

Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
<b>Items allowed in order dated 18.9.2015 in Petition No. 228/GT/2014</b>					
1	Purchase of 02 numbers of Minibus against replacement	40.42	These assets/works claimed were admitted vide Tariff order dated 18.9.2015 in Petition No. 228/GT/2014.	It is noticed that the additional capital expenditure claimed under this head was allowed for Rs.30.00 lakh and de-capitalization of Rs.19.35 lakh i.e. (30.00-19.35) lakh by order dated 18.9.2015 in Petition No. 228/GT/2014 under Regulation 14(3)(viii) of the 2014 Tariff Regulations as the assets are already approved. In view of this, the additional capital expenditure incurred is <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The actual de-capitalization value of Rs.14.93 lakh for old replaced assets/works has been considered under 'Assumed deletions'.	40.42
<b>New Items</b>					
2	Permanent Store Cum Office Building at Transport Yard (102/001795) and Electrification work of the Building	72.49	The Petitioner has submitted that the older buildings presently in use in the project were constructed in 1978-80 and are temporary in nature. The buildings constructed had no RCC foundation. The super structure was supported on wooden pillars. The walls were made up of Bamboo stick net having mud	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00



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			plaster on both sides. The roofing is of GI sheets supported on wooden structures with false ceiling. As per CPWD norms these type of buildings are considered as Temporary in nature. The present building has already outlived their useful life and more than 35 years old. Some of the structures are very dilapidated condition and are not safe to live. Accordingly, the new building construction cost incurred for Rs.82.02 lakhs and Electrification cost of Rs.2.35 lakhs.		
3	Electrification of newly constructed club building at Leimatak (102/001929)	2.21	The Petitioner has submitted that the Club building was capitalised during FY 2015-16 and the electrification work was done in new constructed Club building at Leimatak to come to workable condition during FY 2017-18.	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
4	Beacon make pump model 10LA4 bare shaft pump for cooling water system of PH	14.42	The Petitioner has submitted that old cooling water pumps had been installed at the generating station way back since commissioning and due to ageing, wear and tear, the discharge of these old pumps had been reduced considerably resulting in reduced efficiency in cooling of various	Considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.95 lakh for old,	14.42



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			coolers associated with generating units. To improve the cooling system of generating units, Beacon make cooling water pumps were replaced in 2017-18. Gross value of old assets is considered as Rs. 95054 and WDV is Rs.3.	replaced assets/works has been considered under 'De-capitalization' in 2016-17.	
5	PLC based online real time monitoring and recording system, MAKE: Srijon microsystems	20.09	The Petitioner has submitted that in the generating station, three Butterfly Valves are installed at Valve House (remotely located) for all three units. This PLC based remote monitoring system is purchased to monitor and control the operation of valve from Powerhouse control room, even if shut down of butterfly valves are required on account of any eventuality like rapture of Penstock.	Considering the fact that the additional capital expenditure incurred is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
6	Vertical turbine pump, 25 HP, discharge-300 M3/HR-MAKE: WPIL, MODEL:E12 TC	6.47	The Petitioner has submitted that the new pumps have been purchased on replacement basis for dewatering and drainage purposes in Powerhouse. Old pumps were purchased on 1.4.1986 and their acquisition value is Rs.71289. The deletion of old pumps has already been claimed in FY 2016-17.	Considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.71 lakh for old, replaced assets/works has been considered under 'De-capitalization' in 2016-17.	6.47
7	Vertical turbine pump, 30 HP, discharge-300 M3/HR - MAKE: WPIL, MODEL:E12 TC	4.98			4.98



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8	Laying & supplying of Delivery Pipeline from Filtration plant-old colony water storage tank, Loktak	15.04	The Petitioner has submitted that new pipeline system has been layered from Filtration Plant to Old colony water storage tank for supply of clean drinking water for employees.	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
9	Laying of OFC link from Loktak Powerhouse (Leimatak) overhead through 11KV line	24.76	The Petitioner has submitted that the OFC Link between Loktak to Leimtak is required to be replaced as the OFC in use remains delinked/ broken-down on regular basis. We have various locations in generating station like Leimtak, HOP Sectt and other supporting departments in Loktak, who has to be in touch /communication continuously for operation & maintenance of Powerhouse and other works. Frequent breakdown in OFC connectivity causes interruption of communications between the sites and head quarter, function of ERP system and Internet Service etc. The replacement of this system is very much essential for proper and smooth functioning of power station. The Gross value of Old assets is Rs.1784635 and WDV as Rs.811704.	Considering the fact that the additional capital expenditure incurred is for the efficient operation of the generating station, the same is <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.17.85 lakh for old, replaced assets/works has been considered under 'Assumed deletions'.	24.76



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
9	4 numbers Otoscope	0.30	The Petitioner has submitted that the generating Station has hospital at Loktak, Leimatak, Ithai and dispensary at Jeevan Nagar, which requires various instruments for providing treatment to the patients of local vicinity as well as employee and their family members. Since there is no hospital facility near this location, all the outsiders are also dependent to these project hospitals.	Considering the fact that the additional capital expenditure incurred is not directly related to the efficient operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
10	3 numbers Wheeled dust bin -660L, nilkamal WB660L10G R	1.02	The Petitioner has submitted that in terms of initiation of Prime minister "Swachh Bharat Mission Abhiyan" the 40 numbers wheeled dustbins has been purchased for cleaning the environment and remove and disposal of the garbage in systematic manner to minimise the chronic disease to people.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expensed, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
11	36 numbers fire extinguisher	3.38	The Petitioner has submitted that Many fire extinguishers installed at different location of power stations became obsolete and needs to be replaced. Moreover, some additional locations are also identified for compliance of OHSAS and environment policy, where fire extinguishers need to be installed. Therefore, Fire extinguisher has been purchased. The deletion	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the same is <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The de- capitalization value of Rs.2.68 lakh for old, replaced assets/works has	3.38



