

S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			of Koteshwar HEP' against Agreement dated 12.11.2014. Provision for the expenditure were also exist in the Approved RCE-2012, i.e., in the original scope of work.		
12	TATA dumper LPK2518TC	41.73	TATA Dumper LPK2518TC was procured for various construction activities of Koteshwar Project. The same is required for meeting out emergent situation for safety & efficient plant operation.		41.73
13	Extension of LAN equipment	1.22	Extension of local area network was done through radio devices from administrative block to Q.C. Lab & Dam top. These works are necessary for safety of power plant, successful and efficient plant operation.		1.22
14	Prefabricated dock system	39.68	For proper mooring and facilitate boarding in department survey boat / barge, a Prefabe Dock system has been installed at Koteshwar. these works are necessary for safety of power plant, successful and efficient plant operation.		39.68
15	TATA safari	9.27	For the inspection of various site works at Koteshwar Project. The old vehicle was in the original scope of work and after completion of useful life, new vehicle was purchased in lieu of old vehicle. These works were necessary for successful and efficient plant operation.		9.27
<b>Items additionally claimed as per actual site requirement (not allowed in order dated 9.10.2018)</b>					
16	Metering instrument	9.11	Water level measuring instrument installed at dam top under HM Department, Koteshwar Project, procured for measurement of Reservoir level, these works are necessary for successful and efficient plant operation.  The Respondent UPPCL has submitted that out of the total claim, during 2015-16 an expenditure of Rs. 9.11 lakh for metering instruments. Hence	It is noticed that the additional capital expenditure was disallowed by the Commission vide order dated 9.10.2018 in petition No. 117/GT/2018 on the ground that these were in the nature of tools and tackles. In view of this and in term of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the claim of	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			claim is currently inadmissible and needs to be disallowed.  The Petitioner, in its rejoinder to the reply of Respondent UPPCL, has submitted that Commission had disallowed the additional capital expenditure amounting to Rs. 9.11 lakh towards metering instruments, however this has been claimed in truing up Petition keeping in view the importance of the system to measure the water level for safety of plant and getting the input of reservoir head for computing the power at the HMI of Governor system which is necessary for the successful and efficient plant operation.	the Petitioner is <b>not allowed</b> .	
	<b>Total amount claimed</b>	<b>5709.32</b>			
	<b>Total amount allowed</b>				<b>5700.21</b>

20. Based on the above, the total additional expenditure of Rs. 5763.21 lakh (Rs. 63.00 lakhs + Rs. 5700.21 lakhs) is allowed in 2015-16.

### **2016-17**

21. The Petitioner has claimed additional capital expenditure of Rs. 16.34 lakh in 2016-17 under various provisions of Regulation 14(3) of the 2014 Tariff Regulations, and the same is examined below:

Sl. No.	Regulation		(Rs. in lakh) 2016-17
(a)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security / internal security	2.37
(c)	14(3)(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	13.97



		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;	
	<b>Total additional capital expenditure claimed</b>		<b>16.34</b>

**(a) Claims under Regulation 14(3)(iii) of the 2014 Tariff Regulations**

*(Rs. in lakh)*

S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
<b>Items allowed in order dated 9.10.2018 in Petition No. 117/GT/2018</b>					
1	Mobile phone / cordless phone etc. for CISF fire wing	2.37	Walkie-Talkie sets with other accessories purchased for newly inducted CISF fire wing. These items were required for security and safety of the plant.	It is noticed that the Commission vide its order dated 9.10.2018 in Petition No. 117/GT/2018 had allowed the additional capital expenditure on this asset/work and had also directed the Petitioner to furnish the documentary evidence in support of the claim, at the time of truing up of tariff. The Petitioner has furnished document of CISF in support of the claim. Considering the fact that the asset / work pertains to safety and security of the power station, the additional capital expenditure claimed is <b>allowed</b> .	2.37

**(b) Claims under Regulation 14(3)(viii) of the 2014 Tariff Regulations**

*(Rs. in lakh)*

S No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
<b>Items allowed in order dated 9.10.2018 in Petition No. 117/GT/2018</b>					
1	Submersible pump	0.13	Submersible Pump was procured for washing & cleaning of mud and foreign particles from the gates installed at intake structure for smooth & efficient operation of intake gates. These works were necessary for successful and efficient plant operation.	It is noticed that the additional capital expenditure claimed for above assets / works, were allowed in 2016-17 by the Commission vide order dated 9.10.2018 in Petition No. 117/GT/2018. Also, the claims of the Petitioner are within the RCE limit of the project. Accordingly, the additional capital expenditure claimed is <b>allowed</b> .	0.13
2	Wi-fi system for administrative building	4.45	Wi-Fi system have been installed at Admin Building, Guest House, old field hostel, new field hostel, Powerhouse, Dam and Switchyard at		4.45



S No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			Koteshwar project, these works are necessary for safety, successful and efficient plant operation.		
3	Dell server	2.13	Dell Power Edge R620 Server procured for server room to make it antivirus server, these works are necessary for successful and efficient plant operation and safety of the plant.		2.13
4	Microsoft win server	0.55	Window Server 2012 R2 (OS) purchased for Dell Server, these works are necessary for successful and efficient plant operation.		0.55
<b>Items not allowed in order dated 9.10.2018 in Petition No. 117/GT/2018</b>					
5	EOT crane 2-EOT-II	4.13	<p>Purchase of essential components of EOT Crane for smooth operation of EOT crane being used for safety of power plant, successful and efficient plant operation.</p> <p>The Respondent UPPCL submitted that, since the expenditure was earlier disallowed by the Commission, claim is currently inadmissible and needs to be disallowed.</p> <p>The Petitioner submitted that the items namely EOT Crane 2-EOT-II and Tata Hitachi Hydraulic Excavator are important for the successful &amp; efficient plant operation and safety point of view.</p>	It is noticed that the claimed expenditure is towards components of EOT crane and the same are of O & M nature. Further, the additional capital expenditure claimed was disallowed by the Commission vide order dated 9.10.2018 in Petition No. 117/GT/2018. In view of this, the claim of the Petitioner is <b>not allowed.</b>	0.00
6	Construction plant and machinery	2.58	Purchase of essential components of Tata Hitachi hydraulic excavator deployed Koteshwar Project.	It is noticed that the claimed expenditure is towards components of Tata Hitachi hydraulic excavator	0.00



S No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			These works were necessary for successful and efficient plant operation.	and the same are O & M nature. Further, the additional capital expenditure claimed was disallowed by the Commission vide order dated 9.10.2018 in Petition No. 117/GT/2018. In view of this, the claim of the Petitioner is <b>not allowed.</b>	
	<b>Total amount claimed</b>	<b>13.97</b>			
	<b>Total amount allowed</b>				<b>7.26</b>

22. Based on the above, the total additional expenditure of Rs. 9.63 lakhs (Rs. 2.37 lakhs + Rs. 7.26 lakhs) is allowed in 2016-17.

### **2017-18**

23. The details of the actual additional capital expenditure claimed by the Petitioner in 2017-18 under the various provisions of Regulation 14(3) of the 2014 Tariff Regulations are examined below:

			<i>(Rs. in lakh)</i>
Sl. No.	Regulations		2017-18
(a)	14(3)(iii)	Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Govt. Agencies of statutory authorities responsible for national security / internal security	32.95
(b)	14(3)(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.	4610.29
	<b>Total additional capital expenditure claimed</b>		<b>4643.24</b>



**(a) Claims under Regulation 14(3)(iii) of the 2014 Tariff Regulations**

(Rs. in lakh)

