

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 21 of 2022

In the matter of:

Petition seeking adjustment of tariff for Tanga Small Hydro Power Project (5 MW) of M/s Himalaya Hydro Power Pvt. Ltd. due to additional capital expenditure necessitated due to the catastrophic damage caused to the plant, as per Section 61 and 62 of the Electricity Act, 2003 read with Regulation 14(7) of UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulation, 2018 as amended from time to time.

Petition No. 22 of 2022

In the matter of:

Petition seeking adjustment of tariff for Motighat Small Hydro Power Project (5 MW) of M/s Himalaya Hydro Power Pvt. Ltd. due to additional capital expenditure necessitated due to the catastrophic damage caused to the plant, as per Section 61 and 62 of the Electricity Act, 2003 read with Regulation 14(7) of UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulation, 2018 as amended from time to time.

In the matter of:

M/s Himalaya Hydro Pvt. Ltd.

... Petitioner

AND

In the matter of:

Uttarakhand Power Corporation Ltd.

... Respondent

CORAM

Shri D.P. Gairola

Member (Law) – Chairman(I/c)

Shri M.K. Jain

Member (Technical)

Date of Hearing: August 23, 2022

Date of Order: September 15th, 2023

The Order relates to the Petitions dated 05.07.2022 filed by M/s Himalaya Hydro Pvt. Ltd. (hereinafter referred to as “Petitioner”) seeking adjustment of tariff for Tanga Small Hydro Power Project (5 MW) (hereinafter referred to as “Tanga SHP”) and Motighat Small Hydro Power Project (5 MW) (hereinafter referred to as “Motighat SHP”) of the Petitioner, necessitated due to additional capital expenditure incurred on account of damages caused by the natural calamity which happened on 02.07.2018 in the vicinity of Tanga SHP and Motighat SHP.

The Petitioner, i.e. M/s HHPL had filed two separate Petitions for adjustment of tariff for Tanga SHP and Motighat SHP respectively, however, as both the Petitions were of similar in nature and the cause of action, i.e. natural calamity due to heavy rainfall on 02.07.2018 was also common for both the projects, therefore, the Commission has decided to club the matters and dispose the same through this single Order.

1. Background and Petitioner’s Submissions

- 1.1 The Petitions were filed under Section 61 and 62 of Electricity Act 2003 read with Regulation 14(7) of UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Source and non-fossil based Co-generating Stations) Regulations, 2018 (“RE Regulations, 2018”) as amended from time to time, for redetermination/adjustment of tariff of Tanga and Motighat SHP respectively located on the Seraghat river, Munsyari Block, District Pithoragarh, due to additional capital expenditure incurred on account of damages caused by the natural calamity.
- 1.2 The Petitioner submitted that their Tanga and Motighat SHP are located near Seraghat Village, Munsyari Block, Pithoragarh District in upper reaches of Himalayas near the Indo-Nepal-Tibet border region of the Uttarakhand state. The Petitioner submitted that the projects Tanga SHP and Motighat SHP were commissioned with great difficulty in March, 2017 and May, 2011 respectively due to its extremely remote location (which is about 350 km from the nearest railhead at Haldwani) and very hostile terrain, where landslides and flash floods occur frequently.
- 1.3 The Petitioner submitted that it had entered into PPAs dated 05.02.2003 with UPCL for sale of power from the Tanga SHP (3MW) and Motighat SHP respectively. Subsequently, a Supplementary PPA was executed for both Tanga and Motighat SHPs on 07.12.2009, whereby the Petitioner agreed to sell and the distribution licensee agreed to purchase

entire energy generated by Tanga and Motighat SHPs respectively having an enhanced project capacity of 5MW.

The Petitioner submitted that in case of Tanga SHP the Commission passed an order approving the aforementioned PPAs and directed the Petitioner and the Respondent to execute supplementary PPA dated 16.03.2018, and subsequently the Commission had determined a project specific tariff of Rs.6.44/kWh under UERC (Tariff and Other Terms for Supply of Electricity from Non-conventional and Renewable Energy Sources), 2013, as amended from time to time vide its order dated 17.09.2019, and the Petitioner has been supplying power at the aforementioned tariff.

Similarly, for Motighat SHP the Petitioner has been supplying power to UPCL under the generic tariff specified in the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010 as amended from time to time. The Petitioner submitted that the Commission vide its Order dated 10.02.2015 had approved the aforesaid PPA of Motighat SHP and pursuant to the said Order another Supplementary PPA was executed between UPCL and the Petitioner on 12.06.2015.

- 1.4 The Petitioner submitted that till about 8.00 PM on 01.07.2018 both the projects were generating power normally, and there was heavy rainfall in and around the project site from 01.07.2018 and at about 8.00 PM, both Tanga SHP and Motighat SHP were shut down as the water was observed to have substantial amount of silt. There was heavy rainfall throughout the night and in the early hours of 02.07.2018 the plants operation team observed that water levels in the Seraghad river was rising very rapidly, and shortly thereafter, the water levels continued to rise unabatedly resulting in flash floods, thus, apprehending danger to their personal safety and life, the staff at the diversion weir were forced to move to higher ground and took shelter in the nearby village. The Petitioner submitted that the flash flood that occurred on 02.07.2018 damaged Tanga SHP and Motighat SHP and was a natural calamity/Force Majeure event which was beyond the control of the Petitioner.
- 1.5 The Petitioner submitted that the flash floods that occurred in the early hours of 02.07.2018 were very intense with enormous amount of water laden with muck and huge

boulders causing severe damage to the civil structures of both the projects. The Petitioner submitted that news of the flash floods and the damage caused to Tanga SHP and Motighat SHP was widely reported in various newspapers.

