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other rights hereunder, which shall remain in full force and effect.

Member (Director)
HPSEB Shimla

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20.5 **RELATIONSHIP OF THE PARTIES**

This Agreement shall not be interpreted or construed or create an association, joint venture, or partnership between the parties or to impose any partnership obligation or liability upon either party. Neither party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other party.

20.6 SURVIVAL

Cancellation, expiration or earlier termination of this Agreement shall not relieve the parties of obligations that by their nature should survive such cancellation, expiration or termination, including, without limitations, warranties, remedies, promises of indemnity and confidentiality; provided, however, that all obligations surviving the cancellation, expiration or early termination of this agreement shall only survive for a period of 5 (five) years.

20.7 LANGUAGE

The language of this agreement shall be English. All documents, notices, waivers and all other communication written or otherwise between the parties in connection with this Agreement shall be in English Language.

20.8 GOVERNING LAWS

This Agreement and the rights and obligations hereunder shall be interpreted, construed and governed by the laws of India as in force from time to time.

20.9 ENTIRETY

Subject to provisions of Section 20.22, this Agreement and the schedules attached hereto are intended by the parties as the final expression of their agreement and are intended also as a complete and exclusive statement. All prior written or oral understandings, offers or other communications of every kind pertaining to the sale or purchase of Electrical output hereunder between the Board and the Company are hereby abrogated and withdrawn except for the Baspa-II Agreement.

Member (Electrical)
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20.10 **ASSIGNMENT**

This Agreement shall not be assigned by either party other than by mutual agreement between the parties in writing.

Notwithstanding the foregoing, for the purpose of financing the project, the Company may assign or create security over its rights and interests under or pursuant to (a) this Agreement, (b) any agreement related to the Project, (c) the Project, (d) the site, (e) the movable property and intellectual property of the Company, or (f) the revenues or any of the rights or assets of the Company. The holder of any security created under this Section 20.10 shall not be prevented or impeded by the Board from enforcing such security in accordance with its terms, including, without limitation, exercising any right it may have to reassign this Agreement to a new qualified owner or operator of the project. The Board shall execute all such consents to assignment and/or acknowledgements of any security created in accordance with this Section 20.10 as are reasonably requested by the Company to give effect to the foregoing.

Notwithstanding the above,the Board shall have the right to assign this Agreement to any entity assuming all or part of the Board's rights and obligations in connection with the purchase of electrical output provided, however, that such transfer does not materially and adversely affect the ability of the transferee to perform its obligations under this agreement; and, provided further that the SG Guarantee shall remain in place and shall be effective as to such successor.

20.11 **CONFIDENTIALITY**

(a) Each of the parties shall hold in confidence the copyright documents and other secret technical or commercial information supplied to it by or on behalf of the other party relating to the design construction, insurance, operation, maintenance, management and financing of the Project and shall not, save as required by law or appropriate regulatory, legislation authorities, or to prospective lenders or to investors in the Company or to the professional advisors of the parties hereto or of such lenders or investors as aforesaid, publish or otherwise disclose or use the same for its own purposes otherwise than as may be required to perform its obligations under this Agreement.

Director (Electrical)
SKB Shimla

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(b) The provision of paragraph (a) above shall not apply to:

(i) any information in the public domain otherwise than by breach of this Agreement;

(ii) information in the possession of the receiving party thereof before divulgence as aforesaid, and which was not obtained under any obligation of confidentiality;

(iii) information obtained from a third party who is free to divulge the same, and which is not obtained under any obligation of confidentiality and

(iv) information relating to the Project after the Board has acquired the Project from the Company.

20.12 SUCCESSORS AND ASSIGNS

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

20.13 NO THIRD PARTY BENEFICIARIES

This Agreement shall not confer any right of suit or action whatsoever on any third party.

20.14 AFFIRMATION

The Company and the Board declare and affirm that neither party nor its directors, employees, any of its agents or, in the case of the Company, its sponsors, has paid nor has it undertaken to pay and that it shall in the future not pay any unlawful commission, bribe, pay-offs, kick-backs and that it has not in any other way or manner paid any sums, whether in Indian currency or foreign currency and whether in India or abroad, or in any other manner given or offered to give any gifts and presents in India or abroad to any person or Company to procure this Agreement. The Company and the Board undertake not to engage in any of the said or similar acts during the term of and relative to this Agreement.

Member (Electrical)
CERC Shimla

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20.15 THE BOARD'S OBSERVATION VISITS

The Board's Engineers or its authorised representatives shall have at all reasonable time access to the Project to observe construction, testing, commissioning and operation and maintenance of the Project. The Company shall assist in arranging any such observation visits to the Project. All persons visiting the Project on behalf of the Board shall comply with the reasonable instructions and directions of the Company or its Contractors. The Company shall provide a suitable site office for use by the Board's visiting personnel as well as for the resident Board staff deployed for the project supervision/inspection etc.

20.16 NO ADVERSE DISCRIMINATION

Board shall not practise any adverse discrimination against the Company in the exercise of its discretion or authority under this Agreement with respect to dispatching of the energy generated by the Project and approval of Scheduled Outages and maintenance Outages vis a vis other generating companies and stations. The Company shall not unfairly discriminate against the Board under this Agreement with respect to its obligations and discretion hereunder.

20.17 EXECUTION OF UPSTREAM PROJECT AND EFFECT OF WATER RELEASES THERE FROM

Baspa-II Agreement provides that the planning/design/construction of Baspa Hydroelectric Project Stage I or any other Hydroelectric Project upstream of the Project shall be so arranged that the annual energy generation at the Project is not adversely affected in the process.

In case at any time during the term of the Agreement, the Board desires the Company to utilise any surplus water from such project(s) for generation at the station, the Company shall utilise additional water subject to technical capabilities of the Project at that point in time. The terms and conditions for sharing the benefits of generation of additional power shall be mutually decided by the Company and the Board at that time.

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20.18 **LENDER'S REQUIREMENT**

During financial closing for the Project, if lenders require any amendment or clarification to any of the section of the Agreement affecting rights and performance of the lenders, the same shall be jointly discussed by the parties and the lenders and suitable amendments as mutually agreed to will be incorporated in the Agreement.

20.19 **EVACUATION OF POWER FROM OTHER PROJECTS**

The transmission line (between the Project and Jhakri) can also be utilised for evacuation of power from any other generation project established or to be established in the area provided that the right of the Company shall always be recognised for evacuation of its own power from the Project. The beneficiary whose power is to be wheeled through the said transmission system, shall pay the wheeling charges to the Board, the rates for which shall be decided by the Board based upon the cost of the new transmission system and other parameters applicable at that time.

However proposal(s) for such evacuation of power shall be mutually examined at the appropriate time keeping in view the technical parameters of the existing transmission system and the incoming system in accordance with prudent utility practices.

20.20 **EMPLOYMENT**

Subject to availability, all the unskilled/skilled staff and other non-executive as may be for execution/operation and maintenance of the project, after deployment of the surplus workers from other existing projects of the company located within Himachal Pradesh, shall be recruited only through employment exchanges in Himachal Pradesh. In regard to the employment of the executives, other things being equal in term of qualification, experience etc., the Company shall give preference to the residents of Himachal Pradesh.

20.21 **CHANGE IN LAW**

(a) Definition of Law

For the purpose of this Agreement, "Law" means any act, rule regulation, notification directive order or instruction having the force of Law enacted or issued by any competent legislature, Government or Statutory Authority in India.

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(b) **Definition of Change in Law**

For the purpose of this Agreement, "Change in Law" means:-

(i) any enactment and enforcement of any new law,

(ii) any amendment, alteration, modification or repeal of any existing Law by a competent court, Tribunal or legislature in India which is contrary to the existing accepted interpretation thereof.

in each case coming into effect after the December 1993, and directly or indirectly affecting the parties to this Agreement in their performance of their obligation under this Agreement, and provision for which has not been made elsewhere in the Agreement.

(c) Delays

In the event of any change in law coming into force prior to the scheduled commercial operation date of any unit causes and delay in commercial operation of the unit, the scheduled commercial date of that unit shall be extended by a reasonable time as mutually agreed between the Board and the Company.

(d) Additional/Reduced Expenditure

The amount of any additional expenditure incurred by the company with regard to the project, which is reasonably necessary to comply with the change in law coming into force prior to unit III commercial operation date shall be added to the capital cost subject to approval by Board/Government. To the extent the amount of any such expenditure shall have been funded with Debt, interest on Debt, and Debt Repayment attributable thereto shall be reflected in the tariff, and to the extent the amount of any such expenditure shall have been funded with equity, the return on equity attributable thereto shall be reflected in the tariff.

The amount of any reduction in expenditure accrued by the company with regard to the project as a direct result of Change in Law coming into force prior to COD of the project shall be subtracted from the capital cost and this reduction in capital cost shall be reflected in the tariff.

Senior (Legal)
SJVNL Shimla-4

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(e) Additional facilities and modifications

Where any change in law coming into force after unit III commercial operation date requires the construction of any additional facilities or modifications of any existing facilities of the Project, the company may incur such expenditure thereon as may be reasonably required to comply with such change in law and the amount of such expenditure shall be added to the capital cost subject to approval by Board/SG/Authority. The company shall provide the Board with as much prior notification of such additional modifications and their costs as is reasonably practicable. To the extent amount of any such expenditure shall have been funded with Debt, the interest on Debt and Debt payment attributable thereto shall be reflected in the tariff, and to the extent the amount of any such expenditure shall have been funded with equity, the return on equity attributable thereto shall be reflected in the tariff. Benefits, if any, with regard to tariff, accrued due to change in law shall go towards reduction in tariff.

(f) Other increased/decreased costs

To the extent that the company incurs any other increase in costs as a result of any change in law which are not covered by the escalation in the tariff elsewhere provided in this Agreement, the amount of such costs shall be reflected in the tariff payable by the Board to the Company, subject to approval by Board/SG/Authority.

To the extent of actual decrease in cost or any actual increase in revenues to the Company as a direct result of Change in Law which are not covered by the tariff elsewhere, the amount of such decrease in cost shall be reflected in the tariff.

(g) General

The plan of remedial measures to mitigate the effect of change in law including how and by whom the costs of mitigation are to be funded, shall be as may be mutually agreed upon.

(h) Change in tariff due to change in law

If there is any change in tariff as per Section 20.21, due to change in law, then the same would be got approved from the Board.

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(i) There shall be no increase or decrease in the amounts billed to the Board as a result of Sections 20.21(d) and 20.21(f) unless the reasonably expected increase or decrease in costs resulting from such a Change in Law exceeds Rupees one crore in a Tariff Year.

(j) Either party may resort to procedure laid out in Article 18 in the event that the parties are unable to agree upon and implement any change required pursuant to this provision within 90 (ninety) days after either party first notifies the other party of a Change in Law giving rise to rights under this Section 20.21

20.22 International legal vetting

Both the parties agree that this Agreement shall be got legally vetted Internationally. If any amendments/modifications to this Agreement are considered necessary, a supplementary agreement shall be executed by the parties.

IN WITNESS WHEREOF, the Parties have executed and delivered this agreement as of the date first above written.

BOARD
HIMACHAL PRADESH STATE ELECTRICITY BOARD

By :

Name : Member (Electrical) HPSEB Shimla-4

Title :
(Party of the First Part)

Witness :

1. (M.L GUPTA)

2. (PC Jassal)

COMPANY
JAIPRAKASH HYDRO-POWER LIMITED

By :

Name : JAI PRAKASH GAUR

Title : CHAIRMAN CUM MANAGING DIRECTOR
(Party of the First Part)

Witness :

1. (S.K JAIN DIRECTOR (JHPL) & VICE CHAIRMAN CUM MANAGING DIRECTOR (JIL))

2. (JH. DIRECTOR (JHPL))

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SCHEDULE - I

PLANT AVAILABILITY LEVEL

1.1 INTRODUCTION

(a) This schedule sets out how plant availability level is to be calculated for the purpose of this Agreement.

(b) Clause 2 deals with the Company's obligation to declare the Available Capacity, and any impairment of the Contracted Operating Characteristics of the power station in the Weekly Capacity Notices and Revised Capacity Notices.

(c) Clause 3 defines when the Power Station is considered to have been subject to a Capacity Failure both in normal operation and when it is being tested or monitored.

(d) Clause 4 describes how Settlement Periods are divided into Settlement Period Categories for the purposes of calculating the capacity failure.

(e) Clause 5 sets out how Available Capacity is to be determined, including how it is to be adjusted when the Power Station is subject to a Capacity Failure.

(f) Clause 6 sets out the formula for calculating the Availability level in any relevant period from the data collected pursuant to this Schedule I.

1.2 DEFINITIONS

For purpose of this Schedule I and Agreement, the following terms shall have the following meanings:

Settlement Period

means any one hour period beginning at the end of last completed hour such as 01.00 to 02.00 hours. Settlement periods in a year shall be 8760 hours in a year except in leap year when settlement periods shall be 8784 hours.

Settlement Period Categories

means Peak Settlement Periods, Standard Settlement Periods and Off-Peak Settlement Periods, being the categories into which all settlement periods are divided.

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Schedule day

means the day by reference to which the Generating Plant is scheduled.

Schedule week

means the week by reference to which the Generating Plant is scheduled.

2. CAPACITY NOTICES

2.1.1 Each week not later than 16.00 hours on Wednesday the company will submit to the Board a written notice (a "Weekly Capacity Notice") declaring the expected availability of the Power Station and impairment of its contracted operating characteristics in each settlement period of the week beginning on the next Monday.

2.1.2 As soon as practicable before the first unit is commissioned and thereafter not later than the 16.00 hours of each preceding day, the Company shall deliver a notice, the "Capacity Notice" to the Board in respect of immediately succeeding day (Schedule day).

2.1.3 The Weekly Capacity Notice and the Capacity Notice shall specify:-

(a) The date and time of issue of the weekly capacity notice and the capacity notice.

(b) The Schedule week/day to which it relates;

(c) The Declared Capacity of the Power Station for each Settlement Period in the relevant Schedule week/schedule day (and if the power station's Declared Capacity is expected to change, the time at which each change is expected to occur). Unless the Power Station is declared to be fully available in all the settlement periods of the relevant week/day, the Weekly Capacity Notice/Capacity Notice must state the reasons why the power station is expected not to be fully available.

(d) The extent (if any) to which the Company expects the power station to be incapable of performing in accordance with its Contracted Operating Characteristics in any Settlement Period (and save for any exceptions noted in the Weekly Capacity Notice/Capacity Notice, the company shall be deemed to have declared the Power Station to be capable of meeting its Contracted Operating Characteristic(s).

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2.2 Whenever the Company believes that any information previously provided to the Board pursuant to this Paragraph 2.1 (b) is no longer accurate, it shall promptly deliver a revised notice (a "Revised Capacity Notice") to the Control Centre in accordance with this Paragraph 2.3 specifying:

(i) the date and time that the Revised Capacity Notice is issued;

(ii) a reference to the previously provided information that is to revised;

(iii) a statement of the changes required to be made to the previous information to make it consistent with the Company's current expectations regarding the performance of the power station.

2.3 A declaration by the Company increasing the power station's Declared Capacity from zero shall be taken to mean that the power station could be synchronised to the Grid System not later than the time that the increase in Declared Capacity is stated to be effective (or, if no such time is stated, then immediately) and within the periods stipulated in Schedule VIII, if a Despatch Instruction to synchronize was given at any time after the declaration was given and, following synchronization could comply with a Despatch Instruction to ramp up immediately to its Declared Capacity or any intermediate load above its minimum stable generation at a loading rate consistent with its Contracted Operating Characteristics and grid requirement (or any slower loading rate declared for the time being by the Company pursuant to Clause 2.1.(d).

2.4 A declaration by the Company increasing the Declared Capacity of the power station from a level above zero shall be taken to mean that the power station could comply with a Despatch Instruction given at the time, the increase in Declared Capacity is stated to be effective (or, if no such time is stated, then immediately) or at any later time to go from its then prevailing condition to its new Declared Capacity or any intermediate load within a time consistent with the start up times and loading rates set out in the Contracted Operating Characteristics (or any longer start-up times or slower loading rates declared for the time being by the Company pursuant to Clause 2.1.(d).

2.5 A declaration by the Company reducing the power station's Declared Capacity below its then prevailing level of generation shall be taken to mean that the power station must be given a Despatch Instruction to ramp down not later than the time when the reduction in Declared Capacity is stated to be effective (or, if no such time is stated, then immediately) from the then prevailing level of generation to its Declared Capacity or any lower load and could company with Despatch Instruction

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by ramping down at a deloading rate consistent with its Contracted Operating Characteristics.

2.6 The Company shall prepare Weekly, Daily and Revised Capacity Notices with due care and attention in order to declare accurately the Company's expectations regarding the performance of the power station.

2.7 The Company shall not submit any Capacity Notice or Revised Capacity Notice declaring the Available Capacity of the power station to be greater than its installed capacity or the tested capacity of the generating units which have achieved commercial operation, whichever is lower, or less than its minimum stable generation.

2.8 The Declared Capacity of the power station shall be unaffected by any despatched shutdown of the power station (unless the relevant despatch instruction is issued to give effect to a requirement that the Unit be taken out of service to remedy any impairment of its ability to meet its Contracted Operating Characteristics) while the power station continues to be capable of starting up, being synchronized and ramping upto its Declared Capacity or any intermediate load above its minimum stable generation within the time allowed by its Contracted Operating Characteristics (or any longer time declared for the time being by the Company pursuant to this Clause 2).

2.9 If the Declared Capacity of the power station changes during the course of a Settlement Period, the power station's declared capacity throughout that Settlement Period shall be equal to the lowest declared capacity in effect, at any time, during that Settlement Period.

3. CAPACITY FAILURE

3.1 A capacity failure occurs in a Settlement Period when the power station's level of generation during that Settlement Period (expressed in MW) falls short of the despatched level after the time allowed for complying with the relevant Despatch Instruction (determined consistently with the Operating Characteristics at that time) (i) by any amount during the Capacity Test during the period of Monitoring or (ii) by more than the permitted tolerance at any other time. The Capacity Failure for Standard Settlement Period shall be equal to the difference between the declared capacity and the achieved capacity in case the achieved capacity is below the required capacity. If achieved capacity is equal to the required capacity there shall be no capacity failure.

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If the station is not able to meet despatch instruction due to adverse grid conditions, the Company will promptly inform the control centre and the same shall not count towards capacity failure.

3.2 The permitted Tolerance shall be (+)/(-) 3% in relation to failure to achieve the Despatch MW output.

3.3 Whenever Board has reason to believe that the power station may not be capable of performing consistently with the declaration contained in the Capacity Notice or Revised Capacity Notice, it may issue a notice (a "Monitoring Notice") to the Company to monitor its declared capacity and shall indicate the maximum period over which monitoring will occur, which period shall not exceed ten (10) hours. During the period of monitoring, the Board shall instruct the Company to set the power station governors so as to not be responsive to the changes in Grid System frequency.

3.4 The company shall not be entitled to any additional compensation by reason of the monitoring of the power station.

4. DETERMINATION OF PEAK, OFF-PEAK AND STANDARD SETTLEMENT PERIODS.

4.1 Subject to the following provisions of this Clause 4 the Board shall designate (a) 3000 Settlement Periods in each tariff year of 12 months (and a proportionate number of Settlement Periods for the tariff period) as Peak Settlement Period and (b) 2500 Settlement Periods in any tariff year of 12 months (or a proportionate number in the tariff period) as Off-peak Settlement Periods. All settlement periods not subject to a designation under this Clause 4.1 shall automatically be designated Standard Settlement Periods. For each quarter of the year, number of Peak, Off-peak and Standard Settlement Period shall be designated proportionately.

4.2 The Board shall give the Company not less than one month prior written notice of any designation of a settlement periods, as a Peak settlement period or an off-peak settlement period and may cancel/modify any such designation by giving the Company not less than two (2) weeks prior written notice atleast two weeks before the relevant settlement periods. Any settlement period whose designation as a Peak or an Off-peak settlement period has been cancelled under this paragraph 4.2 shall automatically be designated a Standard Settlement Period, unless the same has been redesignated as Off-peak or Peak settlement period, as the case may be.

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4.3 All settlement periods coinciding with a Scheduled Outage or a Maintenance Outage shall automatically be designated Standard Settlement Periods, notwithstanding any contrary designation under these provisions.

4.4 The Capacity Reduction attributable to capacity failure in a Peak settlement period shall also be determined in the same manner as applicable for the standard peak settlement periods in accordance with Clause 3.1 but the capacity reduction so determined shall be multiplied by 1.5.

4.5 The capacity reduction attributable to capacity failures in an Off-peak settlement period shall also be determined as applicable for the standard peak settlement period in accordance with Clause 3.1 but the capacity reduction so determined shall be multiplied by 0.4.

4.6 Nothing in this paragraph 4 shall restrict the Board's right to require the Company to take the power station or any unit out of service to remedy any impairment in its Contracted Operating Characteristics.

5. AVAILABLE CAPACITY

5.1 The power station's available capacity in each settlement period (its "Available Capacity") shall be equal to its Declared Capacity in that settlement period, less any capacity reduction attributable to a capacity failure affecting the power station in that settlement period. The capacity reduction in respect of a settlement period shall be determined in accordance with the relevant provisions under the Clauses 3 & 4. Available Capacity during Peak Settlement Periods can be less than zero.

6. PLANT AVAILABILITY LEVEL

In any period the plant availability level of the power station shall be calculated as follows:-

$$Av = \frac{100 \sum_{o}^{p} AC}{Cap \times n}$$

Where

Av is the Plant Availability level for the power station in that period (expressed as a percentage)

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$\sum_{n}^{d}$ AC is the sum of the Available Capacities of all Units in each Settlement Period in that period, (expressed as a number of MW).

Cap is the weighted average of installed capacity of power station in that period.

n is the number of Settlement Periods in that period.

7. NOTICES

7.1 All written notices required to be given pursuant to this schedule may be delivered by facsimile.

7.2 The notices pursuant to this article may be given on telephone, provided the same are confirmed in writing through fax within two hours of such communication on telephone. In case of failure of fax communication, this time period of confirmation in writing shall be extended by the time period for which the failure of fax communication take place.

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SCHEDULE - II

BUY-OUT PRICE

1. **INTRODUCTION :**

This schedule outlines (i) the procedures to be adopted in the event that a Buy-out Notice by the Company or the Board as described in Article 14 and (ii) the methodology to be followed for calculating the Buy-out Price. The provisions of this Schedule-II shall survive expiry of termination of this Agreement.

2. **DEFINITIONS :**

For purposes of this Schedule II, the following terms shall have the following meanings :

Appraiser

An independent firm of chartered accountants that is competent and experienced in the valuation techniques and appointed as per provisions of Clause 4(a) of this schedule.

Buy-out

A purchase by the Board of the Project pursuant to the issue of a Buy-out Notice.

Completion

The receipt by the Company of the Buy-out Price in immediately available funds and the transfer of the Project to the Board.

Statement of Practice

The Statement of Asset Valuation Practice and Guidance Notes issued by the Institute of Chartered Surveyors / Accountants.

Transfer Date

The date of Completion, of transfer or such date to be mutually agreeable to both Parties but in no event later than sixty (60) days after the date of the Buy-out Notice unless both parties mutually agree to an extension.

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3. SCOPE OF THE SALE :

a) The Board shall purchase all the assets of the Company relating to the Project including land, buildings, civil structures, plant and equipment, spare parts, records and drawings except for cash and bank balance.

b) The Board shall not purchase any cash in hand and or any amount credit of Bank Accounts, trade and book debts or receivables accruing to the Company prior to the Transfer Date unless due consideration for these can be mutually agreed upon between the Parties.

c) All other assets existing at the Transfer Date that are not included in clauses (a) and (b) above shall be for the benefit of the Company, including the proceeds of any insurance or warranty claims made prior to the Transfer Date.

d) The Company shall be responsible for all liabilities and obligations of the Company that have accrued prior to the Transfer Date.

e) No warranties as to the condition of the property and assets of the Project shall be given except that the Company agrees to assign to the Board the benefit of any warranties from third parties existing at the Transfer Date.

f) No debt, claim for damages or other liability whether actual or contingent relating to the Project and incurred before the date of the Buy-out Notice will be assumed by the Board unless it chooses to and can reach agreement of the same with the Company and, if necessary, the Lenders or other creditors (where such agreement is necessary in order to give legal effect to the assumption thereof by the Board), subject to clause (g) below. Due allowance shall be made in computing the Buy-out Price to take account of liabilities assumed by the Board and liabilities retained by the Company.

g) The Company shall, if so required by the Board make efforts to procure the novation (or failing that, assignment of the underlying rights held by the Company) to the Board of any relevant construction or any other contract relating to the Project on such terms as the Board may reasonably require.

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h) Additional Assurance : Upon the written request of Board, the Company shall sign, execute and deliver, or cause to be signed, executed and delivered, and do or make, any and all agreements, instruments, papers, deeds, acts to things, supplemental

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confirmatory otherwise as may reasonably be required by the Board for the purpose of or in connection with the transfer set forth, including without limitation, transferring to Board all items of equipment specifications, manufacturers' operation and maintenance manuals, schedules of protection schemes and protective relay settings, and signed and sealed copies of all as-built drawings for the Project, including the civil and architectural works;

4. Procedure for Determination of the Buy-out Price :

a) Following an issue of a Buy-out Notice, the Company shall select an Appraiser that is agreeable to the Board (such agreement not to be unreasonably withheld or delayed) to carry out a determination of the Buy-out Price (the "Valuation"). Such Appraiser will be selected and begin work within twenty (20) days of the issue of the Buy-out Notice and shall be provided with all necessary data and information by each Party in order to carry out the Valuation. Failing agreement of a mutually acceptable Appraiser within thirty (30) days of the issue of the Buy-out Notice, an Appraiser shall be nominated by the President or Acting President of the Institute of the Chartered Accountants of India.

b) The Appraiser shall prepare the Valuation in accordance with the methodology described in Sections 5 and 6 of this Schedule II. Throughout the process, the Appraiser shall consult with both Parties, update them of progress and analyze any commentary they may have on the Valuation.

c) The Appraiser shall complete the Valuation within sixty (60) days of the issue of the Buy-out Notice and deliver a copy to both Parties.

d) The Transfer Date shall occur within fifteen (15) Days after receipt and the acceptance of the Valuation by both Parties at a time and place that is mutually agreeable to both Parties. The Board shall pay the Buy-out Price to the Company in immediately available funds, and simultaneously therewith, the Company shall transfer and assign to the Board all of its right(s), title(s) and interest(s) in the Project except to the extent excluded pursuant to Clause 3 of this Schedule II. All payments shall be made in Rupees.

e) Following Completion, the Board and the Company may each submit a "Post Closing Adjustment" to the other Party in line with normal industry practice for asset acquisitions to reflect differences between the assumptions used in the Valuation and the actual asset

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position on the Transfer Date, for example, a difference in inventory levels. Any dispute over the Post Closing Adjustment would be referred to the Appraiser, whose sole judgement would be final and binding and shall not be open to dispute or arbitration.

5. Calculation of the Components of the Buy-out Price :

a) Buy-out Price shall be determined as per Clause 5 and 6 of this Schedule:

i) The Buy-out Price will be stated in the Valuation in Rupees. If there is a movement of 3% or more between the Rupee/Foreign exchange rate used in the valuation and the rate on the Transfer Date, then the Appraiser will update the Valuation following Completion to reflect the exchange rate on the Transfer Date and the difference will be included as a Post-Closing Adjustment.

ii) The valuation will be conducted on the presumption that this Agreement will continue to be in full force and effect until the end of its full term, and will be conducted on the further presumption (which the Appraiser can depart from for good reason, excluding the existence of a direct Indian political force majeure event under Sections 17.1(b)(i) to 17.1(b)(iv) or the Board Event of Default) would have continued in full force and effect until the natural expiry. Furthermore, it will be assumed that for the purposes of the Valuation the Board would have met its future payment obligations under this Agreement and that there is an end to any effect of any political fore majeure events, that led directly to the issue of the Buy-out Notice shall be disregarded

b) The discounted cash flow valuation ("DCFV") shall be an estimate of the net present value of the expected cash flows accruing to the Company (after all debt service and all other Project costs and expenses) as a result of operating the Project over the remainder of the term of this Agreement (as if it were not terminated until its expiry of full term) plus the residual value of the Project as set forth below. The DCFV will apply to any Unit that has achieved Commercial Operation and shall be carried out in line with normal industry practice, following the guidelines below :

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i) Annual cash flow ("ACF") projections in Rupees shall be prepared on an after-tax basis according to the following formula :

Rev - Opex - Capex - Debt - Taxes - dNWI

where

Rev = All operating revenues determined under this Agreement for the Units that have achieved Commercial Operation.

Opex = Cash expenses of the Project including all interest and fees on borrowing, operation and maintenance expenses, interest on working capital etc.

Capex = Any capital expenditure not already included in Opex, including the estimated cost of repairing, any defect or physical loss or damage to the Project.

Debt = All principal repayments pursuant to the approved financial package.

Taxes = Corporate income taxes.

dNWI = Any increase or decrease in net working capital required each year. Reductions in net working capital shall be treated as negative. The net working investment shall be the sum of inventories and trade receivables minus payable.

ii) ACFs should be considered to occur on average at the middle of each year.

iii) Inflation and exchange rate movements should be applied to the components of the forecast where deemed appropriate by the appraiser. The forecast of Indian inflation used in the computation of the Buy-out Price shall not be less than 5% nor greater than 9% per annum.

iv) The Appraiser will have sole regard to the future operation of the Project, considering all factors that are likely to affect it, including but not limited to the following :

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Electrical Output, Design Energy, availability and the operation maintenance expenses for the calculation of tariff should be based on historical performance unless there is a reason to believe that this is not a reliable indicator of future performance/cost levels.

v) A terminal value cash flow shall be included at the end of the final year of the projection period. Such cash flow shall equal the Terminal Value as defined below.

vi) The discount rate will be nominal discount rate (i.e. including inflation) and will be determined by the Appraiser based on the cost of equity of electricity generating companies that are publicly quoted in India but adjusted to take into account the location and size of the Project, the length of operating history, the predicability of the cash flows and their limited growth potential and any other factors that the Appraiser judges to be appropriate. The discount rate shall be determined to be in a range of 11% of 16% in real terms, plus the forecast of Indian inflation made pursuant to clause (iii) above.

vii) The DCFV should be based on the value of the assets as on the Transfer Date. However, the DCFV should also include a component to cover any reduction in profits that the Company has suffered as result of the Company receiving reduced revenues between the date of any Termination Notice and Transfer Date. Such component shall be calculated at the sole discretion of the Appraiser.

c) The Construction Period Valuation ("CPV") shall apply to any unit of the Project if it has not reached its COD and shall be stated in Rupees, and will equal the sum of all equity subscriptions paid into the Company and spent on the project until the transfer date less the equity component of capital cost in respect of the units as shall have already achieved COD as per Sections 8.4.2 and 8.4.3. Such sum shall be in the currencies that the equity was originally subscribed, converted into Rupees at the current rate of Exchange as on the Transfer Date. The Appraiser shall make any adjustments that in his sole discretion he feels are necessary to account for any loss or gain in the value of the underlying assets. Such adjustments should reflect :

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i) The extent to which progress of construction of any unit would have led to the liquidated damages payable to the Board for delay.

ii) The extent to which the amounts actually incurred by the Company differ from the estimated amounts at the start of construction;

iii) The extent to which the estimated final specification, operating costs and performance characteristics of the project differ from those anticipated at the start of construction;

iv) Such other matters as the Appraiser may determine.

However, the Company should not suffer a reduction in the Buy-out Price for losses which have occurred due to direct Indian political force majeure events or for which compensation would have been available through liquidated damages in the Construction Contract had the termination not halted construction. To the extent that the Company receives any compensation through liquidated damages, the amount of compensation shall reduce the Buy-out Price commensurately.

d) The terminal valuation ("TV") shall be equal to the depreciated book value as determined by the appraiser as at the end of the term of the Agreement.

e) The "Total Debt Amount" shall be given in Rupees and shall equal 100% of all outstanding principal repayments of the Company pursuant to the approved Financial Package. In respect of the units which have not achieved commercial operation such outstanding principal repayment of loan shall not exceed the loan amount spent on that unit.

f) The "Transfer Taxes" shall equal all stamp and additional stamp duties and any other taxes (including any sales or value added taxes but not capital gains tax or income tax) and any registration fees that become payable by the Company as a result of the purchase of the Project by the Board.

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g) The "Transfer Cost" shall equal all the costs and liabilities of the Company which are a result of the purchase of the Project by the Board, including without limitation: the fees and out-of-pocket expenses of the Appraiser, Lenders' fees and out-of-pocket expenses for repayment of any loans, any termination payments or novation fees on contracts in connection with the Project whose terms are reasonable and customary for private power projects such as this Project or where specifically approved by the Board, but excluding any amount specified in clause (f) above.

6. The Buy-out Price :

The Buy-out Price shall equal the sum of the following elements, adjusted if appropriate under the other provisions of this Schedule II :

a) A times the DCFV
b) B times the CPV
c) C times the TV
d) D times the Total Debt Amount;
e) E times the Transfer Taxes; and
f) F times the Transfer Cost.

where A, B, C, D, E and F are determined depending on the reason for termination (as described in Article 14) as shown in the table below. The notes to the table should also be taken into account when calculating the relevant variable.

Sl. No.	Reasons for Termination	DCFV	CPV	TV	Total Debt	Total Tax	Transfer Cost
		A	B	C	D	E	F
1.	The Board purchase option following expiry of Agreements	Nil	Nil	100% depreciated book value	Nil	100%	100%
2.	Company Default	5%	*1	0%	100%	0%	0%
3.	The Board Default	100%	100%	0%	100%	100%	100%
4.	The Company sale option or Board purchase option following Force Majeure Event	50%	100%	0%	100%	100%	100%

*1 If CPV is positive after all adjustments are made by the appraiser then B=0, if CPV is negative then B = 100%

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SCHEDULE - III

TECHNICAL PARAMETERS OF INTERCONNECTION FACILITIES

1.0 The interconnection point of the two circuits of 400 kV Baspa-II - Jhakri transmission line to the 400 kV Jhakri Sub-station shall be the bus bars of 400 kV gas insulated switchgear owned by NJPC.

2.0 The interconnection facilities including 2 nos. gas insulated switchgear bays, their protection, control and metering devices shall be got procured, installed and maintained by the Company from NJPC at the cost of the Company to evacuate the delivered energy from Baspa-II Project. The interconnection facility shall be complete with gas monitoring system, group operated bus bar disconnects, safety ground switches etc. required for the purposes.

3.0 The technical parameters of interconnection facilities shall be:

No. of switchgear bays	-	Two (2)
Type of switchgear	-	Gas insulated (inside a building)
Rated voltage	-	420 kV
Rated current	-	2000 A
Rated S.C. current	-	40 kA (1 second)
B.I.L.	-	1425 kVp
Bus bar arrangement	-	Double bus bar
Control and protection	-	Static/Numerical
Energy metering	-	0.5 accuracy class

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CESC Shimla-1

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SCHEDULE - IV

INSURANCE

I INSURANCE DURING CONSTRUCTION PERIOD

The Insurance coverage to be obtained by the Company during construction stage shall include the following, without limitation -

1. Contractor's All Risks Insurance (CAR)

   This would cover all Civil works relating to Project's executed and in the course of execution, materials, temporary works and the Company's/Contractor's equipment while at the site, including its operational testing and maintenance during construction periods, against all risks of physical loss or damage. Cover shall provide the equivalent terms, conditions and perils/causes of loss provided under an Contractor All Risks insurance policy.

2. Erection All Policy (EAR)

   This policy shall cover insurance of all Electro-Mechanical equipment for any loss/damage/theft during marine/transit, storage, erection, testing and commissioning of the equipment. Cover shall provide the equivalent terms, conditions and perils/causes of loss provided under the policy.

3. Comprehensive Third Party Liability

   Against legal liability to third parties for bodily injury or damage to property arising out of the design, procurement, construction, testing and commissioning of the Project required to achieve the Commercial Operation Date pursuant to this Agreement.

4. Miscellaneous

   i) Other insurance as is customary, desirable or necessary to comply with the laws of India or other Indian requirements, such as Workmen Compensation Insurance in relation to all workmen employed in the construction of the Project and Motor Insurance on any vehicle.

   ii) Other Insurance Coverage required to be obtained by the Company in accordance with Section 10.1.

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II INSURANCE DURING OPERATION PERIOD

The Insurance Coverage to be obtained by Company during Operation stage (i.e. from commercial operation of the first unit upto the expiry of Baspa II Agreement) shall include the following, without limitation. The Insurance Coverage shall be for full replacement cost of the associated equipment/project.

1. Material Damage Insurance

   All building contents, machinery, stock, fixtures, fittings and all other personal property forming part of each unit and project against "All Risks" of physical loss or damage, including (but not limited to) those resulting from fire, lighting, explosion, spontaneous combustion, storm, wind, tempest, flood, hurricane, water damage, sprinkler leakage, riot, strike, malicious damage, aircraft, impact, earthquake (fire and shock) debris removal.

2. Third Party Liability;

   Legal liability of the insured for damage to property of third parties or injury to third parties arising out of the ownership, operation and maintenance of the Project.

3. Miscellaneous

   i) Other insurance as are customary, desirable or necessary to comply with the laws of India or other local requirements, such as Workmen Compensation insurance in relation to all workmen employed at the Project or in connection with its operation or maintenance, and Motor Insurance on any vehicle.

   ii) Other Insurance coverage required to be obtained by the Company in accordance with section 12.3.

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SCHEDULE - V

PERFORMANCE TESTS AND UNIT OPERATING CHARACTERISTICS TEST(S)

1.0 Test Objectives

The objectives of the Tests are to demonstrate the performance and operational characteristics of each Unit/Project.

2.0 General

.1 Board shall maintain or cause to maintain the stability of the frequency, voltage and other electrical properties of the Grid throughout the duration of the Tests. In the event of any variation of voltage, frequency or other electrical properties of the Grid during the Test, which has an adverse effect on the ability of the Station to operate at its Nameplate Capacity, the Test results shall be corrected for such variations in an agreed manner. Alternatively, the Company shall have the option to reschedule a new Test.

.2 The Company will determine and prepare the procedures for the test in accordance with relevant IEC/Indian standard as per prudent utility practices.

.3 These Tests will be coordinated between the Company and the Board. The Tests schedule will be agreed in not less than Sixty (60) days prior to the synchronization of each Unit.

3.0 Performance Tests

The following Performance Tests shall be performed:

a) Start-up Test;
b) Load Rejection Test;
c) Performance Capacity Test at continuous rating of 100 MW for each generating unit(s) and 300 MW for the project;
d) Functional Verification Test for Electrical Metering and Relaying.

3.1 Start-up Test

Company shall perform plant start-up tests including but not limited to unit start up, loading at part and full loads, stopping in both manual and Auto mode.

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3.2 **Load Rejection Test**

The Company shall perform Load Rejection Tests at 25%, 50%, 75% and 100% rated load of each generating unit.

The objective of the Load Rejection Test are to verify that

(i) a unit does not trip when shedding 25%, 50%, 75% and 100% Rated load,

(ii) is capable of continuing operation with its auxiliaries, and

(iii) is capable of being reloaded in the times specified under technical limits.

Board shall arrange necessary permissions for conducting the tests from appropriate authority.

3.3 Performance Capacity Tests

3.3.1 The objective of the Capacity Performance Tests is to verify the capacity of each Unit(s)/Project.

The Performance Test shall comprise a predetermined run(s) at rated load of 100 MW at rated head to verify generator net output. If the rated head condition is not available during the test run, necessary correction as determined by independent Engineer shall be applied. Rated load of 100 MW shall be maintained for at least twenty four(24) hours subject to availability of water demonstrate continuous operation. Capacity (output) of generator shall be measured in accordance with IEC 34.2 code.

The performance test of the station shall be conducted at 300 MW, for at least 4 hours and capacity shall be measured as per procedures laid down in IEC 34-2 code. If water is available, then the test shall be conducted for a period of twenty four hours.

3.3.2 Periodic performance capacity test shall also be performed on similar lines as per provisions of Section 6.8.

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3.4 Functional Verification Test for Electrical Metering and Relaying

The Company shall perform functional verification tests of the protection, control and metering system of the generating station as well as the Switchyard and transmission facilities. The purpose of the functional verification tests is to ensure that power equipment protection and control system will perform as designed to protect the electrical power system in a reliable manner and not jeopardize the Company or Grid facilities.

The design of the protection control and metering system shall include adequate test facilities so that functional tests can be properly &performed.

The tests shall be conducted to satisfy Grid requirements. Periodic verification of protection and control in accordance with an agreed maintenance schedule shall be performed by the Company as well as Grid in a coordinated manner to ensure the integrity of the protection and control system of both facilities.

4.0 Unit Operating Characteristic Test(s)

Unit operation characteristic test(s) as under shall be carried out to meet requirements of IEC-34 :-

- To verify voltage variation range i.e. ± 5% of rated voltage
- To verify frequency variation range i.e. + 3% and - 5%
- Unit start up time from issue of command for main inlet valve opening till loading upto 90% of rated load subject to grid conditions.
- Functional tests to demonstrate performance of all auxiliary equipments.

5.0 Efficiency Tests

The efficiency test of hydraulic turbines shall be conducted by "Thermo dynamic method" in accordance with the "International Code for the Field Acceptance Tests of Hydraulic turbines (IEC-41-1991)" and the efficiency test of generator by "Summation of Losses method" as per IEC 34-1.

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6.0 Data Recording and Measurement

1. The Company will provide the necessary labour, material, instrumentation and Controls to record, observe and evaluate the Test data and maintain the logs of all data taken.
2. Data will be recorded in electronic form as far as practical. Data which can not be recorded in electronic form shall be recorded manually.
3. Company shall specify the variables that will be recorded, the form of recording and the frequency of recording of each variable during each Test.
4. All instruments and meters will be calibrated in accordance with prudent utility Practice prior to the Tests.

7.0 Test Reports

1. Company will provide to the Board and Independent Engineer Test report of the Test results and other relevant data as per provisions of Article 6.
2. The format and contents of the Test reports may be modified by mutual agreement between the Company and the Board in order to meet the Test objectives.

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SCHEDULE-VI

GUARANTEE OF THE STATE OF HIMACHAL PRADESH

This guarantee is made at Shimla on _____ 1997 corresponding to Shaka Samvat the day of_____ by the Governor of HIMACHAL PRADESH on behalf of THE STATE OF HIMACHAL PRADESH (hereinafter referred to as the "Guarantor").

In consideration of Jaiprakash Hydro Power Limited, a Company organized and existing under the laws of India (the "Company" and having its registered office at C-16, Sector-I, SDA Housing Colony, New Shimla-171009, H.P. and head office at JA House, 63 Basant Lok, Vasant Vihar, New Delhi-110057 undertaking to develop, procure finance for, construct, own operate and maintain Baspa-II Hydro-electric power generating facility 3 x 100 MW capacity at district Kinnaur in the State of Himachal Pradesh, India (hereinafter referred to as the "Project") and to make sales of capacity and net electrical output from the project to Himachal Pradesh State Electricity Board (hereinafter referred to as "Board") under Power Purchase Agreement (hereinafter referred as "PPA") dated 4th June, 1997 as the same may be amended, supplemented or modified from time to time and made between the Company and the Board and inter-alia, in order to induce financial institutions to finance the project, the Guarantor hereby covenants and agrees as follows:

1. GUARANTEE

The Guarantor hereby guarantees unconditionally and irrevocable to pay to the Company within 30 days following receipt by the Guarantor thereof of a demand for payment by the Company of any sum of money which the Board is liable to pay to the Company under or pursuant to the PPA and fails to pay in accordance with the terms of the PPA.

2. CONDITIONS RELATING TO DEMAND

The Company shall be entitled to make a demand for payment upon the Guarantor pursuant to this Guarantee if and only if the Board has failed to pay, any sum of money which is liable to be paid to the Company under or pursuant to Section 10.12 of the PPA.

3. PAYMENTS

All payments made by the Guarantor hereunder shall be made without set off or counterclaim and without any deduction or withholding for any reason except as required by law.

4. OTHER PROVISIONS OF THE GUARANTEE

(a) Waiver

No obligation of the Guarantor hereunder shall be in any way discharged or impaired by reason of any time or other indulgence granted by the Company to the Board by any variation of the PPA or by any other act or thing. If the Board discharges its obligations guaranteed hereunder or thereunder, the liability of the guarantor shall deemed to have been discharged. Further no waiver by the Company shall be effective unless it is in writing.

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(b) Continuing Guarantee

This guarantee shall be continuing security.

(c) Additional Security

This guarantee shall be in addition to, and not in substitution for, or derogation of, any other security which the Company may at any time hold in respect of the obligations of Board under the PPA.

(d) Immediate Recourse

Subject to Clause 4(b), the Company shall not be obliged before taking steps to enforce this Guarantee to:

(i) take action or obtain judgement against the Board in any court, or

(ii) make or file any clam in bankruptcy of the Board, or

(iii) exercise diligence against the Board, or

(iv) exercise any legal remedies which may be available to it under or in respect of the PPA.

5. GUARANTOR'S REPRESENTATION AND WARRANTIES

The Guarantor hereby represents, warrants and undertakes to the Company as follows:

(a) Legal Validity

This Guarantee constitutes legal, valid, binding and enforceable obligations of the Guarantor in accordance with its terms.

(b) Approvals

All necessary action has been taken under laws, as applicable to authorise the execution, delivery and performance of this Guarantee.

6. NOTICES

All notices, demands or other communications required to be given shall be in writing in the English language and shall be addressed to the Guarantor or the Company as the case may be, at the following address (or any other address as provided by either party to the other in writing):

GUARANTOR:

Government of Himachal Pradesh,
Shimla, Himachal Pradesh, India..
Telephone : 0177_____
Telecopier: 0177_____
Fax No. : _____

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COMPANY:

Jaiprakash Hydro-Power Ltd.
JA Annexe, 54 Basant Lok, Vasant Vihar,
NEW DELHI-110 057.

Fax No. : 011-6885379 & 011-6873591.
Telephone No.: 011-6141540 & 011-6147411

7. MISCELLANEOUS PROVISIONS

(a) Cumulative Remedies.

No single or partial exercise of any right or remedy shall preclude any other or further exercise thereof or the exercise of any other right or remedy. The rights and remedies of the Company herein provided are cumulative and not exclusive of any rights or remedies provided by law. This Guarantee cannot be amended except by written agreement between the Guarantor and the Company.

(b) Assignment of the Company

The Company shall not assign or transfer, other than to the Company's lenders, all or any part of its rights or obligations hereunder without the prior written consent of the Guarantee in its sole discretion exercised reasonably.

(c) Governing Law

The rights and obligations of the parties under or pursuant to this Guarantee shall be governed by and construed according to Indian Law.

(d) Arbitration

(i) Any dispute arising out of or in connection with this Guarantee including any question regarding its existence, validity or termination or any question as to whether a matter is arbitrable and which has not been resolved between the parties hereto proceedings shall be referred to and finally resolved by arbitration under the Arbitration and Conciliation Act, 1996.

(ii) The arbitration shall be conducted in Shimla in Himachal Pradesh. The arbitration shall be conducted in English and all written documents used during the arbitration shall be in English. The award shall be speaking award.

(iii) The parties agree that any decision or award of an arbitral tribunal shall be final, conclusive and binding upon the Parties subject to legal remedies according to law. The Parties also agree that any arbitration award rendered hereto may be enforced by any court of competent juriidiction.

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(iv) During any period of arbitration, there shall be no suspension of this Guarantee.

(v) The Parties specifically agree that any arbitration shall be pursuant to arbitration provisions made herein above.

IN WITNESS WHEREOF, this Guarantee has been executed the day, month and year first before written.

SIGNED, SEALED AND DELIVERED

By_____

Name: Mr._____
Designation: _____
_____Department,
Government of Himachal Pradesh.

For and on behalf of the Government
of Himachal Pradesh in the presence of

1._____
Name: Mr._____

2._____
Name: Mr._____

ACCEPTED AND AGREED

By_____
Name: Mr._____

Designation: _____

Authorised Signatory

being the authorised signatory for and on behalf
of Jaiprakash Hydro Power Limited.

JSW Hydro Energy Limited

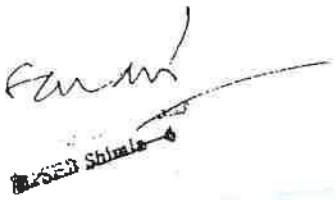
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SCHEDULE -VII

AUTHORIZATION PERMITS AND LIECENCES

Clearances	Clearing Authority
(A) Statutory Clearance	
1. Cost Estimate, Section 29(1)	Authority
2. Techno-economic clearance	Authority
3. Publication as per Section 29(2)	SG
4. Water availability	CWC/SG
5. SEB clearance	Board
6. Pollution clearance (water and air)	State/Centre Pollution Control Board
7. Forest clearance	Ministry of Environment & Forests/GOI
8. (a) Environment clearance	Ministry of Environment & Forests/GOI
(b) Rehabilitation and re-settlement of displaced families by land acquisition.	SG
9. Company registration	Registrar of Companies
(B) Non-Statutory Clearance	
1. Land availability	SG
2. Financing	CEA/SG/BOARD







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SCHEDULE-VIII

TECHNICAL LIMITS

1. **Electrical System Characteristics:**

Grid Voltage	400 ±5% kV
Grid Frequency	50 Hz + 3% - 5%
Power Factor	0.90 lagging to 0.95 leading P.F.

2. **Capacity of Generating Equipment:**

With respect to each generating unit, continuous capacity shall be as under:

Continuous rating	=	111.1 MVA for each generating unit
Rated load	=	100 MW for each generating unit
Maximum reactive load	=	0.9 lagging P.F. at full load 0.95 leading P.F.
3. Minimum stable load with respect to each unit	=	Twenty five (25) percent of rated load upto rated load.

4. Start up Time:

Maximum time for Cold start	=	30 minutes
Maximum start up time	=	15 minutes
Maximum interval for restart of each time	=	15 minutes

Shimla

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BASPA - II H.E.P. [3 x 100 MW]
ENERGY CALCULATIONS

A NET/SALEABLE DESIGN ENERGY	Million Units (MU) of Energy		
	100 MW	200 MW	300 MW
a) Energy generated in the 90% Dependable Year (1981-82) with 95% availability of installed capacity (as per calculations at Schedule: IX-A)	701.98	998.96	1,219.08
b) Design energy (after considering release of water for acquatic life)	698.08	993.88	1,213.18
c) *Deduct losses on account of the following* .			
(i) Auxiliary Consumption at the Project @ 0.5% of energy generated i.e. *0.5% of 'b'*	3.49	4.97	6.07
(ii) Transformation losses upto Station 400kV busbars @ 0.5% of the energy generated i.e. *0.5% of 'b'*	3.49	4.97	6.07
Total Losses	6.98	9.94	12.14
d) Net Design energy available at Station 400kV bus bars after deducting losses (i.e. *'b' - 'c(ii)'*)	*691.10*	*983.94*	*1,201.04*
e) Deduct line losses upto I/connection point @ 0.65% of *'d'*	*4.49*	*6.40*	*7.81*
f) Net design energy (available at interconnection point after deducting line losses)	686.61	977.54	1,193.23
g) "Saleable Design Energy" (at interconnection point @ 88% of the net Design Energy available ,i.e.after deducting 12% free energy supply to the Board)	*604.22*	*860.24*	*1,050.04*
SAY	*604.0*	*860.0*	*1,050.0*

Net Design/Saleable design energy shall be apportioned month-wise on the basis of month-wise flow of the 90% dependable year, as per Schedule: IX-A.