SI No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	Siren for CISF Fire wing & RO for CISF	0.35	This is CISF mandatory requirement, this work is necessary for successful and efficient plant operation and safety of power plant.	In terms of the first proviso to Regulation 14(3) of the 2014 Tariff Regulations (as quoted above), the additional capital expenditure claimed are <b>not allowed.</b>	0.00
2	Geyser for CISF	1.11	For CISF fire wing deployed for safety of power plant.		0.00
3	Kirloskar make Pump	1.53	1 no. pump set was procured to ensure uninterrupted supply of water to fire wing unit of CISF for safety of the power plant	In terms of the documentary evidence furnished by the Petitioner and since the asset / work is required for the safety and security of the generating station, the additional capital expenditure claimed is <b>allowed.</b>	1.53
4	Bolero for CISF 3 No.	21.83	3 nos. Jeep (Bolero) were procured for CISF as per MOU signed between THDC & CISF. As per MOU Jeeps (Bolero) were to be provided before induction of additional requirement of CISF in Koteshwar. These are essentially required for safety of the power plant.		21.83
5	Almirah for CISF for additional strength	5.32	Required for CISF additional strength deployed at the Project for safety of the power plant.	In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the additional capital expenditures claimed are <b>not allowed.</b>	0.00
6	Dining Table for CISF for additional strength	1.20			0.00
7	Centre Table for CISF for additional strength	0.22			0.00
8	Board Photo Gallery for CISF for additional strength	0.16			0.00



SI No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
9	Wooden Podium for CISF for additional strength	0.11			0.00
10	Table for CISF for additional strength	0.10			0.00
11	LED TV for CISF for additional strength	0.70			0.00
12	Cello Cushion Chair for CISF for additional strength	0.31			0.00
	<b>Total amount claimed</b>	<b>32.95</b>			
	<b>Total amount allowed</b>				<b>23.36</b>

**(b) Claims under Regulation 14(3)(viii) of the 2014 Tariff Regulations**

*(Rs. in lakh)*

SI no	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	Up Gradation of Existing EPABX System	7.30	Real Timer for communication required for safety and efficient plant operation.	As these works are required for the successful and efficient operation of plant, the same are <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalisation of old asset / work is considered under "Assumed Deletions".	7.30
2	Installation of Wi-Fi System at Mechanical Building	0.88			0.88
3	Land unclassified	97.48	Release of payments as per the recommendation of Committee of Experts constituted by GoUK, for the investigation of the land sliding near reservoir area due to collateral damages and rehabilitation including left out properties.	As the expenditure is based on the recommendations of the Committee constituted by the Govt. of Uttarakhand (which has been furnished by the Petitioner), the additional capital expenditure as	97.48
4	Land unclassified	30.00			30.00



SI no	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
				claimed is <b>allowed.</b>	
5	Seepage channelization, lining and other works of Main Access Tunnel to Powerhouse and wall cladding, false ceiling and flooring works for powerhouse building.	632.03	Stabilisation and channelisation of seepage work at entry portal of Main Access tunnel. This is also for protection of exposed steel supports from corrosion by shotcrete along with chain-link. This work is necessary for successful and efficient plant operation and safety of power plant.	As these works are required for the successful and efficient operation of plant, the same are <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	632.03
6	Slope Protection Wall for TK Road	188.82	(i)Restoration / slope stabilisation work of Tehri Koteshwar road Ch.1.755 to 1.905 km by high strength cable net with high strength anchors.		188.82
7	Approach road to boat point	41.03	(ii) Restoration / slope protection work of Tehri Koteshwar road Between Ch.1.755 to 1.797, 15.420 to 15.461 km & 15.551 to 15.564 km by chain-link fabric, shot-crete and grouted rock bolts.  This road is essentially required in all-weather to be kept operational for efficient plant operation and safety of the power plant.		41.03
8	Shaft current monitor unit	12.39	To monitor shaft current for safety of power plant, this work was necessary for successful and efficient plant operation.		In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the additional capital expenditures claimed are <b>not allowed.</b>
9	Stator air cooler	13.91	This shall be for cooling of Stator for efficient working of Generator and safety of generator. This work is necessary for successful and efficient plant operation.	0.00	
10	Supply and installation of online dry out system	25.36	Purchased for enhancing Electrical property of Power oil present in Generator transformer installed at Powerhouse and to avoid breakdowns for safety of generator transformer. This is necessary for successful and efficient plant operation.	0.00	





SI no	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
11	Scorpio for GM (Project)	11.13	Jeep (Scorpio) 01 no. was procured against BER vehicle. The old vehicle was in the original scope of work and after completion of useful life, new vehicle was purchased in lieu of old vehicle. This work was necessary for successful and efficient plant operation.		0.00
12	Bus	15.63	One Bus was procured for transportation of THDC staff at KHEP, Koteshwar in lieu of BER declared / auctioned bus. The old vehicle was in the original scope of work and after completion of useful life, new vehicle was purchased in lieu of old vehicle. This work was necessary for successful and efficient plant operation.		0.00
13	Water Tanker	24.40	One no. water tanker was procured to supply water for construction work at different sites of Koteshwar project and supply of water to villages and Koteshwar colony in rainy season and another emergency. The old vehicle was in the original scope of work and after completion of useful life, new vehicle was purchased instead of old vehicle. This work was necessary for successful and efficient plant operation.	The additional capital expenditure claimed for these assets is <b>not allowed</b> , as the same is not directly related to the operation of the plant.	0.00
14	Strengthening measures for plugging of Diversion tunnel, Stabilization work at right bank for dump muck piles and stabilization of left bank in D/s of dam	3388.06	Central water Commission New Delhi was requested to review and address the issues of diversion tunnel plug. Team of CWC officers visited Koteshwar HEP in October'17 and after detail discussions suggested various works to strengthen the diversion tunnel plug. Various works such as extension of grout curtain towards u/s of DT, grouting of sluiced under water concrete and drilling of piezometer holes etc has been taken up for the strengthening the Diversion tunnel plug works. During April, 2017 subsidence in between EL 685 to 560 was observed at left bank in D/s of Dam. Keeping in view the	As these assets/ works are required for successful and efficient operation of plant, the same are <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	3388.06



SI no	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			vulnerable situation of subsidence and development of cracks on slopes of left bank, team of Geology and Design along with Consultant Geology Dr. P.C. Nawani have visited the project site and suggested various slope stabilization measures in form of concrete gravity wall with micro piles, boulder filled gabion wall and toe walls of R.R. Masonry etc. Immediate offloading of slump mass was also necessitated immediately. Accordingly, essential stabilization measures have been taken up at left of Koteswar HEP. This work was necessary for successful and efficient plant operation.		
15	Intake Stoplog Gate	91.38	An additional set of intake stoplog gate has been procured for inspection and maintenance of service gate and civil structure simultaneously in two units. This is essentially required for successful and efficient operation and safety of the Power Plant.		91.38
16	Bye pass arrangement	30.49	Penstock inspection devices were procured for the inspection and maintenance of vertical portion of penstock steel liner. This is essentially required for successful & efficient operation and safety of the Power Plant.	In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
	<b>Total amount claimed</b>	<b>4610.29</b>			
	<b>Total amount allowed</b>				<b>4476.97</b>

24. Based on the above, the total additional expenditure of Rs. 4500.33 lakh (23.36+ 4476.97) is allowed in 2017-18.

### **2018-19**

25. The details of the actual additional capital expenditure claimed by the Petitioner in 2018-19 under Regulation 14(3)(iii) (items at serial no. 1, 8, 12 & 15) and Regulation 14(3)(viii) of the 2014 Tariff Regulations are examined below:



(Rs. in lakh)

Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
1	VHF Digital Repeater	2.60	For covering larger area for communication system in Powerhouse area by VHF (Walkie-Talkie) for safety. This work was necessary for successful plant operation.	As the additional capital expenditure claimed is necessary for efficient operation of the plant, the same is <b>allowed</b> .	2.60
2	HBA1C Machine for Hospital	0.71	Facility provided to employees for testing of blood sugar for their performance in organisation towards their health due to the Project is in inaccessible area, this work was necessary for successful plant operation	As the additional capital expenditures claimed are pertaining to other than plant, the claims are <b>not allowed</b> .	0.00
3	X-ray table and Protection shield with glass for hospital	1.09	No close proximity available for the X-ray technician to avoid the side effects of X-ray radiation & for good health of employees, this work was necessary for successful plant operation.	<b>not allowed</b> .	0.00
4	Wall cladding false ceiling flooring work for Powerhouse building	397.20	To protect the delicate electronic and electrical devices from dust and moisture free of Powerhouse building.  Work of wall cladding, false ceiling and flooring was done Ch. (-38) to (+24) m and extended between B line to D line & service Bay area. This work was necessary for successful and efficient plant operation.	As these assets / works are necessary for the successful operation of plant, the same are <b>allowed</b> .	397.20
5	Seepage Channelization lining & other work of main access tunnel to Powerhouse	35.42	For the improvement of entrance to powerhouse, entry portal of Main Access tunnel has been stabilized and also for the covering of exposed steel supports of main access tunnel to powerhouse, so that steel support should not decayed with rust etc, protective layer of plastering along with chain-link and arrangement for local seepage. This work is necessary for successful and efficient plant operation.		35.42
6	DG Room	15.62	Old DG room building was damaged due to settlement and Land slide / geological surprises, therefore new building has been constructed. This work is	As these assets / works were necessitated on account of geographical	15.62