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			of old assets has already been claimed in FY 2016-17. Gross value of old assets is Rs.267595 and WDV as Rs.112.	already been considered under 'De-capitalization' in 2016-17.	
12	Solar power plant, ongrid TYPE,3 PH, 25 KVA capacity with accessories.	78.03	The Petitioner has submitted that as per guidelines of GOI, Solar rooftop Power Plants are to be installed in the office buildings, Guest Houses and other Project areas of Central PSU's and to be connected to the Grid. Hence the Solar Power plants have been installed during the FY 2017-18.	The provisions of the 2014 Tariff Regulations do not provide for capitalisation of the additional capital expenditure claimed by the Petitioner. Moreover, such major investments should be backed by DPR, beneficiaries' consent, cost benefit analysis, etc. Accordingly, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
13	3 numbers Thermal fogger/ defogger machine - MAKE-RALLI MODEL-RF-02	1.82	The Petitioner has submitted that the Loktak power station falls within the rainy area and during rainy season, grasses grow very fast and different insects, snake etc. comes frequently to the working area as well as residential area. For safety of the employee and their family, it is essential to remove the insecticides periodically. Accordingly, the Thermal fogger has been purchased.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
14	3 numbers Brush Cutter & 3 numbers Lawn mover	2.54	The Petitioner has submitted that the Loktak power station falls within the rainy area and during rainy season, grasses grow very fast and different	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature	0.00



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			insects, snake etc. comes frequently to the working area as well as residential area. For safety of the employee and their family, it is essential to remove the insecticides periodically. Accordingly, the Brush Cutter and Lawn mower have been purchased.	of O&M expense, the additional capital expenditure claimed is <b>not allowed</b> .	
15	28 numbers Fire extinguishers	0.45	The Petitioner has submitted that many fire extinguishers installed at different location of power stations became obsolete and needs to be replaced. Moreover, some additional locations are also identified for compliance of OHSAS and environment policy, where fire extinguishers need to be installed. Therefore, Fire extinguisher has been purchased. The deletion of old assets has already been claimed in FY 2016-17. Gross value of old assets is Rs.267595 and WDV as Rs.112.	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the same is <b>allowed</b> under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.2.68 lakh for old, replaced assets/works has already been considered under 'De-capitalization' in 2016-17.	0.45
16	40 numbers Wheel dust bin-120L, nilkamal WB120LBLU	0.87	The Petitioner has submitted that in terms of Initiation of Prime minister "Swachh Bharat Mission Abhiyan" the 40 numbers wheeled dustbins has been purchased for cleaning the environment and remove and disposal of the garbage in systematic manner to minimise the chronic diseases to people	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> . Further, the Petitioner has not submitted any	0.00



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
17	Hospital equipment like accucheck active glucometer, pulse-oximeter, nebulizer etc.	0.69	The Petitioner has submitted that Power Station has hospital at Loktak, Leimatak, Ithai and dispensary at Jeevan Nagar, which requires various instruments for providing treatment to the patients of local vicinity as well as employee and their family members. Since there is no hospital facility near this location, all the outsiders are also dependent to these project hospitals.	documentary evidence in support of the said claim.	0.00
18	Club Building at Powerhouse Colony, Leimatak	9.76	Part amount has been capitalised for already constructed Club Building.		0.00
19	Star delta starter panel for 2 numbers Of 105hp pumps (main and standby) -automation and remote panel	3.14	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised the new Assets were purchased during 2017-18 and the same was put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.32333 and WDV as Rs.3421.	Considering the fact that the additional capital expenditure claimed under this head is in the nature of capital spares, after the cut-off date, the same is <b>not allowed</b> The corresponding de-capitalization on account of the same is also <b>not allowed</b> .	0.00





Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
20	Star delta starter panel of 25HP pumps with automation panel	1.86	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2017-18 and the same was put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.19190 and WDV as Rs.2030.		0.00
21	Star delta starter panel of 25hp pumps with automation panel	1.86	The Petitioner has submitted that as per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2016-17 and the same was put to use during 2017-18. Based on Indexation method, gross value of		0.00



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			old assets is considered as Rs.19190 and WDV as Rs.2030.		
22	ACB WITH AMF PANEL FOR DG SET ACB 800A 415 V	6.37	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The Assets were purchased during 2016-17 which has been kept under exclusion category at Sl No. 16 of Form 9D FY 2016-17 and put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.65682 and WDV as Rs.7329.		0.00
23	3 nos. ANNUNCIATION WINDOW FOR UNITS PANEL, 8RX8C, 64 WINDOWS, 20V DC, EXTERNAL ACK/ACCEPT/RESET FACILITY	2.48	The Petitioner has submitted that as per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised The		0.00



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			Assets were purchased during 2016-17 which has been kept under exclusion category at Sl No. 17 of Form 9D FY 2016-17 and put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.25596 and WDV as Rs.2584.		
24	8 numbers ANNUNCIATION WINDOW FOR CONTROL DESK, 6RX4C, 24 WINDOWS, 2 20V DC, EXTERNAL ACK/ACCEPT/RESET FACILITY	2.95	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The Assets has been purchased during 2016-17 which has been kept under exclusion category at Sl. No. 18 of Form 9D FY 2016-17 and put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.30,392 and WDV as Rs.3060.		0.00
25	2 numbers INDUSTRIAL DEWATERING SUBMERSIBLE PUMP 4HP 3	2.57	The Petitioner has submitted that as per IND AS Accounting policy, spare parts procured along with mother plants or subsequently which		0.00