B AVERAGE SECONDARY ENERGY			
a) Avg. secondary energy (as per Calculation at Sch.:IX-B)	26.93	105.63	179.04
b) Net avg. secondary energy at I/connection point	*26.49*	*103.89*	*176.10*
c) Average Saleable secondary energy at I/connection point	23.31	91.42	154.97
SAY	*23.0*	*91.0*	*155.0*

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Schedule: IX-A

POWER & ENERGY GENERATION FOR 100MW CAPACITY IN OPERATION

AS PER RIVER INFLOW				After Release of Water Due To Environmental Reasons				
PERIOD	RIVER Discharge * [m/sec]	100 MW Power [MW]	100 MW Energy [GWH]	Available Discharge [m/sec]	100 MW Power [MW]	100 MW Energy [GWH]	Net Design Energy [GWH]	Salable DESIGN ENERGY [GWH]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)*.99*.9935	(9)=(8)*0.88
1981-82								
JUNE I	42.70	95.00	22.80	42.70	95.00	22.80		
II	46.46	95.00	22.80	46.46	95.00	22.80		
III	76.20	95.00	22.80	76.20	95.00	22.80	67.28	59.20
JULY I	72.10	95.00	22.80	72.10	95.00	22.80		
II	90.70	95.00	22.80	90.70	95.00	22.80		
III	140.30	95.00	25.08	140.30	95.00	25.08	69.52	61.18
AUG. I	116.50	95.00	22.80	116.50	95.00	22.80		
II	77.20	95.00	22.80	77.20	95.00	22.80		
III	49.70	95.00	25.08	49.70	95.00	25.08	69.52	61.18
SEPT. I	42.80	95.00	22.80	42.80	95.00	22.80		
II	34.10	95.00	22.80	34.10	95.00	22.80		
III	27.80	95.00	22.80	27.80	95.00	22.80	67.28	59.20
OCT. I	20.50	95.00	22.80	20.50	95.00	22.80		
II	18.30	95.00	22.80	18.30	95.00	22.80		
III	16.00	95.00	25.08	15.86	94.85	25.04	69.48	61.14
NOV. I	14.80	88.51	21.24	14.66	87.68	21.04		
II	13.30	79.54	19.09	13.16	78.71	18.89		
III	12.80	76.55	18.37	12.66	75.72	18.17	57.15	50.29
DEC. I	11.50	68.78	16.51	11.36	67.94	16.31		
II	10.70	63.99	15.36	10.56	63.16	15.16		
III	10.20	61.00	16.10	10.06	60.17	15.88	46.57	40.98
JAN. I	10.10	60.40	14.50	9.96	59.57	14.30		
II	10.20	61.00	14.64	10.06	60.17	14.44		
III	9.70	58.01	15.31	9.56	57.18	15.10	43.12	37.95
FEB. I	9.40	56.22	13.49	9.26	55.38	13.29		
II	9.40	56.22	13.49	9.26	55.38	13.29		
III	9.90	59.21	11.37	9.76	58.37	11.21	37.17	32.71
MARCH I	9.90	59.21	14.21	9.76	58.37	14.01		
II	9.90	59.21	14.21	9.76	58.37	14.01		
III	10.10	60.40	15.95	9.96	59.57	15.73	43.03	37.87
APRIL I	10.00	59.81	14.35	9.86	58.97	14.15		
II	10.46	62.56	15.01	10.32	61.72	14.81		
III	13.70	81.94	19.67	13.56	81.10	19.46	47.62	41.91
MAY I	16.00	95.00	22.80	15.86	94.85	22.76		
II	15.66	93.30	22.39	15.46	92.46	22.19		
III	24.80	95.00	25.08	24.80	95.00	25.08	68.88	60.61
TOTAL			701.98			698.08	686.61	604.22

Design Energy 698.08 GWH

NET Saleable Design Energy 604.22 GWH

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BSPHCL Bhopal

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* *Transmission Losses have been taken @ 0.65%.*

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Schedule: IX-A

POWER & ENERGY GENERATION FOR 200MW CAPACITY IN OPERATION

AS PER RIVER INFLOW					After Release of Water Due To Environmental Reasons				
PERIOD		RIVER Discharge [m3/sec]	200 MW Power [MW]	200 MW Energy [GWH]	Available Discharge [m3/sec]	200 MW Power [MW]	200 MW Energy [GWH]	Net Design Energy [GWH]	Salable DESIGN ENERGY [GWH]
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)*.99*.9935	(9)=(8)*0.88
1981-82									
JUNE	I	42.70	190.00	45.60	42.70	190.00	45.60		
	II	46.46	190.00	45.60	46.46	190.00	45.60		
	III	76.20	190.00	45.60	76.20	190.00	45.60	134.55	118.41
JULY	I	72.10	190.00	45.60	72.10	190.00	45.60		
	II	90.70	190.00	45.60	90.70	190.00	45.60		
	III	140.30	190.00	50.16	140.30	190.00	50.16	139.04	122.35
AUG.	I	116.50	190.00	45.60	116.50	190.00	45.60		
	II	77.20	190.00	45.60	77.20	190.00	45.60		
	III	49.70	190.00	50.16	49.70	190.00	50.16	139.04	122.35
SEPT.	I	42.80	190.00	45.60	42.80	190.00	45.60		
	II	34.10	190.00	45.60	33.96	190.00	45.60		
	III	27.80	166.26	39.90	27.66	165.43	39.70	128.75	113.30
OCT.	I	20.50	122.60	29.42	20.36	121.77	29.22		
	II	18.30	109.45	26.27	18.16	108.61	26.07		
	III	16.00	95.69	25.26	15.86	94.85	25.04	79.01	69.53
NOV.	I	14.80	88.51	21.24	14.66	87.68	21.04		
	II	13.30	79.54	19.09	13.16	78.71	18.89		
	III	12.80	76.55	18.37	12.66	75.72	18.17	57.15	50.29
DEC.	I	11.50	68.78	16.51	11.36	67.94	16.31		
	II	10.70	63.99	15.36	10.56	63.16	15.16		
	III	10.20	61.00	16.10	10.06	60.17	15.88	46.57	40.98
JAN.	I	10.10	60.40	14.50	9.96	59.57	14.30		
	II	10.20	61.00	14.64	10.06	60.17	14.44		
	III	9.70	58.01	15.31	9.56	57.18	15.10	43.12	37.95
FEB.	I	9.40	56.22	13.49	9.26	55.38	13.29		
	II	9.40	56.22	13.49	9.26	55.38	13.29		
	III	9.90	59.21	11.37	9.76	58.37	11.21	37.17	32.71
MARCH	I	9.90	59.21	14.21	9.76	58.37	14.01		
	II	9.90	59.21	14.21	9.76	58.37	14.01		
	III	10.10	60.40	15.95	9.96	59.57	15.73	43.03	37.87
APRIL	I	10.00	59.81	14.35	9.86	58.97	14.15		
	II	10.46	62.56	15.01	10.32	61.72	14.81		
	III	13.70	81.94	19.67	13.56	81.10	19.46	47.62	41.91
MAY	I	16.00	95.69	22.97	15.86	94.85	22.76		
	II	15.60	93.30	22.39	15.46	92.46	22.19		
	III	24.80	148.32	39.16	24.66	147.48	38.93	82.50	72.60
TOTAL				998.96			993.88	977.55	860.25

Design Energy — **993.88 GWH**

NET Saleable Design Energy — **860.25 GWH**

* Transmission Losses have been taken @ 0.65%

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Schedule IX-A

POWER & ENERGY GENERATION FOR 300MW CAPACITY IN OPERATION

AS PER RIVER INFLOW					After Release of Water Due To Environmental Reasons				
PERIOD		RIVER Discharge	300 MW		Available Discharge	300 MW		Net Design Energy	Salable DESIGN ENERGY
			Power	Energy		Power	Energy		
		[m3/sec]	[MW]	[GWH]	[m3/sec]	[MW]	[GWH]	[GWH]	[GWH]
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)*.99*.9935	(9)=(8)*0.88
1981-82									
JUNE	I	42.70	255.37	61.29	42.56	254.54	61.09		
	II	46.46	277.86	66.69	46.32	277.02	66.48		
	III	76.20	285.00	68.40	76.20	285.00	68.40	192.75	169.62
JULY	I	72.10	285.00	68.40	72.10	285.00	68.40		
	II	90.70	285.00	68.40	90.70	285.00	68.40		
	III	140.30	285.00	75.24	140.30	285.00	75.24	208.56	183.53
AUG.	I	116.50	285.00	68.40	116.50	285.00	68.40		
	II	77.20	285.00	68.40	77.20	285.00	68.40		
	III	49.70	285.00	75.24	49.56	285.00	75.24	208.56	183.53
SEPT.	I	42.80	255.97	61.43	42.66	255.14	61.23		
	II	34.10	203.94	48.95	33.96	203.10	48.74		
	III	27.80	166.26	39.90	27.66	165.43	39.70	147.21	129.54
OCT.	I	20.50	122.60	29.42	20.36	121.77	29.22		
	II	18.30	109.45	26.27	18.16	108.61	26.07		
	III	16.00	95.69	25.26	15.86	94.85	25.04	79.01	69.53
NOV.	I	14.80	88.51	21.24	14.66	87.68	21.04		
	II	13.30	79.54	19.09	13.16	78.71	18.89		
	III	12.80	76.55	18.37	12.66	75.72	18.17	57.15	50.29
DEC.	I	11.50	68.78	16.51	11.36	67.94	16.31		
	II	10.70	63.99	15.36	10.56	63.16	15.16		
	III	10.20	61.00	16.10	10.06	60.17	15.88	46.57	40.98
JAN.	I	10.10	60.40	14.50	9.96	59.57	14.30		
	II	10.20	61.00	14.64	10.06	60.17	14.44		
	III	9.70	58.01	15.31	9.56	57.18	15.10	43.12	37.95
FEB.	I	9.40	56.22	13.49	9.26	55.38	13.29		
	II	9.40	56.22	13.49	9.26	55.38	13.29		
	III	9.90	59.21	11.37	9.76	58.37	11.21	37.17	32.71
MARCH	I	9.90	59.21	14.21	9.76	58.37	14.01		
	II	9.90	59.21	14.21	9.76	58.37	14.01		
	III	10.10	60.40	15.95	9.96	59.57	15.73	43.03	37.87
APRIL	I	10.00	59.81	14.35	9.86	58.97	14.15		
	II	10.46	62.56	15.01	10.32	61.72	14.81		
	III	13.70	81.94	19.67	13.56	81.10	19.46	47.62	41.91
MAY	I	16.00	95.69	22.97	15.86	94.85	22.76		
	II	15.60	93.30	22.39	15.46	92.46	22.19		
	III	24.80	148.32	39.16	24.66	147.48	38.93	82.50	72.60
TOTAL				1,219.08			1,213.18	1,193.24	1,050.06

Design Energy 1,213.18 GWH

NET Saleable Design Energy 1050.06 GWH

JSW Hydro Energy Limited

* Transmission Losses have been taken @ 0.65%

Asstt. Manager (Electrical)
SSRB Shimla-9

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Schedule. IX-B

CALCULATION OF SECONDARY ENERGY

BASPA-II HYDROELECTRIC PROJECT [3 x 100 MW]

100 MW CAPACITY IN OPERATION

Sl. No.	Period	POTENTIAL Energy [GWH]	PRIMARY Energy [GWH]	SECONDARY Energy [GWH]
(A)	100 MW			
1	1977-78	771.42	698.08	73.34
2	1978-79	726.56	698.08	28.48
3	1979-80	655.95	698.08	0.00
4	1980-81	669.70	698.08	0.00
5	1981-82	698.08	698.08	0.00
6	1982-83	671.84	698.08	0.00
7	1983-84	720.28	698.08	22.20
8	1984-85	675.91	698.08	0.00
9	1985-86	729.76	698.08	31.68
10	1986-87	725.35	698.08	27.27
11	1987-88	729.45	698.08	31.37
12	1988-89	705.09	698.08	7.01
13	1989-90	746.85	698.08	48.77
14	1990-91	746.31	698.08	48.23
15	1991-92	774.83	698.08	76.75
16	1992-93	733.82	698.08	35.74
	AVERAGE	*717.58*		*26.93*

a)	*AVERAGE SECONDARY ENERGY [GWH]*		*26.93*
b)	NET AVERAGE SECONDARY ENERGY	'a' * 0.99 * 0.9935	26.49
c)	NET AVG. SALEABLE SEC. ENERGY	'b' * 0.88	23.31

SAY ***23.0 GWH***

Executive Engineer (Electrical)
HPSEB Shimla-4

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CALCULATION OF SECONDARY ENERGY

BASPA-II HYDROELECTRIC PROJECT [3 x 100 MW]

200 MW CAPACITY IN OPERATION

Sl No.	Period	POTENTIAL Energy [GWH]	PRIMARY Energy [GWH]	SECONDARY Energy [GWH]
(B)	200 MW			
1	1977-78	1,207.49	993.88	213.61
2	1978-79	1,145.11	993.88	151.23
3	1979-80	985.93	993.88	0.00
4	1980-81	1,041.83	993.88	47.95
5	1981-82	993.88	993.88	0.00
6	1982-83	979.98	993.88	0.00
7	1983-84	1,115.62	993.88	121.74
8	1984-85	987.86	993.88	0.00
9	1985-86	1,146.78	993.88	152.90
10	1986-87	1,079.01	993.88	85.13
11	1987-88	1,181.44	993.88	187.56
12	1988-89	1,058.11	993.88	64.23
13	1989-90	1,169.64	993.88	175.76
14	1990-91	1,153.21	993.88	159.33
15	1991-92	1,166.78	993.88	172.90
16	1992-93	1,151.61	993.88	157.73
	AVERAGE	*1,097.77*		***105.63***

a)	*AVERAGE SECONDARY ENERGY [MU]*		*105 63*
b)	NET AVERAGE SECONDARY ENERGY	'a' * 0.99 * 0.9935	103 89
c)	**NET AVG. SALEABLE SEC. ENERGY**	'b' * 0 88	**91.42**

SAY ***91.0 MU***

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Schedule: IX-B

CALCULATION OF SECONDARY ENERGY

BASPA-II HYDROELECTRIC PROJECT [3 x 100 MW]

300 MW CAPACITY IN OPERATION

Sl. No.	Period	POTENTIAL Energy [GWH]	PRIMARY Energy [GWH]	SECONDARY Energy [GWH]
(C)	300 MW			
1	1977-78	1,540.41	1,213.18	327.23
2	1978-79	1,493.95	1,213.18	280.77
3	1979-80	1,229.80	1,213.18	16.62
4	1980-81	1,296.98	1,213.18	83.80
5	1981-82	1,213.18	1,213.18	0.00
6	1982-83	1,203.45	1,213.18	0.00
7	1983-84	1,434.90	1,213.18	221.72
8	1984-85	1,283.06	1,213.18	69.88
9	1985-86	1,455.10	1,213.18	241.92
10	1986-87	1,355.08	1,213.18	141.90
11	1987-88	1,525.22	1,213.18	312.04
12	1988-89	1,365.67	1,213.18	152.49
13	1989-90	1,499.02	1,213.18	285.84
14	1990-91	1,495.12	1,213.18	281.94
15	1991-92	1,435.38	1,213.18	222.20
16	1992-93	1,439.50	1,213.18	226.32
	AVERAGE	*1,391.61*		*179.04*

a)	*AVERAGE SECONDARY ENERGY (MU)*		*179.04*
b)	NET AVERAGE SECONDARY ENERGY	'a' * 0.99 * 0.9935	176.10
c)	NET AVG. SALEABLE SEC. ENERGY	'b' * 0.88	154.97

SAY *155.0 MU*

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SCHEDULE - X

BASPA HYDRO-ELECTRIC PROJECT

TECHNICAL PARAMETERS

Location	:	**District Kinnaur (H.P.)**
River	:	**Baspa, a tributary of river Satluj**
State	:	**Himachal Pradesh**
Installed Capacity	:	**3 x 100 MW**
Diversion Barrage		
• Max. Pond Level	:	El. 2531.50 m
• Min. Pond Level	:	El. 2527.50 m
• River Bed Level	:	El. 2519.00 m
Intake		
• Crest Level	:	El. 2520.50 m
• Max. Discharge	:	65 cumecs
Sedimentation Chamber	:	2 nos
Head Race Tunnel		
• Design Discharge	:	52 cumecs
• Size		4 m dia, Horse shoe type
Pressure Shaft	:	3.1 m dia, Steel lined,
Power House		
• Type of P.H.	:	Underground
• Type of Turbines	:	Pelton
• Max. Head	:	716 m
• Min. Head	:	677 m
• Speed	:	375 rpm
• Type of Generator	:	Vertical, suspended type
• Generator output	:	111,100 kVA
• Generator voltage	:	13.8 kV
• Excitation system	:	Static
Type and Rating of Transformers	:	Single phase, 37 MVA, $13.8 / \frac{400}{\sqrt{3}}$ kV
Type of H.V. Switchgear	:	400 kV, gas-insulated type

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WEIGHTED PRICE INDEX

A. ANNUAL RATE OF ESCALATION FOR DETERMINING CAPITAL COST

The rate of annual escalation to be allowed on the unspent amount of the basic capital cost as per approved financial package in accordance with the provisions of Section 8.4 shall be worked out as per following formula:

$$\text{Percentage rate of Annual Escalation in capital cost} = \left(0.7 \times \frac{W1 - W0}{W0} + 0.3 \times \frac{L1 - L0}{L0} \right) \times 100\%$$

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. In case of broken period not constituting a full financial year such index number for the last month of the relevant broken period shall be considered.

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 the annual escalation is to be determined. However, for determining the rate of escalation for the period 1/94 to 3/94, this shall mean the said index for 12/93.

L_1 = Consumer Price Index Number 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. In case of broken period not constituting a full financial year such index number for the last month of the relevant broken period shall be considered.

L_0 = Consumer Price Index Number 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 the annual escalation is to be determined. However, for determining the rate of escalation for the period 1/94 to 3/94, this shall mean the said index for 12/93.

Note: i) The rate of escalation worked out on above basis shall be suitably adjusted in accordance with the provisions under Section 8.4.

ii) In case of broken periods not constituting a full financial year, the rate of escalation worked out on above basis shall be covered into an annual rate of escalation on proportionate basis. The annual rate so worked out shall be adjusted in accordance with Section 8.4 and shall be applied for actual number of days in such broken period on proportionate basis.

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XI - 1

JAIPRAKASH HYDRO POWER LIMITED

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iii) In case the base with reference to which, the indices published, undergoes change, the indices with reference to latest base shall be considered.

iv) For change of base during a year, appropriate conversion factor shall be applied.

v) The amount of escalation permissible for a financial year shall be worked out on the annual rate of escalation worked out on above basis and adjusted in accordance with Section 8.41 on the arithmetical average of the following amount.

(a) Such component of the basic cost which is yet to be spent as on the first day of the relevant financial year, as per the approved financial package.

(b) Such component of the basic cost which is yet to be spent on the last day of the relevant financial year as per the approved financial package.

In case of broken periods not constituting full financial year, the amount on above basis shall be worked out on the average of the unspent amount at the beginning and end of such broken period.

8. ESCALATION IN O & M CHARGES

The rate of escalation in operation and maintenance charges shall be worked out for each tariff year after the expiry of first ten years, as per the following formula in terms of Section 8.7.2.:

$$\text{Percentage rate of Annual Escalation} = \left(0.3 \times \frac{W1 - W0}{W0} + 0.7 \times \frac{L1 - L0}{L0} \right) \times 100\%$$

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 the annual escalation is to be determined.

L_1 = Consumer Price Index Number 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 Number 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 the annual escalation is to be determined.

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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.

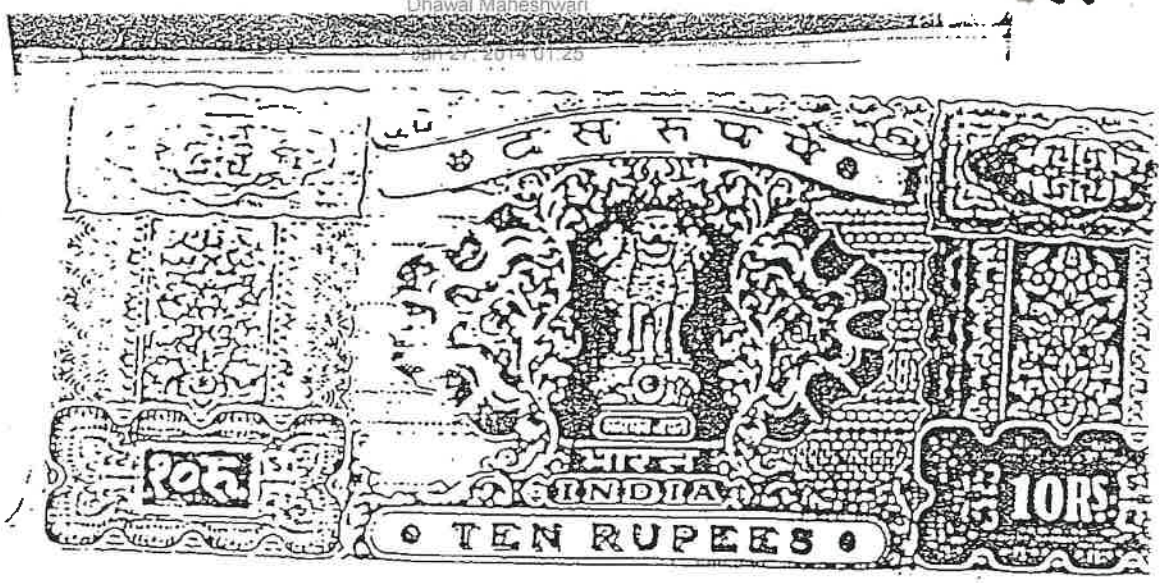
ii) Percentage rate of escalation shall be compounded annually with respect to escalation of first year to determine percentage escalation applicable for that tariff year.

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AMENDMENT NO. 1 DATED 07-01-1998

TO POWER PURCHASE AGREEMENT DATED 4.6.1997

BETWEEN H.P. STATE ELECTRICITY BOARD

AND JAIPRAKASH HYDRO POWER LIMITED

FOR BASPA - II HYDRO ELECTRIC PROJECT

1. Letter of Credit :

The existing Section 10.8 regarding Letter of Credit in the PPA is modified to the extent of the following incorporation :-

The amount of Letter of Credit shall be for 1.5 times of one month billing in respect of following sums :

(a) Capacity charges for one month billing.

(b) Energy charge for saleable Design Energy as per Schedule - IX at applicable tariff for the year

for the month of September

Or

for the peak monthly bill on half yearly basis

7/1/98
MEMBER (Operation)
H.P. State Elecy Board
SHIMLA-4

JSW Hydro Energy Ltd

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2. Escrow Mechanism :

New Sections 10.17 & 10.18 are added to the PPA at the end of Article 10 as under :

10.17 "To provide additional security to the Company for the Board's obligation hereunder, the Board shall also open an Escrow Account with any of the Board's Scheduled Banks, which account shall be maintained by such bank as Agent for the Company, and which shall be pledged as security to the Company and its lenders for payment of all sums due to the Company by the Board under this Agreement as further set forth herein. Such account shall be opened on or before the date thirty (30) days prior to the Scheduled Commercial Operation Date of the first Generating Unit. Such account shall be funded with revenues from payments due to the Board from customers comprising one or more states, circles, areas used by the Board for its administrative convenience. The Board shall cause all payments due to the Board from such customers to be deposited in such Escrow Account aggregating an amount equal to 125% of the annual billing of the Company for a 90% dependable year (as per Schedule -IX). Such instruction shall be irrevocable during the period of repayment of debt of the Project subject to the right of the Board to substitute other states / circles / areas with the concurrence of the Company and its lenders. The Board shall not act in any manner as may negatively affect the inflow of the revenues into this account and shall take such steps as may be necessary to assure the flow of the specified level of revenues in such account (including adding or substituting customers and undertaking collection efforts) during the period of repayment of debt. The Board shall be entitled to withdraw funds from the Escrow Account each month to be used for such purposes as the Board may desire, provided that the Board is in compliance with respect to payment of all sums when due to the Company under this Agreement through the Letter of Credit or otherwise. In the event of the Board's failure to pay any sums due to the Company under this Agreement on the Due Date of Payment through the Letter of Credit or otherwise, or in case of non-renewal of the Letter of Credit as required under Article 10.9, the Company, by notice in writing to the bank holding the Escrow Account, may require such bank not to honour any of the cheques, hundies and requisitions presented to it

Contd..

JSW Hydro Energy Limited

7/1/98
MEMBER (Op...
H.P. State Elecy. Board
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No. 0129544

by the Board or any other drawals on the account until after the claim of the Company is first discharged out of the revenues accumulated in the Escrow Account. An Agreement among the Board, the Company and the Bank (the "Escrow Account Agreement") shall be executed in order to give effect to this Section 10.17, the details of which shall be in the form and substance reasonably acceptable to the Board, Company and its Lenders."

10.18 Review of Letter of Credit amount and Escrow Mechanism :

The above provisions for increased amount of Letter of Credit and for Escrow Mechanism shall be subject to annual review by the parties and shall be for the period of repayment of debt for the Project.

(H.C. Thakur) 7/1/98
Member (Operation)
H.P. State Electricity Board

MEMBER (Operation)
H.P. State Elecy Board
SHIMLA 4

Witness :

1.

2. R.C Sharma
Director(H)

(J.N. Gaur)
Director
Jaiprakash Hydro Power Ltd.

LIMITED JAIPRAKASH HYDRO

Witness :

1. (S.P. Malmodiwalla)
Jaiprakash Hydro Power

2. (Rajan Gulati)
Jaiprakash Hydro Power Ltd.

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Annexure A 2

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सत्यमेव जयते
GOVERNMENT OF INDIA
MINISTRY OF CORPORATE AFFAIRS

Office of the Registrar of Companies
Corporate Bhawan, Plot No.-4, IInd Floor Sec.-27B, Chandigarh, Chandigarh, India, 160019

Certificate of Incorporation pursuant to change of name
[Pursuant to rule 29 of the Companies (Incorporation) Rules, 2014]

Corporate Identification Number (CIN): U40101HP2014PLC000681

I hereby certify that the name of the company has been changed from HIMACHAL BASPA POWER COMPANY LIMITED to JSW HYDRO ENERGY LIMITED with effect from the date of this certificate and that the company is limited by shares.

Company was originally incorporated with the name HIMACHAL BASPA POWER COMPANY LIMITED.

Given under my hand at Chandigarh this Eleventh day of September two thousand eighteen.

DS MINISTRY OF CORPORATE AFFAIRS 18

MAHINDER SINGH PACHOURI

Registrar of Companies
RoC - Himachal Pradesh

Mailing Address as per record available in Registrar of Companies office:
JSW HYDRO ENERGY LIMITED

Karcham-Wangtoo H. E. Project, Sholtu Colony, P. O. Tapri, Sholtu, Kinnaur, Himachal Pradesh, India, 172104

JSW Hydro Energy Limited

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
जल परियोजना आयोजन एवं अन्वेषण प्रभाग
Hydro Project Planning & Investigation Division

No.CEA/HPPI/8/2021/111 Date: 29.04.2021

To,

Sh. Gyan Bhadra Kumar
Whole Time Director- Head Hydro
JSW Hydro Energy Limited
Bandra Kurla Complex, Bandra (East)
Mumbai-450001

Sub: Minutes of the Authority meeting held on 30.03.2021 to discuss "Proposal for Uprating the capacity of Karcham-Wangtoo HEP from 1000 MW to 1091 MW with 10% continuous overload" - regarding.

Sir,

Reference is invited to JSW letter No. HBPCL/KWHEP/18 dated 16.04.2018 regarding Uprating of Karcham-Wangtoo HEP by enhancing capacity from 1000 MW to 1091 MW. In this connection, it is to inform that the Authority meeting to discuss "Proposal for Uprating the capacity of Karcham-Wangtoo HEP from 1000 MW to 1091 MW with 10% continuous overload" was held under the chairmanship of Chairperson, CEA through Video Conferencing on 30.03.2021 wherein detailed deliberations were made in the Authority meeting in light of the recommendations of the Expert Committee constituted by MOWR. Based on various reports and recommendations of the expert groups/ committees and the facts on record, the Authority has agreed to uprate the capacity of Karcham Wangtoo HE Project from existing 1000 MW to 1091 MW in two stages i.e. 1045 MW (with 10% continuous overload) in the first stage and then to 1091 MW (with 10% continuous overload) in the second stage. It was, however, decided by the Authority that after initial uprating to 1045 MW (with 10% continuous overload) in the first stage, the performance of the project and various operating parameters would be observed for at least two monsoon seasons. After this, CEA may concur for further uprating of the capacity to 1091 MW with 10% continuous overload capacity on submission of satisfactory report by the Developer.

JSW Hydro Energy Limited

The design energy generation from the project corresponding to generation at output in two stages have been indicated by the developer as under:

Stage	Installed Capacity (MW)	Design Energy (MU)
I	1045 MW with 10% overload	4176 MU
II	1091 MW with 10% overload	4234 MU

As directed by the Authority, there should be regular reporting by JSW Hydro Energy Ltd. on monthly and annual basis to CEA and State Govt. as per the specified format, which would be forwarded separately. In addition, if required; CEA may direct further inspections of HRT/ TRT etc. and turbine underwater parts by an independent team to inspect their condition.

Yours faithfully

25/4/21

(V K Mishra)
Secretary, CEA

Copy forwarded for information and necessary action to:

1. Joint Secretary (Hydro) Ministry of Power- with reference to MoP letter No. 15-18/8/2019-H-II dated 27.05.2020 and letter dated 18.05.2020.
2. Chief Engineer (HPI), CEA
3. Chef Engineer (HPA/ PDM), CEA
4. SA to Chairperson CEA
5. SA to Member (Hydro)

JSW Hydro Energy Limited

712 (N), सेवाभवन, आर.के.पुरम-1,नईदिल्ली-110066,फैक्स:01126712123,ईमेल:cea-hppi@nic.in,वेबसाइट:www.cea.nic.in
SewaBhawan, R.K.Puram-1, New Delhi-110066,Telefax:011-26712123,Email: cea-hppi@nic.in,website:www.cea.nic.in

Annexure A3

हिमाचल प्रदेश
विद्युत निरीक्षणालय

संख्या:-हिमविनि/बसपा हाईड्रो इलैक्ट्रिक प्रोजैक्ट/कड़छम/02-/4160-63 दिनांक:-21/11/02

सेवा में

उपाध्यक्ष,
जय प्रकाश हाईड्रो पॉवर लि0,
बसपा-II हाईड्रो प्रो0 शोल्टू कॉलोनी,
डा0 टापरी जिला किन्नौर-172104

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विषय:- भारतीय विद्युत नियम 1956 के नियम 63, 51(3), 47(क) व 7(2) के अन्तर्गत विद्युत संस्थापनों का निरीक्षण व अनुमोदन ।

इस कार्यालय पत्र समसंख्या:12885-88 दिनांक 27/9/2002 के प्रसंग को जारी रखते हुए आपके कड़छम स्थित 300 मैगवाट हाईड्रोपावर हाउस में स्थापित निम्नलिखित संस्थापनों तथा 400 के0वी0 डब्बल सर्किट ट्रांसमीशन लाईन का अधोहस्ताक्षरी द्वारा दिनांक 16-10-2002 व 17-10-2002 को निरीक्षण किया गया:-

1) 100 मैगावाट, 13.8 के0वी0 हाईड्रो जैनरेटर= 3 नं0
2) 40 एम0वी0ए0, 13.8/400 के0वी0 ट्रांसफारमरज़= 10 नं0(3 नं0 प्रति यूनिट+एक)
3) एस0एफ0 6 ब्रेकरज़, 400 के0वी0= 18 नं0
4) सहायक पॉवर ट्रांसफारमरज़ 500 के0वी0ए0, 13.8/.415 के0वी0= 1 नं0
5) 800 के0वी0ए0, 22/.415 के0वी0 स्टेशन ट्रांसफारमर= 2 नं0
6) 630 के0वी0ए0, 415 वोल्ट डी0जी0 सैट= 2 नं0
7) 22 के0वी0 ब्रेकरज़= 2 नं0
8) 400 के0वी0 पॉट हैड्ड यार्ड
9) एच0टी0 केबल(12 के0वी0 एक्सएलपीई)
10) मध्यम वोल्टता संस्थापन(पावर इन्स्टालेशन) संयोजित लोड 800.00 कि0वा0 लगभग
11) एक्साईटेशन ट्रांसफारमरज़ 22/.415 के0वी0, 435 के0वी0ए0= 3 नं0
12) 400 के0वी0 डब्बल सर्किट ट्रांसमीशन लाईन(कड़छम से झाकड़ी) 55.00 कि0मी0

निरीक्षण के दौरान संस्थापनों का अधिष्ठापन भारतीय विद्युत नियम 1956 व भारतीय मानक ब्यूरो के विनिर्देशानुसार किया हुआ पाया गया । अत: उपरोक्त संस्थापनों के ऊर्जा संचार हेतु अनुमोदन प्रदान किया जाता है ।

21/11/2002
मुख्य विद्युत निरीक्षक,
हि0प्र0 ब्लॉक नं0-29,
एस.डी.ए. कम्पलैक्स,
शिमला-171009

प्रतिलिपि निम्नलिखित को सूचना एवं आवश्यक कार्रवाई हेतु प्रेषित है:-

1. मुख्य अभियन्ता दक्षिण(परिचालन) हि0प्र0रा0वि0प0 विद्युत भवन शिमला-171004
2. अधीक्षण अभियन्ता परिचालन वृत हि0प्र0रा0वि0प0 रामपुर जिला शिमला हि0प्र0 ।
3. अतिरिक्त अधीक्षण अभियन्ता विद्युत मण्डल हि0प्र0रा0वि0प0 रिकांगपिओ जिला किन्नौर हिमाचल प्रदेश ।

ई.नि0
मुख्य विद्युत निरीक्षक,
हि0प्र0 ब्लॉक नं0-29,
एस.डी.ए. कम्पलैक्स,
शिमला-171009

...000...

JSW Hydro Energy Limited

Annexure A-4'

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Government of India
Central Electricity Authority
SP&PA Division
R.K. Puram, New Delhi -110066

No.8/20/SP&PA-11/1312-19 Dated: 13/09/2011

1	Director(Electrical) SJVNL Limited Himfed Building New Shimla-171009 Fax:- 0177-2672094	2	Executive Director (Engg.) PGCIL 'Saudamini' Plot no. 2, Sector - 29 Gurgaon. Fax;- 0124-2571809
3	Director (Power Regulation& CERC) SLDC, HPSEB Ltd. Totu, Shimla-171011 Himachal Pradesh Fax: 0177-2837649	4	Shri V. V. Sharma GM, NRLDC Katwaria Sarai New Delhi 011-26852747
5	Managing Director Jaypee Karcham Hydro Corporation Ltd. Sector 128, Distt:-Gautam Budhha Nagar,Noida-201304 Fax-120-4609025	6	AGM(Mtn.) NJHPS SJVNL Ltd. Jhakri. H.P Fax:-01782-234049
7	Shri Rajiv Bhardwaj JA House 63,Basant Lok Vasant Vihar, New Delhi Fax:- 011-26153862	8	Shri S.K.Soonee Chief Executive Officer POSOCO,B-9 Qutab Institutional Area New Delhi Fax:-011-26852747

Subject: - Minutes of the meeting held on 07.09.2011 for power evacuation arrangement from Baspa, Karcham Wangtoo and Nathpa Jhakri Hyrdo generation complex..

Sir,

Please find enclosed herewith the minutes of the meeting taken by Chief Engineer (SP&PA) CEA on **7th September,2011 at NLDC Conference Room, 18 SJSS Marg, Katwaria Sarai , New Delhi** to discuss the power evacuation arrangement of Karcham Wangtoo HEP through interconnection of 400 kV Karcham Wangtoo – Abdullapur D/c (quad) line of M/s JPVL with Baspa- Nathpa Jhakri transmission system.

Encl.:- As above.

(B.K.Sharma)
Director (SP&PA)

SE PR&LDC, O.T.
Sr. XEN (SCADA)
Sr. XEN (PC)
Sr. XEN (COMM.)

Pertains to SE (PR)

O/o S.E. (Interstate,)
HPSEB Ltd., Totu Shimla-11
Dy. No. 2104
Date 27/9/11

JSW Hydro Energy Limited

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04

Minutes of the Meeting taken by Chief Engineer (SP&PA), CEA on 07/09/2011 at NLDC, Katwaria Sarai, New Delhi regarding Evacuation of Power from Karcham Wangtoo HEP

1 Chief Engineer (SP&PA), CEA welcomed the participants and stated that this meeting has been called to find out the alternative interim arrangement for evacuation of power from Karcham Wangtoo HEP in view of delay in completion of 400 kV Karcham Wangtoo-Abdullapur D/c (Quad) line. He explained that 20 kms portion of this line from K.Wangtoo end is held up due to ROW issues at few locations and rest of the line is ready.

2 M/s Jaypee suggested opening of 400 kV k.Wangtoo- N.Jhakri D/c line from N.Jhakri end and connecting their completed portion of 400 kV, Abdullapur-K.Wangtoo D/c line with this line as an interim arrangement till they complete the remaining portion of K.Wangtoo-Abdullapur line which would be completed by the end of Nov.2011.

3 CTU stated that studies were conducted with the suggested arrangement and line loadings are within limit under normal operation. However under the contingency outage of one circuit of 400 kV, K.Wangtoo-Abdullapur D/c (Quad) line the other line would carry the combined generation of Baspa & Karcham Wangtoo i.e. 1530 MW. Since this line is a long line (220 kms) oscillations were observed under contingency of outage of one circuit. With tripping of 3 units of K.Wangtoo HEP, 630 MW generation in the complex, oscillations damping as desired was observed. In view of this, suitable SPS system would require to be provided at Karcham Wangtoo HEP for tripping units of K.Wangtoo within 100 ms of tripping of one circuit of K.Wangtoo-Abdullapur D/c line so that generation in the complex is reduced to 630 MW or less.

4 CEO, POSOCO stated that in past also, oscillations were experienced whenever one circuit of Tehri-Meerut line tripped and remaining circuit carried power >700 MW. Similarly, with outage of one 400 KV D/c line from N.Jhakri and power flow of 1500 MW on remaining 400 kV D/c from N.Jhakri, oscillations were observed. . He stressed that keeping in view that entire evacuation of Baspa & K.Wangtoo would be through a 400 kV D/c to Abdullapur, the reliable and fast operation of SPS provided at K.Wangtoo needs to be ensured.

5. DGM, PGCIL (CTU) stated that another possible alternative for evacuation of K. Wangtoo power, would be to LILO of one Circuit between K.Wangtoo and N.Jhakri at Abdullapur with the completed section of Abdullapur-K.Wangtoo line. This alternative was also studied by the CTU and it was observed that in this arrangement under the contingency outage of 400 kV, K.Wangtoo-Abdullapur line, the 400 kV, K.Wangtoo-N.Jhakri line would be loaded to 1530 MW and complete power shall be injected at Nathpa Jhakri bus. Except for this condition this arrangement is better

JSW Hydro Energy Limited

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from the other angles of reliability and operational ease. It was discussed and agreed that this arrangement is a better option than radial operation of Karcham Wangtoo & Baspa generation However, M/s SJVNL representative mentioned that considering the current carrying capacity of each bus of N.Jhakri, injection of 1530 MW into N.Jhakri bus under contingency may have some impact on the Jhakri switchgears.

M/s Jaypee associates indicated that their [illegible] in original arrangement would be [illegible] 2011 and the PSS/AVR of their units has also been tuned and therefore problem of oscillations and safety of units should not be a big problem. Further, in view of Jaypee powergrid assurance that the contingency arrangement is only for very short duration of one and half month and to avoid Jhakri bus from carrying extra injection as well as to avoid any direct impact of the oscillations on Jhakri, this alternative was dropped.

6. Accordingly following emerged:

(i) As an interim arrangement, the 400 kV k.Wangtoo- N.Jhakri D/c line shall be opened from N.Jhakri end and connected with completed portion of 400 kV, Karcham-Wangtoo-Abdullapur D/C line for evacuation of combined generations of Baspa & K.Wangtoo HEPs, till Jaypee Powergrid Ltd completes the remaining portion of K.Wangtoo-Abdullapur line which is expected by the end of November,2011.

(ii) JKHCL would provide suitable SPS system at Karcham Wangtoo HEP for tripping of units of K.Wangtoo within 100 ms of tripping of one circuit of 400 kV, K.Wangtoo-Abdullapur D/c line so that the generation in the complex is 630 MW or less.

(iii) JKHCL will revise connection agreement with POWERGRID (CTU) as per the interim evacuation arrangement mentioned at S.No.(i).

7. Karcham Wangtoo HEP also raised the question of standing clearance for 700 MW power evacuation from KWHEP under present conditions instead of giving it on daily basis by NRLDC. NRLDC was requested to consider issuing a standing clearance for 15 days and review it on daily basis based on grid conditions and withdraw it if required.

JSW Hydro Energy Limited

List of Participants in the meeting taken by Chief Engineer (SP&PA), CEA on 7th September, 2011 at NLDC regarding Evacuation of K.Wangtoo HEP

CEA

1. Shri Ravinder — Chief Engineer (SP&PA)
2. Shri B.K.Sharma — Director (SP&PA)
3. Shri Rajeev Kumar — Dy. Director (SP&PA)

POSOCO / NLDC

1. Shri S.K.Soonee — CEO
2. Shri V.K.Agrawal — G.M.
3. Shri S.R.Narasimhan
4. Shri A.Mani
5. Shri Amandeep

NRLDC

1. Shri V.V.Sharma — GM
2. Shri Rajiv Porwal
3. Shri Vivek Pandey

POWERGRID

1. Shri Mukesh Khanna — DGM
2. Shri V.Thiagarajan
3. Ms. Ankita Singh

SJVN

1. Shri R.K.Agarwal — GM
2. Shri M.Kumar
3. Ms. Sonia Dogra

JAL/JPVL/JPL

1. Shri Suresh Jain — M.D.
2. Shri G.P.Singh
3. Shri P.Singh
4. Shri Rajiv Bhardwaj
5. Shri Suresh Chandra

JSW Hydro Energy Limited

Annexure-A 5

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 37/TT/2011

Coram:-
Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A. S. Bakshi, Member

Date of Hearing: 13.11.2014
Date of Order : 07.05.2015

In the matter of

Petition under Sections 79(1)(c) and (d) read with Section 2(36)(ii) of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for approval of transmission tariff for Transmission System associated with evacuation of power from Karcham Wangtoo Hydro Electric Project for tariff block 2009-14 period.

And in the matter of:

Jaypee Powergrid Limited
'JA ' House, 63, BasantLok,
Vasant Vihar,
New Delhi – 110057 .....**Petitioner**

Vs

1. Jaypee Karcham Hydro Corporation Limited,
   Sector-128, Noida-201 304,
   Uttar Pradesh (India)

2. Himachal Sorang Power Limited,
   C-35, Lane II, Sector-1, New Shimla (HP)

3. Government of Himachal Pradesh,
   Through Secretary, Department of Power,
   H.P. Secretariat, Armsdale Building,
   Shimla-171 002

4. Jaiprakash Power Ventures Limited,
   Sector-128, Noida-201 301, Uttar Pradesh

JSW Hydro Energy Limited

5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Shimla-171 001

6. Satluj Jal Vidyut Nigam Limited,
Himfeb Building, New Shimla,
Shimla-171 009

7. Power Grid Corporation of India Limited,
"Saudamini", Plot No.-2, Sector-29,
Gurgaon-122 001, Haryana

8. POSOCO Limited,
B-9, Qutab Institutional Area,
Katwaria Sarai, New Delhi-110 016

9. Rajasthan Power Procurement Centre,
Vidyut Bhawan, Vidyut Marg,
Jaipur- 302 005

10. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur-302 024

11. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur-302 024

12. Jodhpur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur-302 024

13. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004

14. Punjab State Electricity Board,
The Mall, Patiala-147 001

15. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109

16. Power Development Department,
Govt. of Jammu and Kashmir,
Mini Secretariat, Jammu-180 001

JSW Hydro Energy Limited

17. UP Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001

18. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110 002

19. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110 019

20. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110 019

21. North Delhi Power Limited,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110 034

22. Chandigarh Administration,
Sector-9, Chandigarh-160 009

23. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun-248 001

24. North Central Railway,
Allahabad-211 003

25. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002 ....**Respondents**

For petitioner : Shri Vishal Gupta, Advocate, JPL
Shri Sanjiv Goel, JPL
Shri Kapil Ahuja, JPL
Shri Ashish Gupta, JPL
Shri Vinay Sharma, JPL

For respondents: Shri M.G. Ramachandran, Advocate, JPGL

JSW Hydro Energy Limited

ORDER

The instant petition has been by filed by Jaypee Powergrid Limited (JPL)for approval of transmission charges for Transmission System associated with evacuation of power from Karcham Wangtoo Hydro Electric Project (hereinafter referred to as "transmission assets") located in the State of Himachal Pradesh to Abdullapur Sub-station located in the State of Haryana in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (the 2009 Tariff Regulations).

2. The applicant is a joint venture company promoted by Jaiprakash Power Ventures Limited (74%) and Power Grid Corporation of India Limited (PGCIL) (26%) incorporated under the Companies Act, 1956. The Karcham Wangtoo HEP is being developed by a group company of the applicant. The applicant has proposed the transmission system primarily for evacuation of power from Karcham Wangtoo HEP to Abdullapur Sub-station located in the State of Haryana for its onward transmission to the beneficiary States in the Northern Region.

3. The Feasibility cum Detailed Project Report for the transmission system associated with this project was prepared by PGCIL during May, 2007 and approved by the petitioner company in its Board meeting held on 18.2.2008. The total estimated cost of the Project is ₹88198 lakh including IDC of ₹8930 lakh (based on 4th quarter 2006 price level). The total estimated completion cost is ₹98100 lakh including IDC of ₹9585 lakh. The scope of work under the proposed scheme includes the following:-

JSW Hydro Energy Limited

A. Transmission lines:-

a) Karcham Wangtoo HEP-Abdullapur 400 kV D/C T/L (Quad Conductor): 230 km (Snow portion: 165 km and non-snow portion: 65 km)

b) LILO of both circuit of Baspa-Nathpa Jhakri 400 kV D/C line (Triple Snowbird) at Karcham Wangtoo HEP : 4 km

B. Sub-stations:-

a) Abdullapur Sub-station (Ext.) (PG) 400 kV with 2 nos. of 400 kV line bays;

b) Karcham Wangtoo generation switchyard (Ext.) JKHCL with two nos. of 80 MVAR line reactors.

4. The details of assets covered in the instant petition are as under:-

Name of the asset	Scheduled date of commercial operation	Actual date of commercial operation
LILO of both circuit of Baspa-Nathpa Jhakri 400 kV DC line (Triple Snowbird) at Karcham Wangtoo HEP : 4 km. (hereinafter referred to as "Asset-I)	1.9.2011	1.6.2011.
Karcham Wangtoo HEP-Abdullapur 400 kV DC T/L (Quad Conductor) along with associated bays at Abdullapur Sub-station: 230 km (Snow Portion 165 km and non-snow portion 65km) (hereinafter referred to as "Asset-II")		1.4.2012

5. The petitioner had made an application for grant of transmission license to undertake the business of establishing, commissioning, setting up, operating and maintaining the 400 kV D/C transmission system (hereinafter "the transmission system") comprising of the following elements, namely:-

(a) LILO of 400 kV D/C Baspa-Nathpa Jhakri transmission line at Wangtoo;

JSW Hydro Energy Limited

(b) 400 kV D/C Karcham Wangtoo-Abdullapur transmission line (Quad conductor); and

(c) 400/220 kV sub-station (Extension) (PGCIL) at Abdullapur

6. The Commission while granting transmission licence, vide order dated 17.8.2007 in Petition No. 44/2007 observed that the transmission system proposed by the applicant will be available for evacuation of power from other generating stations located in the Satluj river basin, and granted transmission license to the petitioner for the following assets:-

(a) LILO of 400 kV D/C Baspa-Nathpa Jhakri transmission line at Wangtoo;

(b) 400 kV D/C Karcham Wangtoo-Abdullapur transmission line (Quad conductor); and

(c) 400/220 kV Sub-station (Extension) (PGCIL) at Abdullapur

7. The provisional annual transmission charges for the period 2009-14 were allowed for the instant transmission assets under Regulation 5(4) of the 2009 Tariff Regulations vide order dated 14.6.2012.

8. The petitioner has claimed the transmission charges in the instant petition as follows:-

(₹ in lakh)

Particulars	Asset-I			Asset-II	
	2011-12	2012-13	2013-14	2012-13	2013-14
Depreciation	102.54	125.63	128.23	5006.01	5118.38
Interest on Loan	151.21	191.47	167.18	8156.72	7165.85
Return on Equity	116.53	142.78	147.48	5692.99	5890.89
Interest on Working Capital	6.31	9.40	9.07	464.61	450.69
O & M Expenses	4.20	4.44	4.70	533.80	585.35
Total	**380.79**	**473.72**	**456.66**	**19874.13**	**19211.16**

JSW Hydro Energy Limited

9. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)

Particulars	Asset-I			Asset-II	
	2011-12	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	0.63	0.67	0.70	83.07	87.80
O & M expenses	0.35	0.37	0.39	46.15	48.78
Receivables	63.47	78.95	76.11	78.95	76.11
Total	64.45	79.99	77.20	208.17	212.69
Interest	6.31	9.40	9.07	9.40	9.07
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%

10. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Reply has been filed by Himachal Sorang Power Limited (HSPL), Respondent No. 2, vide affidavit dated 14.3.2012, Government of Himachal Pradesh, Respondent No. 3, vide affidavit dated 11.11.2014 and Jaiprakash Power Ventures Limited (JPVL), Respondent No. 4, vide affidavit dated 26.4.2012. The petitioner has not filed any rejoinder to the replies filed by the respondents.

11. We have heard the representatives of the petitioner present at the hearing and have perused the other material available on record. We proceed to dispose of the petition.

12. During the hearing on 1.4.2014, the representative of Punjab State Power Corporation Limited (PSPCL) submitted that provisional tariff granted by the Commission has been included in the Point of Connection (PoC) charges and it is borne by PSPCL as per the Central Electricity Regulatory Commission (Sharing of Inter-State

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Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations). Hence, PSPCL should be impleaded as a respondent along with other beneficiaries in the Northern Region. Accordingly, the petitioner was directed to implead all the beneficiaries in Northern Region as respondents in the instant petition and serve a copy of the petition and subsequent information filed by the petitioner to all the beneficiaries of Northern Region. The petitioner has vide affidavit dated 25.9.2014 submitted that it has impleaded all the beneficiaries of NR and a copy of petition along with subsequent information filed by it has been served on all the beneficiaries.

13. HSPL has submitted that the petitioner has erroneously included assets that it should not have included within the asset pool and is wrongly seeking to recover the costs of such assets through tariff under the instant petition.

14. JPVL vide affidavit dated 25.4.2012 has submitted that the transmission line from Baspa-II to Nathpa Jhakri was never a dedicated transmission line. A memorandum of understanding was executed between the Government of Himachal Pradesh and Jaiprakash Industries Limited (JIL) on 23.11.1991 for the implementation of hydroelectric power generation project at Baspa-II (300 MW). Thereafter, pursuant to the said MOU the Government of Himachal Pradesh and JIL entered into an agreement for the implementation of Baspa-II project on 1.10.1992. The said agreement was assigned by JIL to one if its subsidiaries i.e. Jaiprakash Hydro Power Limited (JHPL) with the consent of Government of Himachal Pradesh. A tripartite agreement between Government of Himachal Pradesh, JIL and JHPL was executed in this regard on 17.10.1995. JPVL has further submitted that the CEA accorded Techno-economic

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clearance to the project vide its letter dated 29.4.1994. This clearance included the construction of transmission line from the project to Nathpa Jhakri switchyard. Hence, JHPL was granted permissions and approvals by the Government of Himachal Pradesh to own, establish, maintain and operate the project of Baspa-II generating station which included the owning, establishing, operating and maintaining the transmission line from Baspa-II to Nathpa Jhakri. Therefore, the Baspa-Nathpa Jhakri line was established, operated and maintained by JHPL as a main transmission line and not as a dedicated transmission line. Further, as per agreement dated 1.10.1992 the said line can also be utilized for evacuation of power from any other generation project established or to be established in the area. The said Baspa-Nathpa Jhakri line was connected to inter-connection facility of NTPC and was fed into Northern Grid for Inter-State transmission. Since Baspa-Nathpa Jhakri line was connected to the inter-connection facility built, owned, operated and maintained by CTU and the part of the power transmitted through it was for the purpose of inter-State transmission, the said line became inter-State transmission line. In the mean time another subsidiary company of JPL namely Jaypee Karcham Hydro Corporation Limited (JKHCL) was executing a 1000 MW hydro electric project at Karcham Wangtoo which was earlier scheduled to be commissioned in the year 2010. In the year 2002, CEA gave clearance to PGCIL to construct a LILO on the said line at Karcham Wangtoo to evacuate power from the Karcham Wangtoo project after its commissioning as the said transmission line had the capacity available for such evacuation and the transmission line envisaged primarily for Karcham Wangtoo project. The Commission vide its order dated 1.10.2007 in Petition No. 44/2007 granted Inter-State transmission licence to JPL, with the permission to construct a LILO on the said

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line. After the construction of LILO the transmission line from Karcham Wangtoo to Nathpa Jhakri still remains an Inter-State transmission line as it is connected to the inter-connection facility of the CTU and power is evacuated through it from Kracham Wangtoo Project for inter-State transmission.

15. During the hearing on 13.11.2014, the Commission directed the CTU to file the information regarding premise under which Karcham-Abdullapur line was converted from a dedicated line to ISTS, which other generators were given access and whether BPTA was signed with these generators and the status of these generators.

16. In response, CTU vide affidavit dated 27.2.2015 has submitted that in July 2006, PTC India Limited applied for Long Term Open Access (LTOA) for evacuation and transfer of 704 MW power from Karcham Wangtoo HEP to various beneficiaries of Northern Region as per 2004 Tariff Regulations. The transmission system for evacuation of power from Karcham Wangtoo HEP was discussed with CEA and Northern Region constituents. Keeping in view, the future hydro potential and RoW constraints, following transmission was proposed and agreed for Karcham Wangtoo HEP:-

(i) LILO of Nathpa-Jhakri-Baspa 400 kV D/C line at Karcham Wangtoo

(ii) Karcham Wangtoo-Abdullapur 400 kV D/C (Quad Conductor)

Based on the discussions, LTOA intimation was given on 1.5.2007. As per the intimation, the Karcham Wangtoo-Abdullapur line was to be constructed as dedicated line. Subsequently, JPL had applied for transmission licence and while granting the transmission license to JPL, the Commission in its order dated 17.8.2007 in Petition No.

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44/2007 had stated that the proposed transmission system shall not be treated as a dedicated transmission system.

17. CTU has further submitted that the transmission system for Karcham Wangtoo HEP was planned in an integrated manner with the transmission system of Nathpa Jhakri HEP. The total capacity to be evacuated from the area is about 6000 MW out of which about 3200 MW have already been commissioned (Nathpa Jhakri HEP-1500 MW, Karcham Wangtoo HEP-1000 MW, Baspa HEP-300 MW and Rampur HEP-412 MW). The projects for which connectivity/LTA has already been agreed are given below:-

(i) Sorang HEP: 100 MW

(ii) Kashang HEP: 195 MW

(iii) Shongtong HEP: 450 MW

The connectivity/LTA application for other projects in upstream of Karcham Wangtoo is yet to be received. For evacuation of power from these projects, margins available on Karcham Wangtoo-Abdullapur 400 kV D/C (Quad) line would be utilized. On the subject line, Baspa, Karcham Wangtoo and Sorang HEPs are being evacuated for which BPTA has been signed. In addition to Karcham Wangtoo HEP and other commissioned projects mentioned above, about 3000 MW of identified hydro potential is to be evacuated through this corridor. The corridor has serious Right of Way constraints and margins available in the system shall also be utilized for evacuation of power from this corridor for future hydro projects. Accordingly, considering the expected power transfer requirement through the corridor, the transmission system 400 kV D/C (Quad) was planned as it was the technically optimal alternative considering Right of

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Way Constraints. The same has also been recorded in the LTOA Meeting held on 3.11.2006.

18. We have considered the submission of petitioner and respondents. The Commission vide order dated 17.8.2007 in Petition No. 44/2007 for grant of license, decided that the proposed transmission system shall not be treated as the "dedicated" transmission system. The relevant extract of the order is as under:-

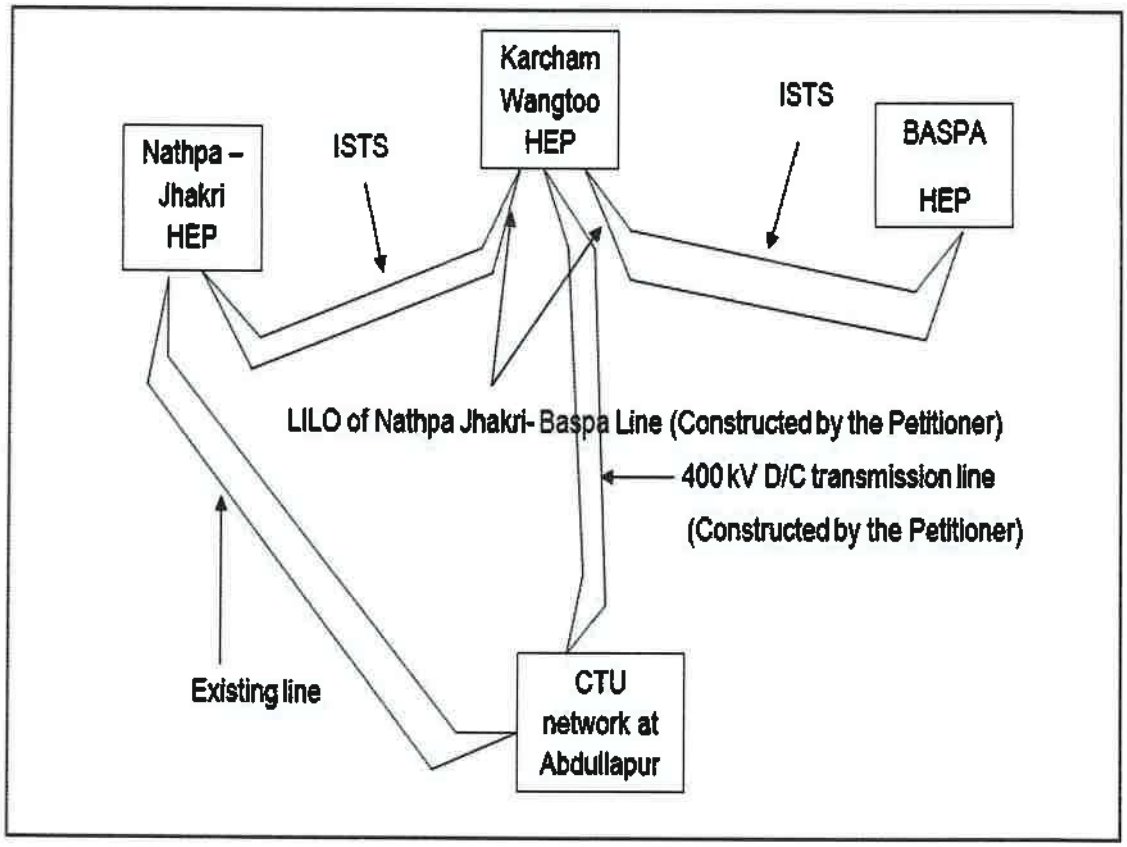
> "25. Before parting, we propose to make some observations, considered essential in the context of the applicant's proposal. The applicant had made application for grant of licence for the "dedicated" transmission lines. The term "dedicated transmission lines" is defined under sub-section (16) of the Section 2 of the Act as under:-
>
> > "dedicated transmission lines" means any electric supply-line for point to point transmission which are required for the purpose of connecting electric lines or electric plants of a captive generating plant referred to in Section 9 or generating station referred to in section 10 to any transmission lines or sub-stations or generating stations, or the load centre, as the case may be."
>
> 26. As the transmission system proposed by the applicant will be available for evacuation of power from other generating stations located in the Satluj river basin, the proposed transmission system shall not be treated as the "dedicated" transmission system."

19. The Commission decided in the above said order that the proposed transmission system is not a dedicated transmission system. Hence, we are of the view that the above said transmission system is treated as inter-State transmission system.

20. The said planned transmission system for evacuation of power from Karcham-Wangtoo HEP was discussed and agreed to in the 22nd meeting of the Standing Committee on Power System Planning of Northern Region held on 12.3.2007.

21. The schematic diagram of the system is given overleaf:-

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22. The Commission, vide letter dated 29.4.2014, had directed the petitioner to clarify its position regarding the number of bays considered in the petition as license was granted for only 2 bays, whereas Form-2 submitted vide affidavit dated 20.12.2013 mentions 3 bays at Abdullapur Sub-station. In response, the petitioner vide affidavit dated 25.9.2014 submitted that it has inadvertently considered a tie bay at Abdullapur Sub-station as main bay while filing final tariff petition on 20.12.2013 but now the same is being rectified and only 2 main bays have been considered at Abdullapur Sub-station. The petitioner has further submitted that it owns and maintains 2 main bays on the outgoing Karcham Wangtoo-Abdullapur 400 kV D/C transmission line at Wangtoo Sub-

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station. Accordingly, 4 nos. of bays have been considered for the purpose of tariff calculation.

23. Further, during the hearing on 26.4.2012 the Commission directed the petitioner to clarify whether the reactors form part of the generation switchyard, because this was agreed in the LTOA meeting to be part of the dedicated transmission system. In response, the petitioner, vide affidavit dated 18.5.2012 has submitted that line reactors are part of the asset built, owned and operated by the petitioner and form part of the switchyard. During the proceedings of LTOA with Northern Region constituents on 3.11.2006, the proposal for granting open access to the beneficiaries of KWHEP was discussed and it was clearly stipulated that associated bays at both ends would be part of the transmission system and all the cost towards this would be borne by the transmission line developers. Further, in the LTOA meeting held on 12.3.2007, it was agreed that the line reactors would be provided at Wangtoo end as a part of the transmission system.

24. We have considered the submission of the petitioner and respondents. It is noted that the proposal for granting open access to the beneficiaries of KWHEP was discussed during LTOA meetings held on 3.11.2006 and 12.3.2007. The LTOA for the transmission system related to KWHEP was discussed during the above meetings as a dedicated system which was to be built by the project developer (generator). Subsequently, the petitioner was granted transmission license for the transmission system for evacuation of power from KWHEP, which included the extension of sub-station only at Abdullapur. Accordingly, only two bays at Abdullapur Sub-station shall

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be considered in the instant petition for tariff calculation. The two bays and the line reactors at KWHEP switchyard shall be a part of generation system.

Capital cost

25. Regulation 7 of the 2009 Tariff Regulations so far as relevant provides as under:-

> **"(1) 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 fund 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 rates specified in regulation 8; and
>
> (c) additional capital expenditure determined under regulation 9:
>
> 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 in case of the thermal generating station and the transmission system, 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."

26. The petitioner has provided the apportionment of original estimated cost in revised Form 5B submitted vide affidavit dated 25.9.2014. Details of apportioned approved cost, the actual capital cost as on date of commercial operation and projected additional capital expenditure as claimed by the petitioner are summarized overleaf:-

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(₹ in lakh)

Asset	Apportioned approved cost as per Form 5B	Estimated completion cost claimed by the petitioner as per Auditor Certificate dated 24.9.2014*					Initial spare	
		Actual cost as on DOCO	Additional capital expenditure for			Total estimated completion cost as on 31.3.14	TL	SS
			2011-12	2012-13	2013-14			
Asset-I	1601.00	2477.63	-	-	-	2477.63	-	-
Asset- II	96504.00	95331.56	-	2314.43	513.95	98159.94	622.33	53.83
Total	**98105.00**	**97809.19**	**-**	**2314.43**	**513.95**	**100637.57**	**622.33**	**53.83**

* Capital cost is inclusive of initial spares and liabilities.