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			necessary for successful and efficient plant operation.	surprises and land slide and are required for successful operation of plant, the same are <b>allowed</b> .	
7	Electromechanical O&M Store	307.03	Due to Geological surprises and settlement of surroundings, the old E&M store got damaged, therefore new E&M store was constructed for Inventory and Management of O&M spares, this work is necessary for successful and efficient plant operation	The de-capitalisation of old asset / work is considered under "Assumed Deletions".	307.03
8	CISF Quarter Guard and Mess Building	266.24	Induction of additional required manpower of CISF in Project for safety of the Power Plant.	It is noticed that the expenditure is to facilitate additional man power of CISF, which was necessitated by the Petitioner for enhanced safety of the plant. Considering the nature of works, the same is <b>allowed</b> .	266.24
9	Stabilization of Left Bank in D/s of DAM	1404.50	During April' 2017 some kind of subsidence in between EL 685 to 560 was observed at left bank in D/s of Dam. Keeping in view the vulnerable situation of subsidence and development of cracks on slopes of left bank, team of Geology and Design along with Consultant Geology Dr. P.C. Nawani have visited the project site and suggested various slope stabilization measures in form of concrete gravity wall with micro piles boulder filled gabion wall and toe walls of R.R. Masonry etc. Immediate off-loading of slump mass was also necessitated immediately. Accordingly, essential stabilization measures have been taken up at left of Koteshwar HEP. This work was necessary for successful and efficient plant operation.	Based on the documentary evidence furnished by the Petitioner, it is observed that these assets / works will facilitate the successful and efficient operation of plant. Hence, the claim of the Petitioner is <b>allowed</b> .	1404.50



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
10	Strengthening measures for Plugging of Diversion Tunnel	850.94	Central water Commission New Delhi was requested to review and address the issues of diversion tunnel plug. Team of CWC officers visited Koteshwar HEP in October'17 and after detail discussions suggested various works to strengthen the diversion tunnel plug various works such as extension of grout curtain towards u/s of DT, grouting of sluiced under water concrete and drilling of piezometer holes etc has been taken up for the strengthening the Diversion tunnel plug works. This work is necessary for successful and efficient plant operation.		850.94
11	Stabilization work at right bank for dump muck piles	652.41	In 2013 at the time of Kedarnath calamity in Uttarakhand, subsidence in dump muck piles at Koteshwar HEP was observed, accordingly for the stabilization of muck piles, works of boulder filled Gabion wall in about 750 m length along river has been taken. For proper Guiding of surface rainwater in a systematic manner in this area, construction of two number Nalah of boulder filled gabion wall was necessitated, so that future threats of further damages in dump muck piles can be minimized. This work was necessary for successful and efficient plant operation.	As the asset / work will facilitate the successful and efficient operation of plant, the same is <b>allowed</b> .	652.41
12	Approach road and fencing at new O&M store	82.54	Road was constructed for approach to O&M store and fencing was done for Safety purpose. This work is necessary for successful and efficient plant operation and safety of the power plant	As the expenditure incurred is associated with O & M store, which was allowed due to geological surprises / land slide, the same is <b>allowed</b> . The de-capitalisation of old asset / work is considered under "Assumed Deletions".	82.54



Sl. No.	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
13	5 kV Insulation resistance Tester with accessories 2 nos.	12.62	Testing Equipment purchased for Switchyard and Powerhouse as per the site requirement. This work is necessary for successful and efficient plant operation	The additional capital expenditure claimed is <b>not allowed</b> as per the proviso to Regulation 14(3) of the 2014 Tariff Regulations.	0.00
14	10 kV insulation resistance tester with accessories	7.31			0.00
15	New bus purchase for CISF	15.41	Bus was procured in order to cater the requirement of additional manpower of CISF deployed in Project for safety of the power plant.	In terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
16	Twin engine boat 20 passenger capacity	159.84	To facilitate regular reservoir rim survey by Geologist and visit of Official of CWC, regular cleaning of reservoir and transportation of employees at Koteshwar HEP boat has been procured. This work was necessary for successful and efficient plant operation.	As this asset / work will facilitate the successful and efficient operation of plant, the same is <b>allowed</b> .	159.84
17	24 kV 8000 LV bushing assembly	8.50	24 KV 8000 LV bushing assembly is required for safety of generator transformer of KHEP, Koteshwar. This work was necessary for successful and efficient plant operation.	As this expenditure is necessary for successful operation of the generating station, the same is <b>allowed</b> . The de-capitalisation of old asset / work is considered under "Assumed Deletions".	8.50
	<b>Total amount claimed</b>	<b>4219.96</b>			
	<b>Total amount allowed</b>				<b>4182.82</b>

26. Based on the above, the total additional expenditure of Rs. 4182.82 lakh is allowed in 2018-19.



## **Discharge of liabilities**

27. The Petitioner has claimed the following discharge of liabilities during the 2014 – 19 tariff period:

	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Liability	2877.55	412.39	687.18	4634.37	144.05
Add: Liabilities corresponding to additional capital expenditure allowed	0.00	636.45	4587.06	101.38	362.56
Discharge of Liabilities	2465.16	361.66	639.87	4591.69	101.56

28. The Respondent UPPCL has submitted that an amount of Rs. 4603.40 lakh has been claimed on accrual basis in 2018-19, which may be disallowed. In response, the Petitioner has submitted that there was a liability of Rs. 4321.52 lakh against which Rs. 4582.52 lakh was discharged in 2018-19, as indicated at Form 9A of the year-wise statement of the additional capital expenditure for 2018-19. The Petitioner has further submitted that in Petition No.117/GT/2018, the same additional capital expenditure was shown in Form 9A in 2016-17 and the discharge of this liability was not shown during 2017-18, in the absence of final books of accounts, due to non-completion of financial year till that time.

29. Further, the Respondent UPPCL has submitted that as the expenditure of Rs. 4744.62 lakh in 2017-18, had not been admitted by the Commission earlier, the same cannot be considered for truing up and may be disallowed. In response, the Petitioner submitted that the undischarged liability of Rs. 101.38 lakh, against Rs. 4744.62 lakh on accrual basis in 2017-18, was discharged in 2018-19.

30. We have considered the submissions of both the parties. It is observed that, the Petitioner has submitted the additional capital expenditure as per finalized accounts of the 2014-19 tariff period. It is observed, on prudence check, that the Petitioner has



claimed liabilities corresponding to the additional capital expenditure for Rs. 6.26 lakh in 2017-18 against the item "Bye pass arrangement" which was disallowed in this order. Hence, the same is not allowed. The summary of discharge of liabilities as allowed is as under:

		<i>(Rs. in lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening undischarged liabilities	2877.55	412.39	687.18	4634.37	137.79
B	Liabilities corresponding to additional capital expenditure allowed during the year	0.00	636.45	4587.06	95.12	362.56
C	Discharges of liabilities during the year	2465.16	361.66	639.87	4591.69	95.29
E	<b>Closing undischarged liabilities (A+B-C)</b>	<b>412.39</b>	<b>687.18</b>	<b>4634.37</b>	<b>137.79</b>	<b>405.06</b>

**Exclusions (additions/deletions incurred, capitalized in books of accounts but not to be claimed for tariff purpose) as per reconciliation with books of account**

31. The year-wise net expenditure exclusion, as claimed by the Petitioner as per (Form 9C) reconciliation, with books of accounts are as follows:

		<i>(Rs. in lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions in Additions		0.00	29.08	46.86	26.00	69.68
Exclusions in Deletions		0.00	0.00	0.00	0.00	0.00
<b>Net Exclusions claimed</b>		<b>0.00</b>	<b>29.08</b>	<b>46.86</b>	<b>26.00</b>	<b>69.68</b>

32. Considering Form-9C, the net exclusions claimed as above are in order and accordingly allowed.

**De-capitalization**

33. As regards de-capitalization, Regulation 14(4) of the 2014 Tariff Regulations, provides as under:

*"In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-*





*capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised.”*

34. The Petitioner has claimed de-capitalization against assets such as dams and barrages, penstock, laptop, computer etc. The de-capitalization claimed are as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
(-)88.44	(-)11.28	(-)11.50	(-) 7.05	(-) 47.15

### **Assumed Deletion**

35. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is to be allowed for the purpose of tariff, provided that the capitalization of the said asset is followed by the de-capitalization of the original value of the old asset. However, in certain cases, where decapitalization is affected in books during the following years, to the year of capitalization of new asset, the de-capitalization of the old asset for the purpose of tariff is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as “Assumed deletion”. Further, in absence of the gross value of the asset being de-capitalized, the same is calculated by de-escalating the gross value of new asset @ 5% per annum till the year of capitalization of the old asset.