The Petitioner submitted that in case of Tanga SHP the head works were completely washed away which included the water diversion trench, intake, stilling basin, overflow section along with the related protection structures. The flood caused severe damage to large sections of the head-race pipeline with more than 300 metre length completely collapsed/crushed along with the associated anchor blocks, saddles etc. Other sections of the head race pipeline were damaged due to landslides. The Petitioner further submitted that flood also caused damage to Tanga SHP's tail-pool and filled it with debris, large sections of the tail-race were completely washed away, debris had entered the pipeline and head race tunnel. The protection structures adjoining the tail-race and the powerhouse of Tanga SHP were washed away, and the approach road to the headworks had collapsed and washed away in several areas.

Similarly, for Motighat SHP, the Petitioner submitted that the head works were completely washed away which included the weir, intake, feeder duct, portion of the desilting tank, silt flushing duct along with the protection structures. The flood also caused severe damage to Motighat SHP's tail-race and tail-pool area with large parts completely washed away and/or suffering severe damage, with the entire area filled with debris and boulders. The protection works adjoining the tail-race, the control room and the adjoining staff quarters of Motighat SHP were completely washed away with staff quarters sustaining damage. The Head race pipeline was severely damaged at various locations due to landslides and debris.

- 1.6 The Petitioner submitted that it had intimated the Commission vide letter dated 03.07.2018, as per UERC RE Regulations, 2018, about the flood calamity/force majeure event of 02.07.2018 which had caused extensive damage to Tanga SHP and Motighat SHP rendering the plant inoperative. The Petitioner submitted that it had also intimated the Respondent vide letter dated 03.07.2018 that the flood calamity/force majeure event had caused extensive damage to Tanga and Motighat SHP and that the projects would be restored after assessing the damage. The Petitioner submitted that it had intimated all other authorities including the local administration in District Pithoragarh and the State

nodal agency UJVN Ltd about the calamities in the two projects. The Petitioner further submitted that the Sub-District Magistrate, Dharchula, District Pithoragarh had visited the project sites on 07.08.2018 and issued a report about the damages incurred.

- 1.7 The Petitioner submitted that both the state highway and the approach roads to the project site was damaged at several places and there was incessant rainfall and floods for next few days. The Petitioner submitted that heavy rainfall of 70 mm, 255 mm and 142 mm on July, 1st, 2nd and 3rd of 2018 was recorded at Munsyari, the nearest rainfall gauge station maintained by the Govt. The Petitioner submitted that the Petitioner's staff were able to venture out to the headworks/weir site after few days with great difficulty due to the heavy floods, landslides and damage to the approach roads, and to approach the damaged headworks of Tanga SHP, the staff had to walk about 2 km in dangerous conditions with landslides, waterfalls and falling boulders.

The Petitioner submitted the summary of the damages suffered by the Tanga SHP as follows:

- i. The entire headworks consisting of the diversion trench, intake, stilling basin, trash-rack/bell mouth etc. were completely damaged with large parts washed away due to the flash floods. All the protection structures in this area were completely washed away.
- ii. The entire area was filled with massive boulders and debris. The debris was deposited upstream and downstream of the headworks. The overflow sections of the stilling-basin was also washed away.
- iii. The intake gates and hoisting structures were completely damaged.
- iv. Over 300 metre length of head race pipeline from the stilling basin/bell-mouth to the head-race tunnel had collapsed and was destroyed along with the saddles and anchor blocks. The entire approach road alongside the pipeline was also washed away along with the protection works.
- v. Landslides and falling boulders had damaged HR Pipeline at several locations with debris entering the pipeline going into the head-race tunnel.
- vi. The floods had washed away the tail-race. The tail-pool area was damaged and filled with boulders and debris.

- vii. The project works included cross drainage works to facilitate the flow of water from waterfalls. The cross drainage works and the civil works in this area were completely washed out.
- viii. The plant's electro-mechanical equipment had also suffered damage since silt had entered the turbines.

Further, the Petitioner submitted the summary of the damages suffered by the Motighat SHP as follows:

- i. The entire diversion weir was completely damaged and washed away due to the flash floods and movement of large boulders, and all the weir protection works, and wing walls were completely washed away. The upstream and downstream aprons were completely damaged and washed away.
- ii. The entire area was filled with massive boulders and debris up to a height of more than 7 to 10 meters. The debris was deposited upstream and downstream of the weir for about 100 meter distance. Huge boulders of varying size including some which were over 10 meter in diameter were also deposited.
- iii. The flash floods had destroyed the intake structure and the area was filled with debris and boulders.
- iv. The weir gates and hoisting structures were completely washed away.
- v. The RCC Feeder Duct of length of about 280 meter connecting the intake to the Desilting tank was damaged and washed away along with its protection structures.
- vi. The Desilting tank was damaged due to falling boulders and choked with debris. The desilting tank flushing duct was washed away along with the protection structures.
- vii. The flood protection structures near the powerhouse and control room were washed away.
- viii. The floods had washed away the tail-race, and the tail-pool area was completely filled with boulders and debris with extensive damage to the concrete structures.
- ix. Landslides and huge boulders had damaged HR Pipeline at several locations, and there were large deposits of sand and debris in the pipeline.

- x. The 300 metre (apprx.) length of road from Desilting tank to the weir was completely washed away, and the river had encroached into this area at several places requiring extensive backfilling at various locations to be restored.
- xi. The project works included cross drainage works to facilitate the flow of water from a stream or 'nala' that passes over the feeder duct, and this cross drainage was completely damaged and washed away.
- xii. The 33 kV transmission line from the switchyard to Seraghat village was completely destroyed with multiple pole structures completely washed away, and some of the outdoor electrical equipment had also suffered damage. The UPCL's 33 kV line from Seraghat village to Darati 33/11 kV sub-station and beyond was also damaged at several locations.
- xiii. The plant's electro-mechanical equipment had also suffered damage since silt had entered the turbines.