27. HSPL vide affidavit dated 14.3.2012 has submitted that the petitioner has wrongly sought to recover the impact of escalation of cost owing to delay in commissioning of the transmission system, which is unreasonably high. The Government of Himachal Pradesh vide affidavit dated 11.11.2014 has submitted that the capital cost of the transmission line seems to be on higher side in comparison to benchmark cost finalized by the Commission. Government of Himachal Pradesh has also submitted that additional ROE may not be allowed as the transmission line was not completed within the stipulated time. Further, there was no separate financing and allocation for Asset-I & II and hence the details provided by the petitioner may be verified. The Government of Himachal Pradesh has further submitted that the petitioner is not having the item wise cost details of the equipment used and the same should have been obtained by the petitioner from the contractor. The transmission tariff for the LILO line alongwith Inter-Connecting Facility (ICF), at Karcham may not be allowed but the capital cost of this LILO line would be included in the capital cost of the project on the same analogy of being considering the capital cost of double circuit 400 kV line from Baspa to Nathpa Jhakri including share of ICF at Jhakri part of capital cost of Baspa-

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Hydro Electric project. We have considered the issues raised by the respondents. As regards the issue of treatment of LILO and ICF raised by the Government of Himachal Pradesh, we are of the view that it is not relevant as the petitioner has already been granted transmission licence for the LILO portion and inter-State power is flowing through the petitioner's LILO and ICF.

Time over-run

28. The transmission system was scheduled to be executed in 42 months from the zero date i.e. date of first Letter of Award (LOA). The first LOA was issued to the erection contractor on 18.2.2008. Accordingly, the scheduled completion was 18.8.2011 (i.e. date of commercial operation on 1.9.2011) against this the Asset-I was commissioned on 1.6.2011 and Asset-II was commissioned on 1.4.2012. Accordingly, there is no time over-run in case of Asset-I, however time over-run of 7 months in case of Asset-II.

29. The Commission, vide "Record of Proceeding" dated 26.4.2012, directed the petitioner to submit detailed justification for time over-run with documentary evidence and steps taken to obtain forest clearance, with documentary evidence. The petitioner vide affidavit dated 20.12.2013 has submitted the following reasons for the time over-run:-

a) Right of Way (RoW) issues:-During the construction of transmission line, the petitioner encountered numerous RoW issues for which court proceedings were initiated in March, 2010 and the relief orders were received only in August, 2011.

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b) Problems due to harvesting seasons:-Substantial part of the line is laid across the orchard where construction workers were not allowed to enter during harvest season. The petitioner's staff and contractors were subjected to physical violence and a number of court cases were filed against the construction of this line, which took time. The petitioner has submitted summary of court cases along with copies of relevant documents vide affidavit dated 20.12.2013.

c) Forest Clearance:-The application for getting authorization for diversion of forest land for non-forest purpose was filed on 5.2.2008. The approval for the same was received only on 21.7.2009. As a result, the forest authorities allowed the work only after 21.7.2009. A copy of the approval dated 21.7.2009 has been submitted by the petitioner vide affidavit dated 20.12.2013.

d) Unprecedented adverse weather:-The region witnessed unprecedented weather conditions including heavy snowfall, rainfall, landslides, less working time in rainy and snow season and other natural calamities, which impacted the initiation and/or continuation of work. The petitioner has submitted newspaper clippings and some weather reports for the same period indicating unfavorable weather conditions vide affidavit dated 20.12.2013.

30. We have considered the documentary evidence submitted by the petitioner in respect of delay in commissioning of Asset-II (Karcham Wangtoo HEP-Abdullapur 400 kV D/C T/L along with associated bays). The petitioner, vide affidavit dated 20.12.2013, has submitted details of court cases and orders passed by court in respect of delay due to RoW, newspaper cuttings in support of adverse weather condition in the region and

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documents in support of delay in getting forest clearances. On perusal of the documents submitted by the petitioner, it is observed that the delay of 7 months caused in completion of Asset-II was mainly due to delay in court proceedings and RoW issues, adverse weather conditions in the region and delay in getting forest clearance. Accordingly, the reasons mentioned herein above are not attributable to the petitioner and accordingly the time over-run of 7 months in completion of Asset-II is condoned.

Cost over-run

31. The completion cost of Asset-I and Asset-II are ₹2477.63 lakh and ₹98159.94 lakh against the estimated completion cost ₹1601 lakh and ₹96504 lakh respectively. Hence, there is a cost over-run of ₹876.63 lakh (55%) in respect of Asset-I and ₹1655.94 lakh in respect of Asset-II (2%). However, the overall completion cost of Asset-I and Asset-II together is ₹100637.57 lakh. Accordingly, there is cost over-run of ₹2532.57 lakh (2.5%) on overall basis.

32. During the hearing on 20.3.2012, HSPL has submitted that there is variation between the project cost and the benchmark cost of the transmission system of similar configuration and requested that the tariff should be determined based on the bench mark cost in the interest of the consumers.

33. We have considered the submission of the petitioner and the respondent. The petitioner has provided the information required for calculation of capital cost like number of different types of towers, type of terrain, insulator type, voltage level, conductor configuration, wind zone and line length etc. It is observed that the transmission lines covered herein are passing through plain, hilly (non-snowbound) and

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snowbound regions. The Commission has specified the benchmark cost for lines in Plain and Hilly terrain. However, as per data provided by PGCIL, cost of line of similar configuration is ₹344 lakh/km without including financing charges. The petitioner has incurred substantial amount towards compensation for tree/crop and forest. Accordingly, the cost incurred by the petitioner seems reasonable.

34. The petitioner was directed vide "Record of Proceedings" dated 13.11.2014 to submit the Revised Cost Estimates (RCE) approved by its Board and the justifications for cost over-run in case of Asset-I. The petitioner vide affidavit dated 10.12.2014 has submitted the Board approved revised completion cost of the project comprising LILO of 400 kV D/C Baspa-Nathpa Jhakri transmission line and Karcham Wangtoo-Abdullapur 400 kV D/C quad transmission line at ₹101500 lakh and additional cost to be met by internal sources. The petitioner has further submitted that there was no separate contract for LILO (Asset-I) as it was included in construction package of Asset-I. Therefore, the total cost of transmission line (Asset-II) and LILO (Asset-I) may be considered for comparing it with the estimated cost. The cost over-run is attributable to increase in compensation paid to forest authorities, increased IDC which is mainly due to early phasing of funds vis-a-vis the estimated phasing and time over-run, which, on account of for the reasons like adverse weather conditions and various court cases. The petitioner submitted that the factors are beyond its control.

35. We have considered the submission of the petitioner. It is observed that the petitioner awarded the contract for both LILO and transmission line in same package and has requested to consider total cost of LILO and transmission line for comparing it

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with the estimated cost. Further, the petitioner's Board has approved revised completion cost of the project comprising LILO of 400 kV D/C Baspa-Nathpa Jhakri transmission line and Karcham Wangtoo-Abdullapur400 kV D/C quad transmission line at ₹101500 lakh. However, the petitioner did not submit any other details of RCE. Therefore, in the absence of detailed RCE, the capital cost of transmission assets is restricted to the original apportioned approved cost as submitted in revised Form-5B. However, the capital cost of the individual transmission assets shall be reviewed at the time of truing-up, subject to the petitioner filing the detailed RCE and justification for cost over-run. This approach has been upheld by the Appellate Tribunal for Electricity in its order dated 28.11.2013 in Appeal No. 165 of 2012, and subsequently the Commission, vide its order dated 18.2.2014 in Petition No. 216/TT/2012, has considered the apportioned approved cost of individual asset for restricting the capital expenditure due to cost over-run for the purpose of tariff determination. The same approach has been adopted in the instant case and the capital expenditure claimed has been restricted to apportioned approved cost.

36. Accordingly, the excess of estimated completion cost over and above the approved apportioned cost for Asset-I and Asset-II are computed and adjusted as given hereunder:-

(₹ in lakh)

Asset	Apportioned Cost as per Revised Form 5B submitted vide affidavit dated 25.9.2014**	Completion cost up to 31.3.2014 as specified in Auditor certificate dated 24.9.2014	Cost over-run w.r.t. original estimates	Adjustment details

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Asset-I	1601.00	2477.63	876.63	Adjusted: 1) ₹680.48 lakh from capital cost as on date of commercial operation 2) ₹97.89 lakh from ACE of 2011-12 3) ₹98.26 lakh from ACE of 2013-14
Asset-II	96504.00	98159.94	1655.94	Adjusted from ACE of 13-14
Total	**98105.00**	**100637.57**	**2532.57**	

** Asset wise cost given in Form-5B.

Capital cost disallowed

37. The petitioner has submitted that ₹184 lakh has been incurred towards company formation expenses and fees for increase in authorized capital which were completely written off in the books of account in the financial year 2010-11 itself. According to the petitioner, these expenditure were not included in the capitalization as per accounting practice and the said expenses are not the part of capital of Assets-I and II on the date of capitalization but the same has been considered as cash outflow and included in the capital cost claimed for tariff. The Government of Himachal Pradesh has submitted that the statutory expenses of ₹184 lakh claimed by the petitioner is not justified and may not be allowed.

38. As ₹184 lakh was not considered for capitalisation, this expenditure of ₹184 lakh has not been considered as part of capital cost for the purpose of tariff calculations.

39. The petitioner has considered 4 bays (2 bays each at Abdullapur Sub-station and Wangtoo Sub-station) and 2 line reactors at KWHEP switchyard but the license granted to the petitioner included only two bays at Abdullapur Sub-station. Therefore, the cost of 2 bays and 2 line reactors shall be deducted from the capital cost of Asset-II. As per Form-5B, submitted by the petitioner vide affidavit dated 25.9.2014, the total cost of sub-station is ₹1816 lakh (including IDC & IEDC) excluding cost of compensating

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equipment (reactor and SVC). The cost of reactors is ₹1648 lakh (excluding IDC & IEDC). The petitioner has claimed 4 bays in substation, whereas licence was granted only for 2 bays. Therefore, half of total cost of sub-station amounting to ₹908 lakh (i.e. 50% of ₹1816 lakh) is being deducted from the capital cost as on the date of commercial operation of Asset-II. Further, the claim towards reactors amounting to ₹1648 lakh and the corresponding pro-rata IDC and IEDC of ₹939.45 lakh is also deducted from the capital cost as on date of commercial operation of Asset-II. However, the petitioner is directed to submit the actual IDC and IEDC pertaining to disallowed reactors/bays at the time of truing-up.

40. We have considered the submission of the petitioner and respondents towards statutory expenses. We are of the view that statutory expenses are not the part of capital cost and hence, shall be deducted from the total capital cost submitted by the petitioner. The disallowed costs as on the date of commercial operation are as under:-

(₹ in lakh)

Particulars	Amount
Expenses towards Company formation and increase in Authorised capital	184.00
half of total cost of Sub-station	908.00
cost of reactors	1648.00
Pro-rata IDC & IEDC of cost of reactors	939.45
Total	**3679.45**

IDC and Finance charges

41. The apportioned IDC cost as per original estimate and the IDC claimed as per auditor certificate dated 24.9.2014 are summarized overleaf:-

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(₹ in lakh)

Particulars	IDC & FC as per Original Estimate as per Form 5B	IDC&FC as on actual date of commercial operation vide Auditor certificate dated 24.9.2014	Increase of IDC	Increase in IDC from the original estimate.
Asset-I	128.00	274.46	146.46	114.42%
Asset -II	9805.00	16032.00	6227.00	63.51%
Total	**9933.00**	**16306.46**	**6373.46**	**64.16%**

The petitioner has also claimed an amount of ₹63.59 lakh as IDC on the additional capital expenditure of the year 2012-13 for Asset-II.

42. There is an increase of 64.16% in overall IDC vis-à-vis the original estimate. During the hearing on 13.11.2014, the petitioner was directed to submit the reasons for the increase in IDC and for claiming IDC and IEDC after the date of commercial operation. The petitioner, vide affidavit dated 10.12.2014, submitted that the IDC claimed by the petitioner as additional capital expenditure pertain to the period before the date of commercial operation. It is just that the claims towards them were raised and are being paid in the later period i.e. after commercial operation date. The petitioner further submitted that that the increase in IDC is mainly attributable to two factors viz. early phasing of funds vis-a-vis the estimated phasing and time over-run. It is observed that the IDC claimed after date of commercial operation does not seem to be pertaining to the period before date of commercial operation. Had it been so, these would be forming part of the liabilities as on date of commercial operation. Accordingly, IDC after the date of commercial operation of Asset-II amounting ₹63.59 lakh is not allowed.

43. The other reason given by the petitioner for increase in IDC is the early phasing of funds and it is not justified. The petitioner had submitted Form-6, Form-13, Form-14

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and Form-14A combined for Asset-I and Asset-II. During the hearing on 13.11.2014, the petitioner was directed to submit these forms separately for Asset-I and Asset-II. However, the petitioner has not submitted these Forms as directed and has stated that, there is no separate financing for Asset-I and Asset-II and therefore it is not possible to show allocation of Gross Loan and its deployment between Asset-I and Asset-II in Forms-6, 13, 14 and 14A. The petitioner has further submitted that, the IDC was allocated between Asset-I and Asset-II based on the direct cost attributable to them on the date of commercial operation of Asset-I, thereafter all the IDC paid was totally on account of Asset-II.

44. However, in the absence of asset wise information, the allocated IDC of ₹274.00 lakh as indicated in auditor certificate dated 5.12.2014 has been considered for Asset-I. The capitalized borrowing cost for the year 2012-13 is shown as ₹15810.21 lakh for Asset-II, whereas the IDC claimed as per auditor's certificate is ₹16032.00 lakh. Hence, for Asset-II, the capitalized borrowing cost has been considered as IDC and FC cost for the purpose of determining capital cost as on date of commercial operation. Accordingly, the amount of ₹221.79 lakh (i.e. ₹16032.00 lakh - ₹15810.21 lakh) has been reduced from the IDC claimed as on date of commercial operation for Asset-II.

45. The petitioner is directed to submit a detailed analysis on the increase of IDC from its original estimates due to time over-run, due to increase in cost of debt and due to early phasing of fund etc. along with the revised cost estimates at the time of submission of truing up petition. The justification of the petitioner for not submitting the asset wise loan allocation is not acceptable. Accordingly, the petitioner is further

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directed to submit the Form-6, Form-13, Form-14 and Form-14A separately for Asset-I and Asset-II after allocating the loan between Asset-I and Asset-II, at the time of filing the true-up petition.

IEDC

46. The petitioner has claimed IEDC of ₹288.93 lakh and ₹18580.89 lakh as on the date of commercial operation for Asset-I and Asset-II respectively. The petitioner has also claimed IEDC of ₹298.21 lakh and ₹178.81 lakh for Asset-II on the additional capital expenditure for the years 2012-13 and 2013-14 respectively.

47. During the hearing on 13.11.2014, the Commission directed the petitioner to submit the reason for claiming IEDC after the date of commercial operation. In response, the petitioner vide affidavit dated 10.12.2014, submitted that, the IEDC (forest compensation) being claimed by the petitioner as additional capital expenditure pertains to the period before commercial operation date. It is just that the claims towards them were raised and are being paid in the later period i.e. after date of commercial operation. The petitioner has submitted auditor's certificate dated 24.9.2014 indicating the compensation cost for Asset-II as ₹12980.77 lakh as on date of commercial operation and ₹208.93 lakh and ₹10.06 lakh during 2012-13 and 2013-14 respectively.

48. We have considered the submissions made by the petitioner. The forest compensation paid in case of Asset-II after date of commercial operation is being allowed as additional capital expenditure for the period 2012-13 and 2013-14. Therefore, the excess of IEDC claimed after date of commercial operation other than

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the forest compensation paid has been disallowed. The details of IEDC disallowed in case of Asset-II are as follows:-

(₹ in lakh)

Year	IEDC claimed after date of commercial operation	Forest compensation (included in IEDC) being allowed as additional capital expenditure	additional capital expenditure being disallowed
(a)	(b)	(c)	(d)=(b)-(c)
2012-13	298.21	208.93	89.28
2013-14	178.81	10.06	168.75

Initial Spares

49. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capital expenditure of initial spares in respect of transmission system as under:-

> **"8. Initial Spares.** Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:
>
> XXXX
>
> (iv) Transmission system
>
> (a) Transmission line - 0.75%
>
> (b) Transmission Sub-station - 2.5%
>
> (c) Series Compensation devices and HVDC Station - 3.5%
>
> (d) Gas Insulated Sub-station (GIS) - 3.5%
>
> Provided that where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost under first proviso to clause (2) of Regulation 7, such norms shall apply to the exclusion of the norms specified herein."

50. The Commission had directed the petitioner to furnish the Auditor's certificate to certify the initial spares for Asset-I and Asset-II. However, the petitioner has submitted

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Auditor's certificate dated 5.12.2014 for Asset-II only. As no Auditor certificate has been provided by the petitioner regarding the initial spare for Asset-I (i.e. for LILO portion), the claim of initial spare for Asset-I is considered as nil. As per the Auditor's certificate, the initial spares included in capital cost of Asset-II is ₹622.33 lakh for transmission line and ₹53.83 lakh for sub-station. Based on the capital cost allowed in the instant petition, the claims of initial spare are within the limit specified in the 2009 Tariff Regulations.

Un-discharged Liabilities

51. The petitioner has submitted liability flow statement vide affidavit dated 25.9.2014 for both of the assets. These statements consist of the details of liabilities pertaining to the capital cost as on the date of commercial operation, liability pertaining to the additional capital expenditure, the actual payment of liability during 2011-12, 2012-13 and the projected payment of liability during 2013-14. The liabilities/retention money outstanding as on the date of commercial operation has been deducted from the capital cost as on the date of commercial operation of the concerned asset. On payment of these liabilities, the same has been allowed as additional capital expenditure under Regulation 9(1)(i) of 2009 Tariff Regulations as given hereunder:-

(₹ in lakh)

Liabilities flow for Asset-I				
Liabilities reduced from capital cost		**Allowed as additional capital expenditure under Regulation 9(1)(i)**		
		Paid during 2011-12	**Paid during 2012-13**	**Estimated payment during 2013-14**
As on date of commercial operation	196.15	97.89	-	98.26

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(₹ in lakh)

Liabilities flow for Asset-II			
Liabilities reduced from capital cost		**Allowed as Additional Capital Expenditure under Regulation 9(1)(i)**	
		Paid during 2102-13	**Estimated payment during 2013-14**
As on date of commercial operation	1428.08	966.56	461.52
Add cap 2012-13	1806.55	0.00	1708.29 **
	Total	**966.56**	**2169.81**

** After considering liability reversal of ₹98.26 lakh against Asset-I.

Allowed Capital Cost as on DOCO

52. The capital cost as on date of commercial operation considered for both of the assets are as follows:-

(₹ in lakh)

Capital cost allowed as on date of commercial operation						
1	2	3	4	5	6	7 =(2-3-4-5-6)
Assets	**Capital Cost as on date of commercial operation claimed by petitioner**	**Excess Initial spares disallowed**	**IDC & IEDC disallowed**	**Disallowed cost**	**Liabilities**	**Capital cost as on date of commercial operation allowed for tariff calculation**
Asset-I	2477.63	-	-	680.48	196.15	1601.00
Asset-II	95515.56**	-	221.79	3679.45	1428.08	90186.24
Total	**97993.19**	-	**221.79**	**4359.93**	**1624.23**	**91787.24**

**Inclusive of ₹184 lakh claim towards statutory expenses

Projected Additional Capital Expenditure

53. Clause (1) of Regulation 9 of the Tariff Regulations provides as under:-

> "Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
>
> (i) Undischarged liabilities;
> (ii) Works deferred for execution;

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(iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
(v) Change in Law:"

54. Clause (11) of Regulation 3 of Tariff Regulations defines "cut-off" date as under:-

"cut-off date" means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation".

Therefore, the cut-off date for Asset-I is 31.3.2014 and Asset-II is 31.3.2015.

55. The additional capital expenditure claimed by the petitioner and considered for the purpose of tariff calculations are as follows:-

(₹ in lakh)

Asset-I: Additional Capital Expenditure			
	2011-12	2012-13	2013-14
ACE Claim for payment of liabilities Regulation 9 (1)(1)	97.89	-	98.26
Less: Excess of completion cost over and above original approved apportioned cost	97.89	-	98.26
Additional capital expenditure considered for tariff computation	**0.00**	-	**0.00**

(₹ in lakh)

Asset-II: Additional Capital Expenditure		
	2012-13	2013-14
Additional capital expenditure Claimed as per Auditor certificate	2314.43	513.95
Less: Liabilities included in the above Additional capital expenditure	1806.55	-
Less: Disallowed IDC Claim on Additional capital expenditure	63.59	-
Less : Disallowed IEDC Claim on Additional capital expenditure	89.28	168.75
ACE claim on Cash basis towards pending work: Regulation 9 (1)(2)	355.01	345.20
Add: Additional capital expenditure Claim for payment of liabilities Regulation 9 (1)(1)	966.56	2169.81
Total Additional Capital Expenditure	1321.57	2515.01
Less: Excess of completion cost over and above original approved apportioned cost	-	1655.94
ACE Considered for Tariff computation	**1321.57**	**859.07**

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Capital Cost with Additional Capital Expenditure considered for tariff:-

56. The capital cost considered for the purpose of tariff computation from date of commercial operation of concerned assets to 31.3.2014 is as under:-

(₹ in lakh)

Capital Cost considered for tariff from date of commercial operation to 31.3.2014					
Assets	**Capital Cost as on date of commercial operation**	**Additional capital expenditure for 2011-12**	**Additional capital expenditure for 2012-13**	**Additional capital expenditure for 2013-14**	**Total capital cost as on 31.3.2014**
Asset-I	1601.00	-	-	-	1601.00
Asset-II	90186.24	-	1321.57	859.07	92366.88
Total	**91787.24**	**-**	**1321.57**	**859.07**	**93967.88**

Debt- equity ratio

57. Regulation 12 of the 2009Tariff Regulations provides as under:-

> "12. Debt-Equity Ratio (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:
>
> Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:
>
> Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.
>
> **Explanation-** The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.
>
> (2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.
>
> (3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

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58. The petitioner has not submitted the details of debt-equity ratio for Asset-I and Asset-II separately. The petitioner has submitted Form-6 (Financial package up to date of commercial operation), indicating the details of funding pattern for both the assets combined, as on date of commercial operation of Asset-II, which is given below:-

(₹ in lakh)

For Asset-I & Asset-II combined				
Particulars	Apportioned Approved Cost		as on date of commercial operation	
	Amount	%	Amount	%
Debt	70000.00	70.00	68001.00	70.00
Equity	30000.00	30.00	29200.00	30.00
Total	**100000.00***	**100.00**	**97201.00**	**100.00**

* However, a revised Form 5B was subsequently filed vide affidavit dated 25.9.2015. According to which approved cost is ₹98105 lakh.

59. The petitioner, in Form-14A of the petition, has submitted total funds available for both the assets combined as on date of commercial operation of Asset-II as ₹97201.00 lakh and the actual cash expenditure incurred on both the assets combined as on the date of commercial operation of Asset-II as ₹97170.04 lakh. However, the claimed combined capital cost, as on the date of commercial operation on cash basis is worked out as ₹96368.96 lakh (₹97993.19 lakh - ₹1624.23 lakh). Hence, for the purpose of determination of debt-equity ratio, the claimed combined capital cost as on the date of commercial operation on cash basis amounting to ₹96368.96 lakh and the details of combined loans drawn amounting to ₹68001.00 lakh as shown in Form-13 of the petition has been considered. The equity deployment has been arrived as balancing

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figure. Accordingly, the debt-equity ratio as on date of commercial operation has been worked out as follows:-

(₹ in lakh)

Claimed combined capital cost on cash basis as on date of commercial operation	Debt	Equity (balancing figure)	Debt-equity ratio (as on date of commercial operation)
96368.96	68001.00	28367.96	70.56 : 29.44

60. It is assumed that the entire combined loan, as on the date of commercial operation of Asset-II, amounting to ₹68001 lakh has been sourced to meet the capital cost on as on the date of commercial operation on cash basis for both the assets.

61. As the date of commercial operation of Asset-I and II was 1.6.2011 and 1.4.2012 respectively, it is not possible to determine the debt-equity mix of individual assets as on respective dates of commercial operation. Thus, as stated above, in the absence of individual debt-equity details, the above ratio computed on combined basis has been considered on capital cost as on the date of commercial operation of Asset-I and II, and additional capital expenditure of Asset-I for 2011-12.

62. The petitioner has submitted that, there is no separate financing for additional capital expenditure. However, as per the combined additional capital expenditure claimed on cash basis and combined loan drawn during 2012-13 amounting to ₹1999 lakh, the combined debt-equity ratio has been computed for considering the debt-equity ratio for additional capital expenditure as giver overleaf:-

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(₹ in lakh)

Year	Combined additional capital cost claimed on cash basis	Debt*	Equity (balancing figure)	Debt-equity ratio considered as per 2009 Tariff Regulations for both the assets
2012-13	1474.44	1474.44	0.00	100 : 00
2013-14	2782.02	524.56	2257.46	70 : 30
Total	**4256.46**	**1999.00**		

* It is assumed that the loan of ₹1999.00 lakh drawn during 2012-13 has been sourced to meet entire additional capital expenditure of ₹1474.44 lakh for 2012-13 and the balance of ₹524.56 lakh has been utilised to source the additional capital expenditure of 2013-14.

63. In view of the above, the debt-equity ratio as on 31.3.2014 for Asset-I and Asset-II works out as 70.56:29.44 and 70.55:29.45 respectively. However, the petitioner is directed to submit debt-equity ratio details as on the date of commercial operation and additional capital expenditure for both the assets separately at the time of truing-up.

Return on equity (RoE)

64. Regulation 15 of the 2009 Tariff Regulations provides as under:-

> "15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
>
> (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:
>
> Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:
> Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.
>
> (3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:
>
> (4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission;
Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".

65. The petitioner has claimed an additional RoE of 0.5% and the petitioner was directed, vide letter dated 29.4.2014, to furnish the reasons for claiming 0.5% additional RoE. In response, the petitioner vide affidavit dated 25.9.2014 has submitted that the investment approval was accorded for the project on 18.9.2007 and subsequently the first letter of award on 18.2.2008. The schedule date of completion of the project is 42 months from the zero date, which works out to 18.8.2011. The petitioner has submitted that despite severe RoW issues and uncontrollable adversities, the petitioner was able to commission Asset-I on 1.6.2011, much before the scheduled date of completion. The petitioner has submitted that in spite of many unanticipated hindrances, the petitioner was able to commission Asset-II on 1.4.2012, after a delay of only 227 days from scheduled date of completion. The Government of Himachal Pradesh submitted that the petitioner's claim for 16% RoE is not justified considering the fact that the said line was not completed within the stipulated time.

66. We have considered the submission of petitioner and respondents. As per the 2009 Tariff Regulations, all the elements of the transmission systems need to be

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completed within the time schedule specified in Appendix II for grant of additional RoE. There is time over-run of 7 months in case of Asset-II and hence the petitioner's claim of 0.5% additional RoE is not admissible. This view has been upheld by the Appellate Tribunal of Electricity in its judgment dated 10.5.2012 in Appeal No. 155/2011.

67. The petitioner has submitted the tax rate applicable (MAT rate) to the petitioner company for the year 2011-12, 2012-13 and 2013-14 is 20.008%, 20.008% and 20.961% respectively and has prayed to take into consideration these rates.

68. We have considered the submissions of the petitioner. As per the 2009 Tariff Regulations, the MAT/Corporate Income Tax Rate for the year 2008-09 are to be applied for the purpose of calculating RoE. However, we have considered the MAT rates of the respective years as these are available and petitioner has prayed for it. Thus, there is a minor variation vis-a-vis the 2009 Tariff Regulations. The MAT rates submitted by the petitioner are in line with Finance Acts of relevant years, therefore these rates have been considered for grossing up of base rate. The rate of RoE for both the assets has been worked out accordingly and they are as follows:-

(₹ in lakh)

Particulars	Asset-I			Asset-II	
	2011-12 (pro-rata)	2012-13	2013-14	2012-13	2013-14
Opening Equity	471.28	471.28	471.28	26547.96	26547.96
Addition due to ACE	0.00	0.00	0.00	0.00	257.72
Closing Equity	471.28	471.28	471.28	26547.96	26805.69
Average Equity	471.28	471.28	471.28	26547.96	26676.82
ROE (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate applicable	20.01%	20.01%	20.96%	20.01%	20.96%
Rate of ROE (Pre Tax)	19.377%	19.377%	19.611%	19.377%	19.611%
ROE (Pre Tax)	**76.10**	**91.32**	**92.42**	**5144.20**	**5231.49**

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Interest on Loan (IOL)

69. Regulation 16 of the 2009 Tariff Regulations provides as under:-

"16. **Interest on loan capital** (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(5) 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 or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the

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transmission licensee during the pendency of any dispute arising out of re-financing of loan."

70. The interest on loan has been worked out as detailed below:-

(i) The gross normative loan of concerned assets has been arrived based on the allowed capital cost and the debt-equity ratio considered as above;

(ii) The normative repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period;

(iii) Details of actual loans, their interest rates and repayment schedules have been considered as per the petition;

(iv) The petitioner has not submitted the Form-13 separately for Asset-I and Asset-II. Therefore, the Weighted Average Rate of Interest (WARoI) has been computed based on the combined loan data provided by the petitioner; and

(v) WARoI on actual average loan as per the petition has been applied on the normative average loan during the year to arrive at the interest on loan.

71. Interest on loan has been worked out as detailed below:-

(₹ in lakh)

Particulars	Asset-I			Asset-II	
	2011-12 (pro-rata)	2012-13	2013-14	2012-13	2013-14
Gross Normative Loan	1129.72	1129.72	1129.72	63638.28	64959.85
Cum. repayment up to previous year	-	70.44	154.98	-	4785.82
Net Loan-Opening	1129.72	1059.27	974.74	63638.28	60174.03
Addition due to additional capital expenditure	-	-	-	1321.57	601.35
Repayment during the year	70.44	84.53	84.53	4785.82	4843.39
Net Loan-Closing	1059.27	974.74	890.21	60174.03	55931.98
Average Loan	1094.49	1017.01	932.47	61906.15	58053.00
WAROI	11.912%	12.402%	12.029%	12.4024%	12.0290%
Interest	**108.65**	**126.13**	**112.17**	**7677.86**	**6983.20**

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Depreciation

72. Regulation 17 of the 2009 Tariff Regulations provides as under:-

"17. **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.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and 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 assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) 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."

73. The depreciation for all assets has been computed in accordance with the Regulation 17 of 2009 Tariff Regulations. The instant assets were commissioned on 1.6.2011 and 1.4.2012 and will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method at rates

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specified in Appendix-III of the 2009 Tariff Regulations. Accordingly, depreciation has been worked out on the basis of capital expenditure allowed.

74. Details of depreciation worked out are given as under:-

(₹ in lakh)

Particulars	Asset I			Asset II	
	2011-12 (pro-rata)	2012-13	2013-14	2012-13	2013-14
Opening Gross Block	1601.00	1601.00	1601.00	90186.24	91507.81
Addition during 2009-14 due to Projected Additional Capitalisation	-	-	-	1321.57	859.07
Gross Block	1601.00	1601.00	1601.00	91507.81	92366.88
Average Gross Block	1601.00	1601.00	1601.00	90847.03	91937.35
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2680%	5.2681%
Depreciable Value	1440.90	1440.90	1440.90	81762.32	82743.61
Remaining Depreciable Value	1440.90	1370.46	1285.92	81762.32	77957.79
Depreciation	**70.44**	**84.53**	**84.53**	**4785.82**	**4843.39**

Operation & Maintenance Expenses (O&M Expenses)

75. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line. The O&M Expenses shall be admissible as follows:-

(₹ in lakh)

S. No	Asset	Description (Line Length/ No. of bays)	O&M Expenses		
			2011-12	2012-13	2013-14
1	LILO of both circuit of Baspa-Nathpa Jhakri 400 kV D/C line at Karcham Wangtoo HEP	4 km	2.34	2.96	3.13
2	400 kV D/C Karcham Wangtoo-Abdullapur transmission line	219.8 km	-	244.20	258.05
3	400 kV Bays at Abdullapur	2 nos. of 400 kV bays	-	123.83	130.92

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Interest on Working Capital

76. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months of fixed cost. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M expenses as part of the working capital. The value of maintenance spares has accordingly been worked out.

(iii) O & M Expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. Accordingly, one month's O&M expenses have been considered in the working capital.

(iv) Rate of interest on working capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.4.2009 shall be equal to State Bank of India Base Rate as applicable on 1st April of the year of

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commercial operation plus 350 bps. The rate of Interest on Working Capital for Asset-I has been considered @ 11.75% (i.e. SBI Base rate 8.25% as on 1.4.2011+350 basis points) and the rate considered for Asset-II is 13.50% (i.e. SBI Base rate @ 10% as on 1.4.2012 + 350 basis points)

77. Necessary computations in support of interest on working capital are as follows:-

(₹ in lakh)

Particulars	Asset-I			Asset-II	
	2011-12 (pro-rata)	2012-13	2013-14	2012-13	2013-14
Maintenance Spares	0.42	0.44	0.47	55.20	58.35
O & M expenses	0.23	0.25	0.26	30.67	32.41
Receivables	52.55	51.85	49.70	3066.92	2976.86
Total	53.20	52.54	50.43	3152.80	3067.62
Rate of Interest	11.75%	11.75%	11.75%	13.50%	13.50%
Interest	**5.21**	**6.17**	**5.93**	**425.63**	**414.13**

Transmission charges

78. The transmission charges being allowed for the transmission assets are summarized hereunder:-

(₹ in lakh)

	Asset-I			Asset-II	
Particulars	**2011-12**	**2012-13**	**2013-14**	**2012-13**	**2013-14**
Depreciation	70.44	84.53	84.53	4785.82	4843.39
Interest on Loan	108.65	126.13	112.17	7677.86	6983.20
Return on equity	76.10	91.32	92.42	5144.20	5231.49
Interest on Working Capital	5.21	6.17	5.93	425.63	414.13
O & M Expenses	2.34	2.96	3.13	368.03	388.97
Total	**262.74**	**311.12**	**298.18**	**18401.54**	**17861.18**

Sharing of Transmission Charges

79. During the hearing on 13.11.2014, the Commission directed the petitioner to submit its comments on the PSPCL's submissions regarding payment of transmission charges for the instant assets by the Northern Region (NR) constituents. The petitioner

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vide affidavit dated 10.12.2014 has submitted that the contention raised by PSPCL regarding payment of transmission charges by NR constituents for the transmission system for evacuation of KWHEP is totally misconceived. The petitioner is admittedly an inter-State transmission licensee and it is entitled to servicing of transmission charges as per the 2009Tariff Regulations. The transmission charges payable to the petitioner is recoverable as provided under 2010 Sharing Regulations. The PoC mechanism provides for all the constituents to share and there cannot be exclusion as claimed by the PSPCL. The computation of the PoC rates and recovery of charges are only dependent on the total tariff to be recovered for the ISTS licensees and the load flow studies of the various grid constituents. The contention of PSPCL is contrary to the scheme of PoC mechanism which has been evolved after extensive stakeholder consultation and therefore cannot be accepted.

80. We have considered the submission of the petitioner and PSPCL. The instant line is an ISTS and its charges are to be included in the PoC Charges. Accordingly, the billing, collection and disbursement of the transmission charges with effect from 1.7.2011 shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

81. This order disposes of the Petition No. 37/TT/2011.

sd/-	sd/-	sd/-
(A. S. Bakshi)	**(A.K. Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Chairperson**

JSW Hydro Energy Limited

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
(For Asset I and Asset II combined)

(₹ in lakh)

	Details of Loan	2011-12	2012-13	2013-14
1	**Punjab National Bank**			
	Gross loan opening	**16630.00**	**19430.00**	**20000.00**
	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**0.00**	**1739.16**
	Net Loan-Opening	16630.00	19430.00	18260.84
	Additions during the year	2800.00	570.00	0.00
	Repayment during the year	0.00	1739.16	1739.16
	Net Loan-Closing	19430.00	18260.84	16521.68
	Average Loan	18030.00	18845.42	17391.26
	Rate of Interest	12.256%	13.122%	12.305%
	Interest	2209.82	2472.88	2140.01
	Rep Schedule	Re payment effective from 1.7.2012		
2	**Central Bank Of India**			
	Gross loan opening	**12472.00**	**14572.00**	**15000.00**
	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**0.00**	**1304.40**
	Net Loan-Opening	12472.00	14572.00	13695.60
	Additions during the year	2100.00	428.00	0.00
	Repayment during the year	0.00	1304.40	1304.40
	Net Loan-Closing	14572.00	13695.60	12391.20
	Average Loan	13522.00	14133.80	13043.40
	Rate of Interest	12.006%	12.488%	11.898%
	Interest	1623.50	1764.98	1551.84
	Rep Schedule	Re payment effective from 1.7.2012		
3	**J&K Bank**			
	Gross loan opening	**8315.00**	**9715.00**	**10000.00**
	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**0.00**	**869.60**
	Net Loan-Opening	8315.00	9715.00	9130.40
	Additions during the year	1400.00	285.00	0.00
	Repayment during the year	0.00	869.60	869.60
	Net Loan-Closing	9715.00	9130.40	8260.80
	Average Loan	9015.00	9422.70	8695.60
	Rate of Interest	11.376%	11.879%	11.753%
	Interest	1025.53	1119.29	1022.01
	Rep Schedule	Re payment effective from 1.7.2012		
4	**ICICI Bank**			
	Gross loan opening	**4456.57**	**4987.57**	**4987.57**

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	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**4987.57**	**4987.57**
	Net Loan-Opening	4456.57	0.00	0.00
	Additions during the year	531.00	0.00	0.00
	Repayment during the year	4987.57	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00
	Average Loan	2228.29	0.00	0.00
	Rate of Interest	12.080%	0.000%	0.000%
	Interest	269.17	0.00	0.00
	Rep Schedule	Loan closed during 2011-12		
5	**United Bank of India**			
	Gross loan opening	**5820.00**	**5820.00**	**5820.00**
	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**5820.00**	**5820.00**
	Net Loan-Opening	5820.00	0.00	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	5820.00	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00
	Average Loan	2910.00	0.00	0.00
	Rate of Interest	11.85%	0.00%	0.00%
	Interest	344.88	0.00	0.00
	Rep Schedule	Loan Closed during 2011-12		
6	**Indian Overseas Bank**			
	Gross loan opening	**9976.10**	**9976.10**	**9976.10**
	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**9976.10**	**9976.10**
	Net Loan-Opening	9976.10	0.00	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	9976.10	0.00	0.00
	Net Loan-Closing	0.00	0.00	0.00
	Average Loan	4988.05	0.00	0.00
	Rate of Interest	11.13%	0.00%	0.00%
	Interest	555.20	0.00	0.00
	Rep Schedule	Loan Closed during 2011-12		
7	**State Bank of India**			
	Gross loan opening	**0.00**	**24284.00**	**25000.00**
	Cumulative Repayment upto date of commercial operation/previous year	**0.00**	**0.00**	**437.50**
	Net Loan-Opening	0.00	24284.00	24562.50
	Additions during the year	24284.00	716.00	0.00
	Repayment during the year	0.00	437.50	1750.00
	Net Loan-Closing	24284.00	24562.50	22812.50
	Average Loan	12142.00	24423.25	23687.50
	Rate of Interest	12.00%	12.00%	12.00%
	Interest	1457.04	2930.79	2842.50
	Rep Schedule	Re payment effective from 31-03-2013		
	Total Loan			
	Gross loan opening	57669.67	88784.67	90783.67

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	Cumulative Repayment upto date of commercial operation/previous year	0.00	20783.67	25134.33
	Net Loan-Opening	57669.67	68001.00	65649.34
	Additions during the year	31115.00	1999.00	0.00
	Repayment during the year	20783.67	4350.66	5663.16
	Net Loan-Closing	68001.00	65649.34	59986.18
	Average Loan	62835.34	66825.17	62817.76
	Rate of Interest	**11.9123%**	**12.4024%**	**12.0290%**
	Interest	7485.15	8287.94	7556.36

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Annexure- A 6

REGD A.D.

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION

Vidyut Aayog Bhawan, Block No.-37, SDA Complex, Kasumpti, Shimla-09
Tel No.0177-2627263, 2627907, 2627908 Fax.No.0177-2627162
E-mail: hperc@rediffmail.com Website: http://www.hperc.org

Petition No. 29/2017 – 2237- 2238 **Dated:-** 11.12.2017

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To

1. The HP State Electricity Board Ltd.
through Chief Engineer (SO),
[formerly Chief Engineer (PSP)]
Vidyut Bhawan, Shimla-171004

..... **Petitioner**

2. M/s Himachal Pradesh Baspa Power Company Ltd.(HBPCL)
(formally known as JPVL), Plant-in-Charge,
Baspa and Karcham Wantgoo HEP, Sholtu Colony,
PO Tapri, District Kinnaur, HP-172104

.....**Respondent**

Sub: Authenticated copy of Order dated 08th December, 2017.

Sir,

Authenticated copy of Order dated 08th December, 2017 passed in Petition No. 29 of 2017 is sent herewith please.

Encl. As above

Yours sincerely,

Secretary

JSW Hydro Energy Limited

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

In the matter of:-

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The HP State Electricity Board Ltd.
through Chief Engineer (SO),
[formerly Chief Engineer (PSP)]
Vidyut Bhawan, Shimla-171004

..... **Petitioner**

Versus

M/s Himachal Pradesh Baspa Power Company Ltd.(HBPCL)
(formally known as JPVL), Plant-in-Charge,
Baspa and Karcham Wantgoo HEP, Sholtu Colony,
PO Tapri, District Kinnaur, HP-172104

.....**Respondent**

Petition No. 29 of 2017

(Decided on 8th December, 2017)

CORAM:

S.K.B.S NEGI
CHAIRMAN

BHANU PRATAP SINGH
MEMBER

Counsel:-

for petitioner: Sh. Ramesh Chauhan
(Authorized Representative)
a/w Er. Suneel Grover, CE(SO)

for respondent : Sh. Aman Anand,
Sh. Aman Dixit and
Sh. Ajay Vaidya, Advocates

ORDER

(Last heard on 28th October, 2017 and orders reserved)

This petition has been filed by the Himachal Pradesh State Electricity Board Ltd. (hereinafter referred as "the petitioner" or "the HPSEBL") invoking sections 62 and 86 of the Electricity Act, 2003 for exclusion of the cost of 400 kV Wangtoo-Jhakri portion of 400 kV Baspa-Jhakri Line from the Capital Cost of Baspa-HEP and seeking direction

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to M/s Himachal Pradesh Baspa Power Company Ltd. (HBPCL) (formerly known as M/s JPVL) (hereinafter referred is "the Respondent")-

(a) to get the portion of 400 kV Wangtoo-Jhakri D/C Line declared as the inter-State Line; and approach the Central Electricity Regulatory Commission, for determination of tariff, for the said portion;

(b) to exclude the cost of 400 kV Wangtoo-Jhakri portion of 400 kV Baspa-Jhakri D/C Line, from the Capital Cost of Baspa-II Project and file the petition for determination of tariff for Baspa-II, HEP, based on the revised cost; and

(c) to get SEMs installed at the Wangtoo Sub-Station on both incoming 400 kV Baspa-Wangtoo Transmission Lines to facilitate metering and billing at this point on actual transmission losses of 0.65%, being applied presently.

2. We may refer to a few factual aspects, which would be relevant to decide this petition. The facts in brief of the case as per submissions made by the petitioner, are as under;-

(a) The Government of Himachal Pradesh ('GOHP") had entered into a memorandum of understanding dated 23rd November, 1991 ("MOU") and an implementation agreement dated 1st October, 1992 **("Implementation Agreement")** with M/s Jaiprakash Industries Limited **("JIL")** for the implementation of the Baspa-II Hydroelectric project with installed capacity of 300 MW in District Kinnaur, Himachal Pradesh (hereinafter referred to as the **"Project")**.

(b) Pursuant to the Implementation Agreement, JIL incorporated M/s Jaiprakash Hydro Power Limited **("JHPL")**, as its wholly owned subsidiary for the implementation of the Project. Through a tripartite agreement dated 17th October, 1995 executed amongst GoHP, JIL and JHPL **("Original Tripartite Agreement")**, all rights, assets, obligations, privileges and benefits of the Project under the Implementation Agreement were transferred from JIL to JHPL.

(c) Pursuant to the MOU, Implementation Agreement and the Original Tripartite Agreement, the Himachal Pradesh State Electricity Board the

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predecessor-in-interest of the petitioner, i.e. the HPSEBL entered into a Power Purchase Agreement dated 4th June, 1997 **("PPA")** with M/s JHPL for the purchase of entire energy (excluding 12% free power) generated from the Project on the terms and conditions agreed in the PPA.

(d) Pursuant to a scheme of amalgamation sanctioned by the High Court of Himachal Pradesh vide its order dated November 20, 2009, Jaiprakash Power Ventures Limited **(JPVL)** amalgamated into JHPL effective on of April 1, 2009. Subsequent to the amalgamation, JHPL was renamed as 'Jaiprakash Power Ventures Limited' **(JPVL).**

(e) the GoHP vide the tripartite agreement dated August 29, 2015 executed amongst GoHP, JPVL and Himachal Baspa Power Company Limited (HBPCL) **("Tripartite Agreement"),** inter alia, consented to the transfer of all the rights, assets, liabilities, obligations, privileges and benefits of the project from M/s JPVL to M/s HBPCL and transfer of shareholding of M/s HBPCL from M/s JPVL to M/s JSW.

(f) In terms of the Tripartite Agreement, M/s JPVL and M/s HBPCL have entered into a Novation deed with HPSEBL for transfer of all rights and obligations of M/s JPVL under the PPA to M/s HBPCL.

(g) Energy generated by Baspa-II HEP is being transmitted through 400 kV Double Circuit transmission lines from Baspa-II HEP to interconnection point i.e. 400 kV Sub-station of CTU (Powergrid) at Nathpa-Jhakri. These lines have been constructed by M/s Jaiprakash Industries Limited and their construction cost forms part of the tariff being determined by the Himachal Pradesh Electricity Regulatory Commission **(HPERC).** Since the HPSEBL is purchasing the entire power generated by Baspa-II HEP, the entire ARR inclusive of these lines is being paid by the HPSEBL to the IPP.

(h) In the year 2011, Karcham Wangtoo (1000 MW) HEP of M/s JPVL was ready for commissioning. However, its evacuation system i.e. 400 kV Wangtoo-Abdullapur lines were not ready. Therefore, M/s JPVL made

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a contingent arrangement utilizing a part of Baspa –Jhakri line for establishing connectivity between Karcham Wangtoo HEP switchyard at Wangtoo and Wangtoo-Abdullapur transmission line and approached Central Electricity Authority (CEA) for its approval. The aforesaid contingent arrangement was approved in the meeting held on 7th September, 2011 at CEA wherein representative from the CEA, POSOCO/NLDC, NRLDC, Powergrid, SJVNL and JAL/JPVL/JPL were present. Since the Respondent HPSEBL was not present in this meeting, M/s JPVL approached the HPSEBL and after detailed deliberations interim arrangement for evacuation of Karcham Wangtoo (1000MW) HEP Power to CTU system by LILO of both the 400 kV Baspa-Jhakri transmission lines of Baspa-II HEP was agreed by both parties as under:-

(i) the HPSEBL Ltd. agreed for LILO of 400 kV Baspa-Jhakri line at Wangtoo;

(ii) for the purpose of billing, the energy meters were to be installed at the sending end of Baspa-Jhakri 400 kV D/C line and the energy as recorded on these meters was to be deemed to have been delivered at Jhakri after deducting 0.65% transmission losses between Baspa and Jhakri as per PPA. The meter reading at Baspa end was to be carried out jointly by the HPSEB Ltd. and M/s JHPL/M/s JPVL as was being done at Jhakri at present;

(iii) the transmission charges for the power to be injected from Karcham-Wangtoo project at Karcham and to be wheeled upto Jhakri on the existing Baspa-Jhakri 400 kV D/C line were to be paid to the HPSEBL on the HPERC determined tariff for the same.

(i) The aforesaid terms and conditions were conveyed to M/s JPVL vide the Chief Engineer (Commercial), HPSEBL letter dated 16.03.2011 and as desired vide this letter M/s JPVL gave undertaking to the HPSEBL for this interim arrangement as under:-

(1) the Baspa-Jhakri 400 kV Double Court line was being LILOed at Wangtoo. For this eventuality a final decision for metering

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arrangement for Baspa-II HEP energy and payment of transmission charges etc. by concerned agencies was to be taken by the Appropriate Regulatory Commission;

(2) pending the said decision of the Appropriate Regulatory Commission and in the event of Karcham Wangtoo Project machines being commissioned, the metering of Baspa-II HEP energy and payment thereof was to be temporarily carried out as under:-

(a) The metering of Baspa-II HEP energy was to be carried out at power station of Baspa-II HEP (i.e. Baspa end) where main and check meters, similar to the ones provided already at ICF at Jhakri were being provided.

(b) A joint meter reading was to be taken by HPSEBL and M/s JPVL at Baspa end as being done hitherto at ICF at Jhakri.

(c) The energy recorded at Baspa end as aforesaid was further to be reduced by 0.65% for taking into account the transmission losses.

(d) The energy so worked out was to be adopted for billing by M/s JPVL and accordingly for release of payment by HPSEBL.

(3) After decision of the Appropriate Regulatory Commission regarding final metering arrangement for Baspa-II HEP energy and payment of transmission charges etc. by the concerned agencies, a Supplementary Agreement was to be entered into between the HPSEBL and M/s JPVL.

(j) Karcham-Wangtoo HEP has come up on bar w.e.f. 12th May, 2011 and the portion of 400 kV Baspa-Jhakri Double Circuit transmission line between Wangtoo and Jhakri is being utilized for evacuation of Karcham-Wangtoo HEP Power as well since then. In the near future some other IPPs and Open Access Customers are likely to be connected to this system and, therefore, the transmission charges are payable to this portion by all its users. Presently the HPSEBL alone is paying the tariff

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for this portion and is getting no refund from other users, in order to recover the charges from the concerned user of the system.

3. In other words the Baspa-Jhakri 400 kV D/C lines being LILOed at Wangtoo and the portion of 400 kV Baspa-Jhakri line between Wangtoo and Jhakri is being utilized for evacuation of Karcham-Wangtoo HEP power since 12th May, 2011 i.e. the date of COD of Karcham-Wangtoo HEP. The above contingent arrangement was approved in the meeting held on 7th September, 2011 at CEA. Since the HPSEBL was not present in this meeting, M/s JPVL approached the HPSEBL in this regard and after detailed deliberations both the parties agreed for LILO of 400 kV Baspa-Jhakri line at Wangtoo. It was also agreed that the transmission charges for the power to be injected from Karcham-Wangtoo project at Karcham and to be wheeled upto Jhakri on the existing Baspa-Jhakri 400 kV D/C line shall be paid to the HPSEBL on the HPERC determined tariff. Thereafter, both HPSEBL as well as Karcham-Wangtoo did not approach this Commission for fixation of the tariff.

4. At present, HPSEBL alone is paying the tariff as the cost of this line is included in the capital cost of Baspa HEP. In the near future some other IPPs and Open Access customers are likely to be connected to this system and the HPSEBL has prayed that M/s JPVL (now HBPCL) be directed to get the 400 kV Wangtoo-Jhakri portion of 400 kV Baspa-Jhakri Double Circuit lines declared as inter-State lines and approach the CERC for determination of tariff for this portion.

5. In response to the petition, the Respondent has questioned the maintainability of this petition, stating that-

(i) the Petition, as filed in its present form is not maintainable for, misjoinder of cause of action. Without prejudice, the relief claimed cannot be granted without the CEA, POSOCO/NLDC, NRLDC, Power Grid and SJVNL, being joined as necessary parties to the present Petition. As such the Petition deserves to be dismissed at the threshold;

(ii) the Wangtoo-Ambdullhpur Line has been in operation since 01.04.2012 and all evacuation from Karcham Wangtoo HEP is intended to be done through this corridor only. The LILO at Wangtoo, on the Baspa-Jhakri Line, which was constructed purely as a matter of a temporary interim arrangement, has become redundant for the purposes of power

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evacuation from Karcham Wangtoo HEP and is presently only serving the purpose of providing better grid reliability;

(iii) the Portion of the Baspa-Jhakri Line was being utilized for power evacuation by Karcham Wangtoo HEP. The interim arrangement having served its purpose and outlived its original relevance, the Petitioner Board now desires this arrangement to be cast as a permanent one. There is absolutely no reason or basis for making this redundant temporary arrangement as a permanent one;

(iv) the Baspa-Jhakri transmission line is a part of the Baspa-II HEP and will remain as such. The Petitioner has made out no grounds for any de-capitalization in relation to the approved capital cost of Baspa-II HEP, in accordance with the applicable Regulations. As such the Petition deserves outright dismissal;

(v) there is absolutely no basis to exclude the portion of the Baspa-Jhakri line and have the same declared a part of inter-State transmission lines; and consequently have the tariff for the same determined by the CERC through PGCIL. The Petition deserves to be dismissed for having not laid any foundation, legal or factual, for seeking the relief claimed;

(vi) prayer for installation of SEMS at Wangtoo Substation for metering and billing on basis of actual transmission losses is baseless and deserves to be dismissed. It is respectfully submitted that as per the agreed practice with the Petitioner, the metering of power from Baspa-II HEP is being done at Baspa end and billed to the HPSEB after deducting deemed transmission loss of 0.65% for the transmission line till Jhakri end. The applicability of deemed transmission losses of 0.65% is governed by the agreed provisions of PPA and shall continue, unless mutually amended. After commissioning of Wangtoo-Abdullahpur line, the temporary interim arrangement of LILO on Baspa-Jhakri line has become redundant. Hence, there is no requirement of installing SEMs at Wangtoo Substation for 400 kV Baspa Wangtoo line as such installation will further add into cost of redundant network.

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(vii) though a portion of the Baspa-Jhakri Double Circuit transmission line was being utilized for evacuation of Karcham Wangtoo HEP power for some time [i.e. between 01.06.2011 to 01.04.2012], with the establishment of the Wangtoo–Abdullahpur line, the temporary interim arrangement of using the portion of the Baspa-Jhakri line through a LILO has become redundant. The temporary arrangement now, only serves the purpose of providing better stability of grid operations and if desired, can be disconnected with the consent of all Competent Authorities. The entire basis of the present petition is premised solely on the likelihood of other entities holding to connect to this system in future, which is not a ground for seeking the relief claimed. Further the Petitioner Board alone is paying the tariff for the Baspa-Jhakri line. However, since the Baspa-Jhakri line has been constructed as a part of Baspa-II HEP project which is a project dedicated to supply power to the HPSEB, the HPSEBL alone has to pay the tariff for the same. The temporary arrangement that was in place has become totally redundant and has outlived its purpose.

6. In the rejoinder to the response filed on behalf of the Respondent, the petitioner HPSEBL reiterated its contents of the petition, and further clarified-

(a) That the Baspa-Jhakri 400 kV D/C line LOLOed at Wangtoo has become integral part of the inter-State Transmission System under the scope of Regulation 2(k) of the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010, wherein Deemed inter-State Transmission System (Deemed ISTS) means such transmission system which has regulatory approval of the Commission as being used for inter-State transmission of power and qualified as ISTS for the purpose of these regulations, unless otherwise specified.

That Hon'ble CERC in its Order dated 07.05.2015 in the matter of approval of transmission tariff for Transmission System associated with evacuation of power from Karcham-Wangtoo HEP for the tariff block 2009-14, at para 14, has mentioned that after construction of LILO, the transmission line from Karcham-Wangtoo to Nathpa Jhakri still remains

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an inter-State Transmission Line as it is connected to the Inter Connection Facility of the CTU and power is evacuated through it from Karcham-Wangtoo for Inter-State transmission.

That the relevant extract of paras 14,15,16,17 and 27 of the Hon'ble CERC order dated 07.05.2015 is reproduced as under:-

> ***"14. JPVL vide affidavit dated 25.04.2012 has submitted that the transmission line from Baspa-II to Nathpa Jhakri was never a dedicated transmission line. A memorandum of understanding was executed between the Government of Himachal Pradesh and Jaiprakash Industries Limited (JIL) on 23.11.1991 for the implementation of hydroelectric power generation project at Baspa-II (300MW). Thereafter, pursuant to the said MOU the Government of Himachal Pradesh and JIL entered into an agreement for the implementation of Baspa-II project on 01.10.1992. The said agreement was assigned by JIL to one if its subsidiaries i.e. Jaiprakash Hydro Power Ltd (JHPL) with the consent of Government of Himachal Pradesh. A tripartite agreement between Government of Himachal Pradesh, JIL and JHPL was executed in this regard on 17.10.1995. JPVL has further submitted that the CEA accorded Techno-economic clearance to the project vide its letter dated 29.04.1994. This clearance included the construction of transmission line from the project to Nathpa Jhakri switchyard. Hence, JHPL was granted permissions and approvals by the Government of Himachal Pradesh to own, establish, maintain and operate the project of Baspa-II generating station which included the owning, establishing, operating and maintaining the transmission line from Baspa-II to Nathpa Jhakri. Therefore, the Baspa-Nathpa Jhakri line was established, operated and maintained by JHPL as a main transmission line and not as a dedicated transmission line. Further, as per agreement dated 01.10.1992 the said line can also be utilized for evacuation of power from any other generation project established or to be established in the area.***

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The said Baspa-Nathpa Jhakri line was connected to inter-connection facility of NTPC and was fed into Northern Grid for Inter-State transmission. Since Baspa-Nathpa Jhakri line was connected to the inter-connection facility built, owned, operated and maintained by CTU and the part of the power transmitted through it was for the purpose of inter-State transmission, the said line became inter-State transmission line. In the mean time another subsidiary company of JPL namely Jaypee Karcham hydro Corporation Limited (JKHCL) was executing a 1000 MW hydro electric project at Karchem Wangkoo which was earlier scheduled to be commissioned in the year 2010. In the year 2002, CEA gave clearance to PGCIL to construct a LILO on the said line at Karchem Wangtoo to evacuate power from the Karcham Wangtoo project after its commissioning as the said transmission line had the capacity available for such evacuation and the transmission line had the capacity available for such evacuation and the transmission line envisaged primarily for Karcham Wangtoo project. The Commission line envisaged primarily for Karcham Wangtoo project. The Commission vide its order dated 01.10.2007 in Petition No. 44 of 2007 granted Inter-State transmission licence to JPL, with the permission to construct a LILO on the said line. After the construction of LILO the transmission line from Karcham Wangtoo to Nathpa Jhakri still remains on Inter-State transmission line as it is connected to the inter-connection facility of the CTU and power is evacuated through it from Karcham Wangtoo Project for Inter-State transmission.