36. It is observed that the Petitioner, while claiming the additional capital expenditure in 2018-19, has not provided the de-capitalization value of old asset for some of the items which are being replaced. Accordingly, based on above methodology, the decapitalization value of old asset has been worked out as shown below.



SI No	Assumed Deletions	Additional Capitalization	Assumed Deletion
<b>2014-15</b>			
1	Rehab Exp -Construction of Ali Haljent road	172.99	156.91
<b>2015-16</b>			
2	Building for Transmission Plant and Equipment	252.04	217.72
<b>2017-18</b>			
3	Up Gradation of Existing EPABX System	7.30	5.72
4	Installation of Wi-Fi System at Mechanical Building	0.88	0.69
<b>2018-19</b>			
5	24 KV 8000 LV bushing Assembly	8.50	6.34
6	DG Room	15.62	11.66
7	Electromechanical O&M Store	307.03	229.11
8	Approach road and fencing at new O&M store	82.54	61.59

37. Based on the above, the net additional capital expenditure allowed for the 2014-19 tariff period is as under:

		<i>(Rs. in lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Additions allowed	2017.31	5763.21	9.63	4500.33	4182.82
B	Decapitalization allowed	(-) 88.44	(-) 11.28	(-) 11.50	(-) 7.05	(-) 47.15
C	Assumed Deletions considered	(-)156.91	(-) 217.72	0.00	(-) 6.40	(-) 308.70
D	Discharge of Liabilities	2465.16	361.66	639.87	4591.69	95.29
E	Net Additional Capitalization allowed (E=A+B+C+D)	<b>4237.12</b>	<b>5895.86</b>	<b>638.01</b>	<b>9078.57</b>	<b>3922.27</b>

### **Capital cost allowed for the 2014-19 tariff period**

38. Accordingly, the capital cost allowed for the 2014-19 tariff period is as under:



	<i>(Rs. in lakh)</i>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening capital cost (a)	262240.26	266477.38	272373.24	273011.24	282089.81
Net additional capital expenditure allowed during the year/ period (b)	4237.12	5895.86	638.01	9078.57	3922.27
<b>Closing Capital Cost (a)+(b)</b>	<b>266477.38</b>	<b>272373.24</b>	<b>273011.24</b>	<b>282089.81</b>	<b>286012.08</b>

### **Debt Equity Ratio**

39. Regulation 19 of the 2014 Tariff Regulations provides as under:

*“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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: i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*

*ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*

*iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.*

*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, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*

*(2) The generating company or the transmission licensee shall submit the resolution of the Board of the company or approval from Cabinet Committee on Economic Affairs (CCEA) regarding infusion of fund from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.*

*(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, debt;equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.*

*(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2014, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2014, the Commission shall approve*



*the debt: equity ratio based on actual information provided by the generating company or the transmission licensee as the case may be.*

*(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”*

40. Gross normative loan and equity amounting to Rs. 203515.84 lakh and Rs. 58724.42 lakh, respectively, as on 31.3.2014, as considered in order dated 16.4.2019 in Petition No.41/RP/2018, has been considered as the normative loan and equity as on 1.4.2014. The debt: equity ratio, as on COD, prior to 1.4.2012, was considered in the ratio of 78.30:21.70 and the debt equity ratio after COD, was considered as 70:30, in terms of Regulation 19 of the 2014 Tariff Regulations, for the purpose of additional capitalization. De-capitalization of assets has been deducted from the corresponding loan as well as equity, taking into consideration the debt equity ratio, applied in the year in which it was capitalized, as per Regulation 19 (4) of 2014 Tariff Regulations. The opening and closing debt and equity is as under:

	<i>(Rs in lakh)</i>							
	As on 31.3.2014		Additional Capitalization		De-capitalization		As on 31.3.2019	
	Amount (Rs. in lakh)	(in %)	Amount (Rs. in lakh)	(in %)	Amount (Rs. in lakh)	(in %)	Amount (Rs. in lakh)	(in %)
Debt	203515.84	77.61%	17238.89	70.00%	608.20	71.12%	220146.53	76.97%
Equity	58724.42	22.39%	7388.09	30.00%	246.96	28.88%	65865.56	23.03%
<b>Total</b>	<b>262240.26</b>	<b>100.00%</b>	<b>24626.98</b>	<b>100.00%</b>	<b>855.16</b>	<b>100.00%</b>	<b>286012.08</b>	<b>100.00%</b>

### **Return on Equity**

41. Regulation 24 of the 2014 Tariff Regulations provides as under:

*“24. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.*

*(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:*



*Provided that:*

*i. in case of projects commissioned on or after 1st April 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:*

*ii. the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:*

*iii. additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:*

*iv. the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:*

*v. as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:*

*vi. additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.”*

42. Regulation 25 of the 2014 Tariff Regulations provides as under:

*“Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”*

*(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:*

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

*Where “t” is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess*

*(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based*



*on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2014-15 to 2018-19 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee as the case may be. Any under- recovery or over recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/DICs as the case may be on year to year basis.”*

43. The Respondent BRPL has made the following submissions:

- a) No details of whether any under-recovery or over-recovery tax under of the grossed-up rate of return either claimed or refunded on year-to-year basis from/to the beneficiaries have been filed by the Petitioner.
- b) Although the Petitioner is not very specific about the Section 80 IA of the Income Tax Act, 1961 but the 'Statement of Profit & Loss' for various years of Tariff Period 2014-19 would show that the Petitioner has not paid any Income Tax and seems to have claimed tax benefits on account of the Tax Holiday for enterprises engaged in infrastructure development etc. as per Section 80 IA of the Income Tax Act, 1961 as well as the other benefits like the higher depreciation allowed in initial years under the Income Tax Act, 1961.
- c) The Profit & Loss Account for 2014-19 would show that the Petitioner has not paid any Income tax during the entire tariff period of 2014-19. The reasons for not paying the Income tax are evidently very clear that the infrastructure sector generating companies are entitled for huge benefits under the provisions of the Income Tax Act, 1961.
- d) Accordingly, the Petitioner is not entitled for any grossing up of the ROE under Regulation 25(1) of the 2014 Tariff Regulations. The entire tax collected by the Petitioner is required to be returned with Interest to the beneficiary-Discoms for the tariff period 2014-19.

44. In response, the Petitioner has submitted the following:

- a) Return on Equity (ROE) has been grossed up as per Regulation 25(3) of the 2014 Tariff Regulations. Payment of tax amount is not appearing in the project balance sheet as, the same is being shown in the consolidated balance sheet of the company.
- b) Effective Tax rate based on the actual tax paid for the period 2014-19 is as follows:

<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
20.9605%	21.3416%	21.3416%	21.3416%	21.5488%



- c) The Petitioner pays the income tax on the total income earned from all the projects and the statement of income tax paid is shown in the balance sheet of the Petitioner.
- d) The balance sheet of the Petitioner is available in public domain i.e., in the Petitioner's website. To avoid duplicity in reflecting Income Tax it is shown only in Company's balance sheet, not project wise.
- e) The Petitioner is availing tax holiday in respect of the generating station and paying tax as per MAT rate in line with Income Tax 1961. The Petitioner is availing the benefit of tax holiday for the Project from 2012-13 to 2017-18, but as per provisions of the Income Tax Act 1961, a company is liable to pay a minimum tax on the deemed income computed as per provisions of section 115JB of the Income Tax Act 1961.