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
	PHASE WIRH ACCESSORIES, MAKE: MODY, MODEL: M404T		meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. Old pumps purchased on 1.4.1978 outlived their useful life and accordingly, new pumps have been purchased during FY 2016-17, FY 2016-17 and the same was put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.13252 and WDV as Rs1466.		
26	Spares of Digital Governing Systems	33.74	The Petitioner has submitted that as per IND AS Accounting policy, Spare parts procured along with mother plants or subsequently which meet the recognition criteria are capitalised. The carrying amount of those spare parts that are replaced is derecognised when no future economic benefits are expected from their use. Accordingly, this spare is capitalised. The new Assets were purchased during 2010-11 and the same was put to use during 2017-18. Based on Indexation method, gross value of old assets is considered as Rs.550535 and WDV		0.00



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			as Rs.56648.		
	<b>Total amount claimed</b>	<b>354.70</b>			
	<b>Total amount allowed</b>				<b>94.87</b>

21. Based on the above, the total additional expenditure of Rs.125.38 lakh {Rs.30.51lakh +Rs.94.87 lakh} in 2017-18 is allowed.

### 2018-19

22. The details of the actual additional capital expenditure claimed by the Petitioner in 2018-19 under the various provisions of Regulation 14(3) of the 2014 Tariff Regulations are examined below:

*(Rs. in lakh)*

Sl. No.	Regulation		2018-19
(a)	14(3)(i)	Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law.	26.28
(b)	14(3)(iii)	Expenses 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/ internal security	81.67
(C)	14(3)(viii)	Additional works/expenditure which has become necessary for efficient and successful operation of plant	225.14
	<b>Total additional capital expenditure claimed</b>		<b>333.09</b>

### (a) Additional Capital Expenditure claimed under Regulation 14(3)(I)

Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
<b>New Items</b>					
1	TUNNEL- Custom duty deposited to the departments against claim for imported tunnel equipment.	26.28	The Petitioner has submitted that custom department has raised the demand vide 537C(G)Proj 55/81A dated 17.5.2002 amounting of Rs.26,28,088 against NHPC. The equipment	Considering the fact that the additional capital expenditure claimed is on account of payment of Custom duty towards the imported tunnel equipment for the	26.28



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
			of folding shutters and combination type transit cars was imported from a firm of Italy for Power house at Loktak during 1981-82. The payment was made on 09.10.2018 to the Custom Department, Kolkata.	power house, we <b>allow</b> the claim under Regulation 14(3)(iii) of the 2014 Tariff Regulations being compliance with the existing law.	
	<b>Total amount claimed</b>	<b>26.28</b>			
	<b>Total amount allowed</b>				<b>26.28</b>

**(b) Additional Capital Expenditure claimed under Regulation 14(3)(iii)**

Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
<b>New Items</b>					
1	Providing and fixing of RBT concertina coil fencing along boundary wall at Loktak	41.04	The Petitioner has submitted that due to bad law and order in Manipur and for security reasons it is necessary to have fencing of the boundary wall at Loktak. This was not envisaged earlier during the filing of Tariff Petition.	Considering the fact that the assets/ works are necessary for the safety and security of the generating station and is in terms of the recommendations of the Central Security agency, the additional capital expenditure claimed is <b>allowed</b> under Regulation 14(3)(iii) of the 2014 Tariff Regulations.	41.04
2	Providing of Footpath/ Patrolling track at left side of penstock area between RD 150.0M to RD 950.0M	40.63	The Petitioner has submitted The Penstock is very vulnerable structure and required regular patrolling by security personnel along with fencing. Since there is no foot tracking/ patrolling track on left side for convenience for checking the area by the security staff as well as	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00



Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount allowed (Rs. in lakh)
			maintenance staff. Due to bad law and order situation at Loktak, it is very essential to have regular patrolling in this area. Hence the work has been done.		
	<b>Total amount claimed</b>	<b>81.67</b>			
	<b>Total amount allowed</b>				<b>41.04</b>

(a) Additional Capital Expenditure claimed under Regulation 14(3)(viii)

Sl. No.	Details of the claim	Amount claimed (Rs. in lakh)	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed (Rs. in lakh)
<b>New Items</b>					
1	Permanent Electrical Store cum office building at Loktak and Electrification work of the building.	92.12	The Petitioner has submitted that the older buildings presently in use in the project were constructed in 1978-80 and are temporary in nature. The buildings constructed had no RCC foundation. The super structure was supported on wooden pillars. The walls were made up of Bamboo stick net having mud plaster on both sides. The roofing is of GI sheets supported on wooden structures with false ceiling. As per CPWD norms these type of buildings are considered as Temporary in nature. The present building has already outlived their useful life and more than 35 years old. Some of the structures are very dilapidated condition and are not	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00



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			safe to live. Accordingly, the new building construction cost incurred for Rs.103.07 lakhs and Electrification cost of Rs.3.35 lakhs.		
2	Motorised rolling shutter for 7000 MM X 6000 MM gate	10.37	The Petitioner has submitted that Loktak Machine Hall of power House is situated at EL-463.45 meter and various components like Generator Top Section including Excitation system, governor system, Turbine OPU system etc. are installed at Machine floor. Earlier there was an opening of 6000 X 7000 mm and no gate/shutter was installed at the entrance gate of powerhouse. Due to non-availability of any gate / shutter, rainwater entered in the machine floors especially in monsoon season. This rainwater may damage the various electric components at machine floors. Hence, the work has been carried out.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00
3	2 numbers Oil filtration /transfer unit (38LPM, filter rating	1.61	The Petitioner submitted that there was only one Oil transfer unit with small capacity of 10 LPM and rating of 3.0 kW, 3-phase was installed at power house for transfer of turbine oil from barrels to GBOC Tank, Turbine OPU Tank, Valve OPU Tank and vice versa. Due to non-availability of higher capacity of oil transfer unit with filter, major		0.00
4	20micron micro-glass III WITH ELECTRIC MOTOR)	1.61			0.00