15. During the hearing on 13.11.2014, the Commission directed the CTU to file the information regarding premise under which Karcham-Abdullahpur line was converted from a dedicated line to ISTS, which other generators were given access and whether BPTA was signed with these generators and the status of these generators.

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16. In response, CTU vide affidavit dated 27.02.2015 has submitted that in July 2006, PTC India Limited applied for Long Term Open Access (LTOA) for evacuation and transfer of 704 MW Power from Karcham Wangtoo HEP to various beneficiaries of Northern Region as per 2004 Tariff Regulations. The transmission system for evacuation of power from Karcham Wangtoo HEP was discussed with CEA and Northern Region constituents. Keeping in view, the future hydro potential and RoW constraints, following transmission was proposed and agreed for Karcham Wangtoo HEP:-

(i) LILO of Nathpa-Jhakri Baspa 400 kV D/C line at Karcham Wangtoo.

(ii) Karcham Wangtoo-Abdullahpur 400 kV D/C (Quad Conductor) Based on; the discussion, LTOA intimation was given on 01.05.2007. As per the intimation, the Karcham Wangtoo-Abdullahpur line was to be constructed as dedicated line. Subsequently, JPL had applied for transmission licence and while granting the transmission licence to JPL, the Commission in its order dated 17.08.2007 in Petition No. 44 of 2007 had stated that the proposed transmission system shall not be treated as a dedicated transmission system.

17. CTU has further submitted that the transmission system for Karcham Wangtoo HEP was planned in an integrated manner with the transmission system of Nathpa Jhakri HEP. The total capacity to be evacuated from the area is about 6000 MW out of which about 3200 MW have already been commissioned (Nathpa Jhakri HEP-1500 MW, Karcham Wangtoo HEP-1000MW, Baspa HEP-300MW and Rampur HEP-412MW).

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27 "The transmission tariff for the LILO line alongwith Inter-Connecting Facility (ICF), at Karcham may not be allowed but the capital cost of this LILO line would be included in the capital cost of the project on the same analogy of being considering the capital cost of double circuit 400 kV line from Baspa to Nathpa Jhakri including share of ICF at Jhakri part of capital cost of Baspa-Hydro Electric Project. We have considered the issues raised by the respondents. As regards the issue of treatment of LILO and ICF raised by the Government of Himachal Pradesh, we are of the view that it is not relevant as the petitioner has already been granted transmission licence for the LILO portion and inter-State power is following through the petitioner's LILO and ICF."

(b) that Baspa-Nathpa D/C line is part of the inter-State Transmission system. Further, the capital cost of Baspa-II HEP project has been approved from the dates of commercial operation of its units i.e. 24.05.2003 (Unit 1), 29.05.2003 (Unit-2) and 08.06.2003 (Unit-3) by HPERC vide its order dated 24.02.2007 (petition No. 338 of 2005) and also in the subsequent orders for Baspa-II HEP. The Baspa-II HEP capital Cost is inclusive of Baspa-Nathpa Jhakri D/C line and ICF at Jhakri Switchyard.

(c) that as mentioned in Hon'ble CERC order dated 07.05.2015, LILO at Wangtoo is permanent arrangement and has become integral part of inter-State Transmission System of Sutlej Basin.

(d) that the HPSEBL has prayed to the Commission for direction to file petition for determination of tariff for Baspa-II HEP for revised Capital Cost after excluding cost of the Portion of 400 kV Baspa-Jhakri D/C line.

(e) that there is no denial of the fact that Baspa-Jhakri Transmission line is a part of Baspa-II HEP. However, this transmission being LILOed at Wangtoo has become integral part of the inter-State Transmission System, the tariff determination, transmission charges collection and

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reimbursement of charges to original beneficiary need to be done under the relevant regulations of Hon'ble CERC.

(f) that the Hon'ble CERC in order dated 07.05.2015 has already determined transmission charges for the LILO of both circuits of Baspa-Nathpa-Jhakri 400 kV D/C line at Karchham-Wangtoo HEP(Asset-I) for FY2011-12 to FY 2013-14.

(g) that the metering of power from Baspa II HEP is being done at Baspa end and billed to HPSEBL after deducting deemed transmission losses of 0.65% for the transmission line till Jhakri end. In terms of article 2.2.124 of PPA, transmission losses means the difference of the electrical energy measured at the sending end and receiving end of transmission lines i.e. the Station and the Interconnection point. Transmission losses shall be deemed to be 0.65% of the energy transmitted for the purpose of tariff determination and all other purposes.

(h) that the HPSEBL agreed for LILO of 400 kV Baspa-Jhakri line at Wangto with the condition that a final decision for metering arrangement for Baspa-II HEP energy and payment of transmission charge etc. by concerned agencies shall be taken by the Appropriate Regulatory Commission.

Pending the above mentioned decision of the Appropriate Regulatory Commission and in the event of Karcahm Wangtoo Project machines being commissioned, the metering of Baspa-II HEP energy and payment thereof shall temporarily be carried out as under:-

(i) The metering of Baspa-II HEP energy shall be carried out at power station of Baspa-II HEP (i.e. Baspa end) where main and check meters, similar to the ones provided already at ICF at Jhakri are being provided.

(ii) Joint meter readings shall be taken by HPSEBL and JPVL at Baspa end as being done hitherto at ICF at Jhakri.

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(iii) The energy recorded at Baspa end as above shall further be reduced by 0.65% for taking into account the transmission losses.

(iv) The energy so worked out shall be adopted for billing by JPVL and accordingly for release of payment by HPSEBL.

(i) that after decision of the Appropriate Regulatory Commission regarding final metering arrangement for Baspa-II HEP energy and payment of transmission charges etc. by the concerned agencies, a Supplementary Agreement will be entered into between HPSEBL and M/s HBPCL (formerly JPVL).

7. During the hearing, before the matter could be considered on merit, the petitioner as well as the respondent prayed for an opportunity to make their written submissions and the prayer was granted. The written submissions made by them were taken on record.

8. The petitioner and the respondent Corporation have re-asserted and re-affined, their submissions made in the petition, response to the petition, rejoinder and counter filed by them. However, Shri Aman Anand, Advocate, representing the Respondent Corporation strenuously contends that the present petition cannot be proceeded with, unless and until the CTU, the CEA and the NLDC being necessary parties, are not impleaded as respondents in this case.

9. We heard both the petitioner and the Respondent's arguments in detail and also have gone through the petition, reply, rejoinder and counters submitted by them, including the supporting documents as well as written arguments and find that-

(1) The energy generated by Baspa-II HEP is being transmitted through 400 kV Double Circuit Transmission Line from Baspa-II HEP to Inter-connection Point i.e. 400 kV Sub-station of CTU (Powergrid) at Nathpa-Jhakri. This line has been constructed by M/s Jaiprakash Industries Limited and their construction cost forms part of the tariff being determined by the HPERC. Since the HPSEBL is purchasing the entire power generated by Baspa-II HEP, the entire ARR inclusive of this line is being paid by the HPSEBL to M/s HBPCL (successor of M/s JPVL).

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(2) that in year 2011, Karcham Wangtoo (1000 MW) HEP of M/s JPVL was ready for commissioning. However, its evacuation system i.e. 400 kV Wangtoo- Abdullapur line was not ready. Therefore, M/s JPVL made a contingent arrangement utilizing a part of Baspa-Jhakri line for establishing connectivity between Karcham Wangtoo HEP Switchyard at Wangtoo and Wangtoo-Abdullapur transmission line and approached the Central Electricity Authority (CEA) for its approval. The aforesaid contingent arrangement was approved in the meeting held on 7th September, 2011 at CEA wherein representative from CEA, POSOCO/NLDC, NRLDC, Powergrid, SJVNL and JAL/JPVL/JPL were present. The minutes of aforesaid meeting were circulated by Central Electricity Authority (CEA) vide their letter No.8/20/SP&PA-11/1312-19 dated 13/09/2011.

(3) That M/s HBPCL owns Baspa-Jhakri 400 kV D/C Transmission Line and operation and maintenance of the same is done by the Company. The responsibility for recovery of transmission charges for the power being wheeled by Generating Stations, other than Baspa-II HEP project, through a portion of the Baspa-Jhakri Transmission Line rests with M/s HBPCL. As per the CERC's order dated 07/05/2015, referred to in para 6 of this order, this transmission line has become part of inter-State Transmission Lines and, therefore, the separate tariff now needs to be determined by the Appropriate Commission i.e. CERC. .

(4) That Baspa-II HEP tariff, which is determined by HPERC since beginning is based on the integrated capital cost i.e. Capital Cost of hydro electric power generation assets and capital cost of transmission assets, shall need to be adjusted suitably pursuant to sub-para (3) above.

(5) That M/s JPVL, CEA, POSCO/NLDC, NRLDC, Powergrid, SJVNL and JAL/JPVL have agreed and decided LILO of Baspa-Jhakri Transmission Line in the meeting held on 07.09.2011 conducted by the CEA, which was subsequently agreed to by the HPSEBL also provisionally, as mentioned in sub-paras (h) and (i) of para 2 of this order.

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10. Bearing the above findings in mind, we find the only question before us for consideration is whether this petition is maintainable for non- joinder of parties and whether the direction can be given to the respondent, as prayed for, to get the portion of 400 kV Wangtoo-Jhakri D/C line declared as the inter-State, transmission line; and to approach the Central Electricity Regulatory Commission, for determinate of tariff, for the said portion. Since both the issues are interwoven, we are taking and deciding them simultaneously.

11. With regard to the issue of maintainability of the petition is concerned it can be stated that Hon'ble APTEL in its verdict rendered in **Gujrat Urja Vikas Nigam Ltd. V/s Gujrat Electricity Regulatory Commission 2015 ELR (APTEL) 28** has concluded that whenever the State Commission, as a preliminary issue, felt that it is necessary to hear the issue on the basis of the submissions made by both the parties with reference to the question of maintainability of the petition, the State Commission is competent to decide the issue of maintainability of the petition, even at the admission stage, without going into the merits of the matter.

12. The petitioner is unable to pin point any specific provisions, under which the directions are sought to be given to the Respondent. Per definition of "inter-State transmission system", as given in Clause (36) of Section 2 of the Electricity Act, 2003, the intra-State transmission includes the transmission of electricity within territory of a State on a system built, owned, operated, maintained or controlled by a Central Transmission Utility.

13. The Hon'ble Central Electricity Regulatory Commission in para 14 its Order dated 07.05.2015 (Supra), in the matter of approval of transmission tariff for Transmission System associated with evacuation of power from Karcham-Wangtoo HEP, as reproduced in para 6 (a) of this Order, has stated that after construction of LILO, the transmission line from Karcham-Wangtoo to Nathpa Jhakri still remains an inter-State transmission line, as it is connected to the Inter-connection Facility of the CTU and the power is evacuated through it from Karcham-Wangtoo for Inter-State transmission. The LILO at Wangtoo is permanent arrangement and has become integral part of the Inter-State Transmission System of Sutlej Basin. Further the capital cost of Baspa-II HEP has been approved from the dates of Commercial Operation of the Units,

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i.e. 24.05.2003 (Unit-I), 29.05.2003 (Unit-2) and 08-06-2003 (Unit-3) by the HPERC vide Order dated 24-02-2007, passed in petition No. 38 of 2005, and also in the subsequent orders for Baspa-II HEP. The Baspa-II HEP capital cost is inclusive of Baspa-Nathpa Line and bays at Jhakri Switchyard.

14. Per Section 79(1)(c) of the Electricity Act, 2003 it is the function of the Central Commission to regulate the "inter-State transmission of electricity". "To regulate" means to deal with all matters in incidental to the inter-State transmission of electricity. Per Clause (a) of Sub-section (1) of Section 86 of the Electricity Act, 2003, the State Commission is vested with the responsibility of determining the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State of Himachal Pradesh. Further, clause (b) of said sub-section (1) of Section 86 empowers the State Commission to regulate electricity purchase and procurement process of the distribution licensees including the price at which electricity shall be procured from the generating companies or the licensees or from other sources through agreements for purchase of power for distribution and supply within the State. Clause (c) of aforesaid sub-section (1) of Section 86 stipulates that the State Commission shall facilitate intra-State transmission system and wheeling of electricity and these powers and the powers given under Section 86 (1)(f) of the Act are general in nature whereas the powers given to the Central Commission under Section 79(1)(f) of the Act are specific for the clause mentioned in (a) to (d) of Section 79(1) of the Electricity Act, 2003 and the specific powers to have the supremacy over the general powers is well-settled by law. As such the State Commission does not have any power under the Electricity Act, 2003 to deal with the matters relating to inter-State transmission of power.

15. The powers of the Central Commission as well as State Commission are not concurrent. This Appellate Tribunal by judgment dated 4th September, 2012 in Appeal Nos. 94 and 95 of 2012 referred in the Judgment dated 07.10.2015- **M/s Vandana Vidyut Ltd. Chattisgarh V/s Chattisgarh State Electricity Regulatory Commission, Raipur & another 2015 ELR (APTEL) 1293,** has held that the Central Commission has got a wide jurisdiction. In fact, the functions vested in the Central Commission are specific in nature whereas, the functions vested in the State

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Commission are general in nature applicable to a particular State. The specific function will therefore, have to be given supremacy to the general functions vested in the Central Commission. This is provided under Rule 8 of the Electricity Rules, 2005 which provides as under:-

> *"The tariff determined by the Central Commission for generating companies under Clause (a) to (b) of Sub-section (1) of Section 79 of the Act shall not be subject to re-determination by the State Commission in exercise of functions under Clauses (a) or (b) of Sub-section (1) of Section 86 of the Act and subject to the above, the State Commission may determine whether a Distribution Licensee in the State should enter into Power Purchase Agreement or procurement process with such generating companies based on the tariff determined by the Central Commission".*

16 Admittedly M/s JPVL, made a contingent arrangement utilizing a part of Baspa-Jhakri line for establishing connectivity between Karcham-Wangtoo HEP Switchyard at Wangtoo and Wangtoo-Abdullapur transmission line and approached Central Electricity Authority (CEA) for its approval. The aforesaid contingent arrangement was approved in the meeting held on 7th September, 2011 at CEA wherein representative from the CEA, POSOCO/NLDC, NRLDC, Powergrid, SJVNL and JAL/JPVL/JPL were present. M/s JPVL approached the HPSEBL and after detailed deliberations interim arrangement for evacuation of Karcham Wangtoo (1000MW) HEP Power to CTU System by LILO of both the 400 kV Baspa-Jhakri transmission lines of Baspa-II HEP was agreed by both parties.

17. We are, therefore, of the considered opinion that the CTU, the CEA and NLDC, are the necessary parties, the petition without inpleading them is not maintainable, and further in light of the forgoing discussion and the Hon'ble CERC Order dated 07.05.2015, since the parties themselves have agreed as per the undertaking of M/s JPVL, for LILO of Baspa-Jhakri 400 kV D/C Transmission Line at Wangtoo, final decision for metering arrangement for Baspa-II HEP energy and payment of transmission charges etc. by the concerned agencies shall be taken by the Appropriate

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Regulatory Commission. Accordingly, after decision of Appropriate Commission, a Supplementary Agreement is to be entered into between HPSEBL and M/s JPVL.

The petition is disposed of accordingly. However, there is no order as to costs.

(BHANU PRATAP SINGH)
MEMBER

(S.K.B.S NEGI)
CHAIRMAN

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Annexure A-7

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Multi-Year Tariff Order
for
BASPA II HEP
for
FY 2019-20 to FY 2023-24

Himachal Pradesh Electricity Regulatory Commission

Date: 29th June 2019

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BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

Petition No. 30/ 2019

CORAM

Sh. S.K.B.S. Negi

Sh. Bhanu Pratap Singh

IN THE MATTER OF:

Determination of Tariff for FY 2019-20 to 2023-24 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
Karcham Wangtoo H.E. Project
Sholtu Colony, PO, Tapri 172104
District Kinnaur (H.P.)

APPLICANT/ PETITIONER

M/s JSW Hydro Energy Limited (hereinafter referred as 'Petitioner') has filed a Petition with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as 'the Commission' or 'HPERC') 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 the period FY 2019-20 to FY 2023-24.

The Commission, after considering the Petition filed by the Petitioner (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 Petitioner 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 fourth Control Period FY 2019-20 to FY 2023-24.

	Sd/-	**Sd/-**
Shimla	**(Sh. Bhanu Pratap Singh)**	**(Sh. S.K.B.S. Negi)**
Dated: 29th June 2019	**Member**	**Chairman**

JSW Hydro Energy Limited

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1. BACKGROUND

1.1 M/s JSW Hydro Energy Limited (hereinafter referred to as the "Petitioner" or "Applicant"), 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 JaiPrakash 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 Petitioner has filed a Petition on 30th November, 2018 with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as the "Commission") under sections 37 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 and its amendments, 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 2019-20 to FY 2023-24.

1.5 The Petitioner has also filed additional submissions with the Commission on 24th April, 2019 for approval of an additional claim allowed by Arbitral Tribunal vide its Order dated 21.06.2018 in arbitration Case no. 69 of 2014.

1.6 In this Order, the Commission has reviewed the operational and financial performance of the Petitioner based on the PPA for supply of power to HPSEBL, reviewed and analysis of the past records, information filed by the Petitioner 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

1.7 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

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for determination of tariff applicable to generating companies and also by the National Tariff Policy formulated under the said Act.

1.8 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.

1.9 Subsequently, the Commission came out with amendments to these regulations for determination of tariff from hydro generating projects for the next Control Period starting from 1st April, 2014. 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

1.10 The Commission had issued 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 trued up the tariff for the period FY 2003-04 to FY 2007-08.

1.11 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.

1.12 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.

1.13 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 6 September 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 July 2011.

1.14 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

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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 (hereinafter referred to as MTR Order dated 31.10.2018).

Admission of Petition

1.15 The Petitioner has filed a Petition vide MA No. 136/2018 on 30th November 2018 and additional submission vide MA No. 101/2019 on 24th April 2019, with the Commission for determination of tariff for the period FY 2019-20 to FY 2023-24.

1.16 The Commission admitted the petition through its Interim Order dated 25th February 2019 and directed the Petitioner to publish the salient features of the Petition on or before 2nd March 2019 in a manner and as per the disclosure formats attached with the Interim Order. The petition was registered as petition number 30 of 2019.

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.	The Tribune (English)	06.03.2019
2.	Dainik Bhaskar (Hindi)	06.03.2019
3.	The Tribune (English)	07.03.2019
4.	Dainik Bhaskar (Hindi)	07.03.2019

1.18 The Commission, on carrying out a preliminary scrutiny of the Petition conveyed deficiencies vide Letter. No. HPERC/-F(1)-8/2018/2406 dated 12.12.2018, directing the Petitioner to file the additional information and clarifications to make the Petition as complete. The Commission directed petitioner to submit further additional clarifications vide its Letter No. HPERC/-F(1)-8/2018/228 dated 25.4.2019.

1.19 During the period, the Petitioner made several submissions through various filings in Order to address the data/information gaps and clarifications raised by the Commission. The details of the additional submissions are provided in table below:

Table 2: Details of additional submissions made by Petitioner

M.A. No.	Date of Filing
12 of 2019	21.02.2019
101 of 2019	24.04.2019
108 of 2019	01.05.2019
114 of 2019	13.05.2019

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Technical Validation Session

1.20 The Commission conducted a Technical Validation Session (TVS) on 01st May 2019 in the Commission's office on the petition filed by the Petitioner for ensuring that appropriate information is available for processing of the Petition and at the same time giving sufficient opportunity to the Petitioner to explain its stand on various issues.

Public Hearing

1.21 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 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.	Divya Himachal (Hindi)	08.03.2019
2.	Hindustan Times (English)	09.03.2019

1.22 Through the aforementioned publications, the interested parties/ stakeholders were asked to file their objections and suggestions on the Petitions and rejoinders to the Replies filed by the Petitioner for which dates were specified by the Commission through the publications. The Commission received objections/ suggestions from the major stakeholder, HPSEBL and two consumer representatives Mr. K.S. Dhaulta and Mr. Arun Kumar. The Petitioner responded to the objections of the HPSEBL through response dated 16th April 2019 which was registered as M.A. No 94 of 2019. Further the Petitioner responded to the objections raised by Mr. K.S. Dhaulta and Mr. Arun Kumar through its response dated 13.04.2019.

1.23 A public hearing was held at Commission's court room at Shimla on 29th April 2019 for providing adequate opportunity to all the stakeholders for expression of their opinions, suggestions and objections in the matter.

1.24 The objections, issues and concerns raised by the stakeholders, consumer representatives and HPSEBL, the responses along with the submissions of the Petitioner and the views of the Commission is detailed in Chapter 3 of this Order.

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2. SUMMARY OF THE PETITION

2.1 This Chapter summarizes the Petition No. 30 of 2019 filed by the Petitioner on 30th November 2019 and MA No. 101 of 2019 filed on 24th April 2019, along with the subsequent submissions made, 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 fourth Control Period FY 2019-20 to FY 2023-24.

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%

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2.4 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.

2.5 The Commission also approved the additional capital cost of Rs 95.88 Cr. vide its Order dated 24.01.2011.

2.6 Further, the Commission vide para no. 4.16 of its Order dated 06.06.2014 had approved the additional capital cost of Rs. 2.57 Cr. making the aggregate approved Capital cost at Rs. 1632.41 Cr. (Equity of Rs. 489.72 Cr. and Debt of Rs. 1142.69 Cr.).

Details of the Tariff Petition

2.7 The Petitioner has filed the Petition for determination of Tariff for the Third Control period i.e. FY 2019-20 to FY 2023-24 as prescribed under the multi-year tariff filing procedures set out under the PPA, HPERC (Terms & Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 and amendments thereto.

2.8 The Petitioner has proposed an additional capital expenditure of Rs. 11.05 during the period FY 2018-19 to FY 2023-24 and has therefore not submitted any Business Plan along with the MYT Petition.

2.9 The Petitioner has claimed the additional capital expenditure under the following heads –

a. **Obsolescence:** of then technology on which equipment was manufactured and hence unavailability of essential spares & services for the same in the market or with OEM (Original Equipment Manufacturer).

b. **Upgradation in Technology:** Availability of new, higher and user-friendly versions of software & equipment in market, which cannot be integrated with old equipment / system as such, but needs complete replacement / upgradation.

c. **Prudent utility practices compliance:** as per Article 2, section 2.2.100 of the PPA, prudent utility practices means those practices, method, techniques and standards as changed from time to time, that are generally accepted internally for use in electrical utility industries (taking into account conditions in India) and commonly used in prudent electrical utility engineering and operations to design, engineer, construct, test, operate and maintain equipment lawfully, safety, efficiently and economically as applicable to power station of size, service and type of the project and maintenance guidelines.

The Petitioner has stated in its Petition that as per Article 7, section 7.1 of the PPA the company shall operate and maintain, and if required, effect improvement (within the overall scope of project implementation) in the project in accordance with:-

(i) Prudent Utility Practices.

(ii) All applicable laws and directives.

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(iii) The manuals, instructions and manufacturer's guidelines supplied by construction contractors, manufacturers of equipment / suppliers etc.

(iv) The grid technical parameters as described in Schedule VIII.

(v) Despatch Instructions.

Also Article 13, Section 13.1((h), (i) & (p)) of the PPA states that hereby Company covenants to and agree the Board to the following

.....

(h) Operate and maintain the project in accordance with the dispatch instructions and Prudent Utility Practices

(i) Design, construct and complete the project in a good workman-like manner, only with materials and equipment that are new and of international Utility-grade quality, in such a manner that the useful life of the project will be at least equal to the term of this Agreement and in accordance with

(i) the plans and specifications prepared in accordance with this Agreement,

(ii) all applicable laws rules, regulations, permits and licenses, and

(iii) sound engineering and constructions, and Prudent Utility Practices;

.....

(p) at the end of the term of this agreement, transfer the project in the good working condition to the Board as per provisions of this Agreement.

d. **Change in Law:** As per Article 20 of the PPA signed between the Distribution Licensee and Generating Company, "Change in Law" means: -

i. any enactment and enforcement of any new law,

ii. any amendment, alternation, modification or repeal of any existing law by a competent court, Tribunal or legislature in India which is contrary to the existing accepted interpretation thereof.

Further as per section 20.21 (e) and (h) of the PPA, the Petitioner is allowed to incur additional capitalization to comply with change in law, along with change in tariff required as follows –

'20.21 (e) Additional facilities and modifications

Where any change in law coming into force after unit 3 commercial operation date requires the construction of any additional facilities and modifications of any existing facilities of the project, the company may incur such expenditure thereon as may be reasonably required to comply with such change in law and the amount of such expenditure shall be added to the capital cost subject to approval by Board/SG/Authority. The

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Company shall provide the Board with as much prior notification of such additional modifications and their costs as is reasonably practicable. To the extent amount of any such expenditure shall have been funded with debt, the interest on debt and debt payment attributable thereto shall be reflected in the tariff, and to the extent the amount of any such expenditure shall have been funded with equity, the return on equity attributable thereto shall be reflected in the tariff. Benefits, if any, with regard to tariff, accrued due to change in law shall go towards reduction in tariff.

....

(h) Change in tariff due to change in law

If there is any change in tariff as per Section 20.21, due to change in law, then, the same would be got approved from the Board.'

2.10 The petitioner has cited Regulation 13 (2) of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulation, 2011 (amended in 2011 & 2013), dealing with additional capitalization.

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

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

b) change in law;

c) any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation:

Provided that in any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2011.

2.11 Further, the Petitioner has mentioned Regulation 14 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 -

14. Additional Capitalization and De-capitalization:

The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected

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to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

.....

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

(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation.'

2.12 Further the Petitioner has submitted the technical & financial details and information for tariff computation in formats specified by the Commission under Himachal Pradesh Electricity Regulatory Commission (Terms & Conditions for Determination of Hydro Generation Tariff) (Second Amendment) Regulations, 2013.

2.13 The details of year-on-year capital expenditure proposed by the Petitioner, under various heads as described above, is follows –

Table 5 Summary of Additional Capital Expenditure filed by Petitioner (Rs. Cr.)

Particulars	FY19	FY20	FY21	FY22	FY23	FY24	Total
Obsolescence	1.47	1.62	0.27	1.71	1.88	-	6.95
Prudent Utility Practices/ Upgradation in Technology	0.74	0.71	0.50	0.20	0.20	-	2.36
Change in Law	0.53	0.58	0.64	-	-	-	1.74
Total	**2.75**	**2.91**	**1.41**	**1.91**	**2.08**	**-**	**11.05**

2.14 The details of the Total Annual Charges claimed by the Petitioner in petition no. 30 of 2019 for period FY 2019-20 to FY 2023-24, are as under:

Table 6: Summary of Tariff Petition filed by Petitioner for FY20 to FY24 (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Capacity Charges					
Interest on Outstanding Loan	0.18	0.32	0.37	0.45	0.51
Depreciation + AAD	32.06	70.43	70.49	70.58	70.67
Application Fees	0.05	0.05	0.05	0.05	0.05
Total Capacity Charges	32.29	70.8	70.91	71.08	71.23
Primary Energy Charges					

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Particulars	FY20	FY21	FY22	FY23	FY24
O&M Expenses	43.75	45.54	47.42	49.38	51.37
Return on Equity	78.63	78.70	78.79	78.89	78.89
Interest on Working Capital	6.23	7.52	7.62	7.73	7.83
Sub- Total Primary Charges	128.61	131.76	133.83	136	138.09
Incentive and Taxes					
Incentive for secondary energy	27.94	27.96	28.00	28.03	28.03
Incentive for Higher Plant Availability	9.83	9.84	9.85	9.86	9.86
Tax	25.97	39.39	39.43	39.48	39.51
Sub-Total Incentive and taxes	63.74	77.19	77.28	77.37	77.4
Total Annual Charges	**224.64**	**279.75**	**282.02**	**284.45**	**286.72**

2.15 The Petitioner has also submitted an additional claim on 24.04.2019 for tariff against additional capitalization of Rs. 6.58 Cr., allowed by Arbitral Tribunal vide its Order dated 21.06.2018 in arbitration Case No. 69 of 2014. The additional capital expenditure is allowed by the Tribunal on account of force majeure event of flash flood in July 2005.

2.16 The Commission, on carrying out a preliminary scrutiny of the Petition conveyed deficiencies vide Letter. No. HPERC/-F(1)-8/2018/2406 dated 12.12.2018 and vide Letter No. HPERC/-F(1)-8/2018/228 dated 25.4.2019, and directed the Petitioner to submit, details of existing assets original cost of the asset, accumulated depreciation, etc. proposed to be replaced through additional capitalization and the impact of their decapitalization on MYT tariff calculations. The table below shows the details provided by the Petitioner of the existing assets proposed to be replaced through additional capitalization.

Table 7: Summary of existing assets proposed to be replaced through additional capitalization (Rs. Cr.)

Particulars	Original Capitalised Cost	Balance Value of existing assets (as on 31.03.2018)
Obsolescence	3.90	1.42
Change in Law	2.07	0.75
Total	**5.97**	**2.17**

2.17 The details of the revised Total Annual Charges claimed by the Petitioner in its submission dated 22.04.2019 for the period FY 2019-20 to FY 2023-24, after taking into consideration the impact of additional capitalization of Rs. 6.58 Cr. and decapitalization of existing assets proposed to be replaced in fourth Control Period is as under:

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Table 8: Summary of Revised Tariff Petition filed by Petitioner for FY20 to FY24 (Rs. Cr.)

Particulars	FY20	FY21	FY22	FY23	FY24
Capacity Charges					
Interest on Outstanding Loan	0.18	0.32	0.37	0.45	0.51
Depreciation + AAD	32.70	70.71	70.77	70.83	70.87
Application Fees	0.11	0.05	0.05	0.05	0.05
Total Capacity Charges	**33.00**	**71.08**	**71.19**	**71.33**	**71.43**
Primary Energy Charges					
O&M Expenses	43.89	45.69	47.56	49.52	51.51
Return on Equity	78.90	78.97	79.04	79.11	79.11
Interest on Working Capital	6.27	7.54	7.65	7.75	7.86
Sub- Total Primary Charges	**129.07**	**132.20**	**134.24**	**136.38**	**138.47**
Incentive and Taxes					
Incentive for secondary energy	28.04	28.06	28.08	28.11	28.11
Incentive for Higher Plant Availability	9.86	9.87	9.88	9.89	9.89
Tax	26.31	39.61	39.64	39.67	39.68
Sub-Total Incentive and taxes	**64.21**	**77.54**	**77.60**	**77.67**	**77.68**
Total Annual Charges	**226.28**	**280.83**	**283.03**	**285.38**	**287.58**

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3. COMMENTS/ OBJECTIONS FILED BY STAKEHOLDERS

3.1 Three stakeholders, including consumer representatives and HPSEBL (which is 100% beneficiary of the power generated from BASPA II HEP), have filed written objections to the Petition filed by the Petitioner.

Table 9: Details of Objectors

Sl.	Objector	Address
1.	HPSEBL	Vidyut Bhawan, Shimla
2.	K.S. Dhaulta	A-62, Sector-2 Main Road N. Shimla
3.	Arun Kumar	Skipton Villa, The Ridge, Shimla

3.2 Subsequently, a public hearing was held on 29th April 2019 at the Commission's Court Room in Shimla.

3.3 The issues raised by Stakeholders along with response of the Petitioner and Commission's views on the issues are detailed in the subsequent paragraphs.

Depreciation and Advance against Depreciation

Stakeholder's Objections

3.4 HPSEBL has raised objection that Depreciation/Advance against Depreciation proposed for FY 19-20 is Rs. 32.29 Cr. whereas the depreciation for FY 20-21 is Rs. 70.43 Cr. HPSEBL requested the Commission to seek justification from M/s JSW Hydro Energy Limited on the same.

3.5 Mr. K.S. Dhaulta, a consumer representative, has raised objection that Petitioner may be asked to spell out and explain its computation of Advance Against Depreciation to justify its claim.

Petitioner's Reply

3.6 The Petitioner in its response to the query raised by HPSEBL has submitted that Depreciation and Advance Against Depreciation is worked out in accordance with the clause 8.6.5 of the Power Purchase agreement (PPA) dated 4.6.1997. The Petitioner has further submitted that advance against Depreciation approved till 2015-16 of Rs. 239.63 Cr. is being adjusted against the Depreciation, in terms of para 3 supra of para 8.6.5.1 of PPA. Till the year 2018-19, Rs. 201.38 Cr. can be adjusted and balance of Rs. 38.25 Cr. only can be adjusted in the FY 2019-20. Therefore, in

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subsequent years of FY 2020-21 onwards, Nil amount of advance against Depreciation has been considered.

3.7 The Petitioner in its response to the query raised by Mr. K.S. Dhaulta, a consumer representative, has submitted that detailed calculation of Advance Against Depreciation during fourth control period is submitted to the Commission in Para 8 of the reply dated 21.1.2019.

Commission's View

3.8 The Commission has reviewed the submissions made by the Petitioner and computed the Depreciation and Advance Against Depreciation (AAD) as per the provisions of the PPA as detailed in Chapter 4 of this Order.

Income Tax

Stakeholder's Objections

3.9 HPSEBL has raised objection that significant hike is observed in the income tax from FY 19-20 to FY 20-21, that is, from Rs. 25.97 Cr. to Rs. 39.39 Cr. HPSEBL requested the Commission to seek justification from M/s JSW Hydro Energy Limited on the same.

Petitioner's Reply

3.10 The Petitioner in its response to the query has submitted that the increase in income tax is owing to increased Annual Fixed Charges (AFC) on account of normalization of Depreciation in FY 2020-21 i.e. completion of setting off of Advance Against Depreciation in FY 2019-20.

Commission's View:

3.11 The Commission has undertaken detailed scrutiny of submissions made by the Petitioner for computation of Income Tax and approved tax amount for the Control Period as detailed in Chapter 4 of this Order.

Decapitalization of assets

Stakeholder's Objections

3.12 HPSEBL has raised objection that while working out the O&M charges of the successive years of fourth Control Period, the de-capitalization of the new items proposed under additional CAPEX has not been considered. Thus, the O&M charges for items proposed under additional CAPEX have been considered twice. HPSEBL therefore requested the Commission to seek clarification/justification from M/s JSW Hydro Energy Limited on the same.

Petitioner's Reply

3.13 The Petitioner in its response to the query has submitted that De-capitalization of the replaced assets of Rs. 2.03 Cr. may be given effect once the additional capitalization is approved. Further in response to the deficiency letter raised by the Commission,

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the Petitioner has submitted revised ARR calculations taking into consideration the impact of decapitalization of existing assets.

Commission's View:

3.14 As part of the processing of Petition, the Commission sought various clarification for the claim of additional capitalization claimed by the Petitioner. Also, details like original value, accumulated depreciation, etc. of the existing assets proposed to be replaced through additional capitalization and the impact of decapitalization on MYT tariff calculations was also required to be submitted by the Petitioner. Based on analysis of various submissions and data available, the Commission has considered the impact of replacement of new assets after considering de-capitalization of existing items as discussed in detail under Chapter 4 of this Order.

Additional Capital Expenditure

Stakeholder's Objections

3.15 HPSEBL has raised the following objections in regards to the proposed additional Capital Expenditure of Rs. 1,105.21 Lakh during the fourth Control Period -

a. Many items proposed under additional CAPEX may be executed under R&M expenses such as UPS for Plan Auxiliaries, Welding fume Extractor system, Upgradation of CCTV Surveillance system, Upgradation of Smoke and fire detection system, Upgradation of Public Address System, Upgradation of Power House Lift. Accordingly, HPSEBL requested the Commission to take prudence check of the items which qualify for execution under additional CAPEX and remaining items shall be executed as a part of O&M Charges, which is an integral part of the ARR.

b. In the additional CAPEX proposed by M/s JSW Hydro Energy Limited major works included for Upgradation of Excitation System, Upgradation of Generator Protection System, Upgradation of DCS System, Upgradation of Emulsifier system, Upgradation of HVAC system etc. However, report of any independent Committee or any Independent Engineer has not be supplied. HPSEBL therefore requested the Commission to propose the formulation of committee comprising of HPSEBL representative(s) to ascertain the feasibility of additional CAPEX proposed by M/s JSW Hydro Energy Limited.

3.16 Mr. K.S. Dhaulta, a consumer representative, has raised objection that the Petitioner has given a generalized justification in terms of 'Obsolescence', 'Change in Law' or 'Prudent Utility Practices / Upgradation in Technology' against each works proposed for additional capitalization without any supporting documents to justify the claim. Further the consumer representative has requested the Commission to verify whether these additional Capex works are covered in PPA or are merely R&M works.

3.17 Mr. Arun Kumar, has raised objection that the damages to the barrages and to the pothead yard of BASPA II HEP are not force majeure events and that those damages have been caused due to negligence or mismanagement of the works during construction/ operation of the project. The consumer representative has further

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mentioned that the project has been built on Build, Own, Operate, Transfer basis and therefore the defects/ deficiencies in project are responsibility of Petitioner. Therefore the consumer representative has requested the Commission to disallow the additional capitalization claimed by Petitioner on account of force majeure events.

Petitioner's Reply

3.18 The Petitioner in its response to the queries of HPSEBL and Mr. K.S. Dhaulta has submitted that detailed justification towards the proposed additional capitalisation has been submitted to the Commission.

3.19 Further in response to the queries of Mr. Arun Kumar, the Petitioner has submitted that Additional capitalization in respect of protection works at barrage of Rs. 6.58 Cr., has been allowed by the arbitral tribunal vide its award dated 21.6.2018 in the arbitration case no. 69/2014 only after extensive exercise, and therefore objections to said additional capex can't be urged at this stage when the matters have attained its finality.

Commission's View:

3.20 The Commission has considered the submissions made by the Petitioner in conjunction with relevant provisions of PPA, for approval of additional capital expenditure in Chapter 4 of this Order.

Capital cost exclusion of Karcham Wangtoo-Jhakri transmission line

Stakeholder's Objections

3.21 HPSEBL has stated that the Commission in its MTR Order dated 31.10.2018 for Sale of Power from Baspa-II HEP (300 MW) to HPSEBL for 3rd Control Period (FY 2015-19) has decided that M/s JSW Hydro Energy Limited and HPSEBL will discuss the future steps to be undertaken in this regard within three months of issuance of this order and update the Commission. HPSEBL vide letter No. HPSEBL/CE (Sys. Op.)/IS-231(b)/Vol.XXIII/2018-8459-62 dated 01.12.2018 had requested M/s JSW Hydro Energy Limited for compliance of para 3.8 & 4.85 of the said order of HPERC. But as informed by HPSEBL, no response/ reply in this regard has been received from M/s JSW Hydro Energy Limited. HSPEBL has requested the Commission to direct M/s JSW Hydro Energy Limited to file petition before appropriate Commission with inclusion of necessary parties (that is CEA, PGCIL etc.) to exclude the capital cost of Baspa-Karcham Wangtoo-Jhakri transmission line from the capital cost of Baspa-II HEP.

Petitioner's Reply

3.22 The Petitioner in reply to the query has submitted that after the receipt of copy of communication dated 01.12.2018 issued by Chief Engineer (System Operation) of HPSEBL, the Petitioner was awaiting communication from Chief Engineer (Commercial) HPSEBL, who as per the said communication was to take necessary action for compliance on behalf of HPSEBL, but they did not receive any communication from the Chief Engineer (Commercial) of HPSEBL in this regard. Further, the Petitioner has submitted that there is no impediment or bar for HPSEBL to file an appropriate petition before the Appropriate Commission and since the

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Petitioner is not the aggrieved party it cannot be directed to approach the Appropriate Commission at the behest of HPSEBL.

Commission's View:

3.23 It is observed that both the parties have not complied with the directive of the Commission for deciding the future steps with regard to the Order dated 8th Dec 2017 against petition no. 29 of 2017 within three months from the issuance of the Order dated 31.10.2018 in Petition No. 21 of 2018.

3.24 If either of the two parties believes that the other party has not taken necessary steps in accordance with Commission's directive, they may initiate appropriate proceedings separately against the other party for violating the directions of the Commission.

3.25 The Commission provides additional time of three months to both the parties to take action in this matter and decide the future steps on Order dated 8th Dec 2017 against petition no. 29 of 2017 failing which the Commission may take action under Section 142 of the Electricity Act 2003 against both the parties.

Incentive for Higher Plant Availability and Secondary Energy

Stakeholder's Objections

3.26 HPSEBL in its objections have stated that impact of incentives may be considered for tariff determination for fourth Control Period. Plant Availability of Baspa-II HEP for FY 2014-15 was 99.84%, FY 2015-16 was 98.15% and in FY 2016-17 was 97.49%. Accordingly, HPSEBL has paid incentive for higher plant availability at the end of respective tariff years. HPSEBL further states that Baspa-II HEP has delivered secondary energy of 43.254 MU in FY 2014-15, 90.21 MU in FY 2015-16, 118.30 MU in FY 2016-17, 113.3 MUs in FY 2017-18 and 34.51 MUs in FY 2018-19. Thus HPSEBL has to pay the incentives for secondary energy in the respective month of energy generation beyond monthly saleable design energy upto the maximum limit of 155 MUs. The rate of incentive on secondary energy is Rs. 3.15 per unit in terms of section 8.9 of the PPA dated 04.06.1997. The incentive on secondary energy in terms of section 8.9.1 of PPA, shall not exceed 10% Return on equity for any tariff year. Thus HPSEBL submits that impact of incentives on secondary energy may be considered for determination of tariff for fourth Control Period as the same create a big gap on revenues of HPSEBL.

3.27 Mr. K.S. Dhaulta, a consumer representative, has raised objection that the Petitioner has considered 97% as an average plant availability for calculating the incentive for higher plant availability in fourth control period without providing any authentic data to justify it. Further Mr. K.S. Dhaulta has raised objection that the Petitioner has considered 88.12 MU as average secondary generation for calculating the incentive for secondary energy in fourth control period without elucidating any basis and providing data to justify it.

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Petitioner's Reply

3.28 The Petitioner in reply to the query by HPSEBL has submitted that HPSEB in its query has requested to include incentive for higher plant availability and secondary energy in proposed tariff of respective years, and accordingly the Petitioner has included the impact of incentives in its MYT tariff petition No. 30 of 2019.

3.29 The Petitioner in reply to the query raised by Mr. K.S. Dhaulta regarding the basis for higher plant availability and secondary energy has submitted that the required information has been submitted to the Commission in para 3 and para 4 of the reply dated 21.01.2019.

Commission's View

3.30 In line with the previous Orders, the Commission has approved the tariff for primary energy. Incentives for secondary energy and plant availability are variable and therefore cannot be included as part of the tariff determination process in advance and shall be subsequently trued-up. Further, the clauses of the PPA sufficiently provide for payment to be made against secondary energy and therefore no approval is required in this regard.

O&M Cost

Stakeholder's Objections

3.31 Mr. K.S. Dhaulta has mentioned that Petitioner may be asked to submit the detailed calculations for arriving at the O&M cost towards additional capitalization during the fourth control period.

Petitioner's Reply

3.32 The Petitioner in reply to the query has submitted that the required information has been submitted to the Commission in para 6 of the reply dated 21.01.2019.

Commission's View

3.33 The Commission has considered the submissions made by the Petitioner, for approval of O&M cost in Chapter 4 of this Order.

Capacity Charge and Energy Charge

Stakeholder's Objections

3.34 Mr. K.S. Dhaulta, has mentioned that the Petitioner should submit proposed capacity charge, energy charge and incentives & taxes for each year to the Commission.

Petitioner's Reply

3.35 The Petitioner in reply to the query has submitted that the required information has been submitted to the Commission in para 9 of the reply dated 21.01.2019.

Commission's View

3.36 The Commission has considered the submissions made by the Petitioner, for approval of ARR/ Tariff in Chapter 4 of this Order.

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Use of facilities built for BASPA II HEP for Karcham Wangtoo HEP

Stakeholder's Objections

3.37 Mr. Arun Kumar, has raised an objection that the land, buildings and job facilities built for BASPA II HEP are being used by the Petitioner for its other plant Karcham Wangtoo HEP, but no revenue on this account is been shown for BASPA II HEP.

Petitioner's Reply

3.38 The Petitioner in reply to the query has submitted that separate records are being maintained for both the projects Karcham Wangtoo HEP (1000MW) and Baspa II HEP (300 MW) owned by Petitioner and in case of joint expenditure incurred, proper apportionment of expenses is made between Baspa II HEP & Karcham Wangtoo HEP. These records are certified by the statutory auditors by way of auditor report & audited accounts and submitted to the Commission at the time of True up.

Commission's View

3.39 The Commission has taken cognizance of objection raised and has considered the submission made by the Petitioner. The Commission directs the Petitioner to submit at the time of true-up, the details of all joint expenditure incurred between Karcham Wangtoo HEP and BASPA II HEP along with their apportionment made duly certified by the statutory auditor. The Commission shall analyse these details and the financial statements at the time of true-up towards the end of fourth Control Period.

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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 2019-20 to FY 2023-24 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 has 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:

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(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 from the plant and Plant Availability

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 10: 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**

Energy Generation and Plant Availability for MYT Period (FY2019-20 to FY2023-24)

4.11 As per the Petition, BASPA-II HEP is projected to generate 1050.06 MUs of primary energy and 88.12 MUs of secondary energy during each year of the Control Period.

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The plant is projected to maintain availability of 97% as against normative availability of 90% during the Control Period.

4.12 The Commission has considered the generation of primary energy as 1050.06 MUs for each year of the Control Period from FY 2019-20 to FY 2023-24. 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 at the end of Control Period as per actual plant availability and actual generation of secondary energy.

Table 11: Energy Generation and Plant Availability approved for fourth Control Period

Particulars	FY 20	FY 21	FY 22	FY 23	FY 24
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%

Additional Capitalization and De-Capitalization

Additional capital expenditure of Rs. 11.05 Cr. claimed during fourth Control Period

4.13 The Petitioner has proposed an additional capital expenditure of Rs. 11.05 Cr. during the period FY 2018-19 to FY 2023-24. The Petitioner has claimed the additional capital expenditure under the heads of Obsolescence, Upgradation in Technology/ Prudent Utility Practices and Change in Law, as detailed in Chapter 2 of this Order.

Table 12: Proposed Additional Capitalization for FY19 to FY24 (Rs. Cr.)

Rs. Cr.	FY19	FY 20	FY 21	FY 22	FY 23	FY 24
For Change in Law	0.53	0.58	0.64	0.00	0.00	0.00
For Obsolescence	1.47	1.62	0.27	1.71	1.88	0.00
For Upgradation in Technology/ Prudent Utility Practices	0.74	0.71	0.50	0.20	0.20	0.00
Total	**2.74**	**2.91**	**1.41**	**1.91**	**2.08**	**0.00**

4.14 The Commission also sought rationale and reference of the PPA clauses under which the Petitioner has claimed additional capitalization. In response, the Petitioner submitted a write-up, providing following details for each item claimed under additional capitalization –

- Provisions of PPA and HPERC (Terms and Conditions for determination of hydro generation tariff) Regulations 2011
- Justification for tentative cost claimed under additional capital expenditure based on commercial/ budgetary offers received from OEM/ equivalent suppliers

4.15 It is observed that the Petitioner has provided reference of the Article 20, section 20.21 of PPA for justifying the claim of additional capital expenditure under the head of Change in Law. For the balance works, the Petitioner has supported the claim of

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additional capital expenditure under the heads of 'Obsolescence' and 'Prudent Utility Practices' citing Regulation 13(2) of the MYT Regulations 2011.

4.16 The Commission has reviewed the appropriate clauses of the PPA for approval of the proposed additional capitalization and observes that there is no clause for approving additional capital cost except for 'change in law' and 'force majeure'.

4.17 As per clause 8.4.1 of the PPA, no additional capital expenditure is permitted , except for the cases of force majeure and change in law, as highlighted below:

'8.4.1

.....

(f) In the event of extension in the Scheduled commercial operation date of the Project on account of Force-Majeure events, provisions under Article 17, shall apply.

(g) Any change in cost on account of changes in law as per Article 20.

.....

(l) No other additional cost /charges shall be allowed on any account, whatsoever.'

4.18 Clause 20.21(e) of the PPA signed between the HPSEBL and the Generating Company, allows for additional capital expenditure on account of Change in Law, post COD of the generation plant is reproduced below:

"20.21 (e) Where any change in law coming into force after unit III commercial operation date requires the construction of any additional facilities or modifications of any existing facilities of the Project, the company may incur such expenditure thereon as may be reasonably required to comply with such change in law and the amount of such expenditure shall be added to the capital cost subject to approval by Board/ SG/Authority."

4.19 Accordingly, for the fourth Control Period, the Commission has considered the claim of additional capital expenditure by the Petitioner only to the extent of amount qualifying under 'Change in Law' in line with the clauses of the PPA.

4.20 It is observed that the Petitioner has claimed additional capital expenditure of Rs. 1.74 Cr. on the account of 'Change in Law' from FY 2019-20 to FY 2023-24. The additional capital expenditure has been claimed for implementation of FGMO/ RGMO enabled electronic governors for the three units of plant.

4.21 The PPA signed between the HPSEBL and the generating company, did not provide any specific requirement for implementing FGMO/ RGMO. The Indian Electricity Grid Code, issued first in 2006 and later re-issued in 2010, along with its amendments, introduced the requirement to install FGMO/ RGMO on generating units. Since BASPA II HEP plant got commissioned in the year 2003, and the Indian Electricity Grid Code was issued later, the Commission has therefore allowed the additional capital expenditure towards up-gradation of electronic governors to implement the FGMO/ RGMO.

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4.22 The Petitioner has submitted that three (3) numbers of electronic governors of BASPA Units were commissioned during 2003 by M/s Andritz Hydro Private Limited (Formerly known as M/s Hydro Vevey) and are operational since then. The Petitioner has further submitted that they had approached the original OEM supplier of governor systems i.e. M/s Andritz Hydro for upgradation of the existing governor systems for FGMO/ RGMO. However, the OEM supplier informed the Petitioner that manufacturing of the earlier supplied governor system has been discontinued and spares/ support is not available for the supplied equipment now. The OEM supplier instead of up-grading the existing governor system, suggested installation of the new age digital governor system.

4.23 In order to assess the prudency of the additional capital expenditure proposed by the Petitioner for the implementation of FGMO/ RGMO, the Commission has analyzed the commercial offer received by the generating company from the Original Equipment Manufacturer (OEM) of the governor control system of BASPA II HEP and the note submitted by Petitioner on negotiations between Generating Company and OEM supplier regarding the cost. As per the note submitted, the Petitioner has claimed Rs. 0.53 Lacs as the cost installation of Digital Governor and implementation of FGMO/ RGMO on one (1) generating unit. After analysing the submissions made by the Petitioner, the Commission has provisionally allowed a total additional capital expenditure of Rs. 1.59 Cr. for the implementation of FGMO/ RGMO for three (3) generating units i.e. at the cost of Rs. 0.53 Lacs per generating unit.

4.24 The Petitioner is directed to conduct a competitive process for procurement of FGMO/ RGMO governor systems and discover most competitive cost for implementation of FGMO/RGMO governor systems. The final capital cost for implementation of FGMO/ RGMO would be considered at the time of Truing-Up for the respective years based on prudence check.

4.25 The Petitioner in its petition has sought to implement the FGMO/ RGMO for one unit of 100 MW each, every year from FY 2018-19 to FY 2020-21. However, based on review of the documents submitted by the Petitioner in response to the deficiencies raised by the Commission vide Letter. No. HPERC/-F(1)-8/2018/2406 dated 12.12.2018, it is observed that the Petitioner was in process of taking adequate approvals for the required capital expenditure. The Commission has considered installation of each RGMO/FGMO at the beginning of each year starting 2019-20 onwards and has considered an amount of Rs. 0.53 Cr. towards additional capital expenditure for implementation of FGMO/ RGMO on each unit of the plant from FY2019-20 to FY 2021-22. The actual date of capitalization would be considered at the time of truing-up for the respective years based on prudence check.

Table 13: Summary of additional capitalization allowed by the Commission (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22	FY 23	FY 24	Total
Additional Capitalization for 'change in Law' for implementation of FGMO/ RGMO enabled governor systems	0.53	0.53	0.53	-	-	1.59

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4.26 Regulation 11 of the HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations of 2011, provide for de-capitalization of assets forming part of capital cost but not in use anymore due to additional capitalization.

'11. Capital Cost of Project

(1) Capital cost for a project shall include-

(a) .....

(b) .....

(c) additional capital expenditure determined under regulation 13:

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

Therefore, in accordance with the HPERC regulations, the Commission has de-capitalized the capital cost of existing governor systems which are to be replaced by FGMO/ RGMO enabled governor systems.

4.27 The Commission, on carrying out a preliminary scrutiny of the Petition, conveyed deficiencies vide Letter. No. HPERC/-F(1)-8/2018/2406 dated 12.12.2018 and vide Letter No. HPERC/-F(1)-8/2018/228 dated 25.4.2019 and directed the Petitioner to submit the value of existing assets to be replaced by new assets under additional capitalization, along with their outstanding debt and equity, duly certified by the statutory auditor for considering the impact of decapitalized assets. The Petitioner vide its reply dated 09.05.2019, provided the Auditor certificate for the original capitalized cost and balance value of assets to be depreciated, etc. of the fixed assets to be decapitalized. Accordingly, the Petitioner has submitted original capitalized cost of Rs. 2.07 Cr. for governor systems proposed to be replaced by FGMO/ RGMO enabled electronic governor systems.

4.28 The Commission has decapitalized this capital cost of existing governor systems from the gross capital cost of BASPA II HEP, phased equally over three years from FY 2019-20 to FY 2021-22 as FGMO/ RGMO enabled electronic governor system is implemented for each generating unit during the Control Period. For instance, for FGMO/RGMO implementation on unit-1 of plant in FY2019-20, 1/3rd of original capital cost of all three units (Rs. 0.69 Cr.) is de-capitalized. Similarly Rs. 0.69 Cr. capital cost of existing governor systems is decapitalized in years FY2020-21 and FY2021-22 respectively, considering the implementation of FGMO/ RGMO enabled governor systems on unit-2 and unit-3 of BASPA II HEP in the subsequent years.

Table 14: Summary of de-capitalization allowed by the Commission (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22	FY 23	FY 24	Total
De-Capitalization of existing assets to be replaced by FGMO/ RGMO enabled governor system, from gross capital cost	(0.69)	(0.69)	(0.69)	-	-	**(2.07)**

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Additional Capital Expenditure of Rs. 6.58 Cr. claimed as per Order of Arbitral Tribunal

4.29 The Petitioner in its submission dated 22.04.2019 for additional claim in MYT Petition has submitted that the heavy rain in the night of 05.07.2005 caused severe land sliding leading to damage of plant's barrage. Further, the Petitioner has submitted that the Commission vide its Order dated 10.12.2014 in petition no. 69 of 2014 had constituted an Arbitral Tribunal for adjudication and settlement of dispute between the generator and HPSEBL and ascertain the damages caused by the flash flood in river Baspa on 5th/6th July 2005. Citing the award of the Presiding Arbitrator dated 21.06.2018 for allowing Rs. 6.58 Cr. towards additional capital expenditure, the Petitioner has proposed additional tariff from FY 2005-06 to FY 2023-24.

4.30 The Commission has reviewed the Order of Presiding Arbitrator Justice dated 21.06.2018 which provides relief to the extent of Rs. 6.58 Cr. The Arbitration Panel citing 'Contributory Negligence' of both the generator and the flood, to the plant's damage, allowed a capital expenditure of Rs. 6.58 Cr. on account of force majeure event in its Order dated 21.06.2018. In its Order, the Presiding Officer has ruled the following:

> *"45. in my opinion the principle sum of Rs. 6,57,91,828.20/- granted by me as additional cost is to be adjusted towards tariff for subsequent period of operation in accordance with Article 17.6 (h), Article 17.7 and Article 8.7.2 of the PPA. I have arrived at the above conclusion as no party should be overburdened with any additional liability caused due to an event which was beyond the control of the party and the aggravating circumstance of contributory negligence, which could have been avoided if reasonable care and precaution were taken and appropriate plans were in place to mitigate the losses during the designing and construction of the project by the Claimant"*

4.31 In the judgement, the Tribunal has also made note of the following:

> *"43..... In the present case the amount was to be determined by this Tribunal and until the determination thereof the amount was not crystallized and cannot bear interest, hence the said Article is not applicable."*

4.32 In accordance with the Order dated 21.06.2018, the Commission has allowed additional capital expenditure of Rs. 6.58 Cr. from the date of award. For financing of the additional capitalization, normative Debt: Equity of 70:30 has been considered.

Capital Cost of BASPA II HEP

4.33 In its MYT Order for BASPA II HEP for period FY2014-15 to FY2018-19 dated 06.06.2014, the Commission had allowed capital cost of Rs. 1632.41 Cr. as closing balance for FY2010-11. Based on the additional capitalization and de-capitalization allowed in this Order, as discussed in the sub-sections above, the Capital Cost considered for period FY2018-19 to FY2023-24 is as follows –

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Table 15: Capital Cost allowed by the Commission (Rs. Cr.)

Particulars	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Opening Capital Cost	1,632.41	1,638.99	1,638.83	1,638.67	1,638.52	1,638.52
Additional Capital Expenditure allowed (for FGMO/ RGMO implementation)	-	0.53	0.53	0.53	-	-
De-capitalization considered		(0.69)	(0.69)	(0.69)	-	-
Additional Capital Expenditure allowed (as per Order of Arbitral Tribunal)	6.58	-	-	-	-	-
Capital cost as on 31st March of the year	1,638.99	1,638.83	1,638.67	1,638.52	1,638.52	1,638.52

4.34 Due to additional capitalization and de-capitalization of assets from the gross capital cost, as allowed in the para above, their corresponding amount of loan and equity is also revised. For additional capitalization, a normative Debt: Equity ratio of 70:30 is assumed.