45. We have considered the submissions of the parties. Since the Petitioner has been paying income tax, on the income computed under Section 115JB of the IT Act, 1961, as per MAT rates of the respective financial year, the notified MAT rate for respective financial year has been considered as the effective tax rate for the purpose of grossing up of ROE for the 2014-19 tariff period, in terms of the 2014 Tariff Regulations. Accordingly, the grossing up of base rate has been done with the actual MAT rate of the respective financial year and ROE has been computed in line with Regulations 24 and 25 of the 2014 Tariff Regulations as under:

*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (A)	58724.42	60002.90	61772.59	61964.90	64688.53
Additions due to additional capitalization (B)	605.19	1728.96	2.89	1350.10	1254.85
Addition due to un-discharged liability (C)	739.55	108.50	191.96	1377.51	28.59
Less: Decapitalization (D)	19.19	2.45	2.54	2.06	13.80
Less: Assumed Deletions (E)	47.07	65.32	0.00	1.92	92.61
Reversal of Liability (F)	0.00	0.00	0.00	0.00	0.00
<b>Closing Equity (E)=(A)+(B)+(C)-(D)-(E)-(F)</b>	60002.90	61772.59	61964.90	64688.53	65865.56
Average Equity (G)=(A+F)/2	59363.66	60887.74	61868.75	63326.72	65277.04
Base Rate (%) (H)	16.500%	16.500%	16.500%	16.500%	16.500%
Effective Tax Rate (%) (I)	20.9605%	21.3416%	21.3416%	21.3416%	21.5488%
Effective ROE Rate (%) (J)	20.876%	20.977%	20.977%	20.977%	21.032%



	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Return on Equity (K)= (G)*(J)</b>	<b>12392.76</b>	<b>12772.42</b>	<b>12978.21</b>	<b>13284.05</b>	<b>13729.07</b>

### Interest on Loan

46. Regulation 26 of the 2014 Tariff Regulations provides as under:

*“26. Interest on loan capital: (1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.*

*(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of Decapitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalization of such asset*

*(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 depreciation allowed for the year or part of the year.*

*(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized 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 refinancing 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 beneficiaries or the long term transmission customers /DICs shall not withhold any payment on account of the interest claimed by the*





generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”

47. Interest on loan has been worked out as mentioned below:

- i. The opening gross normative loan as on 1.4.2014 has been arrived at in accordance with Regulation 26 of the 2014 Tariff Regulations
- ii. The weighted average rate of interest has been worked out based on the actual loan portfolio of respective year applicable to the project.
- iii. The repayment for the year of the 2014-19 tariff period has been considered equal to the depreciation allowed for that year.
- iv. Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest considering the time factor.

48. Accordingly, Interest on loan is computed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan (A)	203515.84	206474.48	210600.65	211046.34	217401.28
Cumulative repayment of loan upto previous year (B)	28634.90	41113.17	53736.34	66691.21	79792.57
Net Loan Opening (C)=(A)-(B)	174880.94	165361.31	156864.31	144355.13	137608.72
Repayment during the year (D)=Depreciation	12529.83	12672.93	12960.70	13106.26	13427.33
Cumulative repayment adjustment on a/c of de-capitalization (E)	51.56	49.76	5.83	4.91	130.75
Net Repayment (F)=(D)-(E)	12478.27	12623.17	12954.87	13101.36	13296.58
Net Addition due to additional capital expenditure (G)	2958.64	4126.17	445.69	6354.94	2745.24
Net Loan Closing (H)=(C+G-F)	165361.31	156864.31	144355.13	137608.72	127057.38
Average Loan(I)=(C+H)/2	170121.13	161112.81	150609.72	140981.92	132333.05
Weighted Average Rate of Interest of loan (J)	12.399%	12.283%	12.147%	9.574%	9.291%
<b>Interest on Loan (K=I*J)</b>	<b>21094.10</b>	<b>19790.25</b>	<b>18294.32</b>	<b>13497.69</b>	<b>12294.88</b>

### Depreciation

49. Regulation 27 of the 2014 Tariff Regulations provides as under:



*“27. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.*

*Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*

*(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. 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.*

*(3) 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 station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:*

*Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff: Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.*

*(4) 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.*

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-II 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 the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.*

*(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.*

*(7) The generating company or the transmission license, as the case may be, shall submit the details of proposed capital expenditure during the fag end of the project (five years before the useful life) along with justification and proposed life extension.*



The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure during the fag end of the project.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.”

50. The weighted average rate of depreciation has been calculated by the Petitioner in accordance with Regulation 27 of the 2014 Tariff Regulations. The COD of the generating station is 1.4.2012. The calculation of WAROD is enclosed as Annexure-I to this order. Accordingly, depreciation has been worked out as under:

	(Rs. in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block (A)	262240.26	266477.38	272373.24	273011.24	282089.81
Net Additional capital expenditure during 2014-19 (B)	4237.12	5895.86	638.01	9078.57	3922.27
Closing gross block (C=A+B)	266477.38	272373.24	273011.24	282089.81	286012.08
Average gross block (D)=(A+C)/2	264358.82	269425.31	272692.24	277550.53	284050.95
Land Value (M)	461.78	461.78	461.78	461.78	461.78
Depreciable Value (E=(D-M) *90%))	237507.33	242067.17	245007.41	249379.87	255230.25
Remaining Depreciable Value at the beginning of the year (F=E-Cum Dep at 'L' at the end of previous year)	208872.43	200954.00	191271.07	182688.66	175437.68
Rate of Depreciation (G)	4.7397%	4.7037%	4.7529%	4.7221%	4.7271%
Balance useful Life (H)	33.00	32.00	31.00	30.00	29.00
<b>Depreciation (I=D*G)</b>	<b>12529.83</b>	<b>12672.93</b>	<b>12960.70</b>	<b>13106.26</b>	<b>13427.33</b>
Cumulative Depreciation at the end of the year (J=I+ Cum Dep at 'L' at the end of previous year)	41164.73	53786.10	66697.04	79797.47	93219.90
Less: Depreciation adjustment on account of de-capitalization (K)	51.56	49.76	5.83	4.91	130.75
<b>Cumulative Depreciation at the end of the year (L)</b>	<b>41113.17</b>	<b>53736.34</b>	<b>66691.21</b>	<b>79792.57</b>	<b>93089.15</b>



## **Operation & Maintenance Expenses**

51. As regards O&M expenses, Regulation 29(3)(c) of the 2014 Tariff Regulations, provides as under:

*“In case of the hydro generating stations, which have not been in commercial operation for a period of three years as on 1.4.2014, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding cost of rehabilitation and resettlement works) for the first year of commercial operation. Further, in such case, operation and maintenance expenses in first year of commercial operation shall be escalated @6.04% per annum up to the year 2013- 14 and then averaged to arrive at the O&M expenses at 2013-14 price level. It shall be thereafter escalated @ 6.64% per annum to arrive at operation and maintenance expenses in respective year of the tariff period.”*

52. The Petitioner has claimed the following O&M expenses:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
5938.80	6333.14	6753.66	7202.10	7680.32

53. The COD of the generating station is 1.4.2012. Accordingly, the capital cost of the project allowed as on 31.3.2015 is considered as the project capital cost, as on cut-off date i.e. Rs. 266477.38 lakh. The Rehabilitation and Resettlement cost of Rs. 4344.56 lakh, indicated by the Petitioner has been considered. Accordingly, O&M expenses allowed for first year of the generating station is as under:

		<i>(Rs. in lakh)</i>
A	Total capital expenditure up to cut-off date	266477.38
B	R & R Expenditure	4344.56
C	Capital cost considered for O&M expenses (excluding R&R expenses) (C=A-B)	262132.82
D	O&M Expenses @2% p.a. for first year i.e. 2012-13 (D=2%*C)	5242.66
E	O&M Expenses for 2013-14 (E=D*(1+6.04%))	5559.31
F	Average O&M Expenses for 2012-13 and 2013-14 at 2013-14 price level (G= Average (D, E))	5400.98

54. Based on the above, the O & M expenses have been worked out and allowed as under:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
5759.61	6142.05	6549.88	6984.79	7448.58



### **Additional O&M Expenses**

55. The Petitioner has submitted that it has filed Petition No. 341/MP/2020 claiming the recovery of impact of wage revision of its employees, impact of GST, Minimum Wages and Security expenses in Central Industrial Security Force (CISF) in respect of this generating station for the period from 1.1.2016 to 31.3.2019. Accordingly, the additional O&M claim for the recovery of impact of wage revision of its employees in respect of the generating station during the period 1.1.2016 to 31.3.2019, shall be dealt with in Petition No. 341/MP/2020.