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			maintenance works got delayed and sometimes creates a hasty situation. Accordingly, new oil transfer unit has been purchased.		
5	Pump with Starter 30 numbers	9.37	The Petitioner has submitted that there were very old pumps and motors installed at Different locations of generating station and slide zones of Leimatak. These pumps were creating problem during day-to-day operations. Hence the new pumps with starter have been purchased. Gross value of old assets is Rs.92039 and WDV as Rs16.	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the claim is <b>allowed</b> under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.0.92 lakh for old, replaced assets/works has already been considered under 'De-capitalization' in 2016-17.	9.37
6	Horizontal centrifugal pump with motor (CI/ BRONZE /STEEL ) + 75 KW / 4P-5 numbers	17.91			17.91
7	Pump set of Kirloskar submersible and Electrical mono-black 19 numbers	8.29			8.29
8	Pump with motor 45 KW/60 HP MODEL NO. DSM100/36 - 6 numbers	15.06			15.06
9	Providing of water supply line of GI pipe 25mm dia. for lamdan CRPF camp at Leimatak.	4.70	The Petitioner has submitted that due to bad law & order situation in Loktak Leimatak area, CRPF camp at Lamdan has been established. The water supply line is temporary connected from mountaineering camp and during dry season, water is not sufficient for the security personal. Accordingly, the new water supply line has been Constructed.	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00



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10	Sewage treatment plant 20 KLD CAPACITY - 2 numbers for Loktak & Leimatak Colony	59.98	The Petitioner has submitted that the ministry of Power has instructed for the safe disposal of the sewage in every power station premises by setting up of sewage treatment Plants (STP) at Loktak colony and Leimatak Colony. Due to installation of STP, it has become easy to reuse the wastewater after treatment and also reducing the health hazards for the employees.		0.00
11	Different capacity Fire extinguishers - 35 numbers	3.88	The Petitioner has submitted that as per the guidelines of safety department and as per prevailing standard, the external safety audit held in past, the auditor has recommended to put additional portable fire extinguishers at various location as the earlier capacity is lesser to safeguard any mishappening. Gross value of old assets is Rs.267595 and WDV as Rs.112.	Considering the fact that the additional capital expenditure incurred is necessary for the safety and security of the generating station, the claim is <b>allowed</b> under Regulation 14(3)(iii) of the 2014 Tariff Regulations. The de-capitalization value of Rs.2.68 lakh for old replaced assets/works has already been considered under 'De-capitalization' in 2016-17.	3.88
12	CCTV Camera at HOP residence and Guest Hosue	0.25	Power Station finds that the existing cameras installed at the office campus are not sufficient to monitor/cover the entire area around the HOP office. These cameras cover the main entrance gate only and leaving the open area in front of	Considering the fact that the expenditure incurred is not directly related to the operation of the generating station and is in the nature of O&M expenses, the additional capital expenditure claimed is <b>not allowed</b> .	0.00



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			HOP office as well as corridor of Admin Office. There is regular movement of outsiders/ locals for official meeting to HOP office and other division at Admin Office. Considering the law and order situation in Loktak Power Station, Manipur, two nos. of CCTV cameras are installed for safety and security of HOP office.		
	<b>Total amount claimed</b>	<b>225.14</b>			
	<b>Total amount allowed</b>				<b>54.50</b>

21. Based on the above, the total additional capital expenditure of Rs.121.83 lakh {Rs.26.28 lakh + Rs.41.04 lakh + Rs.54.50 lakh} is allowed in 2018-19.

### **Discharge of liabilities**

23. The Petitioner has claimed the following discharge of liabilities:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
0.00	4.21	55.45	16.42	12.04

24. The Petitioner has furnished the reconciliation of liabilities along with the balance sheet in the present petition. Accordingly, on prudence check, and as discussed under the head of additional capital expenditure for assets / works which are allowed, the liabilities against these assets/ items are allowed as discharge of liabilities. For those assets which are not allowed, the corresponding discharge of liabilities are not allowed. Further, there is reversal of liability on account of laying of OFC cable for Rs. 3.49 lakh which has been considered. Accordingly, the discharge of liabilities is allowed as under:



<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
0.00	0.00	50.38	7.24	10.33

25. The summary of un-discharged liabilities, corresponding to the admitted capital cost, is as under:

<i>(Rs. in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening un-discharged liabilities (A)	0.00	0.00	50.38	11.65	14.56
Liabilities corresponding to additional capital expenditure allowed during the year (B)	0.00	50.38	11.65	10.15	6.87
Discharges of liabilities during the year (C)	0.00	0.00	50.38	7.24	10.33
Reversal of liabilities during the year (D)	0.00	0.00	0.00	0.00	3.49
<b>Closing un-discharged liabilities (A+B-C-D)</b>	<b>0.00</b>	<b>50.38</b>	<b>11.65</b>	<b>14.56</b>	<b>7.61</b>

### **De-capitalization**

26. The Petitioner has claimed de-capitalization of amounts (as per Form 9Bi) as under:

<i>(Rs. in lakh)</i>					
	2014-15	2015-16	2016-17	2017-18	2018-19
De-capitalization	24.84	17.83	63.28	11.65	0.00
Assumed Deletion	79.06	44.69	19.39	49.81	0.00

27. The Petitioner has claimed de-capitalization under two heads viz., the decapitalization approved by the Commission and considered under 'assumed deletion' at the time of determining the tariff and the other as 'de-capitalization'. The de-capitalization claimed by the Petitioner has been dealt with in the relevant paragraphs relating to the additional capital expenditure claims, which have been considered and allowed for the respective years of the 2014-19 tariff period in terms of the provisions of Regulation 14(3) of the 2014 Tariff Regulations. Further, the decapitalization of assets against which capitalization are not allowed have not been considered. Accordingly, the de-capitalization in case of asset like Guide Vane lower ring assembly and 132 kV Current Transformer amounting to Rs.6.05 lakh during



2016-17 and in case of 02 numbers Generator bearing oil cooler, 02 numbers 120 kV, 10 kA, class-iii, metal oxide lightning arrester and 132 kV Current Transformer amounting to Rs.16.40 lakh in 2016-17 and spare amounting to Rs.7.69 lakh in 2017-18 has not been considered for the purpose of tariff and the same is shown as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
De-capitalization claimed by the Petitioner	24.84	17.83	63.28	11.65	0.00
De-capitalization allowed	24.84	11.79	46.88	3.96	0.00

### **Assumed Deletions**

28. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff, provided that the capitalization of the said asset is followed by de-capitalization of the original value of the old asset. However, in certain cases where de-capitalization 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 decapitalization which is not a book entry in the year of capitalization is termed as "Assumed deletion". Further, in the 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.

29. It is observed that the Petitioner has claimed the asset/work such as fire extinguishers, Air Circuit breaker, Current Transformer, Potential Transformer, etc., on replacement basis. However, the Petitioner in this petition has provided the de-capitalization value of the old asset/works which have been replaced which seems to be on lower side for some assets. Also, the assumed deletions for some assets have already been approved by the Commission vide its order dated 18.9.2015 in Petition



No. 228/GT/2014, the same has been considered by the Petitioner in the instant Petition and the same is considered for the purpose of tariff. However, if the assumed deletion amount calculated by Commission's consistent methodology is more than the claim of the Petitioner the same i.e. calculated by the Commission (being on higher side) is considered for the purpose of the tariff. Accordingly, based on above methodology, the assumed deletion considered for these assets/works is as under:

*(Rs. in lakh)*

	Assets/Works	Additions claimed for new assets/works	Assumed Deletions for old assets/works	
			Claimed	Allowed
<b>2014-15</b>				
1	Lift for Powerhouse	30.16	1.59	1.59
2	Construction of one Semi permanent type-I Building having 04 numbers of quarters at Surge Shaft	59.22	3.35	3.35
3	Construction of Permanent type-II Double storied building 04 blocks having 04 quarters in each block at Loktak.	256.68	3.90	3.90
4	Replacement of LT distribution lines by underground LT Cabling at Loktak Colony	20.73	6.09	6.09
5	Replacement of 11KV line from leimatak to Loktak	69.76	38.61	38.61
6	Construction of five numbers new morcha at Ithai Barrage	12.33	1.03	1.03
7	Construction of cook house cum Kitchen for CRPF.	23.59	0.65	0.65
8	Construction of 06 Barracks for CRPF.	64.99	5.04	5.04
9	Siemens Make, Sentron Series 3WL,Air Circuit Breaker (02 numbers)	5.08	0.58	1.12
10	Air Circuit Breaker 630 Amp, 440 Volt (03 numbers)	3.69	0.42	0.81
11	2X10 KVA Online UPS System	8.60	0.00	0.00
12	CO2 Type Fire Extinguisher complete with all necessary Fittings	6.15	1.09	1.36
13	HP PROLIANT DL380E G8 SERVER-INTEL XEON E5-2407,8GB RAM,1.2TB SAS HDD,DVD RW, KEYBOARD, MOUSE,18.5TFT (04 numbers)	8.53	1.38	1.88
14	Handheld VHF device – MOTOROLA GP328 (03 numbers)	0.35	0.56	0.56
15	CVT, 132KV,4400PF (04 numbers)	13.72	1.55	3.02
16	CURRENT TRANSFORMER 132 KV, CTR 300-200/1; CLASS 5P10; BURDEN 30VA	1.10	0.12	0.24



	Assets/Works	Additions claimed for new assets/works	Assumed Deletions for old assets/works	
			Claimed	Allowed
17	132 KV/ 63.5 VOLT POTENTIAL TRANSFORMER (PT) (SINGLE PHASE) (06 numbers)	16.19	1.83	3.57
18	BEACON MAKE PUMP MODEL 10LA4 BARE SHAFT PUMP FOR COOLING WATER SYSTEM OF PH	26.08	2.95	5.75
19	Generator Bearing Oil Cooler (GBOC), 66C.392.368 (02 numbers)*	-	7.96	7.96
	<b>Total</b>			<b>86.52</b>
<b>2015-16</b>				
1	Replacement of LT distribution lines by underground LT Cabling at Powerhouse Colony.	17.02	6.09	6.09
2	Replacement of EPABX System.	17.55	6.85	6.85
3	Construction of Boundary Wall for CRPF Camp at Valve House	29.75	0.44	0.44
4	Supply & Installation of HSD Tank & Dispensing Unit at Loktak PS(PO10214/213)	11.38	1.14	2.39
5	CO2 Type Fire Extinguisher Complete with all necessary fittings (29 numbers)	2.96	0.48	0.62
6	HANDHELD VHF DEVICE – MOTOROLA GP328 (11 numbers)	1.82	1.11	1.11
7	UPGRADATION OF LAN AT LOKTAK	41.73	18.92	18.92
8	EXECUTIVE FIELD HOSTEL AT LOKTAK (16 Quarters)	180.90	5.95	37.96
9	NUMERICAL GENERATOR PROTECTION RELAY, ABB REG 670	9.31	1.00	1.95
10	220V DC,500AH LEAD ACID BATTERY BANK WITH ALL ACCESSORIES	14.53	2.41	3.05
11	220V DC, FLOAT/FLOAT CUM BOOST CHARGER, THREE PHASE 415V AC, RATING 50/80 AMP	5.69		1.19
12	SUBMERSIBLE PUMP 02 HP. MAKE-MODI (02 numbers)	0.00	0.29	0.29
	<b>Total</b>			<b>80.87</b>
<b>2016-17</b>				
1	Bullet Proof Scorpio (1 number)	56.59	8.38	8.38
2	Construction of 05 barracks for CRPF	69.44	6.46	6.46
3	11 KV VCB Panel for DPH, Loktak	4.48	0.62	0.90
4	Construction of 1 number Watch Tower near Main Gate of Transport Yard,	7.11	3.94	3.94
	<b>Total</b>			<b>19.67</b>
<b>2017-18</b>				
1	Purchase of 02 numbers of Minibus against replacement	40.42	14.93	14.93
2	OFC link between Loktak & Leimatak	24.76	17.85	17.85
	<b>Total</b>			<b>32.78</b>



\*The Petitioner has not submitted any additional capital expenditure for the asset during 2014-15, however the Petitioner has de-capitalized an amount of Rs 7.96 in 2014-15. Accordingly, the de-capitalization has been considered.

### **Exclusions**

30. The following exclusions have been claimed by the Petitioner:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions in Addition	152.70	175.02	235.16	159.16	113.82
Exclusions in Deletions	12.94	0.00	42.28	11.31	14.93

### ***Exclusions in Additions (capitalized in books but not to be considered for tariff purpose)***

31. The Petitioner has submitted that the expenditure as stated in the table above is incurred on procurement/replacement of minor assets which are not allowed for the purpose of tariff, after the cut-off date of the generating station, in terms of the 2014 Tariff Regulations. The Petitioner has, accordingly, put these additions under exclusion category, by including the positive entries arising due to Inter-head adjustments. As such, the exclusion of such positive entries is allowed and has no impact on tariff. Hence, the same is in order and allowed.

### ***Exclusions in deletions (de-capitalized in books but not to be considered for tariff purpose)***

32. The Petitioner has de-capitalized the following amounts in books of accounts and has kept the same under exclusion for the purpose of tariff:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Minor Assets de-capitalised	(-)12.94	0.00	(-)38.01	(-)11.31	0.00
Minor assets (Inter Unit Transfer) de-capitalized	0.00	0.00	(-)4.27	0.00	0.00
Tata Bus – de-capitalized	0.00	0.00	0.00	0.00	(-)14.93
<b>Total</b>	<b>(-)12.94</b>	<b>0.00</b>	<b>(-)42.28</b>	<b>(-)11.31</b>	<b>(-)14.93</b>

33. It is noticed that the above exclusion in deletions are for minor assets de-capitalized, minor assets transferred out, and de-capitalization of bus. The minor assets and their inter unit transfer are not considered as capital assets and are not permitted to be capitalised after the cut-off date. Accordingly, exclusion in deletions





for minor assets/ inter unit transfer of minor assets are allowed to be excluded from deletions and are not considered for tariff purpose . As regards the exclusion claimed for Tata bus during 2018-19, it is noticed that this item has been already considered under Assumed Deletions during 2017-18. Accordingly, exclusion for same during 2018-19 is allowed. Based on above, the following exclusion in deletions are allowed and not reduced from capital cost for the purpose of tariff.

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Exclusions in Deletions allowed (to be considered in deletion)	(-)12.94	0.00	(-)42.28	(-)11.31	(-)14.93

### **Net Additional Capital Expenditure allowed**

34. In view of 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
Additions allowed during the year (a)	765.96	450.66	268.70	125.38	121.83
Discharge of liabilities (b)	0.00	0.00	50.38	7.24	10.33
Deletions considered during the year (c)	111.36	92.66	66.55	36.74	0.00
Exclusions in Deletions not allowed (to be considered in deletion)	0.00	0.00	0.00	0.00	0.00
<b>Net additional capital expenditure allowed (c)=(a)+(b)-(c)-(d)</b>	<b>654.60</b>	<b>358.00</b>	<b>252.52</b>	<b>95.88</b>	<b>132.16</b>

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

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

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening capital cost	16880.31	17534.91	17892.91	18145.43	18241.31
Net additional capital expenditure allowed	654.60	358.00	252.52	95.88	132.16
<b>Closing Capital Cost</b>	<b>17534.91</b>	<b>17892.91</b>	<b>18145.43</b>	<b>18241.31</b>	<b>18373.47</b>

### **Debt-Equity Ratio**

36. 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.”*

37. The debt: equity ratio, prior to 1.4.2009, was considered in the ratio of 53.06:46.94 and the debt equity ratio after 1.4.2009, was considered as 70:30 in terms of Regulation 19 of the 2014 Tariff Regulations for the purpose of additional capitalization. The details of the debt: equity ratio considered is as under:

Asset	As on 1.4.2014		Additional Capitalization during 2014-19		De-capitalization during 2014-19		As on 31.3.2019	
	Amount	%	Amount	%	Amount	%	Amount	%



Debt	9410.67	55.75	1260.33	70.00	163.06	53.06	10507.94	57.19
Equity	7469.64	44.25	540.14	30.00	144.25	46.94	7865.53	42.81
<b>Total</b>	<b>16880.31</b>	<b>100.00</b>	<b>1800.47</b>	<b>100.00</b>	<b>307.31</b>	<b>100.00</b>	<b>18373.47</b>	<b>100.00</b>

### **Return on Equity**

38. 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.”*

39. 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:*



$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$

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.”

40. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to the beneficiaries, as the case may be, on an year to year basis. Accordingly, the grossing up of base rate has been done with the actual MAT rate of the respective financial year. In terms of Regulation 24 and Regulation 25 of the 2014 Tariff Regulations, Return on Equity, has been computed as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity (a)	7469.64	7647.16	7738.86	7803.34	7825.88
Addition due to Additional capitalization (b)	229.79	135.20	80.61	37.61	36.55
Addition due to discharge of liability (c)	0.00	0.00	15.11	2.17	3.10
De-capitalization (d)	11.66	5.53	22.01	1.86	0.00
Assumed Deletion (e)	40.61	37.96	9.23	15.38	0.00
Closing Equity (f)=[(a)+(b)+(c)-(d)-(e)]	7647.16	7738.86	7803.34	7825.88	7865.53
<b>Average Equity (g)=[(a+f)/2]</b>	<b>7558.40</b>	<b>7693.01</b>	<b>7771.10</b>	<b>7814.61</b>	<b>7845.71</b>
Base Rate (%) (h)	16.500	16.500	16.500	16.500	16.500
Effective Tax rate (%) (i)	20.961	21.342	21.342	21.342	21.549
Effective ROE rate (%) (j)	20.876	20.977	20.977	20.977	21.032
<b>Return on Equity (k)=[(g)*(j)]</b>	<b>1577.89</b>	<b>1613.76</b>	<b>1630.14</b>	<b>1639.27</b>	<b>1650.11</b>

### Interest on Loan

41. 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.”*

42. The normative loan for the project has already been repaid. The normative loan on account of the admitted additional capital expenditure, during the respective years of the tariff period has been considered as paid fully, as the admitted



depreciation is more than the amount of normative loan in these years. As such, Interest on loan during the 2014-19 tariff period is 'nil'.

### **Depreciation**

43. 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 licensee, 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) alongwith 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.”

44. The COD of the generating station is 1.6.1983. Since the project has completed 12 years of commercial operation as on 1.6.1995, the remaining depreciable value has been spread over the balance useful life of the project in 2014-19 tariff period. Accordingly, depreciation has been computed without considering the admitted additional capital expenditure and is allowed as under:

	<b>(Rs. in lakh)</b>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost (a)	16880.31	16880.31	16880.31	16880.31	16880.31
Closing Capital Cost(b)	16880.31	16880.31	16880.31	16880.31	16880.31
Average Capital Cost (c)=[(a+b)/2]	16880.31	16880.31	16880.31	16880.31	16880.31
Land Value (d)	39.89	39.89	39.89	39.89	39.89
Depreciable value(e)=[(c-d)*0.9]	15156.38	15156.38	15156.38	15156.38	15156.38
Balance life (f)	4.17	3.17	2.17	1.17	0.17
Cumulative depreciation at the beginning (g)	11377.63	12199.21	13061.68	13967.34	14953.78
Remaining Depreciable value (h)=[(e)-(g)]	3778.75	2957.17	2094.70	1189.04	202.60
<b>Depreciation during the period (i)=[(h)/(f)]</b>	<b>906.90</b>	<b>933.84</b>	<b>966.78</b>	<b>1019.18</b>	<b>202.60</b>
Cumulative depreciation(j)=[(g)+(i)]	12284.53	13133.05	14028.46	14986.51	15156.38
Less: Adjustment on account of de-capitalisation (k)	85.32	71.37	61.13	32.73	0.00
<b>Net Cumulative Depreciation (l)=[(j)-(k)]</b>	<b>12199.21</b>	<b>13061.68</b>	<b>13967.34</b>	<b>14953.78</b>	<b>15156.38</b>

45. In respect of admitted additional capital expenditure for the 2014-19 tariff period as above, depreciation is allowed as shown below:

	<b>(Rs. in lakh)</b>				
	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost (a)	0.00	654.60	1012.60	1265.12	1361.00
Admitted additional capital	654.60	358.00	252.52	95.88	132.16



	2014-15	2015-16	2016-17	2017-18	2018-19
expenditure (b)					
Closing Capital Cost (c)=[(a)+(b)]	654.60	1012.60	1265.12	1361.00	1493.16
<b>Average Capital Cost (d)=[(a+c)/2]</b>	<b>327.30</b>	<b>833.60</b>	<b>1138.86</b>	<b>1313.06</b>	<b>1427.08</b>
Land Value (e)	0.00	0.00	0.00	0.00	0.00
Depreciable value (f)=[(d-e)*0.9]	294.57	750.24	1024.97	1181.76	1284.37
Balance life (g)	25.00	24.00	23.00	22.00	21.00
Cumulative depreciation beginning (h)	0.00	11.78	42.55	85.27	135.11
Remaining Depreciable Value (i)=[(f)-(h)]	294.57	738.46	982.42	1096.49	1149.27
<b>Depreciation during the period (j)=[(i)/(g)]</b>	<b>11.78</b>	<b>30.77</b>	<b>42.71</b>	<b>49.84</b>	<b>54.73</b>
Cumulative depreciation (k)=[(h)+(j)]	11.78	42.55	85.27	135.11	189.83
Less: Adjustment on account of de-capitalisation (l)	0.00	0.00	0.00	0.00	0.00
<b>Net Cumulative Depreciation (m)=[(k)-(l)]</b>	<b>11.78</b>	<b>42.55</b>	<b>85.27</b>	<b>135.11</b>	<b>189.83</b>
<b>Total Depreciation (capital cost + additional capital expenditure)</b>	<b>918.68</b>	<b>964.61</b>	<b>1009.50</b>	<b>1069.02</b>	<b>257.32</b>

### Operation & Maintenance Expenses

46. Regulation 29 (3) (a) of the 2014 Tariff Regulations, provides the O&M expenses for this generating station as under:

*“29(3)(a) Following operations and maintenance expense norms shall be applicable for hydro generating stations which have been operational for three or more years as on 1.4.2014:*

	<i>(Rs. in Lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Loktak	9673.64	10316.36	11001.78	11732.74	12512.26

47. Since the Petitioner has claimed O&M expenses in accordance with Regulation 29(3)(a) of the 2014 Tariff Regulations, the aforesaid claim of the Petitioner is allowed.

### Additional O&M Expenses

#### **Impact of Goods and Service Tax**

48. The Petitioner has also claimed reimbursement of the additional tax paid due to implementation of GST in respect of generating station, as additional O&M expenses and for this purpose, has requested for relaxation of the provisions of Regulation 29(3) of the 2014 Tariff Regulations, under Regulation 54 (power to relax)





and Regulation 55 (removal of difficulty) of the 2014 Tariff Regulations. The Petitioner has further submitted that the implementation of GST is a “Change in law” event and the impact of the same should be passed-through in tariff. The Petitioner has submitted that it had filed Petition No. 133/MP/2019, which was disposed of by the Commission vide its order dated 22.8.2019, granting liberty to the Petitioner to raise the claim for reimbursement of additional tax on O&M expenses due to implementation of GST Act, 2017 along with the truing up petition for the 2014-19 tariff period. The additional impact of GST in 2017-18 (1.7.2017 to 31.3.2018) and 2018-19 as submitted by the Petitioner, duly certified by statutory auditors, are as under:

<b>Additional impact of GST on O&amp;M expenses (In Rs)</b>			
<b>2017-18</b>	<b>2018-19</b> (1.4.2018 to 31.12.2018)	<b>2018-19</b> (1.1.2019 to 31.3.2019)	<b>Total</b>
393665	1760793	(-)1902536	251922

49. It is observed that the Commission while specifying the O&M expense norms for the 2014-19 tariff period had considered taxes to form part of the O&M expense calculations and, accordingly, had factored the same in the said norms. This is evident from paragraph 49.6 of the SOR (Statement of Objects and Reasons) to the 2014 Tariff Regulations, which is extracted hereunder:

*“49.6 With regards to suggestion received on other taxes to be allowed, the Commission while approving the norms of O&M expenses has considered the taxes as part of O&M expenses while working out the norms and therefore the same has already been factored in...”*

50. Further, the escalation rates considered in the O&M expense norms under the 2014 Tariff Regulations, is only after accounting for the variations during the past five years of the 2014-19 tariff period, which in our view, takes care of any variation in taxes also. It is pertinent to mention that in case of reduction of taxes or duties, no reimbursement is ordered. In this background, we find no reason to allow the prayer for grant of additional O&M expenses towards payment of GST.



## **Interest on Working Capital**

51. Sub-clause (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 Hydroelectric 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***

52. Working Capital for Receivables equivalent to two months of capacity charges has been worked 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>
2127.01	2254.00	2384.99	2525.25	2525.80

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

53. Working capital for Maintenance spares @ 15% of O&M expenses are worked out and allowed 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>
1451.05	1547.45	1650.27	1759.91	1876.84

### ***Working Capital for O&M Expenses***

54. Working capital for O&M expenses for 1 month of O&M expenses for the purpose of working capital are 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>
806.14	859.70	916.82	977.73	1042.69

55. 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.”

56. In terms of the Regulation 28(1)(c) of the 2014 Tariff Regulations, the interest on working capital is worked out 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>
Working Capital for Maintenance Spares (15% of O&M expenses)	1451.05	1547.45	1650.27	1759.91	1876.84
Working Capital for O&M expenses (one month of O&M expenses)	806.14	859.70	916.82	977.73	1042.69
Working Capital for Receivables (2 months of annual fixed cost)	2127.01	2254.00	2384.99	2525.25	2525.80
<b>Total Working Capital</b>	<b>4384.20</b>	<b>4661.15</b>	<b>4952.07</b>	<b>5262.89</b>	<b>5445.33</b>
Rate of interest on working capital (%)	13.500%	13.500%	13.500%	13.500%	13.500%
<b>Interest on Working Capital</b>	<b>591.87</b>	<b>629.26</b>	<b>668.53</b>	<b>710.49</b>	<b>735.12</b>

### **Annual Fixed Charges**

57. Based on the above, the annual fixed charges approved for the generating station for the 2014-19 tariff period is summarized 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>
Depreciation	918.68	964.61	1009.50	1069.02	257.32
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1577.89	1613.76	1630.14	1639.27	1650.11
O&M Expenses	9673.64	10316.36	11001.78	11732.74	12512.26
Interest on WC	591.87	629.26	668.53	710.49	735.12
<b>Total</b>	<b>12762.08</b>	<b>13523.99</b>	<b>14309.95</b>	<b>15151.52</b>	<b>15154.81</b>

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

58. The Petitioner has claimed NAPAF of 85% in terms of Regulation 37(4) of 2014 Tariff Regulations. The same has been considered for the generating station for the 2014-19 tariff period.

### **Design Energy**



59. The Commission in its order dated 14.6.2011 in Petition No.108/2010 had approved the annual Design Energy (DE) of 448 Million Units for the period 2009-14 in respect of this generating station. However, it is noticed that the Design Energy for the generating station has been revised to 562.73 MUs vide order dated 24.7.2019 in Petition No. 248/MP/2018, subject to model study post R&M as suggested by CEA, in its report dated 24.11.2016. For this reason, the DE of 448 MUs has been considered for this generating station for the 2014-19 tariff period, and the month wise details is shown as under:

<b>Month</b>	<b>Design Energy (MUs)</b>
April	30
May	31
June	30
July	52
August	52
September	50
October	52
November	30
December	31
January	31
February	28
March	31
<b>Total</b>	<b>448</b>

60. The RLDC Fees & Charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2015, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2014 Tariff Regulations.

61. Petition No.296/GT/2020 is disposed of in terms of the above.

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

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

**Sd/  
(P.K.Pujari)  
Chairperson**