4.35 Further, the Commission vide its Letter No. HPERC/-F(1)-8/2018/228 dated 25.4.2019 had asked Petitioner to submit the debt amount for each individual asset proposed to be replaced through additional capitalization, certified by Statutory Auditor. However, the Certificate issued by the Statutory Auditor provides only a combined debt amount for all assets. Therefore, the Commission has assumed a normative debt: equity ratio of 70:30 for computing corresponding loan and equity amount of capital cost to be de-capitalized.

4.36 Based on the additional capitalization and de-capitalization approved above, the adjustments in gross debt and equity for period FY2018-19 to FY2023-24 is as summarized below:

Table 16: Gross Equity and Gross Debt allowed by the Commission (Rs. Cr.)

Particulars	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Gross Equity						
Opening Equity	489.72	491.70	491.65	491.60	491.55	491.55
Additional Equity	1.97	0.16	0.16	0.16	-	-
Less: Equity for decapitalization	-	(0.21)	(0.21)	(0.21)	-	-
Closing Equity	491.70	491.65	491.60	491.55	491.55	491.55
Gross Debt						
Opening Debt	1,142.69	1,147.29	1,147.18	1,147.07	1,146.96	1,146.96
Additional Debt	4.61	0.37	0.37	0.37	-	-
Less: Debt for decapitalization	-	(0.48)	(0.48)	(0.48)	-	-
Closing Debt	1,147.29	1,147.18	1,147.07	1,146.96	1,146.96	1,146.96

Interest on Loans

4.37 For determination of interest on loans, the Petitioner has continued with the approach followed by the Commission in the MYT Order for the third Control Period

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and has proposed interest on loans based on the approved outstanding loan balances for the fourth Control Period i.e. FY 2019-20 to FY 2023-24.

4.38 In absence of a cost-benefit analysis and prior approval for loan restructuring, the Commission in its earlier MYT Order dated 15.07.2011 for the second Control Period FY2011-12 to FY2013-14 had disallowed the restructuring of loans and continued with the previous loan balances approved in its Orders. Therefore, 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 as per the true-up performed under the Mid-Term Review (MTR) Order dated 31.10.2018 of the Petitioner. The methodology considered for approving the interest for each loan is detailed in the subsequent sub-sections.

4.39 As per the loan balances considered in the MTR Order, the repayment for all domestic and foreign loans for BASPA II HEP, except Normative Loan 2, was complete during the third Control Period. Therefore, interest expense for normative loan 2 has been considered along with additional Normative Loan 3 and 4 for the funding of additional capital expenditure of Rs. 1.59 towards RGMO/FGMO and capital cost of Rs. 6.58 Cr. approved by Arbitration Tribunal. Normative debt of 70% of approved capitalization has been considered. Also, considering no debt is outstanding as per the tariff principles considered by the Commission in its previous Orders other than the normative loans for additional capitalization, the debt outstanding towards the decapitalized assets has been considered as nil.

4.40 The repayments and interest charges on the domestic loans considered by the Commission for determination of tariff for FY 2019-20 to FY 2023-24 are discussed in the following paragraphs.

Normative Loan – 2

4.41 The Commission had approved a normative loan of Rs. 1.80 Cr. in the MYT Order dated 06.06.2014 for meeting the debt requirement for payment of 6th provisional bill raised by SJVNL towards ICF. Tenure of 11 years was considered against the normative loan. Annual weighted average rate of interest on approved rupee term loan was to be considered as the interest rate against this normative loan.

4.42 The Petitioner has claimed an interest rate of 9.10% on the normative loan, as the average of existing loans of the Generating Company. The Commission had directed Petitioner to submit the details of existing loans of the generating company vide letter no. HPERC/-F(1)-8/2018/2406 dated 12.12.2018. Based on the prudence check of these existing loans, the Commission has adopted the interest rate of 9.10%, for the period of FY 2019-20 to FY 2023-24.

4.43 The Commission has continued with the closing balance approved in the previous True-Up performed under the MTR Order dated 31.10.2018 for approving the repayment and interest charge on the Normative loan-2 which is also provided in the table below:

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Table 17: Normative Loan-2 Repayment and Interest approved for FY20 to FY24 (Rs. Cr.)

Rs. Cr.	FY 20	FY 21	FY 22	FY 23	FY 24
Opening balance	0.32	0.14	0.00	0.00	0.00
Addition	0.00	0.00	0.00	0.00	0.00
Principal Repayment	0.18	0.14	0.00	0.00	0.00
Closing Balance	0.14	0.00	0.00	0.00	0.00
Interest Rate	9.10%	9.10%	9.10%	9.10%	9.10%
Approved Interest	0.02	0.01	0.00	0.00	0.00

Normative Loan – 3

4.44 The Commission has considered normative Debt-Equity of 70:30 against the approved additional capital expenditure of Rs. 1.59 Cr. towards cost of implementing FGMO/ RGMO, as detailed in para 4.25 of this Order. The loan is assumed to be added at the beginning of the year in which the capitalization has been approved.

4.45 Tenure of 11 years with 4 quarterly repayments is considered separately for each year's addition to the normative loan i.e. 11 years repayment starting from FY20 for normative loan addition in FY20 and 11 years repayment starting from FY21 for normative loan addition in FY21 and so on. The Commission has considered same interest rate as considered for Normative Loan 2 for calculating the interest for Normative Loan 3 i.e. 9.10% for FY2019-20 to FY2023-24.

4.46 The repayment and interest charge approved on the Normative loan 3 is provided in the table below:

Table 18: Normative Loan-3 Repayment and Interest approved for FY20 to FY24 (Rs. Cr.)

Rs. Cr.	FY 20	FY 21	FY 22	FY 23	FY 24
Addition to loan *(at the beginning of year)*	0.37	0.37	0.37	0.00	0.00
Opening balance *(Previous years closing balance plus this years' addition)*	0.37	0.71	1.01	0.91	0.81
Principal Repayment	0.03	0.07	0.10	0.10	0.10
Closing Balance	0.34	0.64	0.91	0.81	0.71
Interest Rate	*9.10%*	*9.10%*	*9.10%*	*9.10%*	*9.10%*
Approved Interest	0.03	0.06	0.09	0.08	0.07

Normative Loan – 4

4.47 Additional capitalization of Rs. 6.58 Cr. is allowed to the Generating Company by Arbitral Tribunal vide its Order dated 21.06.2018 in arbitration case no. 69 of 2014. The capitalization is taken from 22.06.2018 onwards, and a normative loan is considered based on normative Debt-Equity of 70:30 in FY2018-19. Repayment period of 11 years with 4 equal quarterly installments are assumed for repayment

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of the normative loan. For the year FY2018-19, repayment of three quarterly installments has been considered. The Commission has adopted same interest rate as considered for Normative Loan 2 for calculating the interest for Normative Loan 4 i.e. 9.10% for the fourth Control Period. The interest and repayments calculated for the Normative Loan-4 is provided in the table below:

Table 19 Normative Loan-4 Repayment and Interest approved for additional capitalization of Rs. 6.58 Cr.

Rs. Cr.	FY 20	FY 21	FY 22	FY 23	FY 24
Opening balance	4.29	3.87	3.45	3.04	2.62
Addition	-	-	-	-	-
Principal Repayment	0.42	0.42	0.42	0.42	0.42
Closing Balance	3.87	3.45	3.04	2.62	2.20
Interest Rate	9.10%	9.10%	9.10%	9.10%	9.10%
Approved Interest	0.37	0.33	0.30	0.26	0.22

Total Interest and Repayment

4.48 The following table depicts the total interest and repayment approved for the fourth Control Period.

Table 20: Total Interest and Repayments approved for FY20 to FY24 (Rs. Cr.)

Rs. Cr.	FY20	FY21	FY22	FY23	FY24
Interest Payments	0.42	0.40	0.38	0.34	0.29
Total Repayments	0.63	0.63	0.52	0.52	0.52

Depreciation and Advance Against Depreciation (AAD)

4.49 The Commission has determined the depreciation and advance against depreciation for the Control Period FY 2019-20 to FY 2023-24 as per Clause 8.6.5.1 of the PPA. The amount of depreciation and the computation of advance against depreciation for the Control Period, as per the loan repayment approved above, is detailed below:

Table 21: Depreciation and Advance against Depreciation approved for the fourth Control Period (Rs. Cr.)

Particulars		FY 20	FY 21	FY 22	FY23	FY24
1/12th of the Loans	A	95.60	95.59	95.58	95.58	95.58
Repayment of the Loans as considered for working out Interest on Loan	B	0.63	0.63	0.52	0.52	0.52
Minimum of the Above	C	0.63	0.63	0.52	0.52	0.52
Less: Depreciation during the year	D	70.47	70.46	70.46	70.46	70.46
E	**E=C-D**	***-69.84***	***-69.84***	***-69.94***	***-69.94***	***-69.94***

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Particulars		FY 20	FY 21	FY 22	FY23	FY24
Cumulative Repayment of the Loan as considered for working out Interest on Loan	F	1168.57	1169.19	1169.71	1170.23	1170.75
Less: Cumulative Depreciation	G	1203.26	1235.37	1305.83	1376.29	1446.74
H	H=F-G	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Advance Against Depreciation	**I= Min. of E & H**	**(38.35)**	**0.00**	**0.00**	**0.00**	**0.00**
Depreciation + AAD	**(D + I)**	**32.12**	**70.46**	**70.46**	**70.46**	**70.46**

Operations and Maintenance Expenses

4.50 The Commission in its MYT Order dated 06.06.2014 had computed the O&M charges as per clause 8.7.2 of the PPA, which 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"

4.51 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

$$\text{Percentage rate of annual escalation} = \left(0.3 \times \frac{W_1 - W_0}{W_0} + 0.7 \times \frac{L_1 - L_0}{L_0}\right) \times 100\%$$

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*

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L_o = *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 me made as soon as the published indices for the month of March of that tariff year become available."

4.52 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, it is observed that the 1981-82 series of CPI and WPI indices have been discontinued. In the previous MYT Order dated 06.06.2014 for the Control Period FY 2014-15 to FY 2018-19, the Commission had taken 2004-05 base year series of the WPI and 2001 base year series of the CPI.

4.53 It is observed that the 2004-05 base year series of WPI has also been discontinued now. Therefore, in this Order, the Commission has considered 2011-12 base year series of the WPI and 2001 base year series of the CPI in line with the proposal of the Petitioner for projection of O&M expenses.

4.54 In absence of CPI figures for March 2019, the Commission has considered WPI and CPI figures for the month of March 2018, for the calculation of escalation factor for O&M and assumed the same escalation factor for projecting the O&M expense for the fourth Control Period i.e. FY 2019-20 to FY 2023-24.

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

Table 22: WPI and CPI considered for calculation of O&M escalation factor

Particulars	2016-17	2017-18
WPI All Commodities (base year 2011-12)		
For the month of March	113.2	116.3
Change		2.74%
CPI for Industrial Workers (Base year 2001)		
For the month of March	275	287
Change		4.36%
Escalation factor		***3.88%***

4.56 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

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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 3.88% as discussed in para 4.55.

4.57 With respect to the O&M expense being paid by the Petitioner to SJVNL for the Inter Connection Facility (ICF), the Commission in its MYT Order dated 06.06.2014 had approved additional O&M expenses of 0.25% towards ICF from the date of commissioning of the project as per 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.

4.58 The total O&M expenses approved for the Control Period FY 2019-20 to FY 2023-24 are detailed in table below:

Table 23: O&M Expenses approved for fourth Control Period (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22	FY23	FY24
Base O&M Expenses (adjusted for de-capitalization)	38.79	40.27	41.81	43.43	45.12
Add: O&M expense towards additional capitalization of Rs. 94.08 Cr.	2.01	2.09	2.17	2.25	2.34
Add: O&M expense towards additional capitalization of Rs. 67.23 Cr. (for ICF facility)	2.37	2.51	2.66	2.82	2.99
Add: Service Charge on ICF O&M Expenses	0.43	0.45	0.48	0.51	0.54
Add: O&M expense towards additional capitalization of Rs. 1.59Cr.	0.007	0.014	0.021	0.021	0.022
Add: O&M expense towards additional capitalization of Rs. 6.58 Cr.	0.085	0.089	0.092	0.096	0.099
Total O&M Expenses Approved	**43.68**	**45.42**	**47.23**	**49.13**	**51.10**

Return on Equity (RoE)

4.59 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."

4.60 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 in para 4.36 of this Order.

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Table 24: Return on Equity approved for fourth Control Period (Rs. Cr.)

Rs. Cr.	FY 20	FY 21	FY 22	FY 23	FY 24
Closing Balance of Equity	491.65	491.60	491.55	491.55	491.55
Rate Of Return	16%	16%	16%	16%	16%
Return on Equity	**78.66**	**78.66**	**78.65**	**78.65**	**78.65**

Interest on Working Capital

4.61 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

4.62 The rate of interest for calculating the interest on working capital has been taken as per the SBI PLR of 13.80% as on 1st April 2019 for the entire Fourth Control Period. The interest on working capital shall be trued up at the end of Control Period based on the actual SBI PLR applicable as on 1st April of each year.

Table 25: Interest on Working Capital approved for fourth Control Period (Rs. Cr.)

Rs. Cr.	FY 20	FY 21	FY 22	FY 23	FY 24
1/12th of O&M Expenses	3.64	3.79	3.94	4.09	4.26
Maintenance Spares 12% of O&M Expenses	5.24	5.45	5.67	5.90	6.13
Receivables equivalent to 2 months average billing	29.78	38.05	38.39	38.74	39.11
Total Working Capital	**38.66**	**47.28**	**47.99**	**48.73**	**49.50**
Rate of Interest	13.80%	13.80%	13.80%	13.80%	13.80%
Interest on Working capital	**5.34**	**6.53**	**6.62**	**6.73**	**6.83**

Incentive for Secondary Energy

4.63 The computation of incentives has been detailed in the Section 8.9 of the PPA on "Incentive for Secondary Energy" and Section 8.10 of the PPA on "Incentive on Account of Higher Plant Availability".

4.64 As per the Section 8.9.1 of the PPA:

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"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..."

4.65 The Commission, for the fourth Control Period, has not considered any secondary energy generation for the purpose of approval of the ARR/ Tariff. The incentive for secondary energy generation shall be billed by the Petitioner to HPSEBL as per the actual generation in the applicable tariff for each year in accordance with the provisions of the PPA and the Commission shall true up the same at the end of the Control Period.

Incentive for Higher Plant Availability

4.66 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."

4.67 The Commission, for the Fourth Control Period, has considered plant availability as 90% i.e. at normative availability level. The incentive for higher plant availability shall be billed by the Petitioner to HPSEBL as per the actual plant availability in the applicable tariff year as per the provisions of the PPA and the Commission shall true-up the incentive at the end of the Control Period.

Income Tax

4.68 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."

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4.69 In the MTR Order dated 31.10.2018, the Commission had calculated tax as per MAT rates based on the submission of the Petitioner that Baspa II HEP and Karcham Wangtoo HEP are the two generating plants under M/s JSW Hydro Energy Limited and considering Karcham Wangtoo HEP is availing tax holiday, the total tax liability of BASPA II HEP is also worked out as per MAT in line with the provisions of Income Tax Act.

4.70 However, in its tariff petition, the Petitioner has claimed corporate tax rate for FY 2019-20 to FY 2023-24. The Commission directed Petitioner to clarify the reason for taking corporate tax rate instead of MAT rate, in the Technical Validation Session held at 01.05.2019. The Petitioner vide its reply dated 09.05.2019, stated that due to change in depreciation accounting for Karcham Wangtoo from FY 2018-19, normal tax rate shall apply to Karcham Wangtoo and MAT credit shall be utilized accordingly. Before 1.4.2018, the depreciation was being calculated as per Part C of Schedule II to the Companies Act 2013 i.e. based on useful life of the assets. However, post 1.4.2018, depreciation is being calculated as per Part B of Schedule II to the Companies Act 2013 i.e. based on CERC Regulations.

4.71 The Commission feels appropriate to continue with the applicable MAT rate in view submissions and justifications for applicability of MAT in the MTR Order by the Petitioner and has considered a MAT rate of 21.55% (18.50% + 12% surcharge + 4% cess) for the purpose of computing tax for the fourth Control Period. The actual tax paid by the Petitioner would be considered at the time of true-up of fourth Control Period based on the submissions of the Petitioner and prudence check.

4.72 The income tax approved by the Commission for fourth Control Period is provided in table below:

Table 26: Approved Tax for FY 20 to FY 24 (Rs. Cr.)

Rs. Cr.	FY 20	FY 21	FY 22	FY 23	FY 24
Return on Equity	78.66	78.66	78.65	78.65	78.65
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	32.12	70.46	70.46	70.46	70.46
Subtract: Income Tax Depreciation	25.69	24.85	24.03	23.25	22.49
Taxable Income	**85.10**	**124.27**	**125.07**	**125.85**	**126.62**
Tax Rate	*21.55%*	*21.55%*	*21.55%*	*21.55%*	*21.55%*
Income Tax	**18.34**	**26.78**	**26.95**	**27.12**	**27.28**

Expenditure towards publication in newspaper

4.73 In the additional submission filled with the Commission on 24th April 2019 (registered as Petition No. 30 of 2019) the Petitioner has requested to be allowed a cost of Rs. 6,09,316 towards publication expense of salient features of the petition in newspapers, in accordance with Commission's interim order dated 25.02.2019.

4.74 Based on the scrutiny of supporting invoices submitted by the Petitioner, the Commission has allowed to pass through this publication expense in the year

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FY2019-20, in accordance with sub-regulation (5) and sub-regulation (7) of Regulation 16 of the HPERC Conduct of Business Regulations of 2005.

'16.

.....

(5) Where any application, petition, or other matter is required to be published under the Act or the regulations framed thereunder or as per the directions of the Commission, it shall, unless the Commission otherwise orders or the Act or regulations otherwise provide, be published within such time as the Commission may direct and in the absence of any specific directions to the contrary, not less than 7 days before the date fixed for hearing and further unless otherwise directed by the Commission, such publication shall be done in two newspapers one in English language and one in Hindi language having circulation in the area concerned:

.....

(7) The Commission shall be entitled to decide in each case the person(s) who shall bear the cost of such service and publication.'

Application fees

4.75 The Commission has allowed an Application Fees of Rs. 5 lacs per annum in line with the submissions made by the Petitioner.

Annual Fixed Charge for BASPA II HEP

4.76 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 27: Annual Fixed Charge approved for BASPA-II HEP for fourth Control Period (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22	FY 23	FY 24
Capacity Charges					
Interest on outstanding loans	0.42	0.40	0.38	0.34	0.29
Depreciation + AAD	32.12	70.46	70.46	70.46	70.46
Publication expense	0.06	-	-	-	-
Application fee	0.05	0.05	0.05	0.05	0.05
Sub-total Capacity Charges	**32.66**	**70.91**	**70.89**	**70.84**	**70.79**
Primary Energy Charges					
O&M Charges	43.68	45.42	47.23	49.13	51.10
Return on Equity	78.66	78.66	78.65	78.65	78.65
Interest on Working Capital	5.34	6.53	6.62	6.73	6.83
Sub-total Primary Charges	**127.68**	**130.60**	**132.50**	**134.50**	**136.58**
Incentives and Taxes					

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Particulars	FY 20	FY 21	FY 22	FY 23	FY 24
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	18.34	26.78	26.95	27.12	27.28
Sub-total Incentives and Taxes	**18.34**	**26.78**	**26.95**	**27.12**	**27.28**
Total Annual Fixed Charges	**178.67**	**228.30**	**230.34**	**232.46**	**234.66**

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

Table 28: Approved Tariff for fourth Control Period

Particulars	Units	FY 20	FY 21	FY 22	FY 23	FY 24
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.	178.67	228.30	230.34	232.46	234.66
Tariff for Total Energy	**Rs./Kwh**	**1.70**	**2.17**	**2.19**	**2.21**	**2.23**

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REGD A.D.

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION
Vidyut Aayog Bhawan, Block No.-37, SDA Complex, Kasumpti, Shimla-09
Tel No.0177-2627263, 2627907, 2627908 Fax.No.0177-2627162
E-mail: hperc@rediffmail.com Website: http://www.hperc.org

Pet. No. 21 of 2018 (Tariff)/ ३१५५-५८ **Dated:05.11.2018**

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To

1. **The Chairman,**
   Central Electricity Authority,
   Sewa Bhawan, R.K. Puram,
   New Delhi-110066.
2. **The** Principal Secretary (Power),
   to the H.P. Government,
   Shimla-171002.
3. **The HP** State Electricity **Board Ltd. thro' its**
   Chief Engineer (Comm.),
   Vidyut Bhawan, **Shimla-171004**
4. The Himachal Baspa Power Company Ltd.
   Karcham Wangtoo, HE Project, Sholtu Colony
   PO Tapri, Distt. Kinnaur,HP- 172104
5. Shri Charanjeet Singh
   Consumers Representative
   R/o Shanti Niwas, Dhali, Shimla-171012

Sub: **Authenticated copy of Order dated 31.10.2018**

Sir,

I am directed to sent here with a copy of Order passed on 31.10.2018 in Petition No. 21 of 2018 for determination True-up for FY 2014-15 to FY 2016-17 and Mid Term Review for FY 2016-17 and FY 2018-19 for sale of power from Baspa-II HEP (300 MW) to HPSEBL for 3rd control period (FY 2015-19). The Order is enclosed herewith please.

Yours sincerely,

Secretary

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True Up Order for BASPA II HEP for FY 2014-15 to FY 2016-17 and Mid Term Review for FY 2017-18 to FY 2018-19

Himachal Pradesh Electricity Regulatory Commission

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BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

CASE NO. 21 of 2018

CORAM

Sh. S.K.B.S. Negi

Sh. Bhanu Pratap Singh

IN THE MATTER OF:

True up of tariff for sale of power from Baspa II 300 MW HEP to Himachal Pradesh State Electricity Board Limited for period FY 2014-15 to FY 2016-17 and Mid Term Review for FY 2017-18 to FY 2018-19

AND

IN THE MATTER OF:

Himachal Baspa Power Company Limited
Karcham Wangtoo H.E. Project
Sholtu Colony, PO, Tapri 172104
District Kinnaur (H.P.)

APPLICANT/ PETITIONER

The Applicant has filed a Petition with the Himachal Pradesh Electricity Regulatory Commission for true up 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 the period FY 2014-15 to FY 2016-17 and Mid Term Review for period FY2017-18 to FY2018-19.

The Commission, after considering the Petition filed by the Applicant, the facts presented in its various submissions/filings, objections/suggestions received by the Commission from the Himachal Pradesh State Electricity Board Limited, the issues raised in the hearing at Shimla, 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 passes the following Order for true up of tariff for 300 MW Baspa II Hydro Power Plant for the period FY 2014-15 to FY 2016-17 and Mid Term Review for period FY 2017-18 to FY 2018-19.

Shimla

Dated:

(Sh. Bhanu Pratap Singh)
Member

(Sh. S.K.B.S. Negi)
Chairman

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1. BACKGROUND

1.1 M/s Himachal Baspa Power Company Limited (hereinafter referred to as the "Petitioner" or "Applicant" or "HBPCL" or "Baspa II HEP"), 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 JaiPrakash Pover 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.

1.4 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 Petitoner w.e.f. 1.09.2015.

1.5 The Commission had approved the tariff for sale of electricity from BASPA II plant vide Order dated 06.06.2014 for period FY 2014-15 to FY 2018-19 in Case No. 138/2013 and 142/2013.

1.6 The applicant has filed a Petition on 29.12.2017 with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as the "Commission") under sections 37 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 and its amendments, seeking true up 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 2014-15 to FY 2016-17 and Mid Term Review of period FY 2017-18 to FY 2018-19.

1.7 In this Order, the Commission has reviewed the operational and financial performance of the Applicant for period FY 2014-15 to FY 2016-17 based on the PPA between the HBPCL and the HPSEBL, reviewed and 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

1.8 The Commission, in view of the changes in 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.

1.9 Subsequently, the Commission came out with amendments to these regulations for determination of tariff from hydro generating projects for the next Control Period starting from 1st April, 2014. 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,

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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 1st November, 2013.

1.10 Accordingly, the tariff for BASPA-II generating station was fixed for the Control Period i.e. FY 2014-15 to FY 2018-19 in line with the provisions of these Regulations vide Tariff Order dated 06.06.2014.

1.11 Regulation 37 of MYT Tariff Regulations 2011 and amendments thereof state:

"(3) The generation company shall make a petition / application for mid-term performance review on the controllable / uncontrollable factors not less 120 days before the commencement of the year after the mid year of the control period as per principles laid down as follows:-

(a) In the mid-term performance review, the Commission shall make a comparison of the actual performance and expected revenue from tariff and charges vis-à-vis that approved in the first year of the Control period and the generation company shall submit to the Commission all information together with audited account statements, extracts of books of account and such other details in such form and in such manner as may be laid down by the Commission by an Order and also as per the provisions of the Conduct of Business Regulations. The mid-term performance review shall comprise of the following:-

(i) true-up of previous control period;

(ii) true-up of previous years of control period for which audited accounts are made available by the generator company;

(iii) review of ARR for the balance years of the control period in case of any major change in uncontrollable and/ or controllable parameters;

(iv) review of generation tariff on account of modification in ARR for the balance years of the control period."

1.12 In line with the provisions of the MYT Tariff Regulations 2011, HBPCL has filed this petition for truing-up of FY 2014-15 to FY 2016-17 and Mid Term Review for the period FY 2017-18 to FY 2018-19 for the Baspa II HEP.

Procedural Background

1.13 The Commission had issued 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 trued up the tariff for the period FY 2003-04 to FY 2007-08.

1.14 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 capitalisation allowed due to Force Majeure event, expenditure on Inter-Connection facility and additional O&M Expenses on Inter-Connection facility.

1.15 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.

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1.16 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 6 September 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 July 2011.

1.17 Subsequently, the Commission also trued-up the ARR and for the first Control Period i.e. FY 2008-09 to FY 2010-11 vide its Order dated 23.04.2012 and for the second Control Period i.e. FY 2011-12 to FY 2013-14 vide its order dated 30.03.2015.

1.18 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.

Admission of True-Up and Mid-term Review Petition

1.19 The Petitioner has now filed a Mid-term Performance Review Petition vide MA No. 149/2017 on 29.12.2017 with the Commission for True-Up of tariff for the period FY 2014-15 to FY 2016-17 and mid-term review of FY 2017-18 to FY 2018-19.

1.20 The Commission admitted the True-Up petition through its Interim Order dated 18.05.2018 and directed the Petitioner to publish the salient features of the Petition on or before 21.05.2018 in a manner and as per the disclosure formats attached with the Interim Order. The petition was registered as petition number 21 of 2018.

1.21 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	Edition	Date of Publication
1.	Divya Himachal (Hindi)	Shimla-Chandigarh	25.05.2018
2.	Dainik Bhaskar (Hindi)	Shimla	26.05.2018
3.	The Tribune (English)	Chandigarh	26.05.2018
4.	The Tribune (English)	Chandigarh	27.05.2018

1.22 The Commission, on carrying out a preliminary scrutiny of the Petition conveyed deficiencies vide Letter. No. HPERC/Mid Term Review/Baspa/2017-18-2816 dated 09.02.2018, directing the Petitioner to file the additional information and clarifications to make the Petition as complete, which was responded to by the Petitioner.

1.23 During the period, the Petitioner made several submissions through various filings in Order to address the data/information gaps and clarifications raised by the Commission. The details of the additional submissions are provided in table below:

Table 2: Details of additional submissions made by Petitioner

M.A. No.	Date of Filing
40/2018	16.03.2018
41/2018	16.03.2018

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M.A. No.	Date of Filing
69/2018	04.05.2018
106/2018	07.08.2018
114/2018	28.08.2018

Technical Validation Session

1.24 The Commission conducted a Technical Validation Session (TVS) on 24.04.2018 in the Commission's office on the petition filed by the Petitioner for ensuring that appropriate information is available for processing of the Petition and at the same time giving sufficient opportunity to the Petitioner to explain its stand on various issues.

Public Hearing

1.25 The Petitioner, in compliance to the Interim Order dated 18.05.2018, published the salient features of the Petition in the following newspapers:

Sl.	Name of News Paper	Edition	Date of Publication
1.	Divya Himachal (Hindi)	Shimla-Chandigarh	25.05.2018
2.	Dainik Bhaskar (Hindi)	Shimla	26.05.2018
3.	The Tribune (English)	Chandigarh	26.05.2018
4.	The Tribune (English)	Chandigarh	27.05.2018

1.26 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 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:

a) The Tribune (English) dated 01.06.2018

b) Dainik Bhaskar (Hindi) dated 01.06.2018

1.27 Through the aforementioned publications, the interested parties/ stakeholders were asked to file their objections and suggestions on the Petitions and rejoinders to the Replies filed by the Petitioner for which dates were specified by the Commission through the publications. The Commission received objections/ suggestions from the major stakeholder, HPSEBL. The Petitioner responded to the objections of the HPSEBL dated 22.02.2018 which was registered as M.A. No 40/201.

1.28 A public hearing was held at Commission's court room at Shimla on 13.07.2018 for providing adequate opportunity to all the stakeholders for expression of their opinions, suggestions and objections in the matter.

1.29 The objections, issues and concerns raised by the stakeholders, consumer representatives and HPSEBL, the responses along with the submissions of the Petitioner and the views of the Commission is detailed in Chapter 3 of this Order.

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2. SUMMARY OF THE TRUE-UP PETITION

2.1 This Chapter summarizes the True-Up and Mid-Term Review Petition filed by the Petitioner on 29.12.2017 and the submissions made subsequently for sale of power from the Baspa II, 300 MW Hydro Electric Project located on River Baspa, District Kinnaur (H.P.) for the period (FY 2014-15 to FY 2018-19).

Details of the Project

2.2 The Baspa II hydro-electric project is a 300 MW plant with three units each of 100 MW which was commissioned by M/s 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 3: 300 MW BASPA II - Project Details

Particular	Details
Name of the Company	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%
Total Capital Cost	Rs. 1632.41 Crs

2.4 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 Crore for the purpose of determination of tariff.

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2.5 The Commission also approved the additional capital cost of Rs 95.88 Cr. vide its Order dated 24.01.2011.

2.6 Further, the Commission vide para no. 4.16 of its Order dated 06.06.2014 had approved the additional capital cost of Rs. 2.57 Crs. making the aggregate approved Capital cost at Rs. 1632.41 Crs. (Equity of Rs. 489.72 Crs. and Debt of Rs. 1142.69 Crs.).

Details of the True-Up Petition

2.7 The details of the Total Annual Charges claimed by the Petitioner in petition No. 21 of 2018 for True-Up of period FY 2014-15 to FY 2016-17 are as under:

Table 4: Summary of True-Up filed by Petitioner for FY15 to FY17

Particulars	Submitted for True-Up			Approved in MYT Order		
	FY15	FY16	FY17	FY15	FY16	FY17
Capacity Charges						
Interest on Outstanding Loan	13.31	4.23	0.66	13.40	4.33	0.72
Depreciation + AAD	95.22	75.73	5.07	95.22	75.48	5.08
Interest related to Debt Restructuring	1.06	0.35		1.06	0.35	
Repayment related to Debt Restructuring	8.85	8.85		8.85	8.85	
Application Fees	0.05	0.05	0.05	0.05	0.05	0.05
Foreign Exchange Fluctuation (for loan repayment)	4.86	1.23				
Total Capacity Charges	**123.36**	**90.45**	**5.78**	**118.59**	**89.07**	**5.84**
Primary Energy Charges						
O&M Expenses	35.87	37.28	38.70	37.35	40.38	43.66
Return on Equity	78.36	78.36	78.36	78.36	78.36	78.36
Interest on Working Capital	8.65	7.73	5.42	7.93	7.14	4.71
Revenue in ARR for FY 2010-11 on additional Rs. 2.57 Cr of I.C.F.	0.17			0.17		
Cumulative Additional O&M Expense	2.96			2.96		
Service Tax on O&M Expense	1.44			1.44		
Sub- Total Primary Charges	**127.44**	**123.36**	**122.47**	**128.21**	**125.87**	**126.73**
Incentive and Taxes						
Incentive for secondary energy	13.67	28.50	37.38			
Incentive for Higher Plant Availability	9.79	9.79	9.79			
Tax	33.93	16.87	8.63	37.03	32.07	9.73
Sub-Total Incentive and taxes	**57.39**	**55.16**	**55.80**	**37.03**	**32.07**	**9.73**
Total Annual Charges	**308.19**	**268.96**	**184.05**	**283.84**	**247.02**	**142.31**
Payment Received	**319.77**	**270.22**	**188.37**			

2.8 The explanations provided by the Petitioner, for variations in Annual Charges approved and claimed in True-Up Petition, are summarized below.

a. The change in interest on long term loans was claimed to be on account of changes in weighted average interest rates for normative loans (for Rupee Term Loan) and changes in foreign exchange rates (for Foreign Currency Loan) as detailed below.

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Table 5: Change in interest in long-term loans filed by Petitioner

Particulars	FY15	FY16	FY17	Remarks in True-Up Petition
Approved as Per MYT Order dated 06.06.2014				
Interest on Rupee Term Loan	12.34	4.15	0.71	
Interest on Foreign Currency Loan	1.05	0.17	-	
Total	**13.39**	**4.32**	**0.71**	
Claimed In True-Up Petition				
Interest on Rupee Term Loan	12.22	4.05	0.66	Reduction in interest rate of normative loans from 11.50% in MYT Order to 10.61% in FY15 & FY16 and 10.50% in FY17
Interest on Foreign Currency Loan	1.09	0.18	-	Change on account of exchange rate of US$
Total	**13.31**	**4.23**	**0.66**	

b. The variation in Depreciation & AAD as compared to approved ARR was claimed to be on account of change in repayment schedule of loans.

c. The Petitioner has claimed foreign exchange variation because of higher loan repayment amount due to changes in foreign exchange rates. The total approved project cost is Rs 1632.41 Crs with Equity of Rs 489.72 Crs and Debt of Rs 1142.69 Crs. The debt is including foreign currency loan of Rs. 203.26 cros which is US$ 43.26 million loan valued at Rs 47 per US$. The depreciation is allowed at 4.3% of this capital cost of Rs. 1632.41 Crs (and Advance against Deprecation is restricted to 1/12th of loans of Rs 1142.69 Crs), whereas the loans were repaid at foreign currency rates higher than Rs. 47 per US$. The Actual rate of US$ for repayment of foreign currency loans and foreign exchange claimed by the Petitioner are as under:

Table 6: Details of repayments made for foreign currency loan as submitted by Petitioner

Loans & date of payment	Repayment in US$	Rate of US$ in tariff (Rs)	Actual Rate of US$ for repayment (Rs)	Foreign exchange fluctuation (Rs Cr.)	FY15 (Rs. Cr.)	FY16 (Rs. Cr.)
Credit Agricole						
23.04.2014	74734.58	47	61.19	1.06		
27.10.2014	74734.58	47	61.45	1.07	2.13	
24.04.2015	74734.58	47	63.49	1.23		1.23
Siemens Fin						
24.07.2014	480632.78	47	60.10	0.63		
23.01.2015	480632.78	47	61.48	0.70	1.33	
Unicredit Bank (Hypo)						
24.07.2014	475725.08	47	60.10	0.62		
23.01.2015	475725.08	47	61.48	0.69	1.31	
IDBI Bank						
27.06.2014	69120	47	60.00	0.09	0.09	
Total					4.86	1.23

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d. The Petitioner has claimed variation in O&M expenses based on the changes in escalation rates calculated from actual WPI and CPI indices. The MYT Order dated 06.06.2014 considered an escalation factor of 8.24% on the O&M cost as per Schedule XI of the PPA and O&M for additional capital expenditure of Rs. 94.08 crore, subject to truing up exercise. The Petitioner has considered actual WPI index with base year 2004-05 (as published by RBI) and actual CPI index for industrial workers with base year 2001, for the escalation of O&M expenses in the True-Up petition, in accordance with the indices considered by the Commission in its MYT Order dated 06.06.2014. The working of the O&M cost claimed by the Petitioner is as follows –

Table 7: Details of O&M expense claimed by Petitioner

	FY14 Actual	FY15 Claimed	FY16 Claimed	FY17 Claimed
Base O & M Exp. (excluding additional capitalisation and ICF facility)	31.06	32.21	33.41	34.62
Addl. O & M Exp. towards additional capitalisation Rs. 94.08 crore	1.61	1.67	1.73	1.79
O & M Exp. towards ICF Rs. 67.23 crore (62.86+1.80+2.57)	1.67	1.77	1.88	1.99
Service tax / GST on ICF O & M exp.	0.21	0.22	0.26	0.30
Total	34.55	35.87	37.28	38.70
Note:				
CPI Index -March (2001 base)	239.0	254.0	268.0	275.0
WPI Index - March (2004-05 base)	180.3	176.1	175.3	185.8
CPI Weightage	0.7	0.7	0.7	0.7
WPI Weightage	0.3	0.3	0.3	0.3
Escalation % for O & M		3.69%	3.72%	3.63%
Escalation % for ICF		6.00%	3.67%	2.48%

e. The MYT Order dated 06.06.2014 had assumed normative plant availability of 90%, subject to truing up exercise. The Petitioner has claimed Incentive for Higher Plant Availability, as per the actual availability of the plant. The Petitioner has submitted jointly signed statement of plant availability by HPSEBL. In accordance with PPA, the incentive for higher plant availability is calculated at 0.35% of Equity Component of the Capital Cost for each percentage increase over and above normative level of 90% of Plant Availability level subject to a maximum of 2% Return on Equity i.e Rs. 9.79 Crs each year. Accordingly, the Petitioner has claimed incentive for higher plant availability as per details mentioned hereunder:

Table 8: Details of incentive for higher plant availability claimed by Petitioner

Year	Plant availability	Equity (Rs. Crs.)	Rate of Incentive	Incentive for Higher plant availability (Rs. Crs.)
FY-15	99.84%	489.72	Incentive due @ 2% (0.35% * (99.84%-90%) subject to	9.79 (i.e 2% of Rs. 489.72 Crs)

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Year	Plant availability	Equity (Rs. Crs.)	Rate of Incentive	Incentive for Higher plant availability (Rs. Crs.)
			maximum of 2%)	
FY-16	98.15%	489.72	Incentive due @ 2% (0.35% * (98.15%-90%) subject to maximum of 2%)	9.79 (i.e 2% of Rs. 489.72 Crs)
FY-17	97.49%	489.72	Incentive due @ 2% (0.35% * (97.49%-90%) subject to maximum of 2%)	9.79 (i.e 2% of Rs. 489.72 Crs)

f. The MYT Order dated 06.06.2014 had assumed nil secondary energy, subject to truing up exercise. The Petitioner has claimed Incentive for Secondary Energy, as per the actual energy delivered in period FY 2014-15 to FY 2016-17. The Petitioner has submitted jointly signed statement of energy delivered by HPSEBL. As per the terms of PPA, incentive for secondary energy has been worked out by Petitioner using the formula (Secondary energy (MU)*10% ROE)/155MU, subject to maximum of 10% ROE. The incentive for Secondary Energy has been claimed as detailed hereunder:

Table 9: Details of incentive for secondary energy claimed by Petitioner

Year	Secondary Energy (MU)	Equity (Rs Crs)	Incentive for secondary energy	
			Maximum	Eligible
FY-15	43.25	489.72	48.97	13.67 (48.972 / 155*43.25)
FY-16	90.21	489.72	48.97	28.50 (48.972 / 155*90.21)
FY-17	118.30	489.72	48.97	37.38 (48.972 / 155*118.30)

g. The Petitioner has claimed variation in interest on working capital due to changes in annual charges claimed because of incentives and changes in income tax amount. The interest on working capital is calculated as per the methodology adopted by the Commission in its MYT Order dated 06.06.2014.

h. The Petitioner has claimed variation in Income Tax amount based on actual tax payed under MAT for each financial year. The calculation of tax payable as claimed by the Petitioner is mentioned hereunder:

Table 10: Details of income tax claimed by Petitioner

Particulars	FY 15	FY 16	FY 17
Revenue from sale of Electricity	271.76	261.86	256.32
Interest on Arrears	-	-	-
(A) Total Revenue	271.76	261.86	256.32
O&M Expenses	23.89	21.12	27.98
Interest	38.27	51.21	113.50
Depreciation	47.73	47.00	49.20

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Particulars	FY 15	FY 16	FY 17
(B) Total Expenses	109.89	119.33	190.68
(C) Profit eligible for MAT (A-B)	161.87	142.52	65.64
(D) Mat Rate %	20.96%	21.34%	21.34%
MAT payable (C*D)	33.93	30.42	14.01
(E) MAT Actually paid	35.77	16.87	8.63
(F) Lower of the MAT payable and MAT Actually paid	33.93	16.87	8.63

Details of the Mid-Term Review Petition

2.9 The details of the Total Annual Charges claimed by the Petitioner in petition no. 21 of 2018 for Mid-Term Review of period FY 2017-18 to FY 2018-19 are as under:

Table 11: Details of Mid-Term Review for FY18 and FY19 claimed by Petitioner

	Submitted for Mid-Term Review		Approved in MYT Order	
	FY18	FY19	FY18	FY19
Capacity Charges				
Interest on Outstanding Loan	0.19	0.03	0.22	0.04
Depreciation + AAD	3.94	0.18	3.94	0.18
Application Fees	0.05	0.05	0.05	0.05
Total Capacity Charges	**4.18**	**0.26**	**4.21**	**0.27**
Primary Energy Charges				
O&M Expenses	40.12	41.56	47.21	51.05
Return on Equity	78.36	78.36	78.36	78.36
Interest on Working Capital	4.37	4.36	4.89	5.00
Sub- Total Primary Charges	**122.85**	**124.28**	**130.46**	**134.41**
Tax	10.80	10.84	10.80	10.84
Total Annual Charges	**137.84**	**135.38**	**145.47**	**145.52**

2.10 The Petitioner has claimed changes in Mid Term review for the years FY 2017-18 and FY 2018-19, based on the True-up working, taking base year as FY 2016-17.

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3. OBJECTIONS FILED BY STAKEHOLDERS

3.1 HPSEBL, which is 100% beneficiary of the power generated from BASPA II HEP, has submitted its objections vide M.A. no. 29/2018 dated 22.02.2018 to the Petition filed by the Petitioner. The issues raised by HPSEBL along with response of the Petitioner and Commission's views on the issues are detailed in the subsequent paragraphs.

Installed capacity of Karcham Wangtoo

Stakeholder's Objections

3.2 HPSEBL has raised objection that while briefing about the transfer scheme of BASPA II HEP and Karcham Wangtoo HEP from M/s JVPL to the applicant, the Petitioner in its petitoner has mentioned the installed capacity of Karcham-Wangtoo HEP as 1091 MW instead of 1000 MW.

Petitioner's Reply

3.3 The Petitioner has clarified that as per the scheme of arrangement approved by Hon'ble High Court of Himachal Pradesh, the installed capacity of Karcham Wangtoo HEP is mentioned as 1091 MW. Therefore, in Order to avoid any contradiction to the approved scheme, installed capacity in the petition is mentioned as 1091 MW. However, the Commission has approved the installed capacity vide its Order dated 30.3.2017 for Karcham Wangtoo HEP as 1000 MW.

Commission's View:

3.4 As the petition pertains to Mid-term Performance Review of BASPA for the Control Period FY 2014-15 to FY 2018-19, the capacity of Karcham Wangtoo is unrelated to the current petition.

Capital cost exclusion of Karcham Wangtoo - Jhakri transmission line

Stakeholder's Objections

3.5 HPSEBL has claimed in its objection that as per clause 9 of the HPERC's Order dated 08.12.2017 (in petition 29/2017), the capital cost of Karcham Wangtoo – Jhakri line portion of Baspa – Jhakri line, should be excluded from the capital cost of BASPA II HEP, for the purpose of True-Up.

Petitioner's Reply

3.6 The Petitioner has responded that Order of the Commission dated 08.12.2017 does not suggest that the cost of Karcham-Jhakri portion of the Baspa-Jhakri line has to be reduced from the Capital Cost of BASPA-II. The Petitioner has stated that while HPSEBL had made a prayer for exclusion of the cost of the 400 KV Wangtoo-Jhakri portion of Baspa-Jhakri D/C line from the Capital Cost of BASPA-I, under petition no. 20 of 2017, the said petition was disposed off by the Commission in its Order dated 08.12.2017, without providing any relief to HPSEBL.

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Commission's View:

3.7 In the Order dated 8th Dec 2017 against petition no. 29 of 2017, the Commission has already discussed the matter in detail and disposed off the petition with the following judgement:

"17. We are, therefore, of the considered opinion that the CTU, the CEA and NLDC are the necessary parties, the petition without impeading them is not maintainable, and further in light of the forgoing discussion and the Hon'ble CERC Order dated 07.05.2015, since the parties themselves have agreed as per the undertaking of M/s JPVL, for LILO of Baspa-Jhakri 400kV D/C Transmission Line at Wangtoo, final decision for metering arrangement for Baspa-II HEP energy and payment of transmission charges, etc. by the concerned agencies shall be taken by the Appropriate Regulatory Commission. Accordingly, after decision of Appropriate Commission, a Supplementary Agreement if to be entered into between HPSEBL and M/s JPVL. "

3.8 As also mentioned in the Order, the matter is required to be taken up with inclusion of necessary parties to the appropriate Commission. Until an Order is issued by the Appropriate Commission on this matter, the capital cost of Baspa Jhakri LILO transmission line at Wangtoo cannot be excluded from the overall capital cost of BASPA II HEP. The Petitioner along with HPSEBL are required to discuss the future steps to be undertaken in this regard within three months of issuance of this Order and update the Commission.

Refund of excess amount by Petitioner to HPSEBL

Stakeholder's Objections

3.9 HPSEBL has raised objection that a refund of Rs. 17.16 crore is due from Petitioner to HPSEBL and that the same should be refunded along with carrying cost.

Petitioner's Reply

3.10 The Petitioner has responded that carrying cost should not be charged on the excess amount to be refunded to HPSEBL, as the Board had enough opportunities to deduct the said excess amount from various payments made by HPSEBL to BASPA II HEP. The Petitioner has claimed that a supplementary bill of Rs. 39.73 crore was raised to HPSEBL on 05.05.2015 but HPSEBL did not deduct the excess amount while making the payment. Further, the Petitioner has claimed that HPSEBL has also not bothered to deduct the said amount from regular monthly bills raised by the Petitioner.

Commission's View:

3.11 For the purpose of truing-up, the actual payment made by HPSEBL towards regular invoices as per the 'joint statement' has been considered, which is detailed in Chapter 4 of this Order. The dispute relating to adjustment is an operational issue and should be resolved between the two parties as per the provisions of the PPA.

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Interest on Loans

Stakeholder's Objections

3.12 HPSEBL has objected that while the Petitioner has claimed Rs. 1.09 crore and Rs. 0.18 crore as interest on foreign currency for the year FY 2014-15 and FY 2015-16 respectively, the actual payments made as per the documentary evidence (annexure C of the petition) are only Rs. 0.726458 crore and Rs. 0.1351165 respectively.

Petitioner's Reply

3.13 The Petitioner has responded that the amount of interest on foreign loan actually paid has been submitted in Annexure C of the petition and that the same may be considered for final True-Up.

Commission's View:

3.14 The Commission has considered all submissions of the Petitioner and computed the interest on foreign loan as detailed out in Chapter 4 of this Order for the purpose of True-Up.

Foreign Exchange Fluctuation

Stakeholder's Objections

3.15 HPSEBL has stated that the Commission should consider the claim for foreign exchange fluctuation in terms of section 8.13 and 8.14 of the PPA. HPSEBL has further stated that as per clause 8.14 of the PPA, the rate of exchange between US Dollar and Indian Rupees should be taken as applicable on 15th February of the year preceding tariff year.

Petitioner's Reply

3.16 The Petitioner has responded that foreign exchange rate variation has been claimed in terms of Clause 8.13 of PPA which provides that extra rupee liability on account of foreign exchange variation towards interest payment and loan repayment incurred in the relevant year, shall be payable if the same is directly arises out of the foreign exchange variation subject to limit prescribed.

3.17 The Petitioner has further stated that clause 8.14 of the PPA is only for the limited purpose of computation of adhoc tariff and not for True-Up. The Petitioner has highlighted that Clause 8.14 of the PPA states that for tariff computation (projections) by the company shall be made 30 days prior to each tariff year and shall be made available to the Board for their verification. For this tariff computation, the exchange rate between USD and INR as applicable on 15th February of the year preceding the tariff year for which tariff is to be computed, shall be adopted. Further, it is mentioned that payment shall be made by the Board to the Company at notified rates subject to future adjustments along with interest.

Commission's View:

3.18 The Commission has computed the foreign exchange fluctuation as per clause 8.13 of the PPA. The detailed calculation is provided in Chapter 4 of this Order.

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O&M Charges

Stakeholder's Objections

3.19 HPSEBL has stated that the Petitioner has taken WPI index at base year 2004-05 while the WPI index at base year 2011-12 has been notified by the office of economic advisor, Ministry of Commerce & Industry, Govt. of India. Therefore, WPI may be considered at the base year 2011-12 instead of 2004-05. HPSEBL has also highlighted that for Petitioner has considered an incorrect index in case of CPI.

Petitioner's Reply

3.20 The Petitioner has stated that WPI was considered for the base year 2004-05 because the data for the year 2014-15 to 2016-17 is available for the said series in government publications and the same was also considered by the Hon'ble commission for approving MYT 2015-19.

3.21 For CPI, the Petitioner has stated that data has been used as per government publications in terms of PPA and the same forms part of Application.

Commission's View:

3.22 In the MYT Order, the Commission had shifted from the 1981-82 series of WPI and CPI due to discontinuation of the respective series and had considered the 2004-05 series of Wholesale Price Index (all commodities) and 2001 series of Consumer Price Index (for Industrial workers (All India) as published by the RBI. Accordingly, the Commission has continued with the same series and computed the O&M as per the provisions of the PPA.

Interest on Working Capital

Stakeholder's Objections

3.23 HPSEBL has stated that revenue calculation for determining requirement of working capital should exclude incentive for secondary energy, incentive for higher plant availability and income tax, as they were not considered in the MYT Order dated 06.06.2014.

Petitioner's Reply

3.24 The Petitioner has responded that interest on working capital was approved in MYT Order dated 06.06.2014 by the Hon'ble Commission excluding incentives on higher plant availability, incentive for secondary energy on account of non-availability of actual data at that time. The Petitioner also has stated that the Hon'ble Commission has approved income tax in its MYT Tariff Order dated 06.06.2014 which is subject to actual payment.

3.25 Further, the Petitioner has stated that it is nowhere mentioned in PPA or MYT that interest on working capital need to be calculated excluding incentives on higher plant availability, incentive for secondary energy and income tax. The Petitioner also stated that Hon'ble Commission has approved interest on working capital during truing up for the period 2011-12 to 2013-14 vide its Order dated 30.03.2015 which includes incentives on higher plant availability, incentive for secondary energy and income tax, in terms of PPA. Since HPSEBL has not impugned the

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earlier Orders passed on issues referred herein above and thus it has become final and binding between the Parties on the above issues.

Commission's View:

3.26 The Commission acknowledges the concern raised by HPSEBL. The computation of working capital has been done as detailed in Chapter 4 of this Order.

Incentive for Higher Plant Availability and Secondary Energy

Stakeholder's Objections

3.27 HPSEBL in its objections have stated that the impact of incentives is not considered in the process of Baspa-II HEP tariff determination and this creates a gap on the revenues of HPSEBL, to the extent of the incentive paid on this account in each financial year. Further, HPSEBL has also claimed that it is regularly paying for secondary energy of Baspa-II HEP at a rate of Rs. 3.15 per unit (appox) which is also not considered in the process of tariff determination and leads to gap in revenues for HPSEBL.

3.28 HPSEBL has further requested the Commission to direct Petitioner to get re-determination of the design energy of the BASPA II HEP based on the actual generation during the past 10 years.

Petitioner's Reply

3.29 The Petitioner has submitted that claim of HPSEBL is baseless and does not revisiting the well settled and established position regarding recovery of incentive for secondary energy and also undertaking a redetermination of the design energy of Baspa II HEP.

3.30 The Petitioner has submitted that there is no provision under the PPA that permits redetermination of the design energy, unless the same is on account of a relaxation by the Government in the minimum downstream discharge. Since this is admittedly not the case at hand, there is no reason or justification for the Respondent to desire a redetermination of the design energy.

Commission's View:

3.31 The Commission is of the considered opinion that energy from hydro generating stations cannot be forecasted with accuracy at the time of tariff determination process and therefore the design energy is a fair representation of units that could be generated from hydro generating stations, It is observed that even CERC considers the design energy for tariff determination purposes. Further, it is observed that any revenue gap arising due to variations in uncontrollable parameters is duly accounted for in the ARR for HPSEBL and carrying cost is provided to compensate for such shortfall. Therefore, the claim of HPSEBL does not hold true.

3.32 Also, the current petition is for mid-term performance review and True-Up of FY 2014-15 to FY 2016-17. Changes with respect to design energy, which are part of the PPA signed between the Petitioner and HPSEBL cannot be considered as part of this petition.

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4. ANALYSIS OF THE TRUE-UP PETITION

Introduction

4.1 This Chapter deals with the analysis of the True-Up Petition filed by the Petitioner for the period from FY 2014-15 to FY 2016-17 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 submitted by the Petitioner, suggestions and comments raised by the stakeholders during the public hearing and response submitted by the Petitioner. Various parameters and their computation has been undertaken after giving due consideration to the Power Purchase Agreement signed between Petitioner and 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;

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(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 from the plant

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 12: 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**

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Actual Energy Generation and Plant Availability FY 2014-15 to FY 2016-17

4.11 The Commission has considered the actual generation of energy and plant availability for each year of the Control Period, based on the joint statement issued by the Petitioner and HPSEBL, which is detailed in the table below:

Table 13: Actual Energy Generation and Plant Availability for FY 15 to FY 17

Particulars	FY 15 Actual	FY 16 Actual	FY 17 Actual
Generation of Energy (MUs)			
Available Energy	1,242.40	1,295.76	1,327.69
Saleable Energy (88% of available energy)	1,093.31	1,140.27	1,168.36
Primary Energy	1050.06	1050.06	1050.06
Secondary Energy (Saleable Energy minus primary energy)	43.26	90.21	118.31
Plant Availability (%)			
Normative	90%	90%	90%
Actual	99.84%	98.15%	97.49%

Interest on Loans

4.12 In Order to calculate the interest on loans, the Commission has considered the outstanding loan balances and the applicable interest rates for FY 2014-15 to FY 2016-17 as per the prudence check undertaken by the Commission. The methodology considered for approving the interest for each loan is detailed below:

Domestic Loans

4.13 For truing-up of interest on domestic loans, the Petitioner has continued with the approach followed by the Commission in the MYT Order for the third Control Period i.e. FY 2014-15 to FY 2018-19 and has proposed interest on domestic loans based on the approved outstanding loan balances.

4.14 In absence of a cost-benefit analysis and prior approval for loan restructuring, the Commission in its earlier MYT Order dated 15.07.2011 for the second Control Period FY2011-12 to FY2013-14 had disallowed the restructuring of loans and continued with the previous loan balances approved in its Orders. Continuing with the same methodology, the Commission had approved the interest on domestic loans as part of truing-up of second Control Period and Tariff Order for third Control Period. For, truing-up of FY 2014-15 to FY 2016-17 under the third Control Period, the Commission has adopted the approved closing balances of the loans as per original repayment schedule approved in the MYT Order for the calculation of interest on domestic loans.

4.15 As the ownership of Baspa II HEP has changed during the third Control Period due to sale of the plant by M/s Jaiprakash Power Ventures Limited to M/s JSW Energy Ltd., the plant is now part of M/s Himachal Baspa Power Company Ltd. For the purpose of reassessment, the Commission analyzed the actual loans and interest obligation of the new company i.e. HBPCL.

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4.16 On analyzing the audited accounts of Bapa II HEP submitted along with the tariff petition for the period FY 2014-15 to FY 2016-17, significant variations between the outstanding loans as per the audited accounts and outstanding loans as approved under the MYT Order dated 06.06.2014 were observed.

Table 14: Reconciliation of outstanding loans

(in Rs. Crs.)	FY15	FY16	FY17
Outstanding Loans as per Audit Accounts of BASPA II HEP	413.04	1025.76	1015.64
Outstanding loans as per MYT Order dated 06.06.2014	84.99	9.51	4.44

4.17 The Petitioner was asked to submit detailed interest and debt service schedules for the existing domestic loans, along with their documentary evidence in the discrepancy notes dated 09.02.2018. The Petitioner in its reply dated 16.03.2018 responded that BASPA II HEP demerged from M/s Jaiprakash Power Ventures Limited and became a part of the Himachal Baspa Power Company Limited, which led to re-financing of loans existing as on 31.08.2015. The Petitioner provided a table of comparative interest rates, before and after loan restructuring. The Petitioner claimed that as actual interest rates are higher than the interest rates approved in the MYT Order, it has continued with the closing balance amount as approved in the MYT Order dated 06.06.2014, except for the interest rate of normative loans for the purpose of truing-up

4.18 As per the details submitted by the Petitioner, it was observed that the loan balances as well as the lending banks of the approved and actual loans differed significantly post the restructuring.

4.19 With limitations to validate the loans for capital expenditure due to transfer of plant ownership, the Commission has computed the interest expense as per the approved loan balances regardless of actual loans of the Petitioner.

4.20 The repayments and interest charges on the domestic loans considered by the Commission for truing-up for FY 2014-15 to FY 2016-17 are depicted in the following paragraphs.