### **Interest on Working Capital**

56. Sub-section (c) of Clause (1) of Regulation 28 of the 2014 Tariff Regulations provides as under:

*“28. Interest on Working Capital: (1) The working capital shall cover  
(c) Hydro generating station including pumped storage Hydro Electric generating Station and transmission system including communication system:  
(i) Receivables equivalent to two months of fixed cost;  
(ii) Maintenance spares @ 15% of operation and maintenance expense specified in regulation 29; and  
(iii) Operation and maintenance expenses for one month.”*

### **Working Capital for Receivables**

57. The Receivable component of working capital has been worked out based on two months of fixed cost as under:

<i>(Rs. in lakh)</i>				
<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
8858.95	8793.03	8693.85	8029.46	8036.57

### **Working Capital for Maintenance Spares**

58. Maintenance spares @15% of O&M expenses are worked out and allowed as under:



*(Rs. in lakh)*

2014-15	2015-16	2016-17	2017-18	2018-19
863.94	921.31	982.48	1047.72	1117.29

**Working capital for O&M Expenses**

59. O&M expenses for 1 month for the purpose of working capital are as under:

*(Rs. in lakh)*

2014-15	2015-16	2016-17	2017-18	2018-19
479.97	511.84	545.82	582.07	620.72

**Rate of Interest on Working Capital**

60. Clause (3) of Regulation 28 of the 2014 Tariff Regulations provides as under:

*“Interest on working Capital: (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.”*

61. Accordingly, interest on working capital is worked out and allowed as under:

*(Rs. in lakh)*

	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for O&M Expenses (one month of O&M Expenses)	479.97	511.84	545.82	582.07	620.72
Working capital for Maintenance Spares (15% of operation and maintenance expense)	863.94	921.31	982.48	1047.72	1117.29
Working capital for Receivables (two months of fixed cost)	8858.95	8793.03	8693.85	8029.46	8036.57
<b>Total working capital</b>	<b>10202.86</b>	<b>10226.18</b>	<b>10222.16</b>	<b>9659.25</b>	<b>9774.57</b>
Rate of Working Capital (%)	13.500	13.500	13.500	13.500	13.500
<b>Interest on Working Capital</b>	<b>1377.39</b>	<b>1380.53</b>	<b>1379.99</b>	<b>1304.00</b>	<b>1319.57</b>

**Annual Fixed Charges**

62. Based on the above, the annual fixed charges approved for the generating station for the 2014-19 tariff period is summarized as under:



**(Rs. in lakh)**

	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	12529.83	12672.93	12960.70	13106.26	13427.33
Interest on Loan	21094.10	19790.25	18294.32	13497.69	12294.88
Return on Equity	12392.76	12772.42	12978.21	13284.05	13729.07
O&M Expenses	5759.61	6142.05	6549.88	6984.79	7448.58
Interest on Working Capital	1377.39	1380.53	1379.99	1304.00	1319.57
<b>Total</b>	<b>53153.68</b>	<b>52758.19</b>	<b>52163.11</b>	<b>48176.79</b>	<b>48219.43</b>

### **Normative Annual Plant Availability Factor (NAPAF)**

63. Clause (4) of Regulation 37 of the 2014 Tariff Regulations provides for the Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations already in operation. NAPAF of 67% was allowed by Commission for the generating station vide order dated 9.10.2018 in Petition No. 117/GT/2018 with the following observations:

*“46. Clause (4) of Regulation 37 of the 2014 Tariff Regulations provides for the Normative Annual Plant Availability Factor (NAPAF) for hydro generating stations already in operation. Accordingly, NAPAF of 67% as allowed by the Commission vide order dated 15.5.2014 in Petition No. 116/GT/2013 has been allowed. However, the same is subject to review based on the actual PAF for the period 2012-17 at the time of truing up of the tariff.”*

64. The Respondent MPPMCL has submitted that the Commission vide order dated 15.5.2014 in Petition No. 116/GT/2013 had allowed NAPAF of 67% for the generating station, subject to review based on the actual PAF for the period 2012-17. It has also submitted that the Petitioner has not submitted the data relating to actual PAF for period 2012-17 for the generating station. In response, the Petitioner submitted that the details of the actual NAPAF for the period 2014-19 and the actual PAF have been submitted to the Commission, and based on these, the Commission had revised the NAPAF in the 2019 Tariff Regulations applicable for the 2019-24 tariff period.



65. The matter has been examined. It is to mention that Commission vide order dated 15.5.2014 in Petition No. 116/GT/2013 had allowed NAPAF of 67% for the years 2011-12, 2012-13 and 2013-14 for the generating station. Subsequently, vide order dated 9.10.2018 in Petition No. 117/GT/2018, the NAPAF of 67% was allowed in line with Regulation 37(4) of the 2014 Tariff Regulations. Since, the Commission, based on the actual PAF data of the past period, had allowed NAPAF of 67% for 2014-19 tariff period for the generating station in terms of the said regulations, the same is allowed.

### **Auxiliary Energy Consumption**

66. As per Regulation 8(6) of the 2014 Tariff Regulations and its subsequent amendment thereof, the financial gain on account of actual auxiliary energy consumption being less than the normative auxiliary energy consumption is to be shared in the ratio of 60:40 between generating station and the beneficiaries. The Petitioner submitted that, in line with the first amendment to the 2014 Tariff Regulations, in 2015, the financial gain on account of Auxiliary Consumption has been shared with all the beneficiary Discoms. Accordingly, the same has been considered.

### **Design Energy**

67. CEA vide its letter dated 6.8.2012 had approved the Design Energy (DE) of 1154.84 MUs. Accordingly, the same has been considered for the generating station.

The month-wise DE is detailed as under:

<b>Months</b>	<b>Period (10 days monthly)</b>	<b>Design Energy (MUs)</b>
April	I	29.81
	II	30.6
	III	35.61
May	I	40.11
	II	36.42





	III	42.81
June	I	40.01
	II	42.02
	III	12.6
July	I	13.6
	II	14.1
	III	20.41
August	I	52.12
	II	51.11
	III	67.73
September	I	31.51
	II	33.41
	III	20.31
October	I	22.91
	II	19.61
	III	14.9
November	I	18.91
	II	19.6
	III	20.31
December	I	32.5
	II	33.41
	III	37.81
January	I	35.8
	II	36.41
	III	41.82
February	I	39.42
	II	32.01
	III	28.31
March	I	35.31
	II	35.8
	III	35.71
<b>Total</b>		<b>1154.84</b>

68. Accordingly, the DE of 1154.84 MUs has been considered and allowed.

### **Summary**

69. The annual fixed charges allowed vide order dated 4.6.2019 in Review Petition No. 47/RP/2018 and the annual fixed charges allowed in this order (after truing-up) for the 2014-19 tariff period for the generating station are summarized as under:



(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Annual fixed charges allowed vide order dated 4.6.2019, in Review Petition No. 47/RP/2018	53370.68	53041.18	52322.19	47641.39	46552.16
Annual fixed charges allowed in this order	53153.68	52758.19	52163.11	48176.79	48219.43

70. The difference between the annual fixed charges recovered by the Petitioner in terms of order dated 4.6.2019 in Review Petition No. 47/RP/2018 and the annual fixed charges determined by this order, shall be adjusted in terms of the provisions of Regulation 8(13) of the 2014 Tariff Regulations.