1.8 The Petitioner submitted that there was heavy rainfall for several days after the flash floods and the main State highway from Jauljibi to Munsyari was washed away in several places or blocked by landslides, and the road from Seraghat village to Munsyari was also washed away and blocked due to landslides at several places. There was no electricity for several days, as both the 33 kV and 11 kV lines were damaged at several places between Seraghat and Munsyari.

1.9 The Petitioner submitted that the conditions were life threatening and there was a lack of fresh water and food, except for a few staples such as rice and wheat flour, and for several weeks, there was no road connectivity to Seraghat village either from Munsyari or from Jauljibi.

1.10 The Petitioner submitted that in view of the life-threatening conditions at the project site most of the project staff had to be evacuated. Further, the project site and surrounding region continued to receive heavy rainfall throughout the monsoon season of 2018 with heavy water flows in the Seraghat river. The Petitioner submitted that since the approach road to Tanga headworks and Motighat power-house & weir site was breached/washed away, therefore, there was no vehicular access until the roads were repaired after the end of the monsoon season. The Petitioner submitted that during the

monsoon there was heavy water flows in Seraghat river and frequent landslides/falling boulders made any civil work dangerous and impossible. The Petitioner submitted that they were finally able to restore small vehicular access only in December, 2018.

1.11 The Petitioner submitted that after the flood calamity, the Petitioner engaged design and engineering consultants to assist in the early restoration of the project. The Petitioner further submitted that immediately after approach roads were restored, the Petitioner had to divert river waters away from the left bank of the river where all civil structures were located. The Petitioner submitted that the river had changed course at various places and it was necessary to ensure no further erosion or damage could happen to remaining civil structures. The Petitioner further submitted that due to the extensive damage suffered by the plant and the massive quantities of debris and boulders deposited all along the project site by the river, debris removal itself was a very difficult and time-consuming process. The flood had deposited massive boulders near all locations which needed to be removed using mechanical breakers, and the damaged civil works had to be dismantled using mechanical breakers which was time consuming and expensive.

1.12 The Petitioner submitted that the Tanga SHP's diversion structure, intake, feeder and stilling basin was completely damaged and had to be reconstructed, and the entire area had to be excavated and debris from damaged structure had to be mechanically dismantled and removed before reconstruction could be attempted, involving great cost and time.

Similarly, for Motighat SHP the Petitioner submitted that the Motighat SHP's weir and intake was completely washed away and had to be fully reconstructed, and since the construction of weir and intake was in the river-bed, it could only be taken up in the lean season when the water flows are minimal. The Petitioner further submitted that the entire area was buried under boulders and muck to a height of upto 10 meters and extending to more than 100 meters upstream and downstream of the weir, and this entire area had to be excavated and debris from damaged structure had to be removed before reconstruction could be attempted.

1.13 The Petitioner submitted that the Tanga and Motighat SHPs are located in a very hostile

terrain in the upper Himalayan region near the Indo Nepal-Tibet border at a distance of about 350 km from Haldwani, the nearest railhead, and all construction materials including steel, cement, machinery etc. had to be carted from this distance which increased the overall cost. The diesel, which was used for all construction equipments had to be transported from Jauljibi which is about 30 km from the project site.

1.14 The Petitioner submitted that it faced several difficulties during the reconstruction stage of the projects which were beyond the control of the Petitioner. The Petitioner submitted that its engineers and other staff had to be evacuated after the flood calamity. Further, the approach roads to the project location were washed away, therefore, the Petitioner could not access the project site, and initial road access for small vehicle was restored in December, 2018. The Petitioner submitted that due to the unavailability of the skilled labour at the project site it had to engage contractors experienced in the construction of hydro power projects from outside the region and other States. Moreover, in case of Motighat SHP, since the construction of trench weir, intake and a part of feeder-duct was in the river-bed it was a very challenging task as there was continuous water flows in the river, and the same could only be attempted only during the lean season when water flows are minimal.

1.15 The Petitioner submitted that under the above-mentioned extenuating circumstances the minimum critical elements of restoration of the Tanga and Motighat SHP were taken up on a priority basis in order to resume power generation operations at the earliest. The Petitioner submitted that the projects reconstruction/restoration activity were severely disrupted by the sudden onset of the Covid-19 pandemic and the nationwide lockdown from March, 2020 to May, 2020 and again by the subsequent waves of the pandemic and lockdowns.

The Petitioner submitted that, in case of Motighat SHP, out of a total span of about 60 metre length trench weir, the Petitioner initially completed the left bank portion of the weir along with intake, desander etc. and was able to restore power generation in April, 2021. Similarly, in case of Tanga SHP, the Petitioner submitted that despite the immense difficulties faced during the reconstruction of the project through multiple waves of the Covid-19 pandemic's the Petitioner was able to restore power generation operations in August, 2021 after completing the minimum critical works and

resume power supply to the state grid.