IDBI Loan

4.21 An interest rate of 10.50% and repayment of Rs. 7.72 Crore each year has been considered for the truing up of IDBI loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for IDBI loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 15: IDBI loan repayment and interest trued up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	15.45	7.72	0.00
Addition	0.00	0.00	0.00
Principal Repayment	7.72	7.72	0.00
Closing Balance	7.72	0.00	0.00
Interest Rate	10.50%	10.50%	10.50%

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Particulars	FY 15	FY 16	FY 17
Approved Interest	1.12	0.30	0.00

Power Finance Corporation Loan

4.22 An interest rate of 13.15% and repayment of Rs. 17.00 Crore each year has been considered for the truing up of PFC loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for PFC loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 16: PFC Loan repayment and Interest trued up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	12.75	0.00	0.00
Addition	0.00	0.00	0.00
Principal Repayment	12.75	0.00	0.00
Closing Balance	0.00	0.00	0.00
Interest Rate	13.15%	13.15%	13.15%
Approved Interest	0.62	0.00	0.00

IFCI Debentures/ UTI Bank Loan/ Axis Bank Loan

4.23 An interest rate of 10.00% and repayment of Rs. 17.03 Crore each year has been considered for the truing up of IFCI debentures for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for IFCI debentures considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 17: IFCI debentures Repayment and Interest trued up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	34.06	17.03	0.00
Addition	0.00	0.00	0.00
Principal Repayment	17.03	17.03	0.00
Closing Balance	17.03	0.00	0.00
Interest Rate	10.00%	10.00%	10.00%
Approved Interest	2.41	0.70	0.00

IIBI Loan

4.24 An interest rate of 10.50% and repayment of Rs. 1.14 Crore each year has been considered for the truing up of IIBI loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for IIBI loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 18: IIBI Loan Repayment and Interest trued up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	3.41	2.27	1.13

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Particulars	FY 15	FY 16	FY 17
Addition	0.00	0.00	0.00
Principal Repayment	1.14	1.14	1.14
Closing Balance	2.27	1.13	0.00
Interest Rate	10.50%	10.50%	10.50%
Approved Interest	0.28	0.16	0.04

LIC Loan

4.25 An interest rate of 10.50% has been considered for the truing up of LIC loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for LIC loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 19: LIC Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	3.75	2.25	0.00
Addition	0.00	0.00	0.00
Principal Repayment	1.50	2.25	0.00
Closing Balance	2.25	0.00	0.00
Interest Rate	10.50%	10.50%	10.50%
Approved Interest	0.30	0.10	0.00

Bank of Baroda Loan

4.26 An interest rate of 11.75% has been considered for the truing up of Bank of Baroda loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for Bank of Baroda loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 20: Bank of Baroda Loan Repayment and Interest Trued Up for Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	12.50	7.50	0.00
Addition	0.00	0.00	0.00
Principal Repayment	5.00	7.50	0.00
Closing Balance	7.50	0.00	0.00
Interest Rate	11.75%	11.75%	11.75%
Approved Interest	1.12	0.36	0.00

Punjab National Bank Loan

4.27 An interest rate of 10.50% and annual repayment of Rs. 4.49 Cr has been considered for the truing up of PNB loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT

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Order. The repayment and interest charges for PNB loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 21: PNB Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	8.98	4.49	0.00
Addition	0.00	0.00	0.00
Principal Repayment	4.49	4.49	0.00
Closing Balance	4.49	0.00	0.00
Interest Rate	10.50%	10.50%	10.50%
Approved Interest	0.67	0.20	0.00

Indian Overseas Bank Loan

4.28 An interest rate of 10.50% and annual repayment of Rs. 4.45 Cr has been considered for the truing up of IOB loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for IOB loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 22: IoB Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	9.10	4.55	0.00
Addition	0.00	0.00	0.00
Principal Repayment	4.55	4.55	0.00
Closing Balance	4.55	0.00	0.00
Interest Rate	10.50%	10.50%	10.50%
Approved Interest	0.68	0.20	0.00

State Bank of Indore Loan

4.29 An interest rate of 10.50% and annual repayment of Rs. 1.91 Cr has been considered for the truing up of SBoI loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for SBoI loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 23: SBoI Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	3.82	1.91	0.00
Addition	0.00	0.00	0.00
Principal Repayment	1.91	1.91	0.00
Closing Balance	1.91	0.00	0.00
Interest Rate	10.50%	10.50%	10.50%
Approved Interest	0.28	0.08	0.00

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State Bank of Hyderabad Loan

4.30 An interest rate of 11.75% and annual repayment of Rs. 2.00 Cr has been considered for the truing up of SBoH loan for the Control Period FY 2014-15 to FY 2016-17 in line with the MYT Order. The repayment and interest charges for SBoH loan considered for truing-up of the Control Period FY 2014-15 to FY 2016-17 are tabulated below:

Table 24: SBoH Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	4.00	2.00	0.00
Addition	0.00	0.00	0.00
Principal Repayment	2.00	2.00	0.00
Closing Balance	2.00	0.00	0.00
Interest Rate	11.75%	11.75%	11.75%
Approved Interest	0.33	0.10	0.00

IDBI Loan (New)

4.31 In the MYT Order dated 15.07.2011 for period FY 2011-12 to FY 2013-14, the Commission had approved fresh loan of Rs 100 Crore from IDBI bank in lieu of retired loans of CBI (Rs 36.36 Cr.) , SBoM (Rs 9.54 Cr.) and ICICI bank (Rs 50 Cr. and Rs 4.10 Cr.) . The Commission had approved 32 repayment installments spanning over 8 years. The Commission has continued with the annual repayment of Rs. 12.50 Cr. and interest rate of 11.50% approved for IDBI loan (new) and computed the interest and repayment as given in the table below :-

Table 25: IDBI (New) Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	25.00	12.50	0.00
Addition	0.00	0.00	0.00
Principal Repayment	12.50	12.50	0.00
Closing Balance	12.50	0.00	0.00
Interest Rate	11.50%	11.50%	11.50%
Approved Interest	1.98	0.54	0.00

IFCI Loan (New)

4.32 In the MYT Order dated 15.07.2011 for period FY 2011-12 to FY 2013-14, the Commission had approved fresh loan of Rs 47.82 Crore from IFCI bank in lieu of retired loans of SBoT (Rs 18.18 Cr.) , SBoP (Rs 16.36 Cr.) and ICICI bank (Rs 13.28 Cr.). The Commission had approved 32 repayment installments spanning over 8 years. The Commission has continued with the annual repayment of Rs. 5.98 Cr. and interest rate of 11.50% approved for IFCI loan (new) and has computed the interest and repayment as given in the table below:

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Table 26: IFCI (New) Loan Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	11.96	5.98	0.00
Addition	0.00	0.00	0.00
Principal Repayment	5.98	5.98	0.00
Closing Balance	5.98	0.00	0.00
Interest Rate	11.50%	11.50%	11.50%
Approved Interest	0.97	0.28	0.00

Normative Loan-1

4.33 The Commission had approved a normative loan of Rs. 41.37 Crore in the True-Up Order dated 23.04.2012 for meeting the debt requirement for additional capitalization. Tenure of 11 years was considered against the normative loan. Annual weighted average rate of interest on approved rupee term loan was to be considered as the interest rate against this normative loan.

4.34 The Petitioner has claimed a reduced interest rate of 10.61% in FY 2014-15 & FY 2015-16 and 10.50% in FY 2016-17 in its True-Up petition for the normative loan. In its reply dated 16.03.2018 the Petitioner explained to have taken the interest rate for normative loans based on the earlier True-Up Order of the Commission dated 30.03.2015 in which the Commission had considered weighted average interest rate for normative loans as 10.61% in FY 2013-14.

4.35 As the existing approved domestic loans considered by the Commission are approaching closure with majority of them closing during FY15 and FY16, the Commission has considered the interest rate of 10.61% for FY2014-15 and FY2015-16 and 10.50% for FY2016-17 in line with the submission of the Petitioner. The Commission has continued with the closing balance approved in the previous True-Up Order for approving the repayment and interest charge on the Normative loan-1 which is also provided in the table below:

Table 27: Normative Loan-1 Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	15.04	11.28	7.52
Addition	0.00	0.00	0.00
Principal Repayment	3.76	3.76	3.76
Closing Balance	11.28	7.52	3.76
Interest Rate	10.61%	10.61%	10.50%
Approved Interest	1.40	1.00	0.59

Normative Loan-2

4.36 The Commission had approved a normative loan of Rs. 1.80 Crore in the MYT Order dated 06.06.2014 for meeting the debt requirement for payment of 6th provisional bill raised by SJVNL towards ICF. Tenure of 11 years was considered against the normative loan. Annual

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weighted average rate of interest on approved rupee term loan was to be considered as the interest rate against this normative loan.

4.37 The Commission has adopted the same interest rate as considered for Normative Loan 1 for calculating the interest for Normative Loan – 2. Further, the Commission has continued with the closing balance approved in the previous True-Up Order for approving the repayment and interest charge on the Normative loan-2 which is also provided in the table below:

Table 28: Normative Loan-2 Repayment and Interest Trued Up for the Control Period FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening balance	1.22	1.04	0.86
Addition	0.00	0.00	0.00
Principal Repayment	0.18	0.18	0.18
Closing Balance	1.04	0.86	0.68
Interest Rate	10.61%	10.61%	10.50%
Approved Interest	0.12	0.10	0.08

Foreign Currency Loans

4.38 The Petitioner in its reply dated 16.03.2018 has submitted the details of actual interest payments and loan repayments made for foreign currency loans for the truing-up for FY 2014-15 to FY 2016-17. The Petitioner has also submitted a Bank Certificate, stating the applicable foreign exchange rate for these payments.

4.39 The details with respect to interest payment for each foreign currency loan as submitted by Petitioner in annexure C of the petition is detailed below:

Table 29 Details of interest payments made for foreign currency loans as submitted by Petitioner

Date of payment	Interest Amount (in US$)	Rate of US$	Interest Amount (in Rs.)		
			FY 15	FY16	FY17
Crédit Agricole					
23.04.2014	63,844.84	61.19	39,06,854		
27.10.2014	42,563.09	61.45	26,15,502		
24.04.2015	21,281.54	63.49		13,51,185	
Siemens Financial Services GmBH					
24.07.2014	4,518.88	60.10	2,71,585		
23.01.2015	2,281.66	61.48	1,40,276		
HypoVereinsbank (Unicredit Bank AG)					
24.07.2014	3,004.07	60.10	1,80,545		
23.01.2015	1,537.23	61.48	94,509		
IDBI Bank					
27.06.2014	921.10	60.67	55,887		

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Date of payment	Interest Amount (in US$)	Rate of US$	Interest Amount (in Rs.)		
Total Interest			72,64,958	13,51,165	-

4.40 The details with respect to loan repayment for each foreign currency loan as submitted by Petitioner is detailed below:

Table 30 Details of loan repayments made for foreign currency loans as submitted by Petitioner

Date of payment	Repayment Amount (in US$)	Rate of US$	Repayment Amount (in Rs.)		
			FY 15	FY16	FY17
Crédit Agricole					
23.04.2014	7,43,734.58	61.19	4,55,09,119		
27.10.2014	7,43,734.58	61.45	4,57,02,490		
24.04.2015	7,43,734.58	63.49		4,72,19,708	
Siemens Financial Services GmBH					
24.07.2014	4,80,632.78	60.10	2,88,86,030		
23.01.2015	4,80,632.78	61.48	2,95,49,303		
HypoVereinsbank (Unicredit Bank AG)					
24.07.2014	4,75,725.08	60.10	2,85,91,077		
23.01.2015	4,75,725.08	61.48	2,92,47,578		
IDBI Bank					
27.06.2014	69,120.00	60.00	41,47,200		
Total Repayment			21,16,32,798	4,72,19,708	-

4.41 It was observed that the details of interest on foreign loans submitted by the Petitioner as highlighted in the tables above were lower than the interest on foreign loans claimed in the petition. HPSEBL in its comments have also pointed towards the claimed interest amount of Rs. 1.09 crore and Rs. 0.18 crore against foreign currency loans for FY 2014-15 and FY 2015-16 respectively, to be higher than the actual payments made as per the documentary evidence (annexure C of the petition) which were Rs. 0.73 crore and Rs. 0.14 crore, respectively. In response to the query, the Petitioner in its reply dated 16.03.2018, clarified that the interest amount mentioned in annexure C of the petition reflects the actual payment made for interest on foreign currency loan. The Petitioner further mentioned that higher interest rates existed at the time of approval of MYT Tariff Petition for FY2015-19, which was considered for calculation of interest in petition. The Petitioner also submitted that the lower interest payments mentioned in Annexure C of the petition may be considered for final True-Up.

4.42 Based on the response of the Petitioner, the Commission has calculated the applicable interest rates for various foreign currency loans as per the information provided in Annexure C of the petition and applied on the approved loan outstanding and repayment schedule for truing-up of FY 2014-15 to FY 2016-17 as depicted in the following paragraphs.

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Crédit Agricole (earlier Crédit Lyonnais)

4.43 The Commission had approved a loan amount of US $17.91 Million from Credit Lyonnais with tenure of 12 years. The Commission has trued up the interest payments as per the methodology detailed above. For the calculation of principal repayment and interest amount in rupees crore, the actual foreign exchange rate as per the bank statements submitted by the Petitioner are considered.

Table 31 Crédit Agricole Loan repayment and Interest trued up for the Control Period FY15 to FY17

Particulars	FY 15	FY 16	FY 17
In US$ Mn			
Opening balance	2.23	0.74	-
Addition	-	-	-
Principal Repayment	1.49	0.74	-
Closing Balance	0.74	-	-
Approved Interest	0.11	0.02	-
In Rs. Crore			
Principal Repayment	9.12	4.72	-
Approved Interest	0.65	0.14	-

HypoVereinsbank (Unicredit Bank)

4.44 The Commission had approved a loan amount of US $11.31 Million from HypoVereinsbank with tenure of 12 years. The Commission has trued up the interest payments as per the methodology detailed above. For the calculation of principal repayment and interest amount in rupees crore, the actual foreign exchange rate as per the bank statements submitted by the Petitioner are considered.

Table 32 HypoVereinsbank (Unicredit Bank) Loan repayment and Interest trued up for FY15 to FY17

Particulars	FY 15	FY 16	FY 17
In US$ Mn			
Opening balance	0.94	-	-
Addition	-	-	-
Principal Repayment	0.94	-	-
Closing Balance	-	-	-
Approved Interest	0.006	-	-
In Rs. Crore			
Principal Repayment	5.73	-	-
Approved Interest	0.036	-	-

Siemens financials (Loan taken over from VA Tech Finance)

4.45 The Commission had approved a loan amount of US $11.48 Million from Siemens financials with tenure of 12 years. The Commission has trued up the interest payments as per the

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methodology detailed above. For the calculation of principal repayment and interest amount in rupees crore, the actual foreign exchange rate as per the bank statements submitted by the Petitioner are considered.

Table 33 Siemens financials Loan repayment and Interest trued up for the Control Period FY15 to FY17

Particulars	FY 15	FY 16	FY 17
In US$ Mn			
Opening balance	0.86	-	-
Addition	-	-	-
Principal Repayment	0.96	-	-
Closing Balance	-	-	-
Approved Interest	0.007	-	-
In Rs. Crore			
Principal Repayment	5.82	-	-
Approved Interest	0.041	-	-

IDBI Foreign Currency Loan

4.46 The Commission had approved a loan amount of US $2.62 Million from IDBI with tenure of 11 years and 1 year moratorium. The Commission has trued up the interest payments as per the methodology detailed above. For the calculation of principal repayment and interest amount in rupees crore, the actual foreign exchange rate as per the bank statements submitted by the Petitioner are considered.

Table 34 IDBI Foreign Currency Loan repayment and Interest trued up for the Control Period FY15 to FY17

Particulars	FY 15	FY 16	FY 17
In US$ Mn			
Opening balance	0.07	-	-
Addition	-	-	-
Principal Repayment	0.07	-	-
Closing Balance	-	-	-
Approved Interest	0.001	-	-
In Rs. Crore			
Principal Repayment	0.39	-	-
Approved Interest	0.005	-	-

Total Interest and Repayment

4.47 The following table depicts the total interest and repayment approved for domestic and foreign currency loans for Control Period.

Table 35: Total Interest and Repayments (Rs. Cr.)

Particulars	FY15	FY16	FY17

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Particulars	FY15	FY16	FY17
Domestic Loans – Interest Payments	12.28	4.13	0.72
Foreign Currency Loans – Interest Payments	0.73	0.14	-
Total Interest Payment (Rs. Cr.)	**13.01**	**4.27**	**0.72**
Domestic Loans – Repayments	80.50	71.00	5.08
Foreign Currency Loans – Repayments	21.06	4.72	-
Total Repayments (Rs. Cr.)	**101.56**	**75.73**	**5.08**

Depreciation and Advance Against Depreciation (AAD)

4.48 The Commission has trued-up the depreciation and advance against depreciation for the Control Period FY 2014-15 to FY 2016-17 as per Clause 8.6.5.1 of the PPA. The amount of depreciation and computation of advance against depreciation for the Control Period FY 2014-15 to FY 2016-17 as per the loan repayment approved above is detailed below:

Table 36: Trued Up Depreciation and Advance against Depreciation for the Control Period for FY15 to FY17 (Rs. Cr.)

Particulars		FY 15	FY 16	FY 17
1/12th of the Loans	A	95.22	95.22	95.22
Repayment of the Loans as considered for working out Interest on Loan	B	101.56	75.73	5.08
Minimum of the Above	C	95.22	75.73	5.08
Less: Depreciation during the year	**D**	**70.19**	**70.19**	**70.19**
E	E=C-D	*25.03*	*5.53*	*-65.12*
Cumulative Repayment of the Loan as considered for working out Interest on Loan	F	1082.69	1158.42	1163.50
Less: Cumulative Depreciation	G	1022.52	1117.74	1193.47
H	H=F-G	*60.18*	*40.68*	*0.00*
Advance Against Depreciation	**I= Min. of E & H**	**25.03**	**5.53**	**-65.12**
Depreciation + AAD	**(D + I)**	**95.22**	**75.73**	**5.08**

Foreign Exchange Fluctuation

4.49 The Petitioner has requested for variation on account of foreign currency fluctuation in the repayment of foreign currency loans.

4.50 In accordance with clause 8.13 of the PPA, and based on prudence check of bank certificate regarding loan repayments, the fluctuation in foreign exchange rate is allowed for repayment amount of foreign currency loans, as per approved repayment schedule as follows:

Table 37 Trued Up Foreign Exchange Fluctuation for FY15 to FY17

Particulars	Unit	FY 15	FY 16	FY 17
Total Annual Repayments for foreign currency loans	USD Mn	3.45	0.74	-

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Particulars	Unit	FY 15	FY 16	FY 17
Total Annual Repayments for foreign currency loans, at initial Foreign Exchange Rate of Rs. 47 per USD	Rs. Cr.	16.22	3.50	-
Total Annual Repayments for foreign currency loans, at actual Foreign Exchange Rate as on date of loan repayment	Rs. Cr.	21.06	4.72	-
Approved Foreign Exchange Fluctuation	**Rs. Cr.**	**4.83**	**1.23**	-

Operations and Maintenance Expenses

4.51 The Commission in its MYT Order dated 06.06.2014 had computed the O&M charges as per clause 8.7.2 of the PPA, which allows for O&M escalation at weighted average of WPI and CPI indices, 11th year onwards after COD. The 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"

4.52 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

$$\text{Percentage rate of annual escalation} = \left(0.3 \times \frac{W_1 - W_0}{W_0} + 0.7 \times \frac{L_1 - L_0}{L_0}\right) \times 100\%$$

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*

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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 me made as soon as the published indices for the month of March of that tariff year become available."

4.53 In the MYT Order dated 06.06.2014, the Commission had taken WPI and CPI index of December 2013 and December 2014, to calculate the escalation factor for period FY 2014-15 to FY 2016-17, subject to truing up. The Petitioner has now requested change in the O&M expenses based on actual WPI and CPI indices.

4.54 In the MYT Order dated 06.06.2014 for the Control Period FY 2014-15 to FY 2018-19, the Commission had taken note of the following:

"4.57 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, it is observed that the 1981-82 series of CPI and WPI indices have been discontinued. Therefore, the Commission has considered the 2004-05 series of Wholesale Price Index (all commodities) and 2010 series of Consumer Price Index (for Industrial workers (All India) as published by the RBI."

4.55 Therefore, for truing-up, the Commission has considered the actual values of the respective series of WPI and CPI for approving the O&M expenses. In accordance with schedule XI of the PPA, the Commission has considered WPI and CPI indices for the month March immediately preceding the financial year under review. The table below summarizes the computation of escalation factor as per the provisions of the PPA:

Table 38: WPI and CPI considered along with O&M escalation factor for FY15 to FY17

Particulars	FY14	FY15	FY16	FY17
WPI All Commodities (base year 2004-05)				
For the month of March	180.3	176.1	175.3	185.8
Change	6.00%	-2.33%	-0.45%	5.99%
CPI for Industrial Workers (Base year 2001)				
For the month of March	239	254	268	275
Change	6.70%	6.28%	5.51%	2.61%
Escalation factor	***6.49%***	***3.69%***	***3.72%***	***3.63%***

4.56 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

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capitalization as per Order dated 24th January, 2011), after excluding the cost of ICF for which the O&M is computed as per the agreement with SJVNL.

4.57 With respect to the O&M expense being paid by the Petitioner to SJVNL for the Inter Connection Facility (ICF), the Commission in its MYT Order dated 06.06.2014 had approved additional O&M expenses of 0.25% towards ICF from the date of commissioning of the project as per the methodology used in previous Orders, along carrying cost for respective years.

4.58 The Commission has calculated service tax on the O&M cost for ICF based on the applicable Service Tax rates, as described in the table below:

Table 39 Details of applicable Service Tax/GST rates

Particulars	2014-15	2015-16			2016-17	
		Apr – May	Jun – Nov	Dec – Mar	Apr	May – Mar
Service Tax Rate	12.36%	12.36%	14.00%	14.50%	14.50%	15.00%
Wtd. Avg.	**12.36%**	**13.89%**			**14.96%**	

4.59 The total trued-up O&M expenses for the Control Period FY2011-12 to FY2013-14 are detailed in table below:

Table 40: Trued-Up O&M Expenses for FY 15 to FY 17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Base O&M Expenses (excluding additional capitalization & ICF facility)	32.21	33.41	34.62
Add: O&M expense towards additional capitalization approved	1.67	1.73	1.79
Add: O&M expense towards ICF facility	1.77	1.87	1.99
Add: Service Charge on ICF O&M Expenses	0.22	0.26	0.30
Total O&M Expenses Approved	**35.86**	**37.27**	**38.70**

Return on Equity (RoE)

4.60 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."

4.61 The Commission in its MYT Order dated 06.06.2014 had approved the Return on Equity (RoE) as per Section 8.7.3 of the PPA, considering 16% return per annum on the approved equity base. The Petitioner in its True-Up petition has not requested any change in the RoE amount. The Commission has therefore allowed the RoE amount as per the MYT Order for period FY 2014-15 to FY 2016-17, without any change as follows.

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Table 41: Return on Equity for Control Period for FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Opening Balance of Equity	489.72	489.72	489.72
Additions During the Year	-	-	-
Closing Balance of Equity	489.72	489.72	489.72
Rate Of Return	16%	16%	16%
Return on Equity	78.36	78.36	78.36

Interest on Working Capital

4.62 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

4.63 The rate of interest for calculating the interest on working capital has been taken as per the SBI PLR as on 1st April of the respective year of the Control Period for FY 2014-15 to FY 2016-17 as shown in table below:

Table 42: Trued Up Interest on Working Capital for FY 2014-15 to FY 2016-17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
1/12th of O&M Expenses	2.99	3.11	3.22
Maintenance Spares 12% of O&M Expenses	4.30	4.47	4.64
Receivables equivalent to 2 months average billing	51.31	44.83	30.41
Total Working Capital	**58.60**	**52.41**	**38.28**
Rate of Interest	*14.75%*	*14.75%*	*14.05%*
Interest on Working capital	**8.64**	**7.73**	**5.38**

Incentive for Secondary Energy

4.64 The computation of incentives has been detailed in the Section 8.9 of the PPA on "Incentive for Secondary Energy" and Section 8.10 of the PPA on "Incentive on Account of Higher Plant Availability".

4.65 As per the Section 8.9.1 of the PPA:

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"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..."

4.66 The MYT Order dated 06.06.2014 had assumed nil secondary energy, subject to truing up exercise. The Petitioner has claimed Incentive for Secondary Energy, as per the actual energy delivered in period FY 2014-15 to FY 2016-17, and has submitted jointly signed statement of energy delivered to HPSEBL.

4.67 Considering this energy delivered by BASPA II HEP to HPSEBL, the Commission has calculated the incentive for secondary energy as per the terms of clause 8.9.1 of the PPA, as detailed hereunder:

Table 43: Trued-up Incentive for Secondary Energy

Particulars	FY 15	FY 16	FY 17
Equity (Rs. Cr.)	489.72	489.72	489.72
Incentive Limit (10% of Equity) (Rs. Cr.)	48.97	48.97	48.97
Rate for Secondary Energy (10% of Equity/155 MU)	3.16	3.16	3.16
Secondary Energy Generation (MU)	43.26	90.21	118.31
Incentive on Secondary Energy (Rs. Cr.)	**13.67**	**28.50**	**37.38**

Incentive for Higher Plant Availability

4.68 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."

4.69 The MYT Order dated 06.06.2014 had assumed normative plant availability and thereby nil incentive for higher plant availability, subject to truing up exercise. The Petitioner has claimed Incentive for Higher Plant Availability, as per the actual availability of the plant. The Petitioner has submitted jointly signed statement of plant availability by HPSEBL.

4.70 The Commission, for the Control Period, has considered actual plant availability for approval of incentive on higher plant availability which is given in the table below:

Table 44: Trued Up Incentive on Higher Plant Availability for period FY15 to FY17

Particulars	FY 15	FY 16	FY 17

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Particulars	FY 15	FY 16	FY 17
Normative Plant Availability (%)	90.00	90.00	90.00
Actual Plant Availability (%)	99.84%	98.15%	97.49%
Higher Plant Availability (%)	9.84%	8.15%	7.49%
Incentive (Rs. Cr.)	9.79	9.79	9.79

Income Tax

4.71 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."

4.72 The plant was availing tax holiday for the ten year period post commission. In the MYT Order dated 06.06.2014 for the third Control Period of FY2014-15 to FY2018-19, the Commission had observed that the tax holiday period was complete and therefore had approved tax as per the methodology prescribed in Clause 8.11.1 of the PPA.

4.73 However in the True-Up petition, the Petitioner has claimed True-Up for income tax on the basis of MAT for each year. In response to the queries of the Commission for justifying the reason for claiming MAT instead of tax in accordance with Clause 8.11.1 of the PPA, the Petitioner submitted that Baspa II HEP and Karcham Wangtoo HEP are the two generating plants under M/s HBPCL. The Petitioner further submitted that as the Karcham Wangtoo HEP is availing tax holiday, the total tax liability of M/s HBPCL is worked out as per MAT in line with the provisions of Income Tax Act. In accordance with the clarification provided by the Petitioner, the Commission has continued with the calculation of tax liability for BASPA II HEP under the MAT provisions as also considered in the previous true-up Orders.

4.74 The Petitioner has submitted supporting documents of Income Tax Return (ITR), Audited Accounts for BASPA II HEP and the copies of Advance Tax Challan for the verification of tax calculations. It was observed by the Commission that the tax amount as per these three supporting set of documents were not matching.

Table 45: Reconciliation of Tax Amount (Rs. Cr.)

Particulars	FY15	FY16	FY17
Tax as per Audited Accounts of BASPA II	36.27	11.87	7.54
Tax as per ITR of JPVNL/ HBPCL	19.69	33.50	35.93

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Particulars	FY15	FY16	FY17
Tax as per Advance Tax Challan	35.77	16.87	8.63

4.75 The Petitioner was required to provide clarification with respect to the discrepancy observed in the tax amount. In its reply dated 07.08.2018, the Petitioner submitted the following with respect to the mismatch in tax amounts between Audited Accounts, ITR and Advance Tax Challans –

a. The reason for tax amount as per Audited Accounts of Baspa II HEP for FY2014-15 not matching with tax amount as per ITR is that JPVL as a Company, had 5 power plants running at different locations/states, and each power plant had different regulatory body to allow different tariff. However, combined profit or loss of JPVL (all 5 power plants) was assessed by the Income tax authorities. On account of this, ITR of JPVL shows tax liability of Rs. 19.69 crore while actual advance tax challans paid for Baspa II were of Rs. 35.77 crore.

b. The reason for tax amount as per Audited Accounts of Baspa II HEP for FY2015-16 not matching with tax amount as per ITR or Tax as per Advance Tax Challans, is that since BASPA II HEP was transferred to the Petitioner by M/s JPVL in the middle of the year in Aug 2015 and that the audited accounts of Baspa II finalised by JPVL, for the period 1.4.15 to 31.8.15 did not reflect Income tax, since post scheme of arrangement implementation, tax liability ascertained by JPVL for FY 2015-16, was done at corporate level for its all the power plants. Therefore, the Petitioner claimed that the tax amount of Rs. 11.87 cr reflecting in Audited Accounts of BASPA II HEP for FY2015-16 is effectively only for the period of Sep 2015 to Mar 2016 when the plant was owned by the Petitioner. The Petitioner further claimed that tax payable for Baspa II HEP would have been Rs. 38.14 crore on its combined PBT of Rs. 178.39 crore for FY 2015-16, if entity would have been under same control, before scheme of arrangement.

c. The Tax as per Advance Tax Challans does not match with the Tax as per Audited Accounts or Tax as per ITR because advance tax working is made based on few assumptions till 15th March every year and advance tax is paid accordingly on or before 15th March, while audited accounts reflect actual tax liability ascertained by the Company after annual closure of the books of accounts and statutory audits.

4.76 Considering the clarifications submitted by the Petitioner and rationale provided for applicability of MAT, the Commission has decided to continue with calculation of tax liability for BASPA II HEP based on methodology approved by Hon'ble ATE in its Order dated 21st October, 2011 for MAT calculations. In conformity with clause 8.11.1 of the PPA which specify that under no circumstances the actual tax liability payable by the Board shall be more than income tax actually payable by the Company, the Commission has considered the actual tax payout equal to the audited accounts for the Baspa plant submitted by the Petitioner. Subsequently, the lower of Tax as per MAT calculations and Tax as per Audited Accounts of the BASPA II HEP has been considered for approval of tax. However, the Commission observed that the separate accounts of the plant for the period under M/s JPVL for FY2015-16 (i.e. Apr 2015 - Aug 2015) did not include any tax liability. The Petitioner in its response has clarified that the audited accounts of Baspa II finalised by JPVL did not reflect Income tax as the tax liability was ascertained at corporate level for all its power plants under the scheme of arrangement for transfer. Therefore, the Commission has considered the advance tax paid by

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M/s JPVL for the period 1.04.2015 to 31.08.2015 and actual tax recorded in the audited accounts of plant for the balance period of FY2015-16. The approved tax amount for FY2014-15 to FY2016-17 is based on the audited accounts and other available information submitted by the Petitioner and therefore shall be reviewed subject to final assessment.

4.77 The income tax approved by the Commission against True-Up of FY 2014-15 to FY 2016-17 is provided in table below:

Table 46: Trued-up Tax for the Control Period FY 15 – FY 17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Total Revenue	**271.76**	**254.90**	**206.55**
O&M Expenses	23.89	21.12	26.82
Interest	38.27	51.21	113.64
Depreciation	47.73	46.98	33.25
(B)Total Expenses	**109.89**	**119.31**	**173.71**
(C)Profit eligible for MAT (A-B)	161.87	135.59	32.84
(D)MAT Rate	20.96%	21.34%	21.34%
MAT now calculated (C*D)	**33.93**	**28.93**	**7.01**
Actual Tax as per Audited Accounts	36.27	11.87	7.54
Tax paid by JPVL as per Challan	-	5.00	-
Total Tax Actual Paid	**36.27**	**16.87**	**7.54**
Approved Tax (Lower of MAT and Actual Tax Paid)	**33.93**	**16.87**	**7.01**

Amortization of Cost of Debt Restructuring

4.78 The Commission in its MYT Order dated 06.06.04 for period FY 2014-15 to FY 2016-17 had calculated the repayment for principle amount of debt restructuring and its associated carrying cost as per the approach approved in the MYT Order for FY2011-12 to FY2013-14. The principal amount of the debt restructuring expenditure has been considered to be recovered over a period of eight years as part of the capacity charges beginning FY 2008-09 at a carrying cost of 8% p.a. The Petitioner in its True-Up petition did not request any change in these amounts. The Commission has therefore allowed the Cost of Debt Restructuring as per the MYT Order for period FY 2014-15 to FY 2016-17, without any change as follows.

Table 47: Interest on Cost of Debt Restructuring (Rs. Cr.)

Particulars	FY 15 Approved	FY 16 Approved	FY 17 Approved
Total Opening Balance	17.71	8.85	-
Total Drawdowns	-	-	-
Total Repayment	8.85	8.85	-
Total Closing Balance	8.85	-	-
Rate of Interest	8%	8%	-
Total Interest	**1.06**	**0.35**	-

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Annual Fixed Charge for BASPA II HEP

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

Table 48: Trued-up Annual Fixed Charge for BASPA-II HEP for Control Period FY 15 - FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Capacity Charges			
Interest on outstanding loans	13.02	4.27	0.72
Depreciation + AAD	95.22	75.73	5.08
Interest on loan related to debt restructuring	1.06	0.35	0.00
Repayment of loan related to debt Restructuring	8.85	8.85	0.00
Application fee	0.05	0.05	0.05
Foreign Exchange Fluctuation (for loan repayment)	4.83	1.23	0.00
Sub-total Capacity Charges	**123.04**	**90.48**	**5.85**
Primary Energy Charges			
O&M Charges	35.86	37.27	38.70
Return on Equity	78.36	78.36	78.36
Interest on Working Capital	8.64	7.73	5.38
Additional True up of Expenses on capex of 2.57 cr. on ICF	0.17		
Cumulative Additional O&M Expense	2.96		
Service Tax on Cumulative Additional O&M Expense	1.44		
Sub-total Primary Charges	**127.44**	**123.36**	**122.43**
Incentives and Taxes			
Incentive for Secondary Energy	13.67	28.50	37.38
Incentive for Higher Plant Availability	9.79	9.79	9.79
Tax	33.93	16.87	7.01
Sub-total Incentives and Taxes	**57.39**	**55.17**	**54.18**
Total Annual Fixed Charges	**307.87**	**269.00**	**182.46**

Amount Payable by the Board

4.80 As part of the True-Up, the Petitioner has submitted year-wise payment received as shown in the following table:

Table 49: Payment Received from HPSEBL as per Petition (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Bill raised by Petitioner	319.77	270.22	188.37

4.81 The amount submitted as part of the petition did not reconciled with the audited accounts submitted by the Petitioner. The Petitioner was asked to submit the jointly reconciled statement of payment made by HPSEBL during each year i.e. FY2014-15 to FY2016-17. As

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part of clarifications, the Petitioner submitted the jointly reconciled statement and provided clarifications for adjustments undertaken in amount provided in statement values.

4.82 It is observed that the invoices for FY2015-16 are inclusive of the arrears and interest on account of truing-up approved by the Commission. Further, HPSEBL has undertaken adjustments in the year end invoices for FY2014-15 and FY2015-16 resulting in the claimed amount.

4.83 The Commission has recomputed the amount paid by HPSEBL by excluding the amount towards arrears receivable/payable by the Board along with the interest for past years, adjustments made in the year-end invoices, etc. for the period FY2014-15 to FY2016-17 as per the jointly signed statement provided by the Petitioner. The revenue considered by the Commission for true-up of the respective years after adjustments are as provided below:

Table 50: Amount paid by HPSEBL for FY15 to FY17 (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17
Invoice Amount	319.77	274.31	189.36
Adjustments:			
Arrears on account of true-up for previous Control Period along with interest	-	(3.48)	-
Difference in year-end invoice and payment	-	(0.60)	(0.98)
Amount paid by HPSEBL	**319.77**	**270.22**	**188.39**

4.84 The computations of the revenue surplus / gap as per the trued-up ARR and revenue paid by HPSEBL is shown in the following Table:

Table 51: Approved Revenue Surplus/ (Gap) by the Commission (Rs. Cr.)

Particulars	FY 15	FY 16	FY 17	FY18
Total Annual Fixed Charges	307.87	269.00	182.46	
Payment made by HPSEBL towards invoices	319.77	270.22	188.39	
Revenue Surplus/ (Gap)	**11.90**	**1.22**	**5.93**	-
Opening Surplus / (Gap)	-	12.78	15.97	24.56
Surplus / (Gap) for the year	11.90	1.22	5.93	-
Closing Balance of Surplus / (Gap)	11.90	13.99	21.90	24.56
Average Balance	5.95	13.39	18.93	24.56
Interest Rate	*14.75%*	*14.75%*	*14.05%*	*13.85%*
Interest	0.88	1.97	2.66	3.40
Closing Balance of Surplus / (Gap)	**12.78**	**15.97**	**24.56**	**27.96**

4.85 The closing balance of arrears payable to HPSEBL at the end of FY 2017-18 is Rs. 27.96 Crores. The Commission directs the Petitioner to pay/ adjust the amount along with the carrying cost for the balance period of FY 2018-19 in three installments from the date of issuance of this Order.

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5. Analysis of the Mid Term Review Petition

5.1 As part of the Mid-term Review Petition filed, the Petitioner has also proposed review of the ARR for FY2017-18 and FY2018-19 considering the base year as FY2016-17. The Petitioner in its Petition has also request to condone the delay in filing of the Mid-term Review and True-Up Petition as the same was due to delay in compiling of the information/ data.

5.2 It is observed that the Petitioner has submitted the Petition for Mid-Term Review on 29.12.2017, which is already delayed significantly considering the requirement of 120 days prior to close of FY2016-17 i.e. 30.11.2016. Further, it is observed that the variation in revised ARR proposed by the Petitioner with respect to approved ARR for FY2017-18 and FY2018-19 is marginal and would only lead to a small change in the overall ARR. At the same time the entire FY2017-18 and more than six months of FY2018-19 are already complete and the Petitioner has recovered a large part of the ARR as per the approved ARR for the respective years. Therefore, in view of considerable time that is already over, the Commission feels it appropriate to continue with the approved ARR for FY2017-18 and FY2018-19 as per the MYT Order dated 6th June 2014 and shall True-Up the same at the end of the Control Period based on the audited accounts of the Petitioner.

5.3 The Petitioner vide MA no. 114/2018 dated 28.08.2018 has also submitted additional claim to recover filing fees of present true-up petition and charges for publication of advertisement with respect to the petition in the newspaper. It is observed that the amount towards petition and advertisements have been paid during FY2018-19. Since the Commission has not revised the ARR for FY2017-18 and FY2018-19, these amounts may be considered at the time of truing-up for the respective years based on prudence check.

5.4 The approved ARR for FY2017-18 and FY2018-19 as per the MYT Order is restated below:

Table 52: MYT Approved ARR for BASPA-II HEP for period FY18 and FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Capacity Charges		
Interest on outstanding loans	0.22	0.04
Depreciation + AAD	3.94	0.18
Application fee	0.05	0.05
Sub-total Capacity Charges	**4.21**	**0.27**
Primary Energy Charges		
O&M Charges	47.21	51.05
Return on Equity	78.36	78.36
Interest on Working Capital	4.89	5.00
Sub-total Primary Charges	**130.46**	**134.41**
Tax	**10.80**	**10.84**
Total Annual Fixed Charges	**145.46**	**145.51**

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5.5 Accordingly, the tariff approved in the MYT Order dated 6th June 2014 for FY2017-18 and FY2018-19 shall remain as below:

Table 53: MYT Approved Tariff for BASPA-II HEP for period FY18 and FY19

Particulars	Unit	FY 18	FY 19
Saleable Primary Energy	MU	1050.06	1050.06
Total Annual Fixed Charges	Rs Crore	145.46	145.51
Tariff for Total Energy	Rs/kWh	1.39	1.39

The Petition is accordingly disposed.

Shimla :
Dated: ____ _____, 2018

(BHANU PRATAP SINGH)
MEMBER

(S.K.B.S. NEGI)
CHAIRMAN

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RSOD A.D

HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION

Vidyut Aayog Bhawan, Block No.-37, SDA Complex, Kasumpti, Shimla-09
Tel No.0177-2627263, 2627907, 2627908 Fax.No.0177-2627162
E-mail: hperc@rediffmail.com Website: http://www.hperc.org

Pet. No. 6/2020 - 735 - 38 **Dated:-** 9-07-2020

In the Matter of: Petition for seeking truing up of the tariff for sale of power from Baspa-II HEP to HPSEBL for the FY 2017-19 to FY 2018-19 approved by HPERC vide MYT Order dated 06.06.2014 (case No. 138/2013 & 142/2013).

To

1. M/s JSW Hydro Energy. Ltd.
(formerly Himachal Baspa Power Company Limited),
Karcham Wangtoo H.E. Project, Sholtu Colony,
P.P. Tapri-172104, Distt. Kinnaur

2. The HP State Electricity Board Ltd.
thro' its Chief Engineer (Commercial),
Vidyut Bhawan, Shimla-171004

3. The Principal Secretary (Power),
to the Government of HP,
Shimla-171002 (HP).

4. Sh. Ramesh Chauhan,
Consumer Representative,
Himanshu Cottage, Cemetery Road,
Sanjauli, Shimla-171006

Sub: Authenticated copy of Order dated 07th July, 2020.

Sir,

Authenticated copy of Order dated 07th July, 2020 passed in Petition No. 6 of 2020 is sent herewith please.

Encl.As above

yours sincerely,

Secretary

JSW Hydro Energy Limited

True Up Order for BASPA II HEP for FY 2017-18 to FY 2018-19

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Himachal Pradesh Electricity Regulatory Commission

Date 07.07.2020

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JSW Hydro Energy Limited

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

CASE NO. 6/2020

CORAM

Sh. S.K.B.S. Negi

Sh. Bhanu Pratap Singh

IN THE MATTER OF:

True up of tariff for sale of power from Baspa II 300 MW HEP to Himachal Pradesh State Electricity Board Limited for period FY 2017-18 to FY 2018-19

AND

IN THE MATTER OF:

Himachal Baspa Power Company Limited
Karcham Wangtoo H.E. Project
Sholtu Colony, PO, Tapri 172104
District Kinnaur (H.P.)

APPLICANT/ PETITIONER

The Applicant has filed a Petition with the Himachal Pradesh Electricity Regulatory Commission for true up 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 the period FY 2017-18 to FY 2018-19.

The Commission, after considering the Petition filed by the Applicant, the facts presented in its various submissions/filings, objections/suggestions received by the Commission, 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 passes the following Order for true up of tariff for 300 MW Baspa II Hydro Power Plant for the period FY 2017-18 to FY 2018-19.

	Sd/-	Sd/-
Shimla	(Sh. Bhanu Pratap Singh)	(Sh. S.K.B.S. Negi)
Dated: 07.07.2020	Member	Chairman

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1. BACKGROUND

1.1 M/s JSW Hydro Energy Limited (hereinafter referred to as the "Petitioner" or "Applicant"), 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 Himachal Pradesh State Electricity Board Ltd. (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 Commission had approved the tariff for sale of electricity from BASPA II plant vide Order dated 06.06.2014 for period FY 2014-15 to FY 2018-19 in Case No. 138/2013 and 142/2013. Subsequently, the Commission had trued-up tariff for sale of electricity from BASPA II plant vide Order dated 31.10.2018 for period FY 2014-15 to FY 2016-17 in Case No. 21/2018.

1.5 The applicant has filed a Petition on 25.11.2019 with the Himachal Pradesh Electricity Regulatory Commission (hereinafter referred to as the "Commission") under section 37 of the Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 and its amendments, seeking true up 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 2017-18 to FY 2018-19.

1.6 In this Order, the Commission has reviewed the operational and financial performance of the Applicant for period FY 2017-18 to FY 2018-19 based on the PPA between the Petitioner and HPSEBL, review and 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.

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Multi Year Tariff Regulations

1.7 The Commission, in view of the changes in 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 for determination of tariff from hydro generating projects for the next Control Period starting from 1st April, 2014. 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 1st November, 2013.

1.9 Accordingly, the tariff for BASPA-II generating station was fixed for the Control Period i.e. FY 2014-15 to FY 2018-19 in line with the provisions of these Regulations vide Tariff Order dated 06.06.2014.

1.10 Regulation 37 of MYT Tariff Regulations 2011 and amendments thereof state:

"(3) The generation company shall make a petition / application for mid-term performance review on the controllable / uncontrollable factors not less 120 days before the commencement of the year after the mid year of the control period as per principles laid down as follows:-

(a) In the mid-term performance review, the Commission shall make a comparison of the actual performance and expected revenue from tariff and charges vis-à-vis that approved in the first year of the Control period and the generation company shall submit to the Commission all information together with audited account statements, extracts of books of account and such other details in such form and in such manner as may be laid down by the Commission by an Order and also as per the provisions of the Conduct of Business Regulations. The mid-term performance review shall comprise of the following:-

(i) true-up of previous control period;

(ii) true-up of previous years of control period for which audited accounts are made available by the generator company;

(iii) review of ARR for the balance years of the control period in case of any major change in uncontrollable and/ or controllable parameters;

(iv) review of generation tariff on account of modification in ARR for the balance years of the control period."

1.11 The Commission had trued-up tariff for sale of electricity from BASPA II plant vide Order dated 31.10.2018 for period FY 2014-15 to FY 2016-17 in Case No. 21/2018.

1.12 In line with the provisions of the MYT Tariff Regulations 2011, the Petitioner has filed this petition for truing-up of FY 2017-18 to FY 2018-19.

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Procedural Background

1.13 The Commission had issued 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.

1.14 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 trued up the tariff for the period FY 2003-04 to FY 2007-08.

1.15 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 capitalisation allowed due to Force Majeure event, expenditure on Inter-Connection facility and additional O&M Expenses on Inter-Connection facility.

1.16 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.

1.17 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 6 September 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 July 2011.

1.18 Subsequently, the Commission also trued-up the ARR for the first Control Period i.e. FY 2008-09 to FY 2010-11 vide its Order dated 23.04.2012 and for the second Control Period i.e. FY 2011-12 to FY 2013-14 vide its order dated 30.03.2015.

1.19 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.

1.20 True-up of tariff for the period FY 2014-15 to FY 2016-17 was performed by the Commission in its Order dated 31.10.2018 in Case No. 21/2018.

1.21 Also, In the Order dated 29.06.2019 in case no. 30/2019, the Commission approved tariff for Baspa II Plant for the fourth Control Period i.e. FY 2019-20 to FY 2023-24.

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Admission of True-Up Petition

1.22 The Petitioner has now filed a True-up petition vide MA No. 182/2019 on 25.11.2019 with the Commission for True-Up of tariff for the period FY 2017-18 to FY 2018-19.

1.23 The Commission admitted the True-Up petition through its Interim Order dated 07.02.2020 and directed the Petitioner to publish the salient features of the Petition on or before 12.02.2020 in a manner and as per the disclosure formats attached with the Interim Order. The petition was registered as petition number 6/2020.

1.24 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	Edition	Date of Publication
1.	The Tribune	Chandigarh	12.02.2020
2.	Dainik Bhaskar	Shimla	12.02.2020
3.	The Tribune	Chandigarh	13.02.2020
4.	Dainik Bhaskar	Shimla	13.02.2020

1.25 The Commission, on carrying out a preliminary scrutiny of the Petition conveyed deficiencies vide Letter. No. HPERC/-F(1)-14/2019-2894 dated 31.01.2020, directing the Petitioner to file the additional information and clarifications to make the Petition as complete, which was responded to by the Petitioner vide MA No. 12/2020 dated 06.02.2020.

Public Hearing

1.26 The Commission invited suggestions and objections from the public on the Petition filed by the Petitioner in accordance with Section 64(3) of the 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:

a) The Times of India (English) dated 15.02.2020

b) Dainik Bhaskar (Hindi) dated 15.02.2020

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

1.28 However, in view of restrictions due to COVID-19, the Commission felt that it would not be possible to conduct the public hearing in near future and therefore

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decided to provide some additional timeframe for submission of comments /suggestions on the petition based on which it shall be finalizing the True-up Order for FY 2017-18 and FY 2018-19. Therefore, the Commission provided another opportunity to the stakeholders to submit their additional comments upto 12th May, 2020.

1.29 However, the Commission did not receive any objections/ suggestions from stakeholders.

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2. SUMMARY OF THE TRUE-UP PETITION

2.1 This Chapter summarizes the True-Up Petition filed by the Petitioner and the submissions made subsequently for sale of power from the Baspa II, 300 MW Hydro Electric Project located on River Baspa, District Kinnaur (H.P.) for the period (FY 2017-18 to FY 2018-19).

Details of the Project

2.2 The Baspa II hydro-electric project is a 300 MW plant with three units each of 100 MW which was commissioned by M/s 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 2: 300 MW BASPA II - Project Details

Particular	Details
Name of the Company	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%
Total Capital Cost	Rs. 1638.99 Crs

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2.4 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 Crore for the purpose of determination of tariff.

2.5 The Commission approved additional capital cost of Rs 95.88 Cr. vide its Order dated 24.01.2011.

2.6 Further, the Commission vide para no. 4.16 of its Order dated 06.06.2014 had approved the additional capital cost of Rs. 2.57 Cr.

2.7 The Commission also approved additional capital cost of Rs. 6.58 Cr. for year FY 2018-19, vide its Order dated 29.06.2019, making the aggregate approved capital cost at Rs. 1638.99 Cr. (Equity of Rs. 491.70 Cr. and Gross Debt of Rs. 1147.29 Cr.).

Details of the True-Up Petition

2.8 The details of the Total Annual Charges claimed by the Petitioner for True-Up of period FY 2017-18 to FY 2018-19 are as under:

Table 3: Summary of True-Up filed by Petitioner for FY18 to FY19

	True-up Petition		MYT Approved	
	FY18	FY19	FY18	FY19
Capacity Charges				
Interest on Outstanding Loan	0.19	0.23	0.22	0.04
Depreciation + AAD	3.94	0.49	3.94	0.18
Application Fees	0.05	0.23	0.05	0.05
Publication Expenses	-	0.07	-	-
Total Capacity Charges	**4.18**	**1.01**	**4.21**	**0.27**
Primary Energy Charges				
O&M Expenses	40.21	42.77	47.21	51.05
Return on Equity	78.36	78.67	78.36	78.36
Interest on Working Capital	5.41	4.95	4.89	5.00
Sub- Total Primary Charges	**123.98**	**126.39**	**130.46**	**134.21**
Incentive and Taxes				
Incentive for secondary energy	35.80	19.04	-	-
Incentive for Higher Plant Availability	9.79	9.83	-	-
Tax	11.54	12.15	10.80	10.84
Sub-Total Incentive and taxes	**57.13**	**41.02**	**10.80**	**10.84**
Total Annual Charges	**185.30**	**168.43**	**145.47**	**145.52**
Payment Received	**191.06**	**174.52**		

2.9 The explanations provided by the Petitioner, for variations in Annual Charges approved and claimed in True-Up Petition, are summarized below.

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a. The change in interest on outstanding loans was claimed to be on account of changes in weighted average interest rates for normative loans and additional capitalization of Rs. 6.58 Cr. for FY 2018-19 approved by the Commission in order dated 29.06.2019.

b. The variation in Depreciation & AAD as compared to approved ARR was claimed to be on account of additional capitalization of Rs. 6.58 Cr. for FY 2018-19 approved by the Commission in order dated 29.06.2019.

c. The Petitioner has claimed tariff application fees paid towards:

   i. MYT tariff application fee for the control period 2014-19 under case no. 138/2013 of Rs. 25 lakh (as approved by the Hon'ble Commission in MYT Order dated 06.06.2014)

   ii. True up application fee for the period FY 2014-15 to FY 2016-17 under case no. 21/2018 of Rs. 2.50 lakh

   iii. True up application fee for the period FY 2017-18 to FY 2018-19 under present application of Rs. 15 lakh

d. The Petitioner has claimed variation in O&M expenses based on the changes in escalation rates calculated from actual WPI and CPI indices. The MYT Order dated 06.06.2014 considered an escalation factor of 8.24% on the O&M cost as per Schedule XI of the PPA and O&M for additional capital expenditure of Rs. 94.08 crore, subject to truing up exercise. The Petitioner has considered actual WPI index with base year 2004-05 (as published by RBI) and actual CPI index for industrial workers with base year 2001, for the escalation of O&M expenses in the True-Up petition, in accordance with the indices considered by the Commission in its MYT Order dated 06.06.2014. The WPI and CPI indices considered for calculation of O&M cost by the Petitioner is as follows –

Table 4: WPI and CPI claimed by Petitioner

	FY17	FY18	FY19
CPI Index -March (2001 base)	275.0	287.0	309.0
CPI increase over previous year		4.36%	7.67%
WPI Index - March (2004-05 base)	113.2	116.3	119.9
WPI increase over previous year		2.74%	3.10%
CPI Weightage		70%	70%
WPI Weightage		30%	30%
Escalation % for O & M		3.88%	6.29%

e. Additionally for calculating O&M cost on additional cost for ICF facility, the Petitioner has considered escalation rate as per respective bills raised by Satluj Jal Vidyut Nigam Limited (SJVNL) in accordance with ICF Agreement dated 08.05.2003.

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f. The variation in Return on Equity (RoE) as compared to approved ARR was claimed to be on account of additional capitalization of Rs. 6.58 Cr. for FY 2018-19 approved by the Commission in order dated 29.06.2019.

g. The MYT Order dated 06.06.2014 had assumed normative plant availability of 90%, subject to truing up exercise. The Petitioner has claimed Incentive for Higher Plant Availability, as per the actual plant availability of 98.59% and 98.02% for the years FY 2017-18 and FY 2018-19 respectively. The Petitioner has submitted jointly signed statement of plant availability between the Petitioner and HPSEBL. In accordance with PPA, the incentive for higher plant availability is calculated at 0.35% of Equity Component of the Capital Cost for each percentage increase over and above normative level of 90% of Plant Availability level subject to a maximum of 2% Return on Equity, each year.

h. The MYT Order dated 06.06.2014 had assumed nil secondary energy, subject to truing up exercise. The Petitioner has claimed Incentive for Secondary Energy, as per the actual energy delivered in period FY 2017-18 to FY 2018-19. The Petitioner has submitted jointly signed statement of energy between the Petitioner and HPSEBL. As per the terms of PPA, incentive for secondary energy has been worked out by Petitioner using the formula (Secondary energy (MU)*10% ROE)/155MU, subject to maximum of 10% ROE.

i. The Petitioner has claimed variation in interest on working capital due to changes in annual charges claimed because of incentives and changes in income tax amount. The interest on working capital is calculated as per the methodology adopted by the Commission in its MYT Order dated 06.06.2014.

j. The Petitioner has claimed Income Tax as per the Advance Tax paid for FY 2017-18 under MAT & FY 2018-19 under normal tax provisions of Rs. 11.54 crore and Rs. 12.15 crore respectively.

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3. ANALYSIS OF THE TRUE-UP PETITION

Introduction

4.1 This Chapter deals with the analysis of the True-Up Petition filed by the Petitioner for the period from FY 2017-18 to FY 2018-19 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 of the Commission. Various parameters and their computation has been undertaken after giving due consideration to the Power Purchase Agreement signed between Petitioner and 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.

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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 from the plant

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 5: Net Saleable Energy from BASPA II HEP

Particulars	Unit	Values
Design Energy	MU	1213.18

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Particulars	Unit	Values
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**

Actual Energy Generation and Plant Availability FY 2017-18 to FY 2018-19

4.11 The Commission has considered the actual generation of energy and plant availability for each year, based on the joint statement issued by the Petitioner and HPSEBL, which is detailed in the table below:

Table 6: Actual Energy Generation and Plant Availability for FY 18 to FY 19

Particulars	FY 18 Actual	FY 19 Actual
Generation of Energy (MUs)		
Available Energy	1,322	1,261
Saleable Energy (88% of available energy)	1,163	1,110
Primary Energy	1,050	1,050
Secondary Energy (Saleable Energy minus primary energy)	113.30	60.04
Plant Availability (%)		
Normative	90%	90%
Actual	98.59%	98.02%

Interest on Loans

4.12 In order to calculate the interest on loans, the outstanding loan balances and the applicable interest rates for FY 2017-18 to FY 2018-19 has been considered based on prudence check undertaken by the Commission. The methodology considered for approving the interest for each loan is detailed below:

Domestic Loans

4.13 For truing-up of interest on domestic loans, the Petitioner has continued with the approach followed by the Commission in the MYT Order for the third Control Period i.e. FY 2014-15 to FY 2018-19 and has proposed interest on domestic loans based on the approved outstanding loan balances.

4.14 In absence of a cost-benefit analysis and prior approval for loan restructuring, the Commission in its earlier MYT Order dated 15.07.2011 for the second Control Period FY2011-12 to FY2013-14 had disallowed the restructuring of loans and continued with the previous loan balances approved in its Orders. Continuing with the same methodology, the Commission had approved the interest on domestic loans for true-up of second Control Period and Tariff Order of third Control Period.

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4.15 The ownership of Baspa II HEP has changed during the third Control Period due to sale of the plant by M/s Jaiprakash Power Ventures Limited to M/s JSW Energy Ltd. Due to this change in ownership, in its order dated 31.10.2018 for true-up of years FY 2014-15 to FY 2016-17, the Commission reassessed the actual loans and interest obligation of the new company. The Commission once again observed that the loan balances as well as the lending banks of the approved and actual loans, differed significantly post the restructuring. The Commission hence computed the interest expense for true-up of FY 2014-15 to FY 2016-17, as per the loan balances approved in its previous earlier MYT Order dated 06.06.2014. Same methodology is adopted in this tariff order for true-up of FY 2017-18 to FY 2018-19.

4.16 Repayment of all domestic and foreign loans for BASPA II HEP, except for Normative loan 1 and Normative loan 2, was complete by year FY 2016-17. For truing-up interest of these normative loans for years FY 2017-18 to FY 2018-19, the Commission has adopted the approved closing balances of the loans and their repayment schedule as per the True-up Order of FY 2014-15 to FY 2016-17 dated 31.10.2018.