71. Annexure-I enclosed shall form part of this order.

72. Petition No. 245/GT/2020 is disposed of in terms of the above.

**Sd/-**  
**(Pravas Kumar Singh)**  
**Member**

**Sd/-**  
**(Arun Goyal)**  
**Member**

**Sd/-**  
**(I. S. Jha)**  
**Member**



## Annexure I

**2014-15**

Sl. No.	Name of the Assets	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 1.4.2014	Addition during 2014-15 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2014-15
<b>1</b>	<b>LAND</b>						
	Land Freehold	0.00%	461.78	0.00	0.00	0.00	0.00
	Land Leasehold	3.34%	49.18	0.00	1.64	0.00	1.64
<b>2</b>	<b>BUILDING</b>						
	Office Building	3.34%	1226.53	0.00	40.97	0.00	40.97
	Other Civil Works (TEMP STRU)	100.00%	0.00	5.25	0.00	2.63	2.63
<b>3</b>	<b>TOWNSHIP</b>						
	Residential Buildings & Guest House	3.34%	3405.94	47.19	113.76	0.79	114.55
	Water Supply & Sewerage	5.28%	469.52	0.00	24.79	0.00	24.79
<b>4</b>	<b>CONSTRUCTION PLANT AND MACHINERY</b>	5.28%	198.68	0.00	10.49	0.00	10.49
<b>5</b>	<b>VEHICLES</b>						
	Car, Bus, Trucks	9.50%	64.52	49.86	6.13	2.37	8.50
	Boats & Helicopter	5.28%	73.86	0.00	3.90	0.00	3.90
<b>6</b>	<b>OFFICE AND MISC EQUIPMENTS</b>						
	Office & Misc. Equipment's	6.33%	450.93	15.83	28.54	0.50	29.04
	Plant & Machinery & Small Assets upto Rs.5000.00	100.00%	2.57	0.00	0.11	0.00	0.11
	Intangible Assets	20.00%	0.19	0.00	0.04	0.00	0.04
	Computers & Printers	15.00%	98.53	15.30	14.78	1.15	15.93
	Elect. Sub Station & Transmission	5.28%	450.56	40.80	23.79	1.08	24.87
<b>7</b>	<b>ROAD AND BRIDGES</b>	3.34%	1629.48	105.25	54.42	1.76	56.18
<b>8</b>	<b>ENVIRONMENT &amp; ECOLOGY</b>	5.28%	0.00	0.00	0.00	0.00	0.00
<b>9</b>	<b>DAM AND SPILLWAY</b>	5.28%	104431.69	844.77	5513.99	22.30	5536.30
<b>10</b>	<b>TUNNELS, PENSTOCKS POWER HOUSE &amp; OTHER HYDRAULIC WORKS (3)</b>						
	Power House Building	3.34%	58727.31	437.19	1961.49	7.30	1968.79
	Tunnel, Penstock	5.28%	11075.39	9.87	584.78	0.26	585.04
<b>11</b>	<b>GENERATING PLANT AND MACHINERY</b>	5.28%	70900.04	184.56	3743.52	4.87	3748.39
<b>12</b>	<b>UNCLASSIFIED LAND</b>	3.34%	4171.56	172.99	139.33	2.89	142.22
	<b>TOTAL</b>		<b>257888.25</b>	<b>1928.87</b>	<b>12266.48</b>	<b>47.89</b>	<b>12314.37</b>
	Weighted Average Rate of depreciation						4.740%



**2015-16**

Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2015	Addition during 2015-16 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2015-16
<b>1</b>	<b>LAND</b>						
	Land Freehold	<b>0.00%</b>	461.78	0.00	0.00	0.00	0.00
	Land Leasehold	<b>3.34%</b>	49.18	0.00	1.64	0.00	1.64
<b>2</b>	<b>BUILDING</b>						
	Office Building	<b>3.34%</b>	1226.53	295.13	40.97	4.93	45.89
	Other Civil Works ( TEMP STRU)	<b>100.00%</b>	5.25	0.00	2.63	0.00	2.63
<b>3</b>	<b>TOWNSHIP</b>						
	Residential Buildings & Guest House	<b>3.34%</b>	3453.14	6.15	115.33	0.10	115.44
	Water Supply & Sewerage	<b>5.28%</b>	469.52	2.10	24.79	0.06	24.85
<b>4</b>	<b>CONSTRUCTION PLANT AND MACHINERY</b>	<b>5.28%</b>	198.68	78.46	10.49	2.07	12.56
<b>5</b>	<b>VEHICLES</b>						
	Car, Bus, Trucks	<b>9.50%</b>	114.38	48.86	10.87	2.32	13.19
	Boats & Helicopter	<b>5.28%</b>	73.86	0.00	3.90	0.00	3.90
<b>6</b>	<b>OFFICE AND MISC EQUIPMENTS</b>						
	Office & Misc. Equipment's	<b>6.33%</b>	466.75	50.01	29.55	1.58	31.13
	Plant & Machinery & Small Assets upto Rs.5000.00	<b>100.00%</b>	2.57	0.00	0.00	0.00	0.00
	Intangible Assets	<b>20.00%</b>	0.19	0.00	0.04	0.00	0.04
	Computers & Printers	<b>15.00%</b>	113.83	(9.14)	17.08	(0.69)	16.39
	Elect. Sub Station & Transmission	<b>5.28%</b>	491.36	0.00	25.94	0.00	25.94
<b>7</b>	<b>ROAD AND BRIDGES</b>	<b>3.34%</b>	1734.73	0.00	57.94	0.00	57.94
<b>8</b>	<b>ENVIRONMENT &amp; ECOLOGY</b>	<b>5.28%</b>	0.00	0.00	0.00	0.00	0.00
<b>9</b>	<b>DAM AND SPILLWAY</b>	<b>5.28%</b>	105276.46	2956.94	5558.60	78.06	5636.66
<b>10</b>	<b>TUNNELS, PENSTOCKS , POWER HOUSE &amp; OTHER HYDRAULIC WORKS (3)</b>						



Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2015	Addition during 2015-16 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2015-16
	Power House Building	3.34%	59164.50	1685.58	1976.09	28.15	2004.24
	Tunnel, Penstock	5.28%	11085.27	140.62	585.30	3.71	589.01
11	<b>GENERATING PLANT AND MACHINERY</b>	5.28%	71084.59	413.07	3753.27	10.91	3764.17
12	<b>UNCLASSIFIED LAND</b>	3.34%	4344.56	93.24	145.11	1.56	146.67
	<b>TOTAL</b>		<b>259817.12</b>	<b>5761.03</b>	<b>12359.53</b>	<b>132.76</b>	<b>12492.29</b>
	Weighted Average Rate of depreciation						4.704%



**2016-17**

Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2016	Addition during 2016-17 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2016-17
<b>1</b>	<b>LAND</b>						
	Land Freehold	<b>0.00%</b>	461.78	0.00	0.00	0.00	0.00
	Land Leasehold	<b>3.34%</b>	49.18	0.00	1.64	0.00	1.64
<b>2</b>	<b>BUILDING</b>						
	Office Building	<b>3.34%</b>	1521.66	0.00	50.82	0.00	50.82
	Other Civil Works ( TEMP STRU)	<b>100.00%</b>	5.25	0.00	0.00	0.00	0.00
<b>3</b>	<b>TOWNSHIP</b>						
	Residential Buildings & Guest House	<b>3.34%</b>	3459.29	0.13	115.54	0.00	115.54
	Water Supply & Sewerage	<b>5.28%</b>	471.62	0.00	24.90	0.00	24.90
<b>4</b>	<b>CONSTRUCTION PLANT AND MACHINERY</b>	<b>5.28%</b>	277.14	0.00	14.63	0.00	14.63
<b>5</b>	<b>VEHICLES</b>						
	Car, Bus, Trucks	<b>9.50%</b>	163.24	(9.61)	15.51	(0.46)	15.05
	Boats & Helicopter	<b>5.28%</b>	73.86	0.00	3.90	0.00	3.90
<b>6</b>	<b>OFFICE AND MISC EQUIPMENTS</b>						
	Office & Misc. Equipment's	<b>6.33%</b>	516.76	6.82	32.71	0.22	32.93
	Plant & Machinery & Small Assets upto Rs.5000.00	<b>100.00%</b>	2.57	0.00	0.00	0.00	0.00
	Intangible Assets	<b>20.00%</b>	0.19	0.00	0.04	0.00	0.04
	Computers & Printers	<b>15.00%</b>	104.70	0.80	15.70	0.06	15.76
	Elect. Sub Station & Transmission	<b>5.28%</b>	491.36	0.00	25.94	0.00	25.94
<b>7</b>	<b>ROAD AND BRIDGES</b>	<b>3.34%</b>	1734.73	0.00	57.94	0.00	57.94
<b>8</b>	<b>ENVIRONMENT &amp; ECOLOGY</b>	<b>5.28%</b>	0.00	0.00	0.00	0.00	0.00
<b>9</b>	<b>DAM AND SPILLWAY</b>	<b>5.28%</b>	108233.40	0.00	5714.72	0.00	5714.72
<b>10</b>	<b>TUNNELS, PENSTOCKS , POWER HOUSE &amp; OTHER HYDRAULIC WORKS (3)</b>						



Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2016	Addition during 2016-17 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2016-17
	Power House Building	3.34%	60850.08	0.00	2032.39	0.00	2032.39
	Tunnel, Penstock	5.28%	11225.89	0.00	592.73	0.00	592.73
11	<b>GENERATING PLANT AND MACHINERY</b>	5.28%	71497.66	6.71	3775.08	0.18	3775.25
12	<b>UNCLASSIFIED LAND</b>	3.34%	4437.80	0.00	148.22	0.00	148.22
	<b>TOTAL</b>		<b>265578.15</b>	<b>4.85</b>	<b>12622.43</b>	<b>(0.00)</b>	<b>12622.43</b>
	Weighted Average Rate of depreciation						4.753%



**2017-18**

Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2017	Addition during 2017-18 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2017-18
<b>1</b>	<b>LAND</b>						
	Land Freehold	<b>0.00%</b>	461.78	0.00	0.00	0.00	0.00
	Land Leasehold	<b>3.34%</b>	49.18	0.00	1.64	0.00	1.64
<b>2</b>	<b>BUILDING</b>						
	Office Building	<b>3.34%</b>	1521.66	0.00	50.82	0.00	50.82
	Other Civil Works ( TEMP STRU)	<b>100.00%</b>	5.25	0.00	0.00	0.00	0.00
<b>3</b>	<b>TOWNSHIP</b>						
	Residential Buildings & Guest House	<b>3.34%</b>	3459.42	0.00	115.54	0.00	115.54
	Water Supply & Sewerage	<b>5.28%</b>	471.62	1.53	24.90	0.04	24.94
<b>4</b>	<b>CONSTRUCTION PLANT AND MACHINERY</b>	<b>5.28%</b>	277.14	0.00	14.63	0.00	14.63
<b>5</b>	<b>VEHICLES</b>						
	Car, Bus, Trucks	<b>9.50%</b>	153.63	73.00	14.59	3.47	18.06
	Boats & Helicopter	<b>5.28%</b>	73.86	0.00	3.90	0.00	3.90
<b>6</b>	<b>OFFICE AND MISC EQUIPMENTS</b>						
	Office & Misc. Equipment's	<b>6.33%</b>	523.58	17.45	33.14	0.55	33.69
	Plant & Machinery & Small Assets upto Rs.5000.00	<b>100.00%</b>	2.57	0.31	0.00	0.16	0.16
	Intangible Assets	<b>20.00%</b>	0.19	0.00	0.04	0.00	0.04
	Computers & Printers	<b>15.00%</b>	105.50	(7.05)	15.82	(0.53)	15.30
	Elect. Sub Station & Transmission	<b>5.28%</b>	491.36	0.00	25.94	0.00	25.94
<b>7</b>	<b>ROAD AND BRIDGES</b>	<b>3.34%</b>	1734.73	229.85	57.94	3.84	61.78
<b>8</b>	<b>ENVIRONMENT &amp; ECOLOGY</b>	<b>5.28%</b>	0.00	0.00	0.00	0.00	0.00
<b>9</b>	<b>DAM AND SPILLWAY</b>	<b>5.28%</b>	108233.40	3388.06	5714.72	89.44	5804.17
<b>10</b>	<b>TUNNELS, PENSTOCKS , POWER HOUSE &amp; OTHER HYDRAULIC WORKS (3)</b>						





Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2017	Addition during 2017-18 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2017-18
	Power House Building	3.34%	60850.08	632.03	2032.39	10.55	2042.95
	Tunnel, Penstock	5.28%	11225.89	121.87	592.73	3.22	595.94
11	<b>GENERATING PLANT AND MACHINERY</b>	5.28%	71504.38	51.66	3775.43	1.36	3776.80
12	<b>UNCLASSIFIED LAND</b>	3.34%	4437.80	127.48	148.22	2.13	150.35
	<b>TOTAL</b>		<b>265583.00</b>	<b>4636.19</b>	<b>12622.42</b>	<b>114.24</b>	<b>12736.66</b>
	Weighted Average Rate of depreciation						4.71%



**2018-19**

Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2018	Addition during 2018-19 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2018-19
<b>1</b>	<b>LAND</b>						
	Land Freehold	<b>0.00%</b>	461.78	0.00	0.00	0.00	0.00
	Land Leasehold	<b>3.34%</b>	49.18	0.00	1.64	0.00	1.64
<b>2</b>	<b>BUILDING</b>						
	Office Building	<b>3.34%</b>	1521.66	3230.49	50.82	53.95	104.77
	Other Civil Works ( TEMP STRU)	<b>100.00%</b>	5.25	0.00	0.00	0.00	0.00
<b>3</b>	<b>TOWNSHIP</b>						
	Residential Buildings & Guest House	<b>3.34%</b>	3459.42	266.24	115.54	4.45	119.99
	Water Supply & Sewerage	<b>5.28%</b>	473.15	0.00	24.98	0.00	24.98
<b>4</b>	<b>CONSTRUCTION PLANT AND MACHINERY</b>	<b>5.28%</b>	277.14	0.00	14.63	0.00	14.63
<b>5</b>	<b>VEHICLES</b>						
	Car, Bus, Trucks	<b>9.50%</b>	226.62	15.41	21.53	0.73	22.26
	Boats & Helicopter	<b>5.28%</b>	73.86	159.84	3.90	4.22	8.12
<b>6</b>	<b>OFFICE AND MISC EQUIPMENTS</b>						
	Office & Misc. Equipment's	<b>6.33%</b>	541.03	3.93	34.25	0.12	34.37
	Plant & Machinery & Small Assets upto Rs.5000.00	<b>100.00%</b>	2.88	0.00	0.00	0.00	0.00
	Intangible Assets	<b>20.00%</b>	0.19	0.00	0.04	0.00	0.04
	Computers & Printers	<b>15.00%</b>	98.44	(43.99)	14.77	(3.30)	11.47
	Elect. Sub Station & Transmission	<b>5.28%</b>	491.36	0.00	25.94	0.00	25.94
<b>7</b>	<b>ROAD AND BRIDGES</b>	<b>3.34%</b>	1964.58	82.54	65.62	1.38	67.00
<b>8</b>	<b>ENVIRONMENT &amp; ECOLOGY</b>	<b>5.28%</b>	0.00	0.00	0.00	0.00	0.00
<b>9</b>	<b>DAM AND SPILLWAY</b>	<b>5.28%</b>	111621.46	0.00	5893.61	0.00	5893.61
<b>10</b>	<b>TUNNELS, PENSTOCKS , POWER HOUSE &amp; OTHER HYDRAULIC WORKS (3)</b>						
	Power House Building	<b>3.34%</b>	61482.11	432.62	2053.50	7.22	2060.73
	Tunnel, Penstock	<b>5.28%</b>	11347.76	0.00	599.16	0.00	599.16



Sl. No.	Name of the Assets <sup>1</sup>	Depreciation Rates as per CERC's Depreciation Rate Schedule	Gross Block as on 01.04.2018	Addition during 2018-19 (Net of Decapitalisation)	Dep. on Op. Gross Block	Dep. on addition during the year	Total Depreciation for 2018-19
11	<b>GENERATING PLANT AND MACHINERY</b>	<b>5.28%</b>	71556.04	25.73	3778.16	0.68	3778.84
12	<b>UNCLASSIFIED LAND</b>	<b>3.34%</b>	4565.28	0.00	152.48	0.00	152.48
	<b>TOTAL</b>		<b>270219.19</b>	<b>4172.82</b>	<b>12850.58</b>	<b>69.45</b>	<b>12920.04</b>
	Weighted Average Rate of depreciation						4.71%