- 1.16 The Petitioner submitted that due to the Covid-19 lockdown the entire construction activity came to a sudden halt and all the contractors, labour and workers abandoned the site as they rushed to their homes. Even after the first lockdown was lifted at the end of May, 2020, the Government of India had imposed severe restrictions on the movement of people and the Petitioner faced immense hurdles in remobilizing the contractors, labour, materials, machinery, staff etc to the project site.
- 1.17 The Petitioner submitted that there were severe restrictions in movement of people with mandatory quarantines required by the Government. Furthermore, all public transport in the form of trains, buses etc. was also not available, there was no labour willing to travel outside their hometowns/villages and it was especially difficult for the Petitioner and its contractors who had to mobilize labour from other States and bring them to the remotely located Tanga and Motighat SHPs. The Petitioner submitted that it had to incur huge expenditure during this entire effort and had to compensate the contractors who demanded higher prices for the works to be executed during the pandemic. Furthermore, the monsoons of 2019, 2020 and 2021 also caused disruption as there were heavy rains, landslides etc. which made construction activity very dangerous and sometimes impossible at the project site. The Petitioner submitted that after the Covid-19 lockdown in 2020 it was with great difficulty and cost that it could resume the projects restoration/reconstruction works after the end of the monsoon season of 2020. The Petitioner further submitted that in the aftermath of the Covid-19 pandemic lockdown there was also scarcity of key raw materials such as steel, cement etc. and the prices of all commodities/raw materials had increased substantially.
- 1.18 The Petitioner submitted the second Covid-19 wave struck India in March, 2021 and in April, 2021 the Govt. of India suddenly banned use of oxygen for industrial use due to the acute shortage of oxygen for medical use, and because of this ban on oxygen use for industrial purposes, the Petitioner and its contractors could not continue or complete various hydro-mechanical works such as the fabrication & erection of trash racks, gates, pipeline etc.
- 1.19 The Petitioner submitted that in May, 2021 there was a massive outbreak of Covid-19

infections at the projects site despite following all the Covid-19 protocols and precautions, and the Petitioner had to shift a large number of its engineers and staff out of the project site for medical treatment and many of went back to their homes in various States such as Himachal Pradesh, Karnataka, Uttar Pradesh etc. to recuperate. The second Covid-19 wave, and lockdown further disrupted the ongoing reconstruction works as it also affected various contractors and labour force.

- 1.20 The Petitioner submitted that they had obtained and was maintaining an appropriate and adequate insurance cover for the projects, and the insurance company settled the Petitioner's insurance claim in February, 2020, at Rs. 909.66 Lakh for Tanga SHP and Rs. 773 Lakh for Motighat SHP as per the norms.
- 1.21 The Petitioner submitted that it continued to work under immense hardship due to the ongoing Covid-19 pandemic and the disruptions caused by the monsoon of 2021 to complete the restoration and the time taken was beyond its control under the circumstances. The Petitioner submitted that for Tanga SHP, it continued the restoration of the project as required for the long term safety and continued operations of the plant which still has about 30 years of useful life.

Further, for Motighat SHP, the Petitioner submitted that after restoring power generation operations in April, 2021, the Petitioner continued restoration works of the trench weir, guide walls etc. which are integral to the project and necessary for the long term safety and continued operations of the power project for the remaining life of 25 years, and it had to prioritize the restoration works that are absolutely critical such as the completion of the trench weir which must be completed before the onset of the monsoon.

- 1.22 The Petitioner submitted that it has incurred additional capital expenditure to restore the project after it suffered catastrophic damage during the floods of July, 2018, which were necessary for the overall safety and continued operations of the plants for the remaining useful life.
- 1.23 The Petitioner submitted that it has availed loans from Indian Renewable Energy Development Agency (IREDA) Ltd, a public sector enterprise to construct Tanga and Motighat SHP. The Petitioner submitted that the aforementioned natural

calamities/floods that occurred in the Uttarakhand State were beyond the control of the Petitioner, and it has suffered immense financial losses not only due to the material damage to the plants, but also due to the loss of revenues for four years along with huge capital costs incurred.

- 1.24 The Petitioner submitted that due to the devastation suffered by Tanga SHP and Motighat SHP and to restore the project as early as possible it approached its lending agency M/s Indian Renewable Energy Development Agency (IREDA), a Govt. of India owned financial institution under the Ministry of New & Renewable Energy for financial assistance to restore the project, and IREDA sanctioned a term loan of Rs. 1095 Lakh for Tanga SHP and Rs. 599.99 Lakh for Motighat SHP in March, 2019. Further, IREDA also sanctioned additional loan of Rs. 11 Crore in March, 2021 towards the restoration of the damaged Motighat SHP and Tanga SHP, of which Rs. 662.71 Lakh was charged to the Tanga project loan account and balance Rs. 437.29 Lakh to the Motighat project loan account.
- 1.25 The Petitioner submitted that without IREDA's financial support it would have been impossible for the Petitioner to revive the projects and it would have become a NPA, which in turn would have resulted in the loss of 10 MW of renewable power generation asset to Uttarakhand State, and, therefore, they had undertaken enormous additional financial burden in the form of the aforesaid additional loans from IREDA to restore the projects and as such these loans are an integral part of the additional capitalization of the project and the same can be repaid to IREDA only if the Petitioner is allowed to recover these additional costs through an adjustment in tariff. The Petitioner submitted that in addition to the aforesaid loans taken from IREDA, the Petitioner has also brought in additional promoter contribution including internal accruals etc. to restore the Tanga & Motighat SHP.
- 1.26 The Petitioner submitted that it had also implemented the Motighat SHP (5 MW) which is upstream of the Tanga SHP on the Seraghat river. Motighat SHP also suffered extensive damages in the floods of July, 2018. The Petitioner submitted that IREDA is the lending agency for both Tanga SHP and Motighat SHP, and since both SHPs belong to the Petitioner herein and are financed by IREDA, it is imperative that Tanga SHP does not become NPA, as that would automatically make the Motighat SHP's loan

account with IREDA an NPA as per banking norms. The Petitioner submitted that given the additional capital expenditure incurred to restore the Tanga and Motighat SHP after being damaged in July, 2018 floods it is imperative that their financial viability be restored, so that it does not adversely impact the ability of the Petitioner to restore and operate its SHPs, otherwise, it would result in the loss of 10 MW of much needed renewable energy/hydropower projects to the Uttarakhand State and cause huge collateral damage to the social and infrastructure development as well as employment for about 120 families supported by these projects in an extremely backward and underdeveloped part of the state.