4.17 Subsequently, in its tariff order dated 29.06.2019 for MYT tariff of Control Period FY 2019-20 to FY 2023-24, the Commission had additionally created Normative Loan 3 and Normative Loan 4. Normative Loan 3 was created against the approved additional capital expenditure of Rs. 1.59 Cr. towards cost of implementing FGMO/ RGMO, capitalized in the year FY 2019-20. Therefore, no impact of the same has been considered while truing-up for FY 2017-18 and FY 2018-19. Normative Loan 4 was created against additional capitalization of Rs. 6.58 Cr. as per the judgment of Arbitral Tribunal vide its Order dated 21.06.2018 in arbitration case no. 69 of 2014, which was capitalized in the year 2018-19. For truing-up interest of normative loan 4 for FY 2017-18 and FY 2018-19 under third Control Period, the Commission has adopted the amount of additional loan and their repayment schedule considered as per the Tariff Order dated 29.06.2019.

4.18 The repayments and interest charges on the domestic loans considered by the Commission for truing-up for FY 2014-15 to FY 2016-17 are depicted in the following paragraphs.

Normative Loan-1

4.19 The Commission had approved a normative loan of Rs. 41.37 Crore in the True-Up Order dated 23.04.2012 for meeting the debt requirement for additional capitalization. Tenure of 11 years was considered against the normative loan. Annual weighted average rate of interest on approved rupee term loan was to be considered as the interest rate against this normative loan.

4.20 The Petitioner has claimed interest rate of 10.50% True-Up petition for the normative loan-1. In its reply dated 06.02.2020 the Petitioner claimed to have considered the interest rate for normative loans based on the earlier True-Up

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Order of the Commission dated 31.10.2018 in which the Commission had considered weighted average interest rate for normative loans as 10.50% for FY 2016-17.

4.21 The Commission observes that weighted average interest rate for loan as per audited accounts of BASPA II HEP is 9.55% for FY 2017-18 and 9.33% for FY 2018-19. The Commission accordingly has adopted these interest rates for calculation of interest on outstanding normative loan -1. Also the Commission has continued with the closing balance approved in the previous True-Up Order, provided in the table below:

Table 7: Normative Loan-1 Repayment and Interest Trued Up for FY18 to FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Opening balance	3.76	-
Addition	0.00	-
Principal Repayment	3.76	-
Closing Balance	0.00	-
Interest Rate	9.55%	-
Approved Interest	0.13	-

Normative Loan-2

4.22 The Commission had approved a normative loan of Rs. 1.80 Crore in the MYT Order dated 06.06.2014 for meeting the debt requirement for payment of 6th provisional bill raised by SJVNL towards ICF. Tenure of 11 years was considered against the normative loan. Annual weighted average rate of interest on approved rupee term loan was to be considered as the interest rate against this normative loan.

4.23 The Commission has adopted the same interest rate as considered for Normative Loan 1 for calculating the interest for Normative Loan - 2. Further, the Commission has continued with the closing balance approved in the previous True-Up Order for approving the repayment and interest charge on the Normative loan-2 which is also provided in the table below:

Table 8: Normative Loan-2 Repayment and Interest Trued Up for FY18 to FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Opening balance	0.68	0.50
Addition	0.00	0.00
Principal Repayment	0.18	0.18
Closing Balance	0.50	0.32
Interest Rate	9.55%	9.33%
Approved Interest	0.05	0.04

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Normative Loan-3

4.24 The Commission had approved a normative loan of Rs. 1.11 Crore in the MYT Order dated 29.06.2019 for meeting the debt requirement of implementing FGMO/ RGMO. As the interest on this loan would be allowed post implementation of the work and assets being put to use, no interest has been considered corresponding to this loan during true-up for FY 2017-18 to FY 2018-19.

Normative Loan-4

4.25 The Commission had approved a normative loan of Rs. 4.61 Crores in the MYT Order dated 29.06.2019 for meeting the debt requirement of Rs. 6.58 Crores additional capitalization approved by Arbitral Tribunal vide its Order dated 21.06.2018. Tenure of 11 years was considered against the normative loan.

4.26 As approved in the MYT Order dated 29.06.2019, the Commission approved the capitalization of Rs. 6.58 Crores from 22.06.2018 onwards. Accordingly, the Commission has considered three quarterly repayments of Normative Loan - 4 for the year FY 2018-19.

4.27 Similar interest rate as considered for Normative Loan 1 & 2 has been considered for calculating the interest for Normative Loan - 4. The repayment schedule and interest charge calculation for the Normative loan-4 is provided in the table below:

Table 9: Normative Loan-4 Repayment and Interest Trued Up for FY18 to FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Opening balance	-	0.00
Addition	-	4.61
Principal Repayment	-	0.31
Closing Balance	-	4.29
Interest Rate	-	9.33%
Approved Interest	-	0.20

Total Interest and Repayment

4.28 The following table depicts the total interest and repayment approved for domestic and foreign currency loans for Control Period.

Table 10: Total Interest and Repayments Trued Up for FY18 to FY19 (Rs. Cr.)

Particulars	FY18	FY19
Total Interest Payment	0.19	0.24
Total Repayments	3.94	0.49

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Depreciation and Advance Against Depreciation (AAD)

4.29 The Commission has trued-up the depreciation and advance against depreciation for the years FY 2017-18 to FY 2018-19 as per Clause 8.6.5.1 of the PPA as detailed below:

Table 11: Trued Up Depreciation and AAD for FY18 to FY19 (Rs. Cr.)

Particulars		FY 18	FY 19
1/12th of the Loans	A	95.22	95.61
Repayment of the Loans as considered for working out Interest on Loan	B	3.94	0.49
Minimum of the Above	C	3.94	0.49
Less: Depreciation during the year	**D**	**70.19**	**70.41**
E	E=C-D	-66.25	-69.92
Cumulative Repayment of the Loan as considered for working out Interest on Loan	F	1167.44	1167.93
Less: Cumulative Depreciation	G	1198.55	1202.71
H	H=F-G, limited to '0'	0.00	0.00
Advance Against Depreciation	**I= Min. of E & H**	**-66.25**	**-69.92**
Depreciation + AAD	**(D + I)**	**3.94**	**0.49**

Operations and Maintenance Expenses

4.30 The Commission in its MYT Order dated 06.06.2014 had computed the O&M charges as per clause 8.7.2 of the PPA, which allows for O&M escalation at weighted average of WPI and CPI indices, 11th year onwards after COD. The 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"

4.31 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

$$\text{Percentage rate of annual escalation} = \left(0.3 \times \frac{W_1 - W_0}{W_0} + 0.7 \times \frac{L_1 - L_0}{L_0}\right) \times 100\%$$

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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 me made as soon as the published indices for the month of March of that tariff year become available."

4.32 In the MYT Order dated 06.06.2014 for the Control Period FY 2014-15 to FY 2018-19, the Commission had taken note of the following:

"4.57 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, it is observed that the 1981-82 series of CPI and WPI indices have been discontinued. Therefore, the Commission has considered the 2004-05 series of Wholesale Price Index (all commodities) and 2010 series of Consumer Price Index (for Industrial workers (All India) as published by the RBI."

4.33 Therefore, for truing-up, the Commission has considered the actual values of the respective series of WPI and CPI for approving the O&M expenses. In accordance with schedule XI of the PPA, the Commission has considered WPI and CPI indices for the month March immediately preceding the financial year under review. The

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

Table 12: WPI and CPI considered along with O&M escalation factor for FY18 to FY19

Particulars	FY17	FY18	FY19
WPI All Commodities (base year 2004-05)			
For the month of March	113.2	116.3	119.9
Change		2.74%	3.10%
CPI for Industrial Workers (Base year 2001)			
For the month of March	275	287	309
Change		4.36%	7.67%
Escalation factor		3.88%	6.29%

4.34 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 as per Order dated 24th January, 2011), after excluding the cost of ICF for which the O&M is computed as per the agreement with SJVNL.

4.35 With respect to the O&M expense being paid by the Petitioner to SJVNL for the Inter Connection Facility (ICF), the Commission in its MYT Order dated 06.06.2014 had approved additional O&M expenses of 0.25% towards ICF from the date of commissioning of the project as per the methodology used in previous Orders, along carrying cost for respective years.

4.36 As per the copies of SJVNL bills submitted by Petitioner, GST of 18% became applicable from 1st July 2017 onwards, before which Service Tax of 15% (14% service tax plus 0.5% Swacch Bharat Cess and 0.5% of Krishi Kalyan Cess) was applicable. Accordingly, the Commission has considered service tax on the O&M cost for ICF based on the applicable Service Tax rates, as described in the table below:

Table 13: Details of applicable Service Tax/GST rates

	FY 2017-18		FY 2018-19
	Apr – Jun	Jul – Mar	
Service Tax/ GST Rate	15.00%	18.00%	18.00%
Wtd. Average Rate	17.25%		18.00%

4.37 The total trued-up O&M expenses for the Control Period FY 2017-18 to FY 2018-19 are detailed in table below:

Table 14: Trued-Up O&M Expenses for FY 18 to FY 19 (Rs. Cr.)

Particulars	FY 18	FY 19

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Particulars	FY 18	FY 19
Base O&M Expenses (excluding additional capitalization & ICF facility)	35.96	38.23
Add: O&M expense towards additional capitalization approved	1.86	1.98
Add: O&M expense towards ICF facility	2.04	2.11
Add: Service Charge on ICF O&M Expenses	0.35	0.38
Total O&M Expenses Approved	**40.22**	**42.76**

Return on Equity (RoE)

4.38 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."

4.39 The Commission has therefore allowed RoE at 16% on the approved gross equity of BASPA II HEP.

4.40 Additional equity of Rs. 1.97 Crores in FY 2018-19 was approved by the Commission in its MYT Order dated 29.06.2019, towards additional capitalization of Rs. 6.58 Crores. However, the additional capitalization was capitalized from 22.06.2018 onwards (after the date of award by Arbitral Tribunal on 21.06.2018). Therefore, ROE on this additional equity for FY 2018-19 is allowed only for partial year after date of capitalization.

4.41 Gross equity and RoE approved for FY 2017-18 to FY 2018-19 is as follows.

Table 15: Return on Equity for FY18 to FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Opening Balance of Equity	489.72	489.72
Additions During the Year	-	1.97
Closing Balance of Equity	489.72	491.70
Rate Of Return	16%	16%
Return on Equity	**78.36**	**78.60**

Interest on Working Capital

4.42 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:-

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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*

4.43 The rate of interest for calculating the interest on working capital has been taken as per the SBI PLR as on 1st April of the respective year for FY 2017-18 to FY 2018-19 as shown in table below:

Table 16: Trued Up Interest on Working Capital for FY 2017-18 to FY 2018-19 (Rs. Cr.)

Particulars	FY 18	FY 19
1/12th of O&M Expenses	3.35	3.56
Maintenance Spares 12% of O&M Expenses	4.83	5.13
Receivables equivalent to 2 months average billing	30.78	28.03
Total Working Capital	**38.96**	**36.45**
Rate of Interest	13.85%	13.45%
Interest on Working capital	**5.40**	**4.94**

Incentive for Secondary Energy

4.44 The computation of incentives has been detailed in the Section 8.9 of the PPA on "Incentive for Secondary Energy" and Section 8.10 of the PPA on "Incentive on Account of Higher Plant Availability".

4.45 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..."

4.46 The MYT Order dated 06.06.2014 had assumed nil secondary energy, subject to truing up exercise. The Petitioner has claimed Incentive for Secondary Energy, as per the actual energy delivered in period FY 2017-18 to FY 2018-19, and has submitted jointly signed statement of energy delivered to HPSEBL.

4.47 Considering this energy delivered by BASPA II HEP to HPSEBL, the Commission has calculated the incentive for secondary energy as per the terms of clause 8.9.1 of the PPA, as detailed hereunder:

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Table 17: Trued-up Incentive for Secondary Energy for period FY18 to FY19

Particulars	FY 18	FY 19
Equity (Rs. Cr.)	489.72	491.70
Incentive Limit (10% of Equity) (Rs. Cr.)	48.97	49.17
Rate for Secondary Energy (10% of Equity/155 MU)	3.16	3.17
Secondary Energy Generation (MU)	113.30	60.04
Incentive on Secondary Energy (Rs. Cr.)	**35.80**	**19.04**

Incentive for Higher Plant Availability

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 MYT Order dated 06.06.2014 had assumed normative plant availability and thereby nil incentive for higher plant availability, subject to truing up exercise. The Petitioner has claimed Incentive for Higher Plant Availability, as per the actual availability of the plant. The Petitioner has submitted jointly signed statement of plant availability by HPSEBL.

4.50 The Commission, for the Control Period, has considered actual plant availability for approval of incentive on higher plant availability which is given in the table below:

Table 18: Trued Up Incentive on Higher Plant Availability for FY18 to FY19

Particulars		FY 18	FY 19
Normative Plant Availability (%)	a	90.00	90.00
Actual Plant Availability (%)	b	98.59	98.02
Higher Plant Availability (%)	c=b-a	8.59	8.02
Equity (Rs. Cr.)	d	489.72	491.70
Incentive for higher plant availability (0.35% of Equity) (Rs. Cr.)	e=0.35%*c*d	14.72	13.80
Incentive limit of 2% of Equity (Rs. Cr.)	f=2%*d	9.79	9.83
Incentive (Rs. Cr.)	**min (e,f)**	**9.79**	**9.83**

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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 In the True-Up petition, the Petitioner has claimed advance tax of Rs. 11.54 Crores for FY 2017-18 under MAT and advance tax of Rs. 12.15 Crores for FY 2018-19 under normal tax provisions. In its reply dated 06.02.2020, to the discrepancies raised by the Commission, the petitioner confirmed that these amounts are related to BASPA II HEP only and not for BASPA II HEP and Karcham Wangtoo HEP together.

Table 19: Income Tax claimed by the Petitioner for FY18 to FY19

Particulars	FY 18	FY 19
Return on Equity	78.36	78.67
Add: Book Depreciation	3.94	0.49
Less: Income Tax depreciation	-27.46	-26.56
Add:		
Incentive Secondary Energy (50%)	17.90	9.52
PAFM	4.90	4.92
Taxable Income	77.63	67.04
Income Tax (%)	21.34%	34.94%
Tax (as per PPA clause 8.11.1)	16.57	23.43
Advance tax paid (as per challans)	11.54	12.15
Tax liability as per audited accounts	12.15	12.24

4.53 In its Order dated 31.10.2018 for true-up of years FY 2014-15 to FY 2016-17, the Commission had calculated tax as per MAT rates based on the submission of the Petitioner that Baspa II HEP and Karcham Wangtoo HEP are the two generating plants under M/s JSW Hydro Energy Limited and considering Karcham Wangtoo

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HEP is availing tax holiday, the total tax liability of BASPA II HEP is also worked out as per MAT in line with the provisions of Income Tax Act.

4.54 However, in the current true-up petition for FY 2017-18 and FY 2018-19, the Petitioner has claimed MAT for FY 2017-18 and has submitted applicability of corporate tax for FY 2018-19 due to change in depreciation accounting for Karchan Wangtoo. As per review of Income Tax return filed by the Petitioner, it is observed that corporate tax has been applicable for FY 2018-19 and MAT credit has been utilized by the Petitioner. Therefore, the Commission has computed the income tax for FY 2017-18 based on methodology approved by Hon'ble ATE in its Order dated 21.10.2011 for MAT calculations (also followed for truing-up for FY 2014-15 to FY 2016-17 in its previous True-up Order) and income tax for FY 2018-19 has been computed as per Clause 8.11.1 of the PPA.

Table 20: Tax calculation as per MAT rates for FY18 (Rs. Cr.)

Particulars	FY18
Total Revenue	**190.41**
O&M Expenses	28.01
Interest	77.87
Depreciation	33.27
(B)Total Expenses	**139.15**
(C)Profit eligible for MAT (A-B)	51.26
(D)MAT Rate	21.34%
MAT now calculated (C*D)	**10.94**
Actual Tax as per Audited Accounts of BASPA II HEP	12.15
Amount Paid as per Advance Challan	11.54
Approved Tax (Lower of MAT and Actual Tax Paid)	**10.94**

Table 21: Tax calculation as per Corporate Tax rates for FY19 (Rs. Cr.)

Particulars	FY 19
Return on Equity	**78.60**
50% of Incentive for secondary energy	9.52
50% of Incentive for higher plant availability	4.92
ADD: Depreciation	0.49
Subtract: Income tax depreciation	26.36
Taxable Income	**67.18**
Tax Rate	*34.94%*
Income Tax	**23.47**
Actual Tax as per Audited Accounts of BASPA II HEP	12.21
Amount Paid as per Advance Challan	12.15
Approved Tax (Lower of Income Tax as per Clause 8.11.1 of PPA and Actual Tax Paid)	**12.15**

4.55 The Petitioner has submitted supporting documents of Audited Accounts for BASPA II HEP for the verification of tax calculations along with details of challan through which tax amount was deposited. Since clause 8.11 of the PPA states that *'under*

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no circumstances tax liability payable by the Board shall be more than income tax actually payable by the Company' the Commission has allowed the minimum of tax calculated as per MAT rates and tax paid by the Petitioner towards Baspa II HEP.

4.56 The Commission has therefore allowed income tax for years FY 2017-18 to FY 2018-19 as follows:

Table 22: Approved Tax Amount (Rs. Cr.)

Particulars	FY18	FY19
Approved income tax	10.94	12.15

Application fee and publication expense

4.57 The Petitioner has claimed tariff application fees paid towards:

a. MYT tariff application fee for the control period 2014-19 under case no. 138/2013 of Rs. 25 lakh (approved by the Commission in MYT Order dated 06.06.2014)

b. True up application fee for the period FY 2014-15 to FY 2016-17 under case no. 21/2018 of Rs. 2.50 lakh

c. True up application fee for the period FY 2017-18 to FY 2018-19 under present application of Rs. 15 lakh

4.58 The Commission has allowed MYT tariff application fee of Rs. 5.00 lakh per year, approved in Tariff Order dated 06.06.2014. Also, the Commission has allowed True-up (for the period of FY 2014-15 to FY 2016-17) application fee of Rs. 2.50 lakh, paid in the year FY 2017-18.

4.59 It is observed that the amount of Rs. 15 lakh towards application fee for this petition has been paid during FY2019-20. Since the Commission has not revised the ARR for FY2019-20, these amounts may be considered at the time of truing-up for the respective years based on prudence check.

4.60 The Petitioner has claimed a publication expense of Rs. 7.00 lakh towards advertisement publication charges for true-up petition of period FY 2014-15 to FY 2016-17. This expense was also claimed by Petitioner during analysis of True-up petition for period FY 2014-15 to FY 2016-17. Since these charges were paid during FY 2018-19, the Commission had stated to consider these charges at the time of true-up of year FY 2018-19. Accordingly, the Commission has now allowed this publication expense of Rs. 7.00 lakh in year FY 2018-19.

4.61 The Commission has therefore allowed application fees and publication expenses for years FY 2017-18 to FY 2018-19 as follows:

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Table 23: Approved Application Fee and Publication Expense (Rs. Cr.)

Particulars	FY18	FY19
Application Fee	0.075	0.050
Publication Expense	-	0.070

Annual Fixed Charge for BASPA II HEP

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

Table 24: Trued-up Annual Fixed Charge for BASPA-II HEP for FY18 - FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Capacity Charges		
Interest on outstanding loans	0.19	0.24
Depreciation + AAD	3.94	0.49
Application fee	0.08	0.05
Publication expense	-	0.07
Sub-total Capacity Charges	**4.20**	**0.85**
Primary Energy Charges		
O&M Charges	40.22	42.76
Return on Equity	78.36	78.60
Interest on Working Capital	5.40	4.94
Sub-total Primary Charges	**123.97**	**126.30**
Incentives and Taxes		
Incentive for Secondary Energy	35.80	19.04
Incentive for Higher Plant Availability	9.79	9.83
Tax	10.94	12.15
Sub-total Incentives and Taxes	**56.53**	**41.03**
Total Annual Fixed Charges	**184.70**	**168.18**

Amount Payable by the Board

4.63 As part of the True-Up, the Petitioner has submitted year-wise payment received as shown in the following table:

Table 25: Payment Received from HPSEBL as per Petition (Rs. Cr.)

Particulars	FY 18	FY 19
Bill raised by Petitioner	191.06	174.52

4.64 The Commission has considered the amount claimed by the Petitioner which is in line with the jointly signed statement provided by the Petitioner for FY 2017-18

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and FY 2018-19. The revenue considered by the Commission for true-up of the respective years after adjustments are as provided below:

Table 26: Amount passed by HPSEBL for FY18 to FY19 (Rs. Cr.)

Particulars	FY 18	FY 19
Amount passed by HPSEBL	**191.06**	**174.52**

4.65 The computations of the revenue surplus / gap as per the trued-up ARR and revenue paid by HPSEBL is shown in the following Table:

Table 27: Approved Revenue Surplus/ (Gap) by the Commission (Rs. Cr.)

Particulars	FY 18	FY 19	FY 20
Total Annual Fixed Charges	184.70	168.18	-
Payment made by HPSEBL towards invoices	191.06	174.52	-
Revenue Surplus/ (Gap)	**6.36**	**6.34**	**-**
Opening Surplus / (Gap)	-	6.80	14.48
Surplus / (Gap) for the year	6.36	6.34	-
Closing Balance of Surplus / (Gap)	6.36	13.14	14.48
Average Balance	3.18	9.97	14.48
Interest Rate	13.85%	13.45%	13.80%
Interest	0.44	1.34	2.00
Closing Balance of Surplus / (Gap)	**6.80**	**14.48**	**16.48**

4.66 The closing balance of arrears payable by Petitioner to HPSEBL at the end of FY 2019-20 is Rs. 16.48 Crores. The Commission directs the Petitioner to pay/ adjust the amount along with the carrying cost for the balance period of FY 2020-21 in three installments from the date of issuance of this Order.

Capital cost exclusion of Karcham Wangtoo-Jhakri transmission line

4.67 In the Multi-Year Tariff Order for BASPA II HEP for FY 2019-20 to FY 2023-24 dated 29.06.2019, the Commission had stated the following:

"3.23 It is observed that both the parties have not complied with the directive of the Commission for deciding the future steps with regard to the Order dated 8th Dec 2017 against petition no. 29 of 2017 within three months from the issuance of the Order dated 31.10.2018 in Petition No. 21 of 2018.

3.24 If either of the two parties believes that the other party has not taken necessary steps in accordance with Commission's directive, they may initiate appropriate proceedings separately against the other party for violating the directions of the Commission.

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3.25 The Commission provides additional time of three months to both the parties to take action in this matter and decide the future steps on Order dated 8th Dec 2017 against petition no. 29 of 2017 failing which the Commission may take action under Section 142 of the Electricity Act 2003 against both the parties."

4.68 It is observed that the Petitioner has neither taken any action with respect to the directive of the Commission nor provided any reasons in the current petition for delay in compliance of the directive. The Commission directs the Petitioner to undertake suitable measures as per the directive of the Commission in the MYT Order dated 29.06.2019 and provide a status report within one month of issuance of this Order, failing which the Commission would be bound to start proceedings under Section 142 of the Electricity Act 2003 against the Petitioner.

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Annexure A-8

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True-Up for FY 2019-20 to FY 2021-22 and Mid Term Review for FY 2022-23 to FY 2023-24, for BASPA-II HEP

Himachal Pradesh Electricity Regulatory Commission

16-May-2023

JSW Hydro Energy Limited

BEFORE THE HIMACHAL PRADESH ELECTRICITY REGULATORY COMMISSION, SHIMLA

PETITION NO. 02/2023

DECIDED ON: 16-MAY-2023

CORAM

Sh. DEVENDRA KUMAR SHARMA
Sh. YASHWANT SINGH CHOGAL
Sh. SHASHI KANT JOSHI

IN THE MATTER OF:

True-Up of tariff for FY 2019-20 to FY 2021-22 and Mid Term Review for FY 2022-23 and FY 2023-24 for sale of power from Baspa II HEP to HPSEBL

AND

IN THE MATTER OF:

JSW Hydro Energy Limited,
Karcham Wangtoo H.E. Project
Sholtu Colony, PO, Tapri 172104
District Kinnaur (H.P.).....APPLICANT/ PETITIONER

The Applicant has filed a Petition with the Himachal Pradesh Electricity Regulatory Commission seeking True-Up of the tariff for sale of power from Baspa II HEP to HPSEBL Ltd. for the FY 2019-20 to FY 2021-22 approved by HPERC vide MYT Order dated 29.6.2019 and Mid-Term performance review for FY 2022-23 and FY 2023-24.

The Commission, after considering the Petition filed by the Applicant, the facts presented in its various submissions/filings, objections/suggestions received by the Commission from the 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 passes the following Order for True-Up of tariff for Baspa II Hydro Power Plant for the period FY 2019-20 to FY 2021-22 and Mid Term performance review for FY 2022-23 and FY 2023-24.

Place: Shimla

Dated: 16-May-2023

-Sd-	-Sd-	-Sd-
(Shashi Kant Joshi)	**(Yashwant Singh Chogal)**	**(Devendra Kumar Sharma)**
Member	**Member (Law)**	**Chairman**

JSW Hydro Energy Limited

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1. BACKGROUND

1.1 M/s JSW Hydro Energy Limited (hereinafter referred to as the "Petitioner" or "Applicant"), having its registered address at 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"), operating Baspa II HEP in the State of Himachal Pradesh.

1.2 The Baspa II Hydro Electric Project (hereinafter referred to as "Baspa II" or "Project") is a 300 MW plant situated on River Baspa (a tributary of River Satluj, District Kinnaur, Himachal Pradesh) with three units each of 100 MW which was commissioned by M/s Jai Prakash Power Ventures Limited (JPVL) in the FY 2003-04. Last unit of the project was commissioned on 08.06.2003.

1.3 On 04.06.1997, a Power Purchase Agreement (PPA) was executed between Jaiprakash Hydro-Power Limited and Himachal Pradesh State Electricity Board Ltd. (HPSEBL) for sale of Power from Baspa II HEP to HPSEBL. Pursuant to a Scheme of arrangement approved by Hon'ble High Court, Shimla, 300 MW Baspa II Hydro Electric Project (Hydro Electric Project or HEP for short) located in Himachal Pradesh has been transferred by M/s. Jaiprakash Power Ventures Limited to the Petitioner w.e.f. 01.09.2015.

1.4 The Commission had approved the tariff for sale of electricity from BASPA II plant vide Multi Year Tariff (MYT) Order dated 29.06.2019 (Case no. 30/2019) for the control period from FY 2019-20 to FY 2023-24.

1.5 In this Order, the Commission has reviewed the operational and financial performance of the Applicant based on the PPA between the Petitioner and HPSEBL, review and 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.

MYT Regulations

1.6 The Commission, in view of the changes in the principles and methodologies specified by the Central Electricity Regulatory Commission, has issued Himachal Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2011 vide notification dated 1.04.2011 (hereinafter referred to as "MYT Generation Tariff Regulations 2011" or "Regulations").

1.7 Subsequently, the Commission has made the following amendments to the above Regulations:

a. HPERC (Terms and Conditions for determination of Hydro Generation Tariff) (First Amendment) Regulation, 2011 dated 30.07.2011

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b. HPERC (Terms and Conditions for determination of Hydro Generation Tariff) (Second Amendment) Regulation, 2013 dated 01.11.2013

c. HPERC (Terms and Conditions for Determination of Hydro Generation Tariff) (Third Amendment) Regulations, 2018 dated 22.11.2018

1.8 Accordingly, the tariff for BASPA-II generating station was fixed by the Commission vide Tariff Order dated 29.06.2019, for the Control Period i.e. FY 2019-20 to FY 2023-24 in line with the provisions of these Regulations and PPA.

1.9 Regulation 37 of MYT Tariff Regulations 2011 as amended form time to time reads as under:-

"(3) The generation company shall make a Petition / application for mid-term performance review on the controllable / uncontrollable factors not less 120 days before the commencement of the year after the mid year of the control period as per principles laid down as follows:-

(a) In the mid-term performance review, the Commission shall make a comparison of the actual performance and expected revenue from tariff and charges vis-à-vis that approved in the first year of the Control period and the generation company shall submit to the Commission all information together with audited account statements, extracts of books of account and such other details in such form and in such manner as may be laid down by the Commission by an Order and also as per the provisions of the Conduct of Business Regulations. The mid-term performance review shall comprise of the following:-

(i) True-Up of previous control period;

(ii) True-Up of previous years of control period for which audited accounts are made available by the generator company;

(iii) review of ARR for the balance years of the control period in case of any major change in uncontrollable and/ or controllable parameters;

(iv) review of generation tariff on account of modification in ARR for the balance years of the control period."

1.10 In line with the provisions of the MYT Generation Tariff Regulations 2011 as amended form time to time, the Petitioner has filed this Petition on 28.07.2022 seeking True-Up of tariff for FY 2019-20 to FY 2021-22 and Mid Term Review for FY 2022-23 and FY 2023-24.

Procedural Background

1.11 The Commission had issued 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.

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1.12 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 trued up the tariff for the period FY 2003-04 to FY 2007-08.

1.13 The Commission vide Order dated 24.01.2011 (passed in Petition No. 11/2010), revised the Annual Revenue Requirement for the period FY 2006-07 to FY 2010-11, on account of additional capitalizations.

1.14 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.

1.15 The Petitioner had also moved a Petition bearing No. 135/2011 on 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.

1.16 Subsequently, the Commission has also trued-up the ARR for the first Control Period i.e. FY 2008-09 to FY 2010-11 vide its Order dated 23.04.2012 and for the second Control Period i.e. FY 2011-12 to FY 2013-14 vide its Order dated 30.03.2015.

1.17 The Commission has 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.

1.18 The True-Up of tariff for the period FY 2014-15 to FY 2016-17 was performed by the Commission vide Order dated 31.10.2018 in Case No. 21/2018. Also True-Up for the period FY 2017-18 to FY 2018-19 was done by the Commission vide Order dated 07.07.2020 in Petition No. 6/2020.

1.19 In the Order dated 29.06.2019 in Petition no. 30/2019, the Commission has approved tariff for Baspa II Plant for the fourth Control Period i.e. FY 2019-20 to FY 2023-24.

1.20 The Commission has admitted the Petition vide Order dated 11.01.2023 and directed the Petitioner to publish the salient features of the Petition on or before 16.01.2023 in a manner and as per the disclosure formats attached with the Order dated 11.01.23. The Petition was registered as Petition Number 02/2023.

1.21 A detailed scrutiny of the Petition has been made and clarifications/ information have been sought by the Commission from the Petitioner from time to time. The

JSW Hydro Energy Limited

submission made by the Petitioner in response there to, as detailed hereunder, have been taken into consideration:

Table 1: Communication with the Petitioner

Sl.	Letter from Commission	Response from Petitioner
1.	Letter. No. HPERC/-F(1)-40/2022-1757 dated 15.10.2022	M.A. No. 196/2022 dated 27.10.2022
2.	Letter No. HPERC/-F(1)-40/2022-2357 dated 07.12.2022	Filing dated 26.12.2022
3.	Letter No. HPERC/-F(1)-40/2022-3205 dated 20.02.2023	Filing dated 02.03.2023

Public Hearing

1.22 The Petitioner published the salient features of the Petition by the way of a Public Notice in the following newspapers:

Table 2: Details of public notices in newspapers

Sl.	Name of News Paper	Date of Publication
1.	Dainik Bhasker	15.01.2023
2.	The Tribune	15.01.2023
3.	Dainik Bhasker	16.01.2023
4.	The Tribune	16.01.2023

1.23 The Commission invited suggestions and objections from the public on the Petition filed by the Petitioner in accordance with Section 64(3) of the Electricity Act, 2003 (hereinafter to be referred as Act for short) 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: List of Newspapers in which Notice inviting objections from Stakeholders and conveying the date of Public Hearing were published

Sl.	Name of News Paper	Date of Publication
1.	Indian Express	19.01.2023
2.	Divya Himachal	19.01.2023

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

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1.25 A public hearing in the Petition was held in the Commission on 07.03.2023 for providing adequate opportunity to all the stakeholders for expression of their opinions, suggestions and objections in the matter.

1.26 The Commission has received objections/ suggestions from the HPSEBL which are discussed in subsequent chapter of this Order.

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2. SUMMARY OF THE PETITION

2.1 This Chapter summarizes the Petition filed by the Applicant for True up of period FY 2019-20 to FY 2021-22 and Mid Term Review of FY 2022-23 to FY 2023-24, and the submissions made subsequently for sale of power from the Baspa II, 300 MW HEP.

Details of the Project

2.2 The Baspa II Hydro Electric Project is a 300 MW Plant with three units each of 100 MW which was commissioned by M/s 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: BASPA II HEP - Project Details

Particular	Details
Name of the Company	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 True-Up Petition

2.4 The Petitioner has filed total Annual Fixed Charges (AFC) for True-Up of period FY 2019-20 to FY 2021-22 in the Petition dated 28.07.2022. The Commission observed certain discrepancies in the calculations submitted under MYT forms and directed the

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Petitioner to submit revised figures. Accordingly, the Petitioner vide submissions dated 27.10.2022, has provided revised figures for total AFC as follows:

Table 5: Summary of True-Up filed by Petitioner for FY20 to FY22 (Rs. Cr.)

	True-Up Petition			MYT Approved		
	FY20	FY21	FY22	FY20	FY21	FY22
Capacity Charges						
Interest on Outstanding Loan	0.41	0.35	0.32	0.42	0.40	0.38
Depreciation + AAD	32.13	70.45	70.45	32.12	70.46	70.46
Application Fees	0.20	0.05	0.05	0.05	0.05	0.05
Publication Expenses	0.13	-	-	0.06	-	-
Total Capacity Charges	**32.87**	**70.85**	**70.81**	**32.65**	**70.91**	**70.89**
Primary Energy Charges						
O&M Expenses	44.51	45.84	49.47	43.68	45.42	47.23
Return on Equity	78.66	78.65	78.64	78.66	78.66	78.65
Interest on Working Capital	6.53	7.41	6.64	5.34	6.53	6.62
Sub- Total Primary Charges	**129.70**	**131.90**	**134.75**	**127.68**	**130.61**	**132.50**
Incentive and Taxes						
Income tax claimed/true up	16.54	47.16	20.55	18.34	26.78	26.95
Change in Law: TCS new prov.	-	0.12	0.08	-	-	-
Incentive for Higher Plant Avail.	9.83	9.83	9.83	-	-	-
Incentive for Secondary Energy	40.45	28.81	31.43	-	-	-
Sub-Total Incentive and taxes	**66.82**	**85.92**	**61.89**	**18.34**	**26.78**	**26.95**
Total Annual Fixed Charges	**229.40**	**288.68**	**267.44**	**178.67**	**228.30**	**230.34**

2.5 The explanations provided by the Petitioner, for variations in Annual Charges approved and those claimed in True-Up Petition, are summarized below.

a. The commission allowed an additional capitalization of Rs.1.59 crore on account of change in law, against the decapitalization of old assets worth Rs.2.07 crore. The Petitioner incorporated the actual amount of Rs. 1.41 crore in the tariff forms, incurred against the additional capitalization.

b. The change in interest on loans has been calculated based on the actual rate of interest applicable year wise for the term loans availed by the Company

c. The tariff application fees amounting to Rs. 15 lakhs claimed to be paid towards the True up Petition No. 6 of 2020 related to FY 2017-18 & 2018-19, which was deferred by the Commission to be allowed during true up of FY 2019-20.

d. An amount of Rs 6.89 lakhs was incurred during FY 2019-20 by the Petitioner towards newspaper publication of salient features of the True up Petition No. 6 of 2020. The Petitioner has submitted that the aforesaid expenditure of Rs 6.89

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lakh towards the publication in the newspapers, allowed to be recovered as per the provisions of HPERC (Conduct of Business Regulations) 2005.

The Petitioner has claimed variation in O&M expenses based on the changes in escalation rates calculated from actual WPI and CPI indices. The MYT Order dated 29.06.2019, considered an escalation factor of 3.88% for the calculation of O&M costs, as per Schedule XI of the PPA. For truing up of O&M expense, the Petitioner has considered latest available indices - WPI index with base year 2011-12 and actual CPI index for industrial workers with base year 2016, for the escalation of O&M expenses in the True-Up Petition.

For the purpose of O&M expenses on the additional cost approved by the Commission for ICF facility, escalation has been considered as per ICF Agreement dated 08.05.2003 entered with Satluj Jal Vidyut Nigam Limited.

e. In the MYT Order dated 29.6.2019, the Commission has assumed normative plant availability of 90%, subject to truing up exercise. The Petitioner has claimed Incentive for higher Plant Availability, as per the actual plant availability of 97.32%, 96.92% and 97.15% for the FY 2019-20, FY 2020-21 & FY 2021-22 respectively. The Petitioner has submitted jointly signed statement of plant availability between the Petitioner and HPSEBL. In accordance with PPA, the incentive for higher plant availability is calculated at 0.35% of equity component of the Capital Cost for each percentage increase over and above normative level of 90% of Plant Availability level subject to a maximum of 2% Return on Equity, each year i.e., Rs. 9.83 Cr. each year.

f. In the MYT Order dated 29.6.2019, the Commission had assumed Nil Secondary Energy, subject to truing up exercise. The Petitioner has claimed Incentive for Secondary Energy, as per the actual energy of 127.53 MU, 90.85 MU & 99.12 MU delivered in FY 2019-20 FY 2020-21 & FY 2021-22 respectively as per joint statement signed by the Petitioner & HPSEBL. As per the terms of PPA, incentive for Secondary Energy has been worked out by Petitioner using the formula (Secondary Energy (MU)*10% ROE)/155MU, subject to maximum of 10% ROE. Accordingly, incentive for Secondary Energy of Rs. 40.45 Cr., Rs. 28.81 Cr. and Rs. 31.43 Cr. has been claimed.

g. The Commission had approved Interest on Working Capital in MYT order dated 29.06.2019 based in AFC excluding incentive for higher plant availability and incentive for Secondary Energy. Uniform SBI PLR rate of 13.80% was considered for all 5 years of the control period. Interest on Working Capital claimed in True-Up is including incentive for higher plant availability and incentive for Secondary Energy in line with the True up order dated 07.07.2020 and based upon the actual SBI PLR prevailing as on 1st April of the respective financial year.

h. ITRs for FY 2019-20 & 2020-21 filed by the Petitioner reflect that tax liability has been worked out based on the normal tax rate provisions and MAT credit is

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b. Depreciation & advance against depreciation has been considered for FY 2022-23 and 2023-24 based on the methodology adopted by the Commission during approval of MYT Order for the period 2019-24.

c. O&M expenses for FY 2022-23 and FY 2023-24 have been worked out in accordance with the clause no. 8.7.2 of PPA considering the WPI and CPI index for FY 2021-22.

d. Return on Equity for FY 2022-23 and FY 2023-24 are the same as approved by Commission in MYT Order dated 29.6.2019.

e. Interest on Working Capital for FY 2022-23 and FY 2023-24 has been calculated as per provisions of clause no. 8.7.4 of the PPA.

f. Tax on Income for FY 2022-23 and FY 2023-24 has been calculated at applicable MAT rate, considered in MYT Order dated 29.6.2019.

g. Tariff filing fees of Rs 18.75 lakh paid for current True-Up Petition has been considered in FY 2022-23.

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utilized. Accordingly, the Petitioner has claimed tax on income as per clause 8.11.1 of the PPA for FY 2019-20 & 2020-21. Since the Commission has considered MAT rate in MYT order dated 29.6.19 for FY 2021-22 to FY 2023-24, income tax is calculated as per MAT rate for FY 2021-22. Because of a change in law, the Petitioner has billed TCS (Tax Collected at Source) equal to 0.1 per cent of the sale consideration exceeding Rs. 50 lakh.

Details of Mid-Term Review

2.6 The details of the Total Annual Charges claimed by the Petitioner for Mid-Term Review of FY 2022-23 and FY 2023-24 are as under:

Table 6: Summary of Mid-Term review filed by Petitioner for FY23 to FY24 (Rs. Cr.)

	As per Petitioner		MYT approved	
	FY23	FY24	FY23	FY24
Capacity Charges				
Interest on Outstanding Loan	0.29	0.25	0.34	0.29
Depreciation + AAD	70.45	70.45	70.46	70.46
Application Fees	0.24	0.05	0.05	0.05
Publication Expenses	-	-	-	-
Total Capacity Charges	**70.97**	**70.74**	**70.85**	**70.80**
Primary Energy Charges				
O&M Expenses	53.40	57.64	49.13	51.10
Return on Equity	78.64	78.64	78.65	78.65
Interest on Working Capital	6.00	6.19	6.73	6.83
Sub- Total Primary Charges	**138.04**	**142.47**	**134.51**	**136.58**
Incentive and Taxes				
Income tax claimed/true up	21.99	22.12	27.12	27.28
Change in Law: TCS new prov.	-	-	-	-
Incentive for Higher Plant Availability	-	-	-	-
Incentive for Secondary Energy	-	-	-	-
Sub-Total Incentive and taxes	**21.99**	**22.12**	**27.12**	**27.28**
Total Annual Fixed Charges (AFC)	**230.99**	**235.33**	**232.48**	**234.66**

2.7 The explanations provided by the Petitioner, for variations in Annual Charges approved and claimed in Petition for Mid Term Review for FY 2022-23 and FY 2023-24, are summarized below.

a. Interest on loans has been calculated based on the actual rate of interest applicable in FY 2022-23 for the loans availed by the Company.

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3. COMMENTS/ OBJECTIONS FILED BY STAKEHOLDERS

Introduction

3.1 The Commission published a Public Notice inviting the interested parties/stakeholders to file their objections and suggestions on the Petition by 21.02.2023. Comments were received from only the HPSEBL in response to the notice of the Commission.

3.2 A public hearing in the Petition was held on 07.03.2023 in the Commission where the stakeholder and the Petitioner were heard. The stakeholder's suggestions/ comments and the Commission's stand on the same are summarized in this chapter.

Bills Net amount paid by HPSEBL

Stakeholder's Comments:

3.3 It is submitted that payment shown to be made by HPSEBL are after availing rebate allowed in terms of the provisions of the PPA, whereas the total amount raised in bills before availing the rebate for the respective year need to be considered in the True-Up.

Petitioner's Reply:

3.4 The Petitioner in the revised submissions dated 19.12.2022 in respect of calculations of revenue surplus/(gap), has considered billed amounts before availing rebate by the HPSEBL.

Commission's view:

3.5 The Commission taking cognizance of the comments, has considered billed amounts before availing rebate by the HPSEBL, for the purpose of True-Up in this Order. This is also in line with the methodology followed in previous True-Up Orders. The approved workings/ figures are detailed out in subsequent chapter of this Order.

Tax on Income

Stakeholder's Comments:

3.6 Tax on Income claimed by the Petitioner for FY2020-21 is Rs.47.16 crore which is significantly high. The Commission may examine the documentary proof of advance tax paid by the Company and may consider the Income tax liability to the extent of Baspa II generation business for the respective financial year.

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Petitioner's Reply:

3.7 The Petitioner has submitted that tax liability for FY 2020-21 has been worked out using normal tax rate provisions and utilizing MAT credit, as per clause 8.11.1 of PPA. The Petitioner has submitted copies of Advance Tax challan receipts and Audited Accounts of Baspa II HEP, to support its claim.

Commission's view:

3.8 The Commission taking cognizance of the comments has carried out independent analysis for the tax on income claimed by the Petitioner as detailed in subsequent chapter of this Order.

Incentive on Secondary Energy and Incentive on higher Plant Availability Factor

Stakeholder's Comments:

3.9 The generation during the FY2019-20 to FY 2021-22 has been above the annual Design Energy and accordingly incentive on Secondary Energy and Incentive on Higher Plant Availability have been paid by the HPSEBL to the Petitioner for the respective year.

Petitioner's Reply:

3.10 The Petitioner has submitted that it has claimed Incentive on Secondary Energy and Incentive on higher Plant Availability, as per provisions of the PPA.

Commission's view:

3.11 The Commission has independently analyzed Petitioner's submissions of 'Jointly reconciled statement with the HPSEBL for billing and payments', and has considered accordingly in the True-Up exercise, as detailed in subsequent chapter of this Order.

Capital Cost exclusion of Kharcham Wangtoo-Jhakri Transmission line

Stakeholder's Comments:

3.12 The Petitioner had filed the Status Report on 27.07.2020 in compliance to the directives given in Baspa II MYT Order dated 29.06.2019. The HPSEBL submits that due cognizance may be taken of the Status Report.

Petitioner's Reply:

3.13 The Petitioner has submitted that after passing of the Order dated 07.07.2020, the Petitioner duly filed a Status Report dated 05.08.2020, with the Commission.

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Petitioner has also submitted that vide letter dated 27.02.2023, the Petitioner has sent a communication to Northern Regional Power Committee (NRPC), outlining the issues with a request to include the same as an agenda item in the upcoming Operational Coordination Sub-Committee (OCC) meeting.

Commission's view:

3.14 The Commission takes note of the fact that appropriate action has not been taken by the Petitioner with respect to exclusion of the capital cost of Kharcham Wangtoo - Jhakri Transmission line after it has been identified that the transmission line is part of inter-state network and cost of the same should not be included under the Baspa II HEP tariff. The Commission has detailed its observations in Chapter 4 of this Order.



4. ANALYSIS OF THE TRUE-UP PETITION

Introduction

4.1 This Chapter deals with the analysis of the True-Up Petition filed by the Petitioner for the period FY 2019-20 to FY 2021-22 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 of the Commission. Various parameters and their computation has been undertaken after giving due consideration to the Power Purchase Agreement signed between Petitioner and HPSEBL.

Computation of Tariff

4.3 As per the PPA, the tariff for the energy generated by Baspa II HEP comprises of:

(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 Clause 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 Clause 8.6.5 of the PPA; and

(c) Leasing Charges.

Primary Energy Charge

4.5 The primary energy charge as per Clause 8.7 of the PPA is a sum of:

(a) Operations and maintenance charges computed as per Clause 8.7.2 of the PPA;

(b) Return on equity computed as per Clause 8.7.3 of the PPA on the equity component approved by the Commission.

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(c) Interest on Working Capital as per Clause 8.7.4 of the PPA; and

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

Incentive for Secondary Energy

4.6 The incentive for Secondary Energy has been calculated as per Clause 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 has been calculated as per the Clause 8.10 of the PPA and has been detailed in relevant section of this Order.

Tax on Income

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

Energy Generation from the plant

4.9 Schedule IX-A of the PPA provides the details of Gross Energy/ Design Energy of the plant which is 1213.18 MU per annum. As per the Clause 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 Schedule IX of the PPA, as shown below:

Table 7: Net Saleable Energy (as per Design Energy) for BASPA II HEP

Particulars		Unit	Values
Design Energy	A	MU	1213.18
Auxiliary Consumption	B	%	0.50%
Transformation losses	C	%	0.50%
Transmission loss to grid	D	%	0.65%
Share of Available Power	E	%	88.00%
Net Saleable Energy	A*(1-B-C)*(1-D)*E	**MU**	**1050.06**

4.11 The Commission has considered the actual generation of energy and plant availability for each year, based on the joint statement issued by the Petitioner and the HPSEBL, which is detailed in the table below:

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Table 8: Actual Energy Generation and Plant Availability for FY 20 to FY 22

Particulars	Item	FY 20 Actual	FY 21 Actual	FY 22 Actual
Generation of Energy (MUs)				
Available Energy	A	1,338.17	1,296.49	1,305.89
Saleable Energy	B=A*0.88	1,177.59	1,140.91	1,149.18
Primary Energy	C	1,050.06	1,050.06	1,050.06
Secondary Energy	D=B-C	127.53	90.85	99.12
Plant Availability (%)				
Normative	E	90.00%	90.00%	90.00%
Actual	F	97.32%	96.92%	97.15%

Capital Cost

4.12 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 Crore for the purpose of determination of tariff. Thereafter, the Commission has allowed additional capitalization/ de-capitalization for the project as follows:

- The Commission approved additional Capital Cost of Rs 95.88 Cr. vide Order dated 24.01.2011.
- Further, the Commission vide Order dated 06.06.2014 has approved the additional Capital Cost of Rs. 2.57 Cr for the Project.
- The Commission has also approved additional Capital Cost of Rs. 6.58 Cr. for year FY 2018-19, vide Order dated 29.06.2019.

4.13 In accordance with the various orders as mentioned above, the Capital Cost as on 31.03.2019 is worked out to be Rs. 1638.99 Cr.

Additional Capitalization

4.14 In the MYT order dated 29.06.2019, the Commission has allowed additional capitalization of Rs 1.59 crore for the implementation of FGMO/ RGMO for three (3) generating units, against decapitalization of old assets worth Rs. 2.07 crore. The Commission has also mentioned in the MYT order that the final Capital Cost for implementation of FGMO/ RGMO would be considered at the time of Truing-Up for the respective years based on prudence check.

4.15 The Petitioner has now filed for True-Up of this additional capital expenditure, claiming actual additional capital expenditure of Rs. 1.4173 Cr. incurred for installation and commissioning of FGMO/ RGMO for all three units of the Project. To support its claim, the Petitioner has provided documentary evidence of final invoices and commissioning certificates from OEM (M/s Andritz Hydro Pvt. Ltd.).

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4.16 The Commission also directed the Petitioner to provide details with respect to procurement and implementation of FGMO/ RGMO across the three units. In response, the Petitioner has submitted that competitive bidding was followed for selection of OEM for implementation of FGMO/ RGMO in one of the units of the Plant. Further, the Petitioner has submitted that the balance work of installation of FGMO/ RGMO in the remaining two units was extended to the same OEM in view of the critical nature of activity and in order to maintain the system uniformity across all three units.

4.17 The Commission has observed that the amount of capital expenditure as per invoices submitted by the Petitioner, adds up to Rs. 1.4173 Cr, which is lower than the amount initially allowed by the Commission in MYT Order. Accordingly, based on the prudence check of the documentary evidences submitted by the Petitioner, the Commission has allowed following unit wise additional Capital Cost and commissioning date, for True-Up for FY 2019-20 to FY 2021-22:

Table 9: Trued-up Additional Capitalization

Units	Additional Capital Cost for FGMO/ RGMO (Rs. Cr.)		Commissioning date
	Petitioner submission	Commission approved	
Unit #1	0.48	0.48	16.02.2022
Unit #2	0.40	0.40	28.01.2021
Unit #3	0.53	0.53	22.04.2019
Total	**1.42**	**1.42**	

4.18 The Petitioner has considered a de-capitalization of Rs. 2.07 Cr. (Rs. 0.69 Cr. for each unit) against the proposed additional capitalization. This is same as approved by the Commission in MYT Order date 29.06.2019. Accordingly, the Commission has also considered for True-Up in this order, the de-capitalization of Rs. 0.69 Cr. for each unit.

4.19 Based on the discussions above, the year-on-year Capital Cost approved by the Commission is as follows:

Table 10: Trued-up Capital Cost for the Project (Rs. Cr.)

Particulars	Item	FY 20	FY 21	FY 22
Opening Balance of Capital Cost	A	1,638.99	1,638.83	1,638.55
Additional Capitalization	B	0.53	0.40	0.48
Decapitalization	C	-0.69	-0.69	-0.69
Closing Balance of Capital Cost	D=A+B+C	1,638.83	1,638.55	1,638.34

4.20 The Petitioner has stated in the submission that no loan was taken by the Petitioner for additional capitalization of FGMO/ RGMO installation and that all the funding was made from internal accruals. Accordingly, in accordance with Regulation 16 of HPERC Generation MYT Tariff Regulations 2011, the Commission has considered 70:30 debt to equity ratio for the funding of the trued-up capital expenditure. Also, considering that no debt was outstanding as per the tariff

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principles considered by the Commission in its previous Orders, other than the normative loans for additional capitalization (as discussed under Para 4.39 of MYT Order dated 29.06.2019), the debt outstanding towards the decapitalized assets has been considered as nil.

Table 11: Trued-up funding pattern for the Capital Cost (Rs. Cr.)

Particulars	Item	FY 20	FY 21	FY 22
Capital Cost	A	1,638.823	1,638.55	1,638.34
Debt	B	1,147.29	1,147.18	1,146.99
Equity	C	491.65	491.57	491.50

Capital Cost exclusion of Karcham Wangtoo-Jhakri transmission line

4.21 In its Order dated 08.12.2017 in the Petition No. 29 of 2017, the Commission has discussed the matter of excluding Capital Cost of Baspa Jhakri LILO transmission line at Wangtoo from the overall Capital Cost of BASPA II HEP as under:-

> *"17. We are, therefore, of the considered opinion that the CTU, the CEA and NLDC are the necessary parties, the Petition without impeading them is not maintainable, and further in light of the forgoing discussion and the Hon'ble CERC Order dated 07.05.2015, since the parties themselves have agreed as per the undertaking of M/s JPVL, for LILO of Baspa-Jhakri 400kV D/C Transmission Line at Wangtoo, final decision for metering arrangement for Baspa-II HEP energy and payment of transmission charges, etc. by the concerned agencies shall be taken by the Appropriate Regulatory Commission. Accordingly, after decision of Appropriate Commission, a Supplementary Agreement is to be entered into between HPSEBL and M/s JPVL. "*

4.22 Further in Order dated 31.10.2018 in Petition No. 21 of 2018, the Commission has stated as follows:

> *'3.8 As also mentioned in the Order, the matter is required to be taken up with inclusion of necessary parties to the appropriate Commission. Until an Order is issued by the Appropriate Commission on this matter, the Capital Cost of Baspa Jhakri LILO transmission line at Wangtoo cannot be excluded from the overall Capital Cost of BASPA II HEP. The Petitioner along with HPSEBL are required to discuss the future steps to be undertaken in this regard within three months of issuance of this Order and update the Commission.'*

4.23 The Petitioner has failed to comply with the directive issued by the Commission in order dated 31.10.2018 and accordingly the Commission in Order dated 29.06.2019 provided additional three months time to both the parties to take action in the matter and decide the future steps.

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4.24 However, no action was taken by the Petitioner. Consequently vide Order dated 07.07.2020, the Commission again directed the parties to undertake suitable measures and provide a status report within one month.

4.25 The Petitioner provided the status report on the matter to the Commission on 27.07.2020. The Status report mentions that the Petitioner held meetings with the HPSEBL to discuss the matter on 02.09.2019 and 12.12.2019. In the Status Report, the Petitioner has requested the Commission to advise methodology for the recovery of loss of ARR, if Tariff approved by CERC is substantially low as against the Tariff being allowed under HPERC Tariff Regulations.

4.26 In regard to the Status Report provided by the Petitioner, the Commission observes that it is neither under the purview nor under the powers of this Commission to comment on the impact of Order by any other Commission. Once the Order has been issued by the Appropriate Commission, the Commission may consider all the facts in the matter for appropriate adjustment of the cost.

4.27 The Commission has already discussed the matter in detail in Orders dated 08.12.2017 and 31.10.2018(ibid).

4.28 The Commission further asked the Petitioner to clarify the reasons for not filing the Petition on the matter of Capital Cost exclusion of Karcham Wangtoo – Jhakri portion of Baspa Jhakri Transmission Line before the CERC. In response, the Petitioner in its reply dated 02.03.2023 stated that to the best of the Petitioner's understanding, the Commission in the earlier directions nowhere directed the Petitioner to file a Petition before the CERC. Further, the Petitioner stated that it has written a letter to Northern Regional Power Committee (NRPC) on 27.02.2023 to include the agenda for Capital Cost of Wangtoo Jhakri Transmission Line in the next OCC meeting and once the issue is taken up, the Commission shall be informed / approached for necessary orders/ directions in this respect.

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. Inspite 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

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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.

Interest on Loans

4.30 In order to calculate the interest on loans, the outstanding loan balances and the applicable interest rates for FY 2019-20 to FY 2021-22 have been considered based on prudence check undertaken by the Commission.

4.31 Repayment of all Domestic and Foreign Loans for Baspa II HEP (except for Normative Loan 2, Normative Loan 3 and Normative Loan 4) had been completed before the start of 4th control period of FY 2019-20 to FY 2023-24.

4.32 While approving the interest for these normative loans in the MYT Order dated 29.06.2019, the Commission had considered the interest rate of 9.10% per annum for FY 2019-20 to FY 2021-22, which was average of the actual loans prevalent for the project.

4.33 The Petitioner in the True-Up Petition has submitted rate of interest of 9.26%, 8.34% and 8.07% for FY 2019-20, FY 2020-21 and FY 2021-22 respectively, as per actual loan portfolio availed by the Company.

4.34 Regulation 17(2) of HPERC Generation MYT Tariff Regulation 2011 (as amended) 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.";

4.35 Accordingly, based on the prudence check of the documentary evidences submitted by the Petitioner for its actual loan portfolio, the Commission observes

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and approves following year on year rate of interest for normative loans of Baspa II HEP:

Table 12: Trued-up Rate of Interest for Loans

Particulars	FY 20	FY 21	FY 22
Rate of Interest			
As per Petitioner's submission	9.26%	8.34%	8.07%
Average interest rate as per Audited Accounts	10.67%	9.84%	10.76%
SBI MCLR (as on 1st April) + 300 basis points	10.55%	9.75%	9.00%
Approved in MYT Order dated 29.06.2019	9.10%	9.10%	9.10%
Approved now by Commission for True-Up	**9.26%**	**8.34%**	**8.07%**

Normative Loan-2

4.36 The Commission had approved a normative loan of Rs. 1.80 Crore in the MYT Order dated 06.06.2014 for meeting the debt requirement for payment of 6th provisional bill raised by SJVNL towards ICF. Loan repayment tenure of 11 years was considered against the normative loan.

4.37 The Commission has continued with the closing balance approved for this loan in the previous True-Up Order for FY 2018-19, and calculated interest on loan as per approved interest rate as provided in the table below:

Table 13: Normative Loan-2 Interest Trued Up for FY20 to FY22 (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22
Opening balance	0.32	0.14	-
Addition	-	-	-
Principal Repayment	0.18	0.14	-
Closing Balance	0.14	-	-
Interest Rate	9.26%	8.34%	-
Approved Interest	0.02	0.004	-

Normative Loan-3

4.38 The Commission had approved a normative loan of Rs. 1.11 Crore in the MYT Order dated 29.06.2019 for meeting the debt requirement of implementing FGMO/ RGMO. The Commission has trued-up this amount of loan now, as per trued-up additional capitalization as discussed under section 'Capital Cost' of this Order, as follows:

Table 14: Trued-up Loan addition for FGMO/ RGMO installation (Rs. Cr.)

Particulars	Item	FY 20	FY 21	FY 22
Trued-up Additional Capitalization	A	0.53	0.40	0.48
Debt funding required Additional Capitalization (with 70:30 Debt to Equity ratio)	A*0.70	0.37	0.28	0.34

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4.39 Loan repayment tenure of 11 years is considered, separately for each year's addition to the normative loan.

4.40 In accordance with the trued-up loan amount and interest rate, the interest on loan for normative loan 3 is calculated as follows:

Table 9: Normative Loan-3 Interest Trued Up for FY20 to FY22 (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22
Opening balance	0.00	0.34	0.56
Addition	0.37	0.28	0.34
Principal Repayment	0.03	0.06	0.09
Closing Balance	0.34	0.56	0.81
Interest Rate	9.26%	8.34%	8.07%
Approved Interest	0.016	0.04	0.06

Normative Loan-4

4.41 The Commission had approved a normative loan of Rs. 4.61 Crores in the MYT Order dated 29.06.2019 for meeting the debt requirement of Rs. 6.58 Crores additional capitalization approved by Arbitral Tribunal vide Order dated 21.06.2018. Tenure of 11 years was considered against the normative loan.

4.42 The Commission has continued with the closing balance approved for this loan in the previous True-Up Order for FY 2018-19, and calculated interest on loan as per approved interest rate as provided in the table below:

Table 10: Normative Loan-4 Interest Trued Up for FY20 to FY22 (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22
Opening balance	4.29	3.87	3.45
Addition	-	-	-
Principal Repayment	0.42	0.42	0.42
Closing Balance	3.87	3.45	3.04
Interest Rate	9.26%	8.34%	8.07%
Approved Interest	0.38	0.31	0.26

Total Interest and Repayment

4.43 The following table depicts the total interest and repayment trued-up for FY 2019-20 to FY 2021-22:

Table 15: Total Interest and Repayments Trued Up for FY 20 to FY 22 (Rs. Cr.)

Particulars	FY20	FY21	FY22
Total Interest Payment	0.41	0.35	0.32
Total Repayments	0.63	0.62	0.51

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Depreciation and Advance Against Depreciation (AAD)

4.44 The Commission has trued-up the depreciation and advance against depreciation for the years FY 2019-20 to FY 2021-22 as per Clause 8.6.5.1 of the PPA as detailed below:

Table 16: Trued Up Depreciation and AAD for FY20 to FY24 (Rs. Cr.)

Particulars		FY 20	FY 21	FY 22
1/12th of the Loans	A	95.60	95.58	95.57
Repayment of the Loans as considered for working out Interest on Loan	B	0.63	0.62	0.51
Minimum of the Above	C=Min(A,B)	0.63	0.62	0.51
Less: Depreciation during the year	**D**	**70.47**	**70.47**	**70.46**
	E=C-D	*-69.84*	*-69.85*	*-69.95*
Cumulative Repayment of the Loan as considered for working out Interest on Loan	F	1168.57	1169.18	1169.69
Less: Cumulative Depreciation	G	1203.26	1235.38	1305.83
	H=F-G, limited to '0'	*0.00*	*0.00*	*0.00*
Opening Cumulative AAD	I	38.35	0.00	0.00
Advance Against Depreciation	J= Max (Min. of E & H), -I)	-38.35	0.00	0.00
Closing Cumulative AAD	K = I + J	0.00	0.00	0.00
Depreciation + AAD	**L = (D + J)**	**32.12**	**70.47**	**70.46**

Operations and Maintenance Expenses

4.45 The Commission in the MYT Order dated 29.06.2019 had computed the O&M charges as per clause 8.7.2 of the PPA, which allows for O&M escalation at weighted average of WPI and CPI indices, 11th year onwards after COD. The 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"

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

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"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

$$\text{Percentage rate of annual escalation} = (0.3 \times \frac{W_1 - W_0}{W_0} + 0.7 \times \frac{L_1 - L_0}{L_0}) \times 100\%$$

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 me made as soon as the published indices for the month of March of that tariff year become available."

4.47 In the MYT Order dated 29.06.2019 for the Control Period FY 2019-20 to FY 2023-24, the Commission had taken note of the following:

"4.52 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, it is observed that the 1981-82 series of CPI and WPI indices have been discontinued. In the previous MYT Order dated 06.06.2014 for the Control

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Period FY 2014-15 to FY 2018-19, the Commission had taken 2004-05 base year series of the WPI and 2001 base year series of the CPI.

4.53 It is observed that the 2004-05 base year series of WPI has also been discontinued now. Therefore, in this Order, the Commission has considered 2011-12 base year series of the WPI and 2001 base year series of the CPI in line with the proposal of the Petitioner for projection of O&M expenses"

4.48 The Commission observes that the CPI and WPI series used in the MYT Order dated 29.06.2019 have been discontinued by RBI. Accordingly, the Commission in this True-Up order has used CPI series with Base Year 2016 and WPI Series with Base Year 2011-12.

4.49 CPI for Industrial Workers with Base Year 2016 was published by RBI from Sep 2020 onwards. However, as per Part B of the Schedule XI of the PPA, CPI for the month of March 2020 is required, to calculate the percentage change year on year. Accordingly, in line with the proposal of Petitioner, the Commission has adjusted the CPI of Mar 2020 with base year 2001, for base year of 2016.

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

Table 17: WPI and CPI considered along with O&M escalation factor for FY20 to FY22

Particulars	FY19	FY20	FY21	FY22
WPI All Commodities (base year 2011-12)				
For the month of March	119.9	120.4	129.9	148.9
Change		0.42%	7.89%	14.63%
CPI for Industrial Workers (Base year 2001)				
For the month of March	309	326	NA	NA
Change		5.50%	NA	NA
CPI for Industrial Workers (Base year 2016)				
For the month of March	NA	119	120	126
Change	NA	NA	0.89%	5.35%
Escalation factor		**3.98%**	**2.99%**	**8.13%**

4.51 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 approved and trued-up additional capitalization in this Order, adjusted for decapitalization), after excluding the cost of ICF for which the O&M is computed as per the agreement with SJVNL.

4.52 With respect to the O&M expenses being paid by the Petitioner to SJVNL for the Inter Connection Facility (ICF), the Commission in MYT Order dated 29.06.2019 had approved additional O&M expenses of 0.25% towards ICF from the date of commissioning of the project as per the methodology used in previous Orders, along with carrying cost for respective years.

4.53 As per the copies of SJVNL bills submitted by Petitioner, GST of 18% is applicable during FY 2019-20 to FY 2020-22. Accordingly, the Commission has considered GST on the O&M cost for ICF as 18%.

4.54 The total trued-up O&M expenses for the Control Period FY 2017-18 to FY 2018-19 are detailed in table below:

Table 18: Trued-Up O&M Expenses for FY 20 to FY 22 (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22
Base O&M Expenses (excluding additional capitalization & ICF facility)	39.73	40.90	44.20
Add: O&M expense towards additional capitalization approved	4.37	4.51	4.80
Add: Service Charge on ICF O&M Expenses	0.40	0.42	0.43
Total O&M Expenses Approved	**44.50**	**45.82**	**49.44**

Return on Equity (RoE)

4.55 As per the Clause 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."

4.56 The Commission has, therefore, allowed RoE at 16% on the approved gross equity of BASPA II HEP under the Section 'Capital Cost' of this order, as follows:

Table 19: Return on Equity for FY20 to FY22 (Rs. Cr.)

Particulars	FY20	FY 21	FY 22
Closing Balance of Equity	491.65	491.57	491.50
Rate Of Return	16%	16%	16%
Return on Equity	**78.66**	**78.65**	**78.64**

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Interest on Working Capital

4.57 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

4.58 The rate of interest for calculating the interest on Working Capital has been taken as per the SBI PLR as on 1st April of the respective year for FY 2019-20 to FY 2021-22 as shown in table below:

Table 20: Trued Up Interest on Working Capital for FY 2019-20 to FY 2021-22 (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22
1/12th of O&M Expenses	3.71	3.82	4.12
Maintenance Spares 12% of O&M Expenses	5.34	5.50	5.93
Receivables equivalent to 2 months average billing	38.36	48.00	44.57
Total Working Capital	**47.41**	**57.32**	**54.62**
Rate of Interest	13.80%	12.90%	12.15%
Interest on Working Capital	**6.54**	**7.39**	**6.64**

Incentive for Secondary Energy

4.59 The computation of incentives has been detailed in the Clause 8.9 of the PPA on "Incentive for Secondary Energy" and Clause 8.10 of the PPA on "Incentive on Account of Higher Plant Availability".

4.60 As per the Clause 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..."

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4.61 The Commission in the MYT Order dated 29.06.2019 had assumed nil Secondary Energy, subject to truing up exercise. The Petitioner has claimed Incentive for Secondary Energy, as per the actual energy delivered in period FY 2019-20 to FY 2021-22 and has submitted jointly signed statement of energy delivered to the HPSEBL.

4.62 Considering this energy delivered by BASPA II HEP to HPSEBL, the Commission has calculated the incentive for Secondary Energy as per the terms of clause 8.9.1 of the PPA, as detailed hereunder:

Table 21: Trued-up Incentive for Secondary Energy for period FY20 to FY22

Particulars	FY 20	FY 21	FY 22
Equity (Rs. Cr.)	491.64	491.56	491.50
Incentive Limit (10% of Equity) (Rs. Cr.)	49.16	49.16	49.15
Rate for Secondary Energy (10% of Equity/155 MU)	3.17	3.17	3.17
Secondary Energy Generation (MU)	127.53	90.86	99.13
Incentive on Secondary Energy (Rs. Cr.)	**40.45**	**28.81**	**31.43**

Incentive for Higher Plant Availability

4.63 Further, as per the Clause 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."

4.64 The Commission in the MYT Order dated 29.06.2019 had assumed normative plant availability and thereby nil incentive for higher plant availability, subject to truing up exercise. The Petitioner has claimed Incentive for Higher Plant Availability, as per the actual availability of the plant. The Petitioner has submitted jointly signed statement of plant availability by HPSEBL.

4.65 The Commission, for the Control Period, has considered actual plant availability for approval of incentive on higher plant availability which is given in the table below:

Table 22: Trued Up Incentive on Higher Plant Availability for FY20 to FY22

Particulars	FY 20	FY 21	FY 22

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Particulars		FY 20	FY 21	FY 22
Normative Plant Availability (%)	a	90.00	90.00	90.00
Actual Plant Availability (%)	b	97.32%	96.92%	97.15%
Higher Plant Availability (%)	c=b-a	7.32%	6.92%	7.15%
Equity (Rs. Cr.)	d	491.64	491.56	491.50
Incentive for higher plant availability (0.35% of Equity) (Rs. Cr.)	e=0.35%*c*d	12.60	11.91	12.30
Incentive limit of 2% of Equity (Rs. Cr.)	f=2%*d	9.83	9.83	9.83
Incentive (Rs. Cr.)	**min (e,f)**	**9.83**	**9.83**	**9.83**

Income Tax

4.66 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."

4.67 In the MYT Order dated 29.06.2019, the Commission had calculated tax for BASPA II HEP using MAT rates for FY 2019-20 to FY 2021-22. This was based on Petitioner's MYT filling that Karcham Wangtoo HEP (another plant under M/s JSW Hydro Energy Limited) was availing tax holiday. In its Petition, the Petitioner has claimed Income Tax as per normal tax rate for FY 2019-20 and FY 2020-21, while as per MAT rate for FY 2021-22 as follows:

Table 23: Income Tax claimed by Petitioner (Rs. Cr.)

Particulars	FY 20	FY 21	FY 22
Taxable Income	110.25	143.60	117.59
Tax rate (%)	34.94%	34.94%	17.47%
Tax liability	38.53	50.18	20.55
Advance tax paid (Challans & TDS)	16.54	47.16	44.84
Lower of MAT/Tax and actual tax paid	**16.54**	**47.16**	**20.55**

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4.68 The Commission directed the Petitioner to clarify if Karcham Wangtoo HEP was still availing tax holiday or not. In response, the Petitioner replied that the tax is paid at entity/Company level and not at unit/plant level. The Petitioner stated that it has paid tax under normal tax rate as evident from the ITRs filed for FY 2019-20 and FY 2020-21. The Petitioner further stated that during FY 2021-22, following True-Up Order by CERC dated 17.03.2022 for Karcham Wangtoo HEP, the Company's income increased and accordingly MAT provisions were applicable instead of normal tax rate.

4.69 The Commission observes from the ITR copies of the Petitioner that tax deduction (as per Section 80-IA of Income Tax Act) was availed by M/s JSW Hydro Energy Limited in all three years of FY 2019-20 to FY 2021-22. However, in spite of this deduction, in FY 2019-20 and FY 2020-21, the tax liability on Petitioner as per normal tax rate was higher than tax liability as per MAT rates. But in FY 2021-22, the tax liability on Petitioner as per normal tax rate turned out to be lower than tax liability as per MAT rates.

4.70 In line with the submission of the Petitioner, as well as supporting documents regarding the same for True-Up under this Order, the Commission has calculated Income Tax for BASPA-II HEP using normal tax rate of 34.94% (30% Corporate Tax plus 12% Surcharge and 4% Cess) for FY 2019-20 and FY 2020-21 and MAT rate of 17.47% (15% MAT Rate plus 12% Surcharge and 4% Cess) for FY 2021-22.

4.71 The Tax amounts for FY 2019-20 and FY 2020-21 are calculated using formula as per Clause 8.11.1 of PPA. For FY 2021-22, the Commission has computed the income tax using methodology approved by Hon'ble Appellate Tribunal for Electricity vide Order dated 21.10.2011 for MAT calculations in Appeal No. 39/10 (also followed by the Commission in its previous True-Up orders and proposed by the Petitioner in its filing).

4.72 Further the Commission has allowed the lower of tax amount calculated and the actual tax paid by the Petitioner as per Audited Accounts of BASPA-II HEP.

4.73 Accordingly, the Commission now approves the trued-up Income Tax for BASPA-II HEP for the period FY 2019-20 to FY 2020-21, using methodology as per PPA, as follows:

Table 24: Trued-up Income Tax for FY 20 to FY 21 (Rs. Cr.)

Particulars	FY 20	FY 21
Return on Equity	78.66	78.65
50% of Incentive for Secondary Energy	20.23	14.41
50% of Incentive for higher plant availability	4.92	4.92
Add: Depreciation	32.12	70.47
Subtract: Income tax depreciation	25.69	24.85
Taxable Income	**110.24**	**143.59**

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Particulars	FY 20	FY 21
Tax Rate	*34.94%*	*34.94%*
Income Tax calculated	**38.52**	**50.18**
Actual Tax as per Audited Accounts of BASPA II HEP	17.31	46.50
Approved Tax (Lower of Tax calculated and actual Tax paid as per Audited Accounts)	**17.31**	**46.50**

4.74 Further the Commission now approves the trued-up Income Tax for BASPA-II HEP for FY 2021-22, using methodology as approved by Hon'ble APTEL in its Order dated 21.10.2011 as follows:

Table 25: Trued-up Income Tax for FY 22 (Rs. Cr.)

Particulars	FY 22
Total Revenue (A)	**218.82**
Expenses	
O&M	29.94
Interest	37.12
Depreciation	34.17
Total Expenses (B)	**101.23**
Profit Eligible for MAT (C=A-B)	117.59
MAT Rate (D)	17.47%
MAT Calculated (D*C)	**20.55**
Actual Tax as per Audited Accounts of BASPA II HEP	22.98
Approved Tax (Lower of MAT calculated and actual Tax paid as per Audited Accounts)	**20.55**

Note: Figures for revenue and expense items are as per Audited Accounts of BASPA II HEP for FY 2021-22

Application fee and publication expense

4.75 The Petitioner has claimed following application fee and publication expenses:

- Tariff application fees of Rs. 15 lakh paid towards the True up Petition of FY 2017-18 and FY 2018-19 (Petition No. 6 of 2020), which was deferred by the Commission vide Order dated 07.07.2020, to be allowed during true up of FY 2019-20.
- An amount of Rs 6.89 lakh, incurred during FY 2019-20 by the Petitioner towards newspaper publication of salient features of the True up of FY 2017-18 and FY 2018-19 (Petition No. 6 of 2020).
- Application fee of Rs. 5.00 lakh per year for the MYT period FY 2019-20 to FY 2023-24, approved by the Commission in Tariff Order dated 29.06.2020.
- Publication expense of Rs. 6.09 lakh for MYT Petition of FY 2019-20 to FY 2023-24.

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- Application fees of Rs. 18.75 lakh in FY 2022-23, borne for the present True-Up/ MTR Petition of period FY 2019-20 to FY 2023-24.

4.76 Based on the review of the supporting documentary evidence provided by the Petitioner, the Commission has allowed the aforementioned amounts towards application fee and publication expenses, as follows:

Table 26: Trued-up Application Fee and Publication Expense (Rs. lakh)

Particulars	FY20	FY21	FY22	FY23	FY24
For True-Up of FY18 to FY19:					
Application Fees	15.00	-	-	-	-
Publication Expense	6.89	-	-	-	-
For MYT of FY20 to FY24:					
Application Fees	5.00	5.00	5.00	5.00	5.00
Publication Expense	6.09	-	-	-	-
For True-Up/ MTR of FY20 to FY24:					
Application Fees	-	-	-	18.75	-
Publication Expense	-	-	-	-	-
Total allowed by Commission:					
Application Fees	0.20	0.05	0.05	0.24	0.05
Publication Expense	0.13	0.00	0.00	0.00	0.00

TCS as per Change in Law

4.77 The Petitioner has claimed a new expense item against Tax Collected at Source (TCS). The Petitioner has stated that Finance Act 2020 inserted a new section 206C (1H) for TCS. The Petitioner claimed that it has paid TCS on all the receipts received from beneficiary, and credit by way of Form 27D has been given to beneficiary. The Petitioner further stated that since TCS is paid on behalf of beneficiary, its recoverable on account of this change in law.

4.78 The Petitioner further submitted that Section 206C(1H) of the Income Tax Act became applicable from 1.10.2020 for TCS (@ 0.1%) by seller and Section 194Q of the Income Tax Act became applicable from 1.07.2021 for TDS (@ 0.1%) by buyer. Accordingly, Petitioner has billed TCS for the period 1.10.2020 to 30.6.2021 u/s 206C(1H) of the Income Tax Act. Later, HPSEBL has been deducting TDS u/s 194Q of the Income Tax Act w.e.f. 1.7.2021, hence Petitioner stopped charging TCS in subsequent energy bills.

4.79 On account of this change in law, Petitioner has billed Tax collected at source (TCS) effective from 1.10.2020 and paid by the Respondent, in terms of the Clause 20.21 of PPA, as follows:

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Table 27: TCS claimed by Petitioner (Rs. Lakh)

Particulars	FY 20	FY 21	FY 22
TCS claimed by Petitioner	-	11.77	7.58

4.80 The Commission takes cognizance of Section 206C(1H) of Finance Act 2020 and allows the amount of TCS as additional expense item. Since this amount is considered on expense as well as revenue side, the impact is neutral on the overall revenue surplus/gap. However, the Commission observes that the amount of TCS claimed by the Petitioner is different from the TCS amount reflected in the 'Jointly reconciled statement with HPSEBL for billing & payments for FY 19-20 to 21-22'.

4.81 The Commission has allowed the expense towards TCS, as per 'Jointly reconciled statement with HPSEBL for billing & payments for FY 19-20 to 21-22', as follows:

Table 28: Trued-up TCS amount for FY20 to FY22 (Rs. Lakh)

Particulars	FY 20	FY 21	FY 22
TCS approved, as per jointly reconciled statement with HPSEBL	-	11.77	5.74

Annual Fixed Charge for BASPA II HEP

4.82 The total Annual Fixed Charges for the BASPA-II, with the components of the capacity charges, primary energy charges and incentives and taxes trued-up as detailed in the previous Sections in this chapter, are summarized below:

Table 29: Summary of Trued-up Annual Fixed Charge for FY20 – FY22 (Rs. Cr.)

	As per MYT Order			As per Petitioner			Trued-up by Commission		
Particulars	**FY20**	**FY21**	**FY22**	**FY20**	**FY21**	**FY22**	**FY20**	**FY21**	**FY22**
Capacity Charges									
Interest on outstanding loans	0.42	0.40	0.38	0.41	0.35	0.32	0.41	0.35	0.32
Depreciation + AAD	32.12	70.46	70.46	32.13	70.45	70.45	32.12	70.47	70.46
Application fee	0.05	0.05	0.05	0.20	0.05	0.05	0.20	0.05	0.05
Publication expense	0.06			0.13		0.00	0.13	0.00	0.00
Sub-total	**32.65**	**70.91**	**70.89**	**32.87**	**70.85**	**70.81**	**32.87**	**70.86**	**70.82**
Primary Energy Charges									
O&M Charges	43.68	45.42	47.23	44.51	45.84	49.47	44.50	45.82	49.44
Return on Equity	78.66	78.66	78.65	78.66	78.65	78.64	78.66	78.65	78.64
Interest on Working Capital	5.34	6.53	6.62	6.53	7.41	6.64	6.54	7.39	6.64
Sub-total	**127.68**	**130.61**	**132.50**	**129.70**	**131.90**	**134.75**	**129.71**	**131.86**	**134.71**
Incentives and Taxes									
Incentive for Sec. Energy	-	-	-	40.45	28.81	31.43	40.45	28.81	31.43
Incentive for High Plant Avail.	-	-	-	9.83	9.83	9.83	9.83	9.83	9.83
Change in law: TCS provision	-	-	-	-	0.12	0.08	-	0.12	0.06
Tax	18.34	26.78	26.95	16.54	47.16	20.55	17.31	46.50	20.55

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Particulars	As per MYT Order			As per Petitioner			Trued-up by Commission		
	FY20	FY21	FY22	FY20	FY21	FY22	FY20	FY21	FY22
Sub-total	**18.34**	**26.78**	**26.95**	**66.82**	**85.92**	**61.89**	**67.60**	**85.26**	**61.87**
Total Annual Fixed Charges	**178.67**	**228.30**	**230.34**	**229.39**	**288.67**	**267.45**	**230.17**	**287.99**	**267.40**

Amount Payable by the Board

4.83 From the 'Jointly reconciled statement with the HPSEBL for billing & payments for FY 19-20 to 21-22', the Commission observes that a significant outstanding amount is to be paid by the HPSEBL to Petitioner for the bills raised, especially for FY 2020-21. This outstanding is primarily towards the tax invoices raised by the Petitioner against which partial amounts have been paid by the HPSEBL. In response to the queries of the Commission, the Petitioner clarified that the outstanding as per jointly reconciled statement for FY 2019-20 to FY 2021-22 are still outstanding.

4.84 Accordingly, the Commission has considered the amount received by the Petitioner, by adding the amounts paid by the HPSEBL along with rebates availed and TDS amount deducted by HPSEBL, as provided below:

Table 30: Amount received by Petitioner to HPSEBL for FY20 to FY 22 (Rs. Cr.)

Particulars (as per Jointly Reconciled Statement)	**FY 20**	**FY 21**	**FY 22**
Amount Paid by HPSEBL (incl. TCS)	224.63	262.99	269.33
Plus: Rebate availed by HPSEBL	2.29	2.34	2.20
Plus: TDS deducted by HPSEBL	0	0.01	0.12
Total	**226.92**	**265.33**	**271.66**

4.85 The computations of the revenue surplus / gap as per the trued-up ARR and revenue billed is shown in the following Table:

Table 31: Approved Revenue Surplus/ (Gap) by the Commission (Rs. Cr.)

Particulars	**FY 20**	**FY 21**	**FY 22**	**FY23**
Total Annual Fixed Charges	230.16	287.99	267.40	-
Amount Paid by HPSEBL	226.92	265.33	271.66	-
Revenue Surplus/ (Gap)	**-3.25**	**-22.66**	**4.25**	-
Opening Surplus / (Gap)	0.00	-3.43	-27.58	-25.87
Surplus / (Gap) for the year	-3.25	-22.66	4.25	0.00
Closing Balance of Surplus / (Gap)	-3.25	-26.09	-23.33	-25.87
Average Balance	-1.62	-14.76	-25.45	-25.87
Interest Rate	11.16%	10.07%	10.00%	10.79%
Interest	-0.18	-1.46	-2.55	-2.79
Closing Balance of Surplus / (Gap)	**-3.43**	**-27.58**	**-25.87**	**-28.66**

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4.86 The Commission directs the Petitioner/ the HPSEBL to adjust/ pay the amount of closing balance of arrears at the end of FY 2022-23 within three months of issuance of this Order.

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5. ANALYSIS OF THE MID TERM REVIEW PETITION

5.1 As part of the Petition filed, the Petitioner has also proposed review of the ARR for FY 2022-23 and FY 2023-24 considering the base year as FY2021-22.

5.2 In accordance with the trued-up figures for FY 2019-20 to FY 2021-22 as approved by the Commission in this Order, the Commission now determines the revised ARR for FY 2022-23 and FY 2023-24 (subject to be trued up later) basis following assumptions:

(i) No additional capitalization/ de-capitalization is requested by the Petitioner under Mid-Term Review. Accordingly, the closing balance of Capital Cost for FY 2021-22 (along with same funding pattern), as trued-up by the Commission in this Order, is continued for the period of FY 2022-23 and FY 2023-24.

(ii) Loan schedule for ongoing loans of Normative Loan 3 and Normative Loan 4 are prepared using same repayment amount and interest rate as of FY 2021-22, as trued-up by the Commission in this Order.

(iii) Depreciation for FY 2022-23 and FY 2023-24 is calculated as per Clause 8.6.5.1 of the PPA.

(iv) O&M expenses for FY 2022-23 and FY 2023-24 has been worked out in accordance with the Clause no. 8.7.2 of PPA, considering average of escalation factors of FY 2019-20 to FY 2021-22 i.e. 5.03%, as trued-up by the Commission in this Order. Average escalation factor is considered as the escalation factor for last trued-up year FY 2021-22 was significantly higher than previous trend.

(v) The Commission has allowed RoE at 16% on the approved gross equity of BASPA II HEP for FY 2022-23 and FY 2023-24.

(vi) Interest on Working Capital for FY 2022-23 and FY 2023-24 has been calculated as per provisions of Clause no. 8.7.4 of the PPA. The rate of interest for calculating the interest on Working Capital has been taken as the SBI PLR as on 1st April 2022 i.e. 12.30%.

(vii) No incentive for Secondary Energy or higher plant availability is considered for FY 2022-23 and FY 2023-24 by the Petitioner in its Petition. The Commission has also not considered any Secondary Energy generation for the purpose of approval of the ARR/ Tariff. The incentive for Secondary Energy generation shall be billed by the Petitioner to the HPSEBL as per the actual

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generation in the applicable tariff for each year in accordance with the provisions of the PPA and the Commission shall true up the same at the end of the Control Period.

(viii) Income tax is calculated using formula as allowed under the PPA, using MAT rate as approved for FY 2021-22.

(ix) Application fees of Rs. 18.75 lakh borne for this True-up/ MTR Petition of period FY 2019-20 to FY 2023-24 is allowed in FY 2022-23. Also Application fee of Rs. 5.00 lakh per year for FY 2022-23 to FY 2023-24 is allowed, as approved by the Commission in Tariff Order dated 29.06.2020.

Table 32: Summary of approved Mid-Term Review for FY23 and FY24 (Rs. Cr.)

Particulars	As per MYT Order		As per Petitioner		MTR by Commission	
	FY23	FY24	FY23	FY24	FY23	FY24
Capacity Charges						
Interest on outstanding loans	0.34	0.29	0.29	0.25	0.29	0.25
Depreciation + AAD	70.46	70.46	70.45	70.45	70.45	70.45
Application fee	0.05	0.05	0.24	0.05	0.24	0.05
Publication expense	-	-	0.00	0.00	0.00	0.00
Sub-total	**70.85**	**70.80**	**70.97**	**70.74**	**70.98**	**70.75**
Primary Energy Charges						
O&M Charges	49.13	51.10	53.40	57.64	51.95	54.60
Return on Equity	78.65	78.65	78.64	78.64	78.64	78.64
Interest on Working Capital	6.73	6.83	6.00	6.19	6.01	6.13
Sub-total	**134.51**	**136.58**	**138.04**	**142.47**	**136.60**	**139.36**
Incentives and Taxes						
Incentive for Sec. Energy	-	-	-	-	-	-
Incentive for High Plant Avail.	-	-	-	-	-	-
Change in law: TCS provision	-	-	-	-	-	-
Tax	27.12	27.28	21.99	22.12	21.99	22.12
Sub-total	**27.12**	**27.28**	**21.99**	**22.12**	**21.99**	**22.12**
Total Annual Fixed Charges	**232.48**	**234.66**	**230.99**	**235.33**	**229.56**	**232.23**

Impact of Water Cess

5.3 The Governor of Himachal Pradesh has promulgated 'The Himachal Pradesh Water Cess on Hydro Power Generation Ordinance 2023' (Ordinance No. 2 of 2023) on 15.02.2023. As per the Ordinance, 'Himachal Pradesh State Commission for Water Cess on Hydro Power Generation' shall be established for fixation and recovery of water cess on water drawn by hydro power generating stations. Further, the 'Jal Shakti Vibhag' vide notification dated 16.02.2023 has determined the rates for water cess, under Section 17(1) of the said Ordinance 2 of 2023.

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5.4 The Petitioner in the additional submission dated 02.03.2023 has claimed the issuance of this Ordinance as change in law event as per PPA and claimed additional expense of upto Rs. 34.93 Crore annually on account of Water Cess. The amount has been estimated by the Petitioner as follows:

*Design Energy 1213 MUs * water consumed for one-unit generation 0.16 Cubic meter per second * 60 Seconds * 60 Minutes * 1000 * Rs. 0.50 per cubic meter = Rs 34.93 crores*

5.5 The Commission takes a note of the submission made by the Petitioner. However, as per letter dated 29.03.2023, the Secretary (Power), GoHP has informed the Commission that the State Government has decided in principle to neutralize the impact of Water Cess on HPSEBL Consumers. Therefore, the exact impact of same can only be determined when the GoHP clarifies on the mechanism for providing support i.e. as rebate to the HPSEBL or waiver to generators supplying 100% of power generated to the HPSEBL. Therefore, the Commission shall consider the impact of the water cess at the time of True-Up for FY 2022-23 and FY 2023-24, based on the methodology used by Himachal Pradesh State Commission for Water Cess on Hydro Power Generation and mechanism adopted by GoHP to support the additional impact on HPSEBL.

-Sd-	-Sd-	-Sd-
(Shashi Kant Joshi)	**(Yashwant Singh Chogal)**	**(Devendra Kumar Sharma)**
Member	**Member (Law)**	**Chairman**

Place: Shimla

Dated: 16-May-2023

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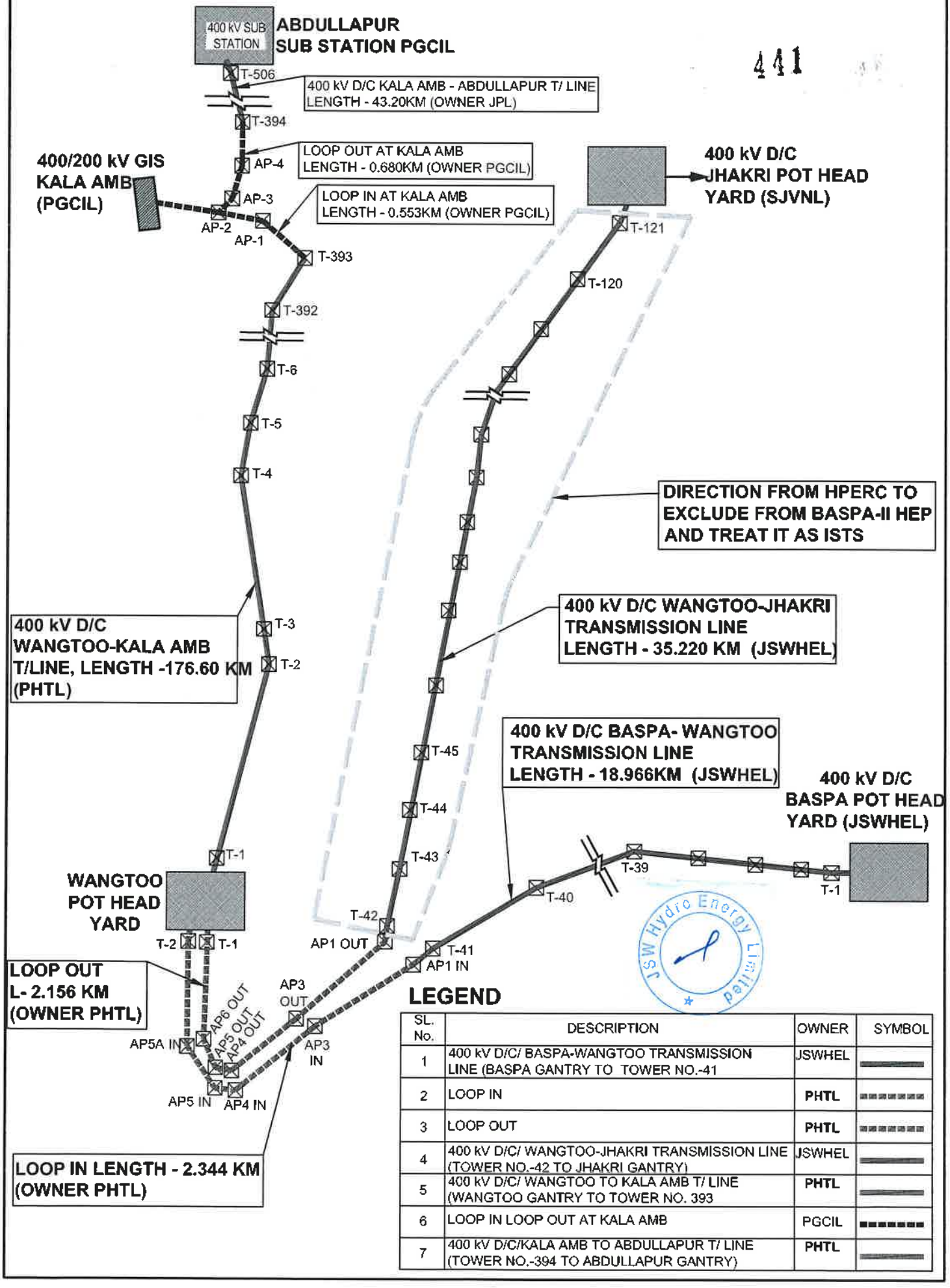
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Annexure A-9'

DATE: 11-08-2023

LINE DIAGRAM OF TRANSMISSION LINE FROM BASPA/KARCHAM WANGTOO H.E. PLANTS TO ABDULLAPUR

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LEGEND

SL. No.	DESCRIPTION	OWNER	SYMBOL
1	400 kV D/C/ BASPA-WANGTOO TRANSMISSION LINE (BASPA GANTRY TO TOWER NO.-41	JSWHEL	
2	LOOP IN	PHTL	
3	LOOP OUT	PHTL	
4	400 kV D/C/ WANGTOO-JHAKRI TRANSMISSION LINE (TOWER NO.-42 TO JHAKRI GANTRY)	JSWHEL	
5	400 kV D/C/ WANGTOO TO KALA AMB T/ LINE (WANGTOO GANTRY TO TOWER NO. 393	PHTL	
6	LOOP IN LOOP OUT AT KALA AMB	PGCIL	
7	400 kV D/C/KALA AMB TO ABDULLAPUR T/ LINE (TOWER NO.-394 TO ABDULLAPUR GANTRY)	PHTL	

Annexure A-10

File No.CEA-PS-11-22(14)/1/2018-PSPA-I Division 78

I/8824/2020 167-72

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भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन -I प्रभाग
Power System Planning & Appraisal - I Division

सेवा में /To,

1. COO (CTU), POWERGRID, Saudamini, Plot no. 2, Sector -29, Gurgaon-122 001
2. CEO, POSOCO, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110010
3. Managing Director, HPPTCL, Himfed Bhawan, New ISBT Road, Panjari, Shimla-171005
4. Managing Director, HPSLDC, SLDC Complex TOTU, Shimla-171011.
5. Director (Electrical), HPPCL, Himfed Bhawan, BCS, Shimla-171009.
6. M/s JSW Energy Limited Centre, Bandra Kurla Complex, Bandra (East), Mumbai-400051

Subject/विषय: Minutes of Meeting to review the evacuation arrangement of Shongtong Karcham (450MW) in Himachal Pradesh.

Sir/ Madam,

Please find enclosed the Minutes of Meeting held on 03.01.2020 at 11:30 A.M under the chairmanship of Chief Engineer (PSPA-1), CEA on the above mentioned subject.

Yours faithfully,

Manjari 22/1/2020

(Manjari Chaturvedi)
Director (PSPA-1)

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Minutes of Meeting held on 3.01.2020 to review the evacuation arrangement for Shongtong Karcham (450 MW) in Himachal Pradesh

List of participants is enclosed at Annexure-I.

As per Master Plan for Satluj basin, power of Shongtong Karcham (450 MW) HEP has been planned through 400 kV D/C (Quad HTLS) line up to 400/220/66 kV substation of HPPTCL under construction at Wangtoo. In the 40th meeting of Standing Committee on Power System Planning-NR held on 22.6.2018, it was decided that this line would be developed as dedicated line of Shongtong Karcham HEP by HPPTCL. Subsequently, in the 1st meeting of NRSCT held on 11.9.2018, for evacuation of power from Shongtong HEP, HPPTCL had proposed LILO of one circuit of 400 kV Baspa-II-KarchamWangtoo D/C (Triple Snow bird) line of M/S JSW at Shongtong Karcham HEP as an interim arrangement, till the upstream projects get materialized. LILO (LILO length about 6 Kms.) to be done with Quad HTLS conductor. After materialization of upstream generations, the LILO would be opened and extended to 220/400 kV Wangtoo substation of HPPTCL and it was decided that a separate meeting may be convened to discuss the above proposal.

The same was discussed in a meeting held in CEA on 12.09.2019 in participation with CTU, POSOCO, HP and JSW, wherein JSW had informed that with this interim arrangement, there would be limitation in power flow during n-1 condition, as the 400 kV Baspa-II-Karcham Wangtoo D/C line is having at cable portion of 630 sq. mm from the pothead yard to the GIS switchyard at Karcham Wangtoo. JSW informed that two set of cables are running parallel through a tunnel with high gradient and replacement of one cable with higher capacity cable is time consuming and troublesome due to space constraints, safety concerns and generation losses. They have no objection for the implementation of the above LILO proposal of HPPTCL and under n-1 condition, SPS may be considered at Shongtong generating station.

After detailed deliberation it was decided that Shongtong to Wangtoo (length-18 km) should be considered with triple tower design and with Twin Moose conductor. With this configuration, the overall cost of the 18km direct line with Twin Moose conductor would be more or less same as with the proposed LILO of 400 kV Baspa-II-Karcham Wangtoo D/C (Triple Snow bird) line of M/S JSW at Shongtong Karcham HEP with Quad conductor (6km). Also, HPPTCL was advised to explore the possibility of above suggestion and were requested to carry out detailed survey based on the above proposal.

Further, in a meeting held on 3.01.2020, HPPTCL stated that looking into the cost economics, instead of laying 18 km Quad line from Shongtong to Wangtoo substation, it is proposed to LILO 400 kV Baspa-II-Karcham

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Wangtoo D/C (Triple Snow bird) line of M/S JSW at Shongtong Karcham HEP (about 6km) with Moose or triple conductor as an interim arrangement. With this the power from Shongtong can be easily evacuated. During outage of one line of higher capacity, there would be loading restrictions on the second line, which could be managed by lowering generation at Shongtong Karcham HEP. In future, the LILO portion of the line can be extended to Wangtoo substation with the upstream projects.
HPPTCL intimated that the timeline for Shongtong is 2024-25 and the upstream project of Shongtong i.e. Jangithopan (780 MW) is likely to come by 2030 timeframe. As such, investing heavily for direct line upto Wangtoo and two line bays at Wangtoo can be avoided presently with the proposed system for evacuation of 450 MW power from Shongtong Karcham HEP.

CTU and POSOCO both suggested that SPS at planning stage may be avoided and termination at Wangtoo should be made reliable and planned without the implementation of SPS.

HPPTCL stated that construction of a direct system upto Wangtoo would involve laying 400 kV line to Wangtoo S/s along with the construction of bays, which would be costly and capacity of the system would remain underutilised till upstream projects are materialised. So in the margins available in the existing system can be easily utilised for evacuation power from Shongtong Karcham HEP through the LILO arrangement.

After detailed deliberations the power following evacuation arrangements from Shongtong HEPwas agreed:

- LILO of 400 kV Baspa-II-Karcham Wangtoo D/C (Triple Snow bird) line of M/S JSW at Shongtong Karcham HEP (about 6km) with Triple Snow bird conductor as an interim arrangement.
- Provision of SPS at Shongtong generation switchyard to take care for n-1 condition.
- As a final arguments, the LILO portion of the line would be extended to Wangtoo Switchyard, along with 2 no. of bays at Wangtoo Switchyard for evacuation of power from Shongtong Karcham and with the upstream projects in that area.

Meeting ended with the thanks to chair.



List of Paricipants for Meeting to review the evacuation arrangement for Shongtong Karcham (450 MW) Annexure-I

S.No.	Name (S/Shri)	Designation	Mb. No.
I	**CEA**		
1	Goutam Roy	CE	8376817933
2	Manjari Chaturvedi	Director	9810502209
3	Nitin Deswal	AD-I	9670563108
4	Komal Dupare	AD-II	9425618454
II	**POWERGRID**		
5	Mukesh Khanna	CGM (CTU-Plg.)	9910378098
6	Rajesh Verma	Sr. DGM (Powergrid)	9599192310
III	**POSOCO**		
7	Alok Kumar	Sr. DGM	9999039321
8	Gaurav Malviya	Dy. Manager	9599441301
IV	**HPPTCL**		
9	R.K Sharma	MD (HPPTCL)	9816082408
10	K.S.Attri	Director	9418488316
11	Sandeep Sharma	GM(plg)	9816628734
V	**HPPCL**		
12	Dheeraj Mittal	GM	9410803201
13	Jitender Dogra	Sr. Manager	7018260751
V	**JSW**		
14	Parveen Puri	HOP	9805009201
15	Anurag Aggarwal	Sr. Manager(JSW Hydro)	9004046998
16	P.K.Jha	Chief Engineer	9805421339



BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO. 37 OF 2011

IN THE MATTER OF:

JAYPEE POWERGRID LTD. .... PETITIONER

VERSUS

JAYPEE KARCHAM HYDRO CORPN. LTD. & ORS ...RESPONDENTS

REPLY ON BEHALF OF RESPONDENT NO. 4 ONLY TO THE QUERY RAISED BY THIS HON'BLE COMMISSION IN THE RECORD OF PROCEEDINGS DATED 12.4.2012

MOST RESPECTFULLY SHOWETH:

1. That this Hon'ble Commission in its Record of Proceedings dated 12.4.2012 in the above mentioned petition had directed Respondent No. 4 i.e. Jaiprakash Power Ventures Limited in the following terms:

   "The Commission directed Respondent No. 4 Jaiprakash Power Ventures Ltd. to explain as to how a portion of its dedicated transmission line namely, Karcham Wangtoo-Nathpa Jhakri portion of the 400 kV D/C Baspa-Nathpa Jhakn Transmission line is being used for evacuation of power from Karcham Wangtoo HEP without it being an Inter-State Transmission line"

2. At the outset it is submitted that the transmission line from Baspa II to Nathpa Jhakri was never a dedicated transmission line. It was always an inter-State transmission line.
3. That in order to explain the status of the transmission line from Baspa II to Nathpa Jhakri owned, established, operated and maintained by Respondent No. 4 and also, after LILO of the said line, the status of Karcham Wangtoo to Nathpa Jhakri transmission line after LILO the

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historical background in which the said Baspa II to Nathpa Jhakri transmission line got established and commissioned is relevant.

BACKGROUND

4. That a memorandum of understanding was executed between the Government of Himachal Pradesh and Jaiprakash industries Limited (JIL) on 23 11.1991 for the implementation of hydro electric power generation project at Baspa-II (300 MW) in Kinnaur district of Himachal Pradesh,

5. Clause 5 of the said MOU reads as under: -

   "5 The State Government and JIL agree that after JIL is satisfied on detailed techno-economic investigations of the project that the project is technically feasible and economically viable, the State Government shall authorize and enter into such instrument of authority and accord all such permissions and approvals, as may be required for implementing the said project on terms to be mutually settled between the parties."

   A copy of the MOU dated 23.11.1991 between the government of Himachal Pradesh and JIL is being enclosed as Annexure R4/1

6. Thereafter, pursuant to the said MOU the Government of Himachal Pradesh and JIL entered into an agreement for the implementation of Baspa II project on 1.10.1992. A copy of the said agreement between Government of Himachal Pradesh and JIL is being annexed hereto and marked as **Annexure R4/2**

7. The relevant part of the said agreement is reproduced herein below for ready reference:

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"1.8 Project means Baspa Hydro Electric Project Stage-II-of 300 MW capacity as may be finally approved by the Central Electricity Authority, including the transmission system upto Jhakri Sub Station of Nathpa Jhakri Project for evacuation of power from the project."

"2. The Government hereby agrees to grant to the Company the right to establish, own, operate and maintain the Project and permission to generate and sell power from the Project for an initial period of forty years from the date of commissioning of the Project, extendable for a further period of twenty years."

"3. The Government hereby agrees to grant ***to the Company all consents, permissions, statutory/ non-statutory, within its purview*** *as required by the Company to undertake, establish, operate and maintain the project."*

"30 (i) ***Power generated at the Project shall be transmitted upto Jhakri Sub-Station and from Jhakri onward, the power would be fed into the Northem Grid through Nathpa Jhakri transmission system which is being set up by National Power Transmission Corporation (NPTC) for evacuation of power from Nathpa Jhakri Project****. The Government shall use its good offices with NPTC towards ensuring that the transmission system for Nathpa Jhakri Project is established by NPTC well in time before the date of availability of power supply from the Project."*

30 (ii) The Project contains provisions for generation as well as transmission lines from the Project upto Jhakri Sub-Station (about 55 Kms) required for evacuation of power from the Project. The project complete as such shall be established owned, operated and maintained by the Company. As offered by the Board, the Company agrees to utilize the services and expertise of the Board for construction of 220 kv transmission

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lines between the Project and Jhakri, modalities for which will be separately worked out between the Company and the Board. The tariff to be calculated shall be worked out at Jhakri busbars. ***This transmission line*** *(between the Project and Jhakri)* ***can also be utilized for evacuation of power from any other generation project established or to be established in the area provided that the right of the*** *Company shall always be recognized for evacuation of its own power from the Project, and authority controlling such generation Project shall bear proportionate wheeling charges and the same shall be paid to the Company by the beneficiary transmitting such power."*

8. The said agreement was entered into by JIL being a generating company under Section 2 (4A) of the Electricity (Supply) Act, 1948.

9. That the said agreement was assigned by Jaiprakash Industries Limited to one if its subsidiaries i.e. Jaiprakash Hydro Power Limited (JHPL) with the consent of Government of Himachal Pradesh. A tripartite agreement between Government of Himachal Pradesh, JIL and JHPL was executed in this regard on 17.10.1995. The said tripartite agreement transferred all assets, liabilities, privileges, rights, obligations and benefits of the project by JIL to JHPL arising out of the MOU dated 23.11.1991 and agreement dated 1.10.1992 executed between the Government of Himachal Pradesh and JIL. A copy of the said tripartite agreement dated 17.10.1995 is being annexed hereto as **Annexure R4/3.**

10. That Central Electricity Authority (CEA) also accorded Techno Economic clearance to the Project vide its letter dated 29.04.1990 This clearance included the construction of transmission line from the project to Nathpa Jhakri Switchyard.

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11. That JHPL was a generating company within the meaning of Section 2 (4A) of the Electricity (Supply) Act, 1948

12. That from the above background it is clear that JHPL was granted permission to establish a generating station of 300 MW capacity namely Baspa II and also the transmission lines for evacuation of the power generated from the said project to Jhakri

13. It may be noted that Section 15 of the Electricity (Supply) Act 1948 provided the objects and jurisdiction of the generating companies. One of the objects of the generating company under that section was to establish, operate and maintain generating stations and tie-lines, sub-stations and main transmission lines connected therewith. It did not provide for establishing dedicated transmission lines.

14. That Section 18 A of the Electricity (Supply) Act, 1948 prescribed the duties of generating company Section 18 A (1) (a) provided as follows

> *"**18A. Duties of Generating Company** - (1) Subject to the provisions of this Act, a Generating Company shall be charged with the following duties, namely: -*
>
> *(a) to establish, operate and maintain such generating stations and tie-lines, sub-stations and main transmission lines connected therewith, as may be required to be established by the competent govemment or governments in relation to the Generating Company."*

This section also charged the generating company with a duty to establish, operate and maintain main transmission lines among other things and not the dedicated transmission line.

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15.It may also be noted that Section 26 A of the Electricity (Supply) Act 1948 provided that a generating company shall not be required to obtain a licence under the Indian Electricity Act, 1910. Further Section 26A sub-section (3) exempted the generating companies from the provisions of Section 30 of the Indian Electricity Act, 1910 which provided for restriction on transmission of energy by any person other than CTU, STU. a transmission licensee etc. The relevant part of the Section 26A of the Electricity (Supply) Act, 1948, is reproduced below.

> ***"26-A. APPLICABILITY OF THE PROVISIONS OF ACT 9 OF 1910 TO GENERATING COMPANY. –***
>
> *(1) Notwithstanding anything contained in sub-section (2), nothing in The Indian Electricity Act, 1910 (9 of 1910)", shall be deemed to require a Generating Company to take out a licence under that Act, or to obtain sanction of the State Govemment for the purpose of carrying on any of its activities.*
>
> .....
>
> *(3) The provisions of Sec. 30 of the Indian Electricity Act, 1910 (9 of 19 1 0) shall not apply to the transmission or use of energy by a Generating Company."*

16.Following emerges from the above mentioned facts and the legal provisions:

(i) JHPL was granted permissions and approvals by the Government of Himachal Pradesh to own, establish, maintain, operate the project of Baspa II generating station which included the owning, establishing, operating and maintaining transmission line from Baspa II to Nathpa Jhakri.

(ii) Section 15A of the Electricity (Supply) Act, 1948 gave power to JHPL to establish, maintain and operate main transmission lines.

(iii) Section 18 A (1) (a) of the Electricity (Supply) Act, 1948 charged JHPL with the duty to establish, operate and maintain main transmission lines. It may be noted here that none of these provisions gave power to JHPL or charged it with the duty to establish dedicated transmission lines.

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17. Therefore the Bapsa-Nathpa Jhakri line was established, operated and maintained by JHPL as a main transmission line and not as a dedicated transmission line

18. Further, Clause 30 (i) of the Agreement dated 1.10.1992 clearly provided that the said line can also be utilized for evacuation of power from any other generation project established or to be established in the area. The very fact that the said line was of 900 MW capacity whereas the generating capacity of Baspa II is only 300 MW clearly shows that this line was not dedicated transmission line and was a main transmission line keeping in view the future need of evacuation of power from other generating stations.

19. The said Baspa - Nathpa Jhakri line was connected to inter- connection facility of National Power Transmission Corporation (NPTC) and was fed into northern grid for inter-state transmission.

20. That 'Inter-State Transmission System' was for the first time defined by Section 2 (e) of the Electricity Regulatory Commissions Act, 1998 which came into force on 2.7.1998. The definition of inter-state transmission system was inserted in Indian Electricity Act, 1910 as sub section (gb) of Section 2 with effect from 31.12.1998. Inter State transmission is defined in the Indian Electricity Act, 2003 in Section 2 (36). The definition of inter-state transmission system in all the above three Acts is identical and the definition as contained in Section 2 (36) of the Electricity Act, 2003 is being quoted herein below

"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,

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(ii) *the conveyance of electricity across the territory of an 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."*

21. That since Baspa-Nathpa Jhakri line was connected to the inter- connection facility built, owned, operated, maintained by Central Transmission Utility (now Power Grid Corporation Limited) and the part of the power transmitted through it was for the purpose of inter State transmission the said line became inter-State transmission line with the enactment of Electricity Regulatory Commissions Act, 1998 and continued so after the enactment of Electricity Act, 2003.

22. In the mean time another subsidiary company of Jaiprakash Industries Limited namely Jaypee Karcham Hydro Corporation Limited was executing a 1000 MW hydro electric project at Karcham Wangtoo which was earlier scheduled to be commissioned in the year 2010.

23. In the year 2002 Central Electricity Authority gave clearance to Power Grid Corporation of India Limited to construct a LILO on the said line at Karcham Wangtoo. The purpose of constructing a LILO at Karcham Wangtoo was to evacuate some power from the Karcham Wangtoo project after its commissioning as the said transmission line had the capacity available for such evacuation and the transmission line envisaged primarily for Karcham Wangtoo project i.e. from Karcham Wangtoo to Abdullapur was under contemplation.



24. Thereafter in various meetings of the CTU as well as CEA this arrangement was approved.

25. In the year 2007 this Hon'ble Commission vide its order dated 1.10.2007 granted inter-State transmission licence to Jaypee Powergrid Limited (the petitioner herein). The said licence included the permission to the petitioner to construct a LILO on the said line. In fact an objection for constructing a LILO on the said line was taken by HPSEB in the proceedings before this Hon'ble Commission for grant of license to the Petitioner which was duly considered and rejected by this Hon'ble Commission. This aspect also makes it clear that this Hon'ble Commission was clearly of the understanding that the line from Baspa to Nathpa Jhakri is an inter-State transmission line and therefore a licence was granted by this Hon'ble Commission to the petitioner to construct a LILO on the said line.

26. That after the construction of LILO on the said line the transmission line from Karcham Wangtoo to Nathpa Jhakri (infact even Bapsa II to Naptha Jhakri) still remains an inter-State transmission line being connected to the inter-connection facility of the CTU at Nathpa Jhakri and the power is evacuated through it from Karcham Wangtoo project for inter State transmission. The Power generated at Bapsa II Project through the said line for supply wihin the state of Himachal Pradesh is incidental to inter-state transmission. Therefore it is covered under the definition of inter-State transmission system as defined in Electricity Act, 2003.

27. In this scenario a question may arise that if Karcham Wangtoo Nathpa Jhakri transmission line is already an inter-state transmission line/ system and not a dedicated transmission line then in what capacity JPVL is maintaining and operating the said line as it does not



have an inter State transmission licence granted by the CERC. In this regard the following may be noted:-

i) Earlier JPVL a JP group company was merged in JPHCL which was granted permission to establish generating stations and transmission lines from the said generating stations: After the merger of JPVL in JPHCL the name of JHPHCL was changed to JPVL. A copy of the order dated 20.11.2009 of the Hon'ble High Court of Himachal Pradesh is being annexed hereto in this regard as **Annexure-R4/4.**

ii) Thus JPVL in effect is JPHCL which was granted permission to establish generating stations and transmission lines

iii) Jaypee Karcham Hydro Corporation Limited got merged in JPVL in April, 2011. A copy of the amalgamation order dated 14.06.2011 of the Hon'ble High Court of Himachal Pradesh is annexed hereto in this regard as **Annexure-R4/5.**

iv) Presently JPVL owns Baspa II and Karcham Wangtoo generating stations.

v) Since JPVL (earlier JPHCL) was given clearance and approval to establish transmission lines under the Electricity (Supply) Act, 1948 it became a deemed transmission licensee under the first proviso to Section 14 of Electricity Act. 2003. First proviso to Section 14 reads as follows:

"Provided that any person engaged in the business of transmission or supply of electricity under the provisions of the repealed laws or any specified in the Schedule on or before the appointed date shall be deemed to be a licensee under this Act for such period as may be stipulated in the license, clearance or approval granted to him under the repealed laws or such Act specified in the Schedule. and the provision of the

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repealed laws or such Act specified in the Schedule in respect of such licence shall apply for a period of one year from the date of commencement of this Act or such earlier period as may be specified, at the request of the licensee, by the Appropriate Commission and thereafter the provisions of this Act shall apply to such business."

vi) Therefore the line from Karcham Wangtoo to Nathpa Jhakri is being maintained and operated by JPVL in the capacity of deemed inter State transmission licensee as the line for which clearance and approval was granted became an inter State transmission line in 1998.

vii) Further, it may be noted that the approval/ permission granted by the Government of HP and CEA to the Respondent No. 4 (its predecessor) under the Electricity (Supply) Act 1948 and Indian Electricity Act, 1910 are saved u/s 185 (2) of the Electricity Act, 2003 as they are not inconsistent to it.

28. That without prejudice to the above, even otherwise CERC (Sharing of inter-state Transmission Charges and Losses) Regulations, 2010 which came into force on 1 July, 2011 defines in Regulation 2 (k) a deemed inter-state transmission system in the following terms: -

*"2 (k) **'Deemed Inter State Transmission System (Deemed ISTS)'** means such transmission system which has regulatory approval of the Commission as being used for interstate transmission of power and qualified as ISTC for the purpose of these Regulations unless otherwise specified,"*

29. The approval of CEA to construct a LILO on Baspa- Nathpa Jhakri transmission line in 2002, subsequent meetings of CEA and CTU in this regard and the order dated 17.8.2007 of CERC permitting a LILO on Baspa-Nathpa Jhakri transmission line was given under the premise and understanding that on the construction of LILO on the

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carrying electricity from Karcham Wangtoo generating station to Nathpa Jhakri at CTU inter connection facility for inter-state transmission. Therefore it is clear that in any case the Karcham Wangtoo-Nathpa Jhakri transmission line is a deemed inter-state transmission system used primarily for the purpose of transmitting electricity for inter-state transmission and transmission of electricity from Baspa II through the said line is only incidental in nature.

30. In view of the above it is clear that the transmission of electricity from Baspa II and Karcham Wangtoo Projects of Respondent No. 4 or Karcham Wangtoo - Nathpa Jhakri Transmission Line is within the legal framework.

31. That the Respondent No. 4 has filed the above reply only limited to the query raised by this Hon'ble Commission in its record of proceeding dated 12.04.2012. The Respondent No. 4 reserves its right to file detailed reply to the Petition on merits later.

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