S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
	commissioning of LT distribution panel & its accessories at surge shaft		Distribution panel at Surge Shaft area for providing supply to pumps for filling up penstock and for illumination of surge shaft area. Earlier temporary arrangement by directly tapping from Switch yard of powerhouse to gantry crane and lighting. Therefore, total system gets shutdown when there was tripping in Powerhouse /Switchyard on fault. So, LT panel was required to isolate the faulty system. Panel was purchased and installed in Jan2015.	the Petitioner and considering the fact that the asset is required for the successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	
4	Calibration instrument of thermometers (oil bath), fluke model	6.85	The Petitioner in justification to its claim has submitted New Asset:  Resistance Temperature  Detectors (RTDs) & Dial Type Thermometers (DTTs) are installed in each Turbine Guide bearing (TGB), Lower Guide Bearings (LGB), Combined Bearings (UGB) and cooling circuit for monitoring the temperature of bearings and Oil. To ensure the proper functioning of these RTDS/DTTS their calibration is required at least once in a year. Earlier this was done through external agencies, however, at times calibration were missed due to non-response of agencies, remoteness of project. So this instrument was purchased, thereafter all RTDs &DTTs are calibrated in house and ensuring the proper functioning and time and money have been saved due to this.	Considering the fact that the claimed additional capital expenditure are in the nature of tools and tackles, the claim is <b>not allowed</b> in terms of the proviso to Regulation 14(3) of the 2014 Tariff Regulations.	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
5	Motorised synchronising lifting system, capacity 10 ton, make: power team	5.77	The Petitioner to substantiate its claim has submitted Due to silt, under water parts like runner, shaft seal, labyrinth etc. gets damaged during operation of plant. Earlier, the damaged labyrinths were replaced at works shop of Original Equipment Manufacturer (OEM) or are repaired at workshops of other firms in business. In such case, entire runner was required to be sent for repair at this location which incurs heavy financial implication including transportation. With purchase of this specialised equipment in 2014-15 damaged labyrinths are being replaced at Power Station thereby saving time and money. Also, duration of annual maintenance is reduced.	Based on the justification furnished by the Petitioner and considering the fact that these assets are required for the successful and efficient operation of plant, the claims are allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	5.77
6	Non-clog sewage submersible pump, 1450 rpm, 21hp, 16 kw, 415 v, 3- ph, with electrical control panel	2.50	The Petitioner has submitted that The leakage through Spillway Radial Gates of all three bays of Dam and through Silt Flushing Gallery increases every year due to continuous erosion, wear and tear in sill beam of Stop log, sill beam of Radial gate, sill beam of SFG, bottom portion of SRG and SFG etc. Therefore, additional submersible pumps were purchased & capitalized in 2014-15 for dewatering in addition to the existing pumps.		2.50
7	Canteen and dam at dam complex	5.91	The Petitioner has submitted that earlier during construction of Project, there was a temporary shed of CGI Sheeted used for the purpose of canteen for providing refreshment & Fooding of employees, round the clock, posted at Dam. Due to	As the claims of the Petitioner are not directly related to the efficient operation of the plant, the same are <b>not allowed.</b>	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
			earthquake & stone falling it was damaged. During the rainy season, it was not suitable for cooking and dinning and also hygienic condition was not maintained due to very old and shabby structure. So, a permanent canteen room has been constructed during Mar2014 for facilitating the employees posted at Dam round the clock.		
8	Public toilet at project hospital	4.59	The Petitioner has submitted that earlier there was no toilet at Project hospital complex for outdoor patients. Hospital was constructed in 1995. A temporary arrangement of common toilet for outdoor patients / public use had been provided, which was being used till 15 years. Therefore, for facilitating the outdoor patients and maintaining of hygienic condition in surrounding area of hospital public toilets has been constructed in the hospital complex.		0.00
9	Water Supply Line and Water Tank at Central Store At Sagbari	4.78	The Petitioner has submitted that the natural water of nallah had been tapped near Meyong village for source of water supply to central store & IRBN security staff colony. The source of water supply has dried up in summer. Also, it was observed later on that flow of nallah during summer had been completely dried-up due to change direction of water flow of natural spring. Therefore, it was necessary to lay additional supply line from another water source to cater the water supply problem in Central store & IRBN Colony. The work has been completed and being used from Mar'2015.		0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
10	Travelling telescope for X and Y axis for inverted plumb line, eds-51-tt	3.20	The Petitioner in justification to the claim has submitted that Telescopes are required for measuring the movement of Dam along X and Y axis. The alignment of old Telescopes purchased during Commissioning were not working properly due to wear & tear and their diaphragm is damaged due to moisture. These were beyond repairable. Two nos. telescopes were purchased.	Based on the justification furnished by the Petitioner and considering the fact that the asset is required for the successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The original value of old asset / work is considered under 'Assumed Deletion'.	3.20
11	Automatic weather station	3.92	The Petitioner to substantiate its claim has submitted that old weather station was purchased in 1995 and have completed their useful life and not functioning as sensors were damaged due to moisture & wear & tear. Therefore, new Automatic weather station was purchased as per the recommendation of Dam Safety inspection team. The Petitioner has also submitted the copy of the Report of DAM safety team.	Based on the justification furnished by the Petitioner and considering the fact that the asset is required for the successful and efficient operation of plant, the same is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The original value of old asset / work is considered under 'Decapitalization'.	3.92
12	Bpl 8108 view 6 channel ecg machine	0.71	The Petitioner has submitted that Old machine was purchased in 1993 and has completed its useful life. A ECG machine was purchase for health care facilities of staff residing at Rangit Power Station	As the claims of the Petitioner are not directly related to the efficient operation of the plant, the same are <b>not</b> allowed.	0.00
13	5 nos air circuit breaker, 800 amps, 3 phase, 415v, abb make,	8.95	The Petitioner has submitted old circuit breakers were installed during Commissioning of Project in year 2000. Due to ageing, wear and tear the operating mechanism of these breakers is not functioning properly. These breakers are installed in 415-volt switchgear. These are beyond economic repair	Based on the justification furnished by the Petitioner and considering the fact that the asset is required for the successful and efficient operation of plant, the claims are allowed under Regulation 14(3)(viii) of the 2014 Tariff	8.95



claim	claimed	Petitioner	admissibility	
Air circuit breaker, 1250 amps, 3 phase, 415v, abb make	1.63	and as such new circuit breaker were purchased and installed during 2014-15 in place of old breakers.  The Petitioner has submitted that Old breakers in Station Service Board were installed during Commissioning i,e. 2000. Breaker in SSB panel of Powerhouse. Due to ageing, wear and tear the operating mechanism of these breakers not functioning. The breaker has completed number of operation and operating mechanism of DG breakers is damaged and is beyond economic repair. OEM is not providing support due to obsolete technology. Hence, same was replaced with new	Regulations. The original value of old asset / work have been considered under 'Assumed Deletion'.	1.63
Sub-Total (R)	77 62	one		54.78
				72.41
	breaker, 1250 amps, 3 phase, 415v, abb	breaker, 1250 amps, 3 phase, 415v, abb make  Sub-Total (B) 77.62	Air circuit breaker, 1250 amps, 3 phase, 415v, abb make  Description of the service Board were installed during Commissioning i,e. 2000. Breaker in SSB panel of Powerhouse. Due to ageing, wear and tear the operating mechanism of these breakers not functioning. The breaker has completed number of operation and operating mechanism of DG breakers is damaged and is beyond economic repair. OEM is not providing support due to obsolete technology. Hence, same was replaced with new one	Air circuit breaker, 1250 amps, 3 phase, 415v, abb make  Discrete Powerhouse. Due to ageing, wear and tear the operating mechanism of these breakers not functioning. The breaker has completed number of operation and operating mechanism of DG breakers is damaged and is beyond economic repair. OEM is not providing support due to obsolete technology. Hence, same was replaced with new one  Considered under 'Assumed Deletion'.  Considered under 'Assumed Deletion'.  Assumed Deletion'.  Sub-Total (B) 77.62

10. Based on the above, the total additional capital expenditure of Rs. 72.41 lakh (17.63 lakh + 54.78 lakh) is allowed in 2014-15.

## <u>2015-16</u>

11. The details of the additional capital expenditure claimed under the provisions of Regulation 14 of the 2014 Tariff Regulations are examined below:

(Rs. in lakh)

S.	Details of the	Amount	Justification submitted by	Remarks on admissibility	Amount	
No	claim	claimed	the Petitioner		Allowed	
A. Addition against approved additional capitalization shifted from other years						
1	Purchase of Mini	8.58	The Petitioner has submitted	The expenditure claimed	8.58	
	Truck		that the Commission has	for this asset was allowed		
			already allowed an amount	vide order date 6.1.2016 in		
			of Rs.10 lakh against this	Petition No. 232/GT/2014.		
			asset under Regulation	Accordingly, the claim of		
			14(3)(viii) of the 2014 Tariff	the Petitioner is allowed		
			Regulations.	under Regulation		
				14(3)(viii) of the 2014 Tariff		
				Regulations. The original		
				value of old asset/work is		



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
				considered under 'Decapitalization'.	
	Sub-Total (A)	8.58			8.58
	3. Items Claimed as		T		
2	Mody make control panel for submersible pump model g902t, 35hp	0.61	The Petitioner submitted that during maintenance work on MIV upstream side penstock needs to depressurise by closing of	Since these works are required for the successful and efficient operation of plant, the claims are allowed under Regulation	0.61
3	Mody make submersible dewatering pump model g902t,26/11 kw/35 hp without control panel	3.41	surge shaft Gate and emptying of penstock. Before lifting of surge shaft gate, penstock requires charging. For charging a pump along with panel has been purchased & installed in 2015-16. The filling time without this Pump is 18 to 19 Hrs (approx.) and with this pump the filling time reduced to 5 to 6 Hrs. In each instant a time saving of 12 Hrs is done, as such shutdown time / outage is reduced.	14(3)(viii) of the 2014 Tariff Regulations.	3.41
4	Fully auto. Capacitance and tan delta monitoring kit with compensating reactors, megger, model 4110	42.89	The Petitioner has submitted that at Rangit Power Station, 39 nos 120 KV Lightening Arrestors (LA), 8 nos 132 KV 3 Ph SF6 circuit breakers, 2 nos 66 KV breakers, 4 nos 25 MVA 3 phase 132/11 KV Generating transformer, 3 nos ,10 MVA, 20 MVA & 3 MVA power transformers and 3 nos Generators installed. To ensure the healthiness of these high voltage equipment Tan delta measurement is one of the test tool. The values of Tan Delta of this equipment to be kept in record from in servicing of equipment for tracking condition of insulation. Earlier these tests are conducted by CPRI and other agencies periodically. This test is not only a preventive test. It is also used as break down maintenance test as per	Considering the fact that the expenditure claimed is in the nature of tools and tackles, the additional capital expenditure claimed is not allowed under first proviso to Regulation 14(3) of the 2014 Tariff Regulations.	0.00



S.	Details of the	Amount	Justification submitted by	Remarks on admissibility	Amount
<b>No</b>	Extension of 1.00KM Water Supply Line at Baniya Khola	4.14	OEM manuals. Due to heavy rains the failure of Outdoor switch yard equipment like LAs, CT, PT is more at Rangit PS. After purchase of these instruments during June'2015, inhouse testing is carried out by maintenance team and thus preventing the complete failure of high voltage equipment.  Earlier Such tests on EHV equipment were carried by M/S CPRI Bangalore at Rangit power station. The Minimum time required to reach site with equipments 3 days to test failure equipment. M/s CPRI used to charge about Rs 20-25 Lakhs for these works per visit in past years.  The Petitioner has submitted that the source of existing water supply to power station area including Dam area, Hospital, ECD, School, and colony has dried in summer. Earlier, the natural surface water of nallah had been tapped at Baniya Khola. Later on during summer it was found that the Nallah dried up completely due to change in flow direction of natural spring due to earth quake. Therefore, extension of the existing water supply line is done for connection of alternate source of water supply to cater the water scarcity problem in Station areas. A new source has been identified one Km near existing source. The is equipment Put to use in April2015.	-	0.00



S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
6	3 nos. Laser sensor make/ model: abb/lm80	25.01	The Petitioner has submitted that old sensors in Radial Gate were installed at the time of commissioning in year 2000. Sensor is used to measure position/opening of Gates. Old sensor was damaged due to ageing & wear & tear and are not functioning properly. The same was replaced with new and advanced one. The new sensor has made level measurement made easy at Dam, are Maintenance free, non-contact continuous level transmitter, No calibration required, Measures solids and opaque liquids at any angle and other features etc.	Since the asset is required for efficient operation of the plant, the claim of the Petitioner is <b>allowed</b> under Regulation 14(3)(viii) of the 2014 Tariff Regulations. The original value of old asset / work is considered under 'Assumed Deletion'.	25.01
7	Boys Toilet at DAV School of Rangit PS	4.97	The Petitioner has submethat One toilet has become constructed in DAV something premises for students. School is maintained by Postation.  Initially a toilet for both and girls has been provided school building for section. At later stage as in the stage as in the section of the section of the section of the section.	the Petitioner has been considered. It has been observed that the claim of the Petitioner is not directly related to efficient operation of the plant hence the same is not allowed.	0.00
	Sub-Total (B)	81.03	1 1140 par to 400 iii 00p2010		29.02
	Total (A+B)	89.61			37.60

12. Based on the above, the total additional capital expenditure of Rs. 37.60 lakh (8.58 lakh + 29.02 lakh) is allowed in 2015-16.



## <u>2016-17</u>

(Rs. in lakh)

S. No	Details of the claim	Amount claimed	Justification submitted by the Petitioner	Remarks on admissibility	Amount Allowed
Α.	Addition against ar	proved a	dditional capitalization shifted	to 2016-17	
1	Purchase of Fire Tender	31.90	The Petitioner has submitted that Commission has Rs. 17.10 (20.00-2.90) IN 2018-19 vide its order dated 06.01.2015 in petition no. 232/GT/2014. Old fire tender SK-04-D-0543 has completed its useful life. As per Safety Policy of NHPC one dedicated Fire Tender has to be deployed in Power Station premises. The item has been purchased in 2016-17 i.e., before the approved time, as the old fire tender was not in sound condition, more over fire tenders for all NHPC power stations were purchased centrally from corporate office. The actual cost is as per discovered after tendering.	The additional capital expenditure claimed for these assets/works were allowed, in 2018-19, vide order dated 6.1.2016 in Petition No. 232/GT/2014. Accordingly, the additional capital expenditure claimed by the Petitioner, is allowed. The original value of old asset / work is considered under 'Assumed Deletion'.	31.90
Α	Sub-total	31.90	discovered after tendering.		31.90
E			ed as per site requirements	L	01100
1	Construction of toilet at dam entry check post of Dam Complex	2.90	The Petitioner has submitted that the check post at entry point of Dam complex is located approximately 1 KM away from Dam and the security personnel on duty at check post have come back to Dam to use the facilities of toilets. Therefore, a tolet have been constructed in July'2016 at entry check post and is being used. Also, Sikkim state is Nirmal Rajya.	The additional capital expenditure claimed for the asset is <b>not allowed</b> , since the same is in the nature of O&M expenses.	0.00
2	Purchase of Automatic Water Level & Discharge measurement	4.05	The Petitioner has submitted that Dam safety team in its Post monsoon inspection 2015 suggested to install Automatic Water Level (AWL) and current meter near Tashiding bridge on Rangit River. This will help to regulate the reservoir for optimum generation, especially during monsoon. The old arrangement i.e. pressure type	Since the asset is required for the efficient operation of the plant, the claim of the Petitioner, is allowed under Regulation 14(3)(viii) of the 2014 Tariff Regulations.	4.05