1.27 The Petitioner submitted that given the scale of devastation suffered by Tanga and Motighat SHPs the Petitioner acted in the best interest of the projects and the State to restore the project by investing additional capital, and if the projects were declared as NPA by IREDA, it would have been impossible to revive it and the State would have lost 10 MW of renewable power, when the balance useful life of the project is 30 years for Tanga SHP and 25 years for Motighat SHP. The Petitioner submitted that if they had not availed the additional financial assistance from IREDA, it would have been impossible for the Petitioner to even attempt the reconstruction of the projects, and with the passage of time, plants, machinery and other assets of the Tanga & Motighat SHPs, would not only have suffered additional physical damage from the natural elements, the accumulating interest burden and increase in reconstruction cost would have made it impossible to revive the projects.

1.28 The Petitioner submitted that during the period from 03.07.2018 to 31.01.2022, for Tanga SHP, it had incurred total additional capital expenditure of Rs. 3049 Lakh which includes receipts of Rs. 909 Lakh of insurance proceeds. The Petitioner submitted that after adjusting the insurance claim proceeds, net capital addition to reconstruct Tanga SHP after the damage suffered in floods/natural calamity of July, 2018 is Rs. 2140 Lakh, which includes Rs. 1450 Lakh towards Building & Civil works, Rs. 24 Lakh towards Miscellaneous Fixed Assets, Rs. 388 Lakh towards project management, Rs. 1168 Lakh towards interest cost, Rs. 19 Lakhs towards Engineering & Consultancy cost. The Petitioner also enclosed a copy of certificate from its statutory auditor certifying capital expenditure incurred till 31.01.2022. The Petitioner submitted that the corresponding

source of funds is IREDA Term Loan GECL of Rs. 662 Lakh, IREDA Term Loan 1714FI2 of Rs. 796 Lakh, insurance receipts of Rs. 909 Lakh, Rs. 97 Lakh from Promoter contribution (including internal accruals), payables to sundry creditors of Rs. 580 Lakh which will be discharged from additional promoter contribution and/or internal accruals. The Petitioner further submitted that it was in the process of completing the remaining reconstruction works as mentioned above within the next few weeks with estimated additional cost of approximately Rs. 300 Lakh, and the Petitioner later through its separate submission submitted the final executed cost of Tanga SHP alongwith its statutory auditors certificate in support of the same.

Similarly, for Motighat SHP, the Petitioner submitted that during the period from 03.07.2018 and 31.01.2022, the Petitioner has incurred total additional capital expenditure of Rs. 2847 Lakh including Rs. 773 Lakh of insurance proceeds, and after adjusting for the insurance claim proceeds, net capital addition to reconstruct Motighat SHP after the damage suffered in floods/natural calamity of July, 2018 is Rs. 2074 Lakh, which includes Rs. 1767 Lakh towards Building & Civil works, Rs. 43 Lakh towards Miscellaneous Fixed Assets including transmission line, Rs. 396 Lakh towards project management, Rs. 608 Lakh towards interest cost, Rs. 34 Lakh towards Engineering & Consultancy cost. The Petitioner also enclosed a copy of certificate from its statutory auditor certifying capital expenditure incurred till 31.01.2022. The Petitioner submitted that the corresponding source of funds is Rs. 1040 Lakh from Promoter contribution (including internal accruals), IREDA Term Loan GECL of Rs. 437 Lakh, IREDA Term Loan 1715FI2 of Rs. 426 Lakh, insurance receipts of Rs. 772 Lakh, payables to sundry creditors of Rs. 172 Lakh which will be discharged from additional promoter contribution and/or internal accruals. The Petitioner further submitted that it was in the process of completing the remaining reconstruction works as mentioned above within the next few weeks with estimated additional cost of approximately Rs. 350 Lakh, and the Petitioner later through its separate submission submitted the final executed cost of Tanga SHP alongwith its statutory auditors certificate in support of the same.

- 1.29 The Petitioner submitted that it had previously informed the Commission that it was struggling to consistently recover its annual fixed charges (AFC) for both Tanga & Motighat SHP due to Respondent's poor 33 kV evacuation infrastructure and lack of

capacity at its Darati 33/11 kV sub-station, due to which the Petitioner has been constrained to raise deemed generation claim in FY 2013, FY 2017-18 and again in FY 2021-2022. The Petitioner submitted that having incurred additional capital expense to restore the project after suffering damage in the floods of July, 2018, it is facing even greater financial distress and struggling to service its loan obligations to IREDA, pay the O&M expenses and remain as a going concern.

- 1.30 The Petitioner submitted that prior to the flood calamity of July, 2018 the Petitioner's Tanga SHP had a loan outstanding of Rs. 45.27 Crore, whereas now it has increased to Rs. 62.53 Crore, i.e. an increase of 38% in additional debt incurred, and in view of the additional capital cost incurred by the Petitioner to restore the Tanga project, it is not financially viable under its current tariff structure as it is unable to recover its annual fixed charges or service the loans availed from IREDA. The Petitioner submitted that this additional capitalization has been necessitated because of the occurrence of a Force Majeure event/floods of July, 2018, which was completely beyond the control of the Petitioner, and, accordingly, sought revision in the tariffs.

Similarly, for Motighat SHP, the Petitioner submitted that prior to the flood calamity of July, 2018 the Petitioner's Motighat SHP had a loan outstanding of Rs. 24.23 Crore, whereas now it has increased to Rs. 33.94 Crore, i.e. an increase of 40% in the additional debt incurred, and in view of the additional capital cost incurred by the Petitioner to restore the Motighat project, it is not financially viable under its current tariff structure as it is unable to recover its annual fixed charges or service the loans availed from IREDA. The Petitioner submitted that this additional capitalization has been necessitated because of the occurrence of a Force Majeure event/floods of July, 2018, which was completely beyond the control of the Petitioner, and, accordingly, sought revision in the tariffs.

- 1.31 The Petitioner also sought grant of interim tariff for the additional capital cost incurred till date on a provisional basis (pending determination of final tariff adjustment) for both Tanga and Motighat SHP as this would provide urgent relief to the Petitioner such that it is able to service its loan obligations to IREDA and not become an NPA. The Commission, earlier, vide its Order dated 25.08.2022 had already allowed provisional tariff for both Tanga and Motighat SHP, subject to adjustment based on the

determination of final tariff by the Commission. The relevant extract of Orders dated 25.08.2022 is reproduced hereunder:

For Tanga SHP:

*“In this regard, the Commission observed that CERC has been allowing provisional tariff in the range of 75% to 90% of the tariffs claimed by the Petitioner's before it. The Commission adopting the similar approach is of the view that the Petitioner may be allowed provisional tariff for additional capitalisation incurred to the extent of 70% of the tariff claimed by it, which works out to Rs. 1.20/kWh (Rs. 1.71/kWh * 70%), which shall however be subject to adjustment based on the determination of final tariff by the Commission. The Petitioner is allowed to raise the bills at this interim tariff from the restoration of generation, i.e. from April, 2021, however, arrears due, if any, shall be paid by the Respondent in three equal instalments.”*

For Motighat SHP:

*“In this regard, the Commission observed that CERC has been allowing provisional tariff in the range of 75% to 90% of the tariffs claimed by the Petitioner's before it. The Commission adopting the similar approach is of the view that the Petitioner may be allowed provisional tariff for additional capitalisation incurred to the extent of 70% of the tariff claimed by it, which works out to Rs. 1.45/kWh (Rs. 2.07/kWh * 70%), which shall however be subject to adjustment based on the determination of final tariff by the Commission. The Petitioner is allowed to raise the bills at this interim tariff from the restoration of generation, i.e. from April, 2021, however, arrears due, if any, shall be paid by the Respondent in three equal instalments.”*

1.32 The Petitioner submitted that the hydro power projects are long gestation/long life projects and are extremely difficult to build in the remote mountainous terrain of Uttarakhand and any force majeure events/natural calamities that may occur are beyond its control. The Petitioner submitted that the additional tariff for Tanga and Motighat SHP arising due to the additional capital invested to restore the projects, i.e. on 31.01.2022 as per the tariff calculations based on the provisions in UERC Tariff Regulations, 2018 works out to Rs. 1.71/kWh and Rs. 2.07/kWh respectively.

1.33 The Petitioner submitted that it is unable to recover its AFC under its present tariff

structure, and now for reasons beyond its control, due to the occurrence of an unprecedented natural calamity, the Petitioner has incurred additional capital expenditure for restoration of the projects, and due to the under recovery of the AFC, the Petitioner has been unable to service loans availed from Indian Renewable Energy Development Agency Ltd (IREDA) for the Tanga and Motighat SHPs and the projects are in danger of becoming a Non-Performing Asset (NPA), which would in turn would be detrimental to the interests of Uttarakhand State and its people, especially the extremely remote region of Pithoragarh where it is located. The Petitioner submitted that Tanga and Motighat SHP are a fit case for seeking relief by way of additional tariff for additional capital expenditure incurred due to force majeure events as envisaged by the Commission in its Tariff regulations.

1.34 The Petitioner submitted that it is currently receiving a levelized project specific tariff of Rs. 6.44/kWh for Tanga SHP and levelized tariff of Rs. 5.79/kWh for Motighat SHP and has sought revision in the same on account of the additional capital expenditure on both the SHPs.

1.35 Copy of the aforesaid Petitions were forwarded to the Respondent (UPCL) for submission of its reply on the same. The Respondent submitted its reply vide letters dated 18.08.2022. The Commission held a hearing on 23.08.2022 and vide Order dated 25.08.2022 allowed provisional tariff for Tanga and Motighat SHP as discussed before. Later, the Petitioner was asked to submit certain information for the purpose of determination of tariff for both the projects, and comments of UPCL were also sought on the relevant matters. The replies and rejoinder of the Petitioner, comments of the Respondent, and Commission's views on the same have been discussed in the subsequent paras of this Order.

2. Respondent's Submissions, Petitioner's replies and the Commission's views on the same

2.1 UPCL vide its letters dated 18.08.2022 submitted that it required additional documents/information from the Petitioner in respect of Tanga and Motighat SHPs for submission of comments in the matter. The Commission vide its letters dated 20.09.2022, asked the Petitioner to submit information on certain deficiencies/shortcomings (including the information requirement raised by the

Respondent) related to Tanga and Motighat SHPs. The Petitioner vide its submissions dated 13.04.2023 submitted its response on the deficiencies/shortcomings pointed by the Commission, which were also forwarded to the Respondent for seeking their comments on the same. The Respondent, i.e. UPCL vide its letters dated 27.05.2023 submitted its comments on the Petitions filed by M/s HHPL, which were forwarded to the Petitioner for submitting their comments/responses on the same. The Petitioner vide its submission dated 05.07.2023 submitted its rejoinder on the comments filed by the Respondent. The replies and rejoinder of the Petitioner, comments of the Respondent, and Commission's views on the same have been discussed in the subsequent paras of this Order.

- 2.2 The Respondent submitted that the Petitions have been filed for review of levelized tariff being received by the Petitioner on account of additional capital expenditure incurred for restitution and re-construction of its Tanga and Motighat SHPs. The Respondent submitted that the Petitions have been moved with insufficient data and lacks authentic evidence with respect to the damage caused to the SHPs, hence, the additional expenditure claimed should not be allowed on the exchequer of the consumers.

In response to the same, the Petitioner submitted that the present Petitions have been filed after its Tanga and Motighat SHPs had suffered catastrophic damage in floods that occurred on 02.07.2018, and the occurrence of the flood and the consequent damage is an undisputed and admitted fact and the same cannot be disputed by the Respondent. The Petitioner further submitted that abnormally high rainfall of 70 mm, 255 mm and 142 mm was recorded on July, 1st, 2nd and 3rd of 2018 at Munsyari, where the nearest rainfall gauge station is maintained, and rainfall data for the month of July, 2018 obtained from District Disaster Management Authority, Pithoragarh has been submitted in the Petition.

The Petitioner further submitted that it had informed all the concerned authorities and agencies immediately after the flood damage vide letters to the Commission, the Respondent/UPCL, district government authorities such as the DM, Pithoragarh, SDM, Dharchula, Urja Cell-Govt. of Uttarakhand, Secretary Energy, Government of Uttarakhand, IREDA (the Petitioner's lending agency which is a Govt.

of India owned financial institution), the insurance company etc., and the flood calamity and the damage that occurred had also been widely covered in the media.

The Petitioner submitted that as per the RE Tariff Regulations, 2018, the Commission had directed UPCL, UJVNL and UREDA to assess the losses suffered by Tanga and Motighat SHPs and submit a report on the same. The Petitioner submitted that officials of UPCL & UJVNL had jointly visited the Tanga SHP project site on 16.08.2018 to assess the quantum of losses and damages caused to the project due to the floods of 02.07.2018, and, thereafter, UPCL submitted a detailed loss/damage assessment report vide letter dated 04.10.2018, wherein the extensive damage suffered by the Petitioner's Tanga and Motighat SHPs was documented.

The Petitioner further submitted that Uttarakhand Renewable Energy Development Agency (UREDA) also inspected and submitted a report on the losses suffered by the Petitioner's Tanga and Motighat SHPs in the floods of 02.07.2018 wherein it has stated the following:

"This is to inform you that both Motighat and Tanga Small Hydro Power projects are damaged severely during cloud burst and flash flood on 02/07/2018 and river has changed course in some locations. Extensive damage at weir, intake and powerhouse, tailrace locations of both projects. Due to damage suffered both plants require major repair to restart power generation. It is to mention that the same flash flood has also completely damaged our abandoned Bhikuriagad powerhouse which is present close to Motighat diversion weir. Some photos, copies of news paper reports and letters by the concerned firm to the respective authorities are attached for reference."

The Petitioner further submitted that SDM, Dharchula vide letter 07.08.2018 had issued site inspection report of Tanga and Motighat SHPs after suffering the flood loss on 02.07.2018 and the said inspection report categorically states that cloud burst/flash floods had occurred in the region on 02.07.2018 and that this was a natural calamity and that Tanga SHP's Stilling basin, pipeline, powerhouse protection structures, switchyard location were completely damaged, and Motighat SHP's weir, intake, tail-race, tail-pool, D-tank, protection walls were completely damaged.

The Petitioner submitted that its lending agency IREDA had sanctioned

additional loans given the extensive damage sustained by Tanga and Motighat SHPs due to flood on 02.07.2018 to enable the Petitioner to restore the projects. Moreover, the Petitioner's insurance company has also admitted the flood loss of 02.07.2018 and as per its norms paid Rs. 908 Lakh for Tanga SHP and Rs. 772 Lakh for Motighat SHP towards the material damage claims filed by the Petitioner. The Petitioner submitted that it is wrong for the Respondent to question the authenticity of the Petition or to suggest that additional expenditure claimed to restore the project should not be allowed merely to deny the adjustment of tariff, and that the tariff adjustment is necessary to ensure the continued viability of Tanga and Motighat SHP and the very survival of the Petitioner Company.

- 2.3 The Respondent submitted that the while constructing a power plant, a very pertinent and important phase is planning & safety. The Hydro plants are always constructed in hilly terrain which is an inevitable factor because of geographical location as the potential energy of water needs to be converted into electrical energy and the same is possible when there is enough height gradient to service the same. The Respondent submitted that every Hydro plant during the phase of construction and even after in operation is likely to face various difficulties and the Petitioner has even exaggerated the normal conditions of hilly areas and the losses occurred out of July 2018 catastrophe.

In response to the same, the Petitioner submitted that UPCL admits that hydro-electric plants in Uttarakhand are constructed in hilly terrain and has further stated that every hydro plant during the phase of construction and even after in operation is likely to face various difficulties. The Respondent itself has characterised the floods of July, 2018 as "the July, 2018 catastrophe" and it is wrong for the Respondent to now turnaround and suggest such events are normal conditions. The Petitioner vehemently denied that it has exaggerated the losses that had occurred due to the floods of July, 2018, and submitted that the extent of losses has been well documented and the Respondent itself has reported the same to the Commission, along with other damage assessment reports by other independent and government agencies.

- 2.4 The Respondent submitted that the Petitioner disclosed that it has received Rs. 908.07 Lakh and Rs. 772.13 Lakh respectively for Tanga and Motighat SHP from the insurance company, however, it has not disclosed the amount claimed by it and the efforts made for

ensuring that amount. The Respondent further submitted that the Petitioner has not filed the relevant document pertaining to the inspection by the insurance agency, the amount of insurance given, the component on which the insurance amount was refused, the reasons for refusing the amount as claimed by the Petitioner.

In response to the same, the Petitioner submitted that the Petitioner received Rs. 908 Lakh and Rs. 772 Lakh respectively for Tanga and Motighat SHPs from the insurance company towards the material damage claimed by it due to the floods of 02.07.2018. The Petitioner submitted that it has maintained sufficient insurance cover for its Tanga and Motighat SHP, and has furnished copies of the extensive documentation that were submitted to the insurance company in support of the material damage claim, which includes site inspection reports by engineering consultants, photographs, rainfall data from District Disaster Management Authority, Pithoragarh, Petitioner's letters intimating the flood loss to various government agencies, SDM Report dated 07.08.2018, engineering consultant technical report dated 13.03.2019 and BOQs, Detailed Project Report for reconstruction with drawings, civil and electromechanical contractor tender documents, insurance claim forms, insurance policies, statutory auditor certificates, audited financial statements, IA & PPA Agreements, Tariff Orders, Regulations, power generation data etc. The Petitioner submitted that the insurance company as per its norms had appointed a surveyor who had submitted its report directly to the insurance company and the same was not shared with the Petitioner. Moreover, the insurer does not cover the cost of removal of external debris, even though the river had changed course and flood waters had deposited huge amounts of debris and boulders. The Petitioner submitted that the insurer has not denied the claim on any component that was damaged and has settled the claim on the depreciated asset value as per its norms/policy terms.

- 2.5 The Respondent submitted that the Petitioner had not given a separate bifurcation of the totally damaged parts/components, partially damaged parts and the parts and components which were unaffected. The Respondent further submitted that any addition which does not confer any benefit in terms of generation cannot be recovered by the generator through tariff.

In response to the same, the Petitioner submitted that the documents submitted by the Petitioner clearly mentions both the damages that had occurred to various

components of Tanga and Motighat SHP and the construction work necessary in each component to restore the project. Further, the head-wise cost of restoration of each project has also been submitted and as such the actual costs incurred for each component of the project can be ascertained.

- 2.6 The Respondent submitted that the cost incurred by the Petitioner for restoration of Tanga SHP is Rs. 3049 Lakh in which Rs. 1168 Lakh (approx. 38%) is IDC claim and for restoration of Motighat SHP is 2074.73 Lakh in which Rs. 608 Lakh (approx. 29%) is IDC claim, which seems to be very high and needs to be allowed only after prudence check by the Commission. The Respondent further submitted that the terms of loan sanctioned by IREDA also categorically mentioned the moratorium period of 1 year only which the Petitioner has stretched and is thereby increasing the IDC which by way of efficient working could have been restricted.

In response to the same, the Petitioner submitted that it is denied that the cost of reconstruction of Tanga and Motighat SHP is too high, and the Petitioner has taken every effort to ensure that the project is restored at an early date and with the least possible cost, since early commissioning of the project and lower project cost is also in the best interest of the Petitioner. The Petitioner submitted that it was able to restore the power generation in August, 2021 for Tanga SHP and in April, 2021 for Motighat SHP respectively by restoring the critical infrastructure, constructing the left-bank portion of the diversion weir to commence power generation at an early date. The Petitioner submitted that, subsequently, the remaining works were completed while generation was ongoing to reduce the cost of interest during construction etc. Moreover, the final cost of restoration of the project is less than the cost projected in the detailed project report. The Petitioner submitted that the IDC of Rs. 1168 Lakh is the interest cost during the reconstruction of the Tanga SHP which is the duration from July, 2018 to August, 2021, and similarly for Motighat SHP the IDC of Rs. 608 Lakh is for the duration from July, 2018 to April, 2021. The Petitioner submitted that the loan sanction letter of IREDA dated 19.03.2021 mentions moratorium for repayment of principal of the loan as one year and the Petitioner has adhered to this condition.

- 2.7 The Respondent submitted that the Petitioner needs to justify the expenditure incurred in civil head in detail with the cost and time of the task. The Respondent further submitted

that the Petitioner has submitted the work allotment orders to local vendors, however, no such evidence has been produced to ascertain that the selection of the vendors has been done through competitive bidding process and, therefore, the cost should be allowed on a normative basis instead of the rates as mentioned by the Petitioner so that the Petitioner does not obtain any undue benefit in the garb of additional capitalization. The Respondent further submitted that the Petitioner must justify the expenditure incurred in Misc. Fixed Assets in detail with the cost and time of the task.

In response to the same, the Petitioner submitted that it has obtained competitive quotes for the civil works. The Petitioner submitted that a small proportion of the works were given to some labour contractors who supplied labour and locally available materials such as stone aggregates etc., and by procuring such materials locally when feasible, the Petitioner was able to reduce the cost of logistics/cost of the civil works as otherwise it would have been more expensive and inefficient to procure certain materials from longer distances such as Pithoragarh which is more than 100 km away or Haldwani which is about 250 km away. The Petitioner submitted that it was able to save time by engaging some labour contractors as this enabled the Petitioner to simultaneously undertake restoration works in multiple locations in the project site. Further, since large portion of the restoration work was done in the aftermath of the Covid-19 pandemic, the Petitioner used labour contractors to mobilize the required labour force to supplement the main contractors as required to complete the restoration works speedily. The Petitioner submitted that by using labour contractors, the Petitioner was in fact able to reduce both cost and time in view of the lockdowns imposed by the government during the Covid-19 pandemic and the disruption in movement of men and material. The Petitioner submitted that the rates charged by the labour contractors are competitive given the extremely remote location and hostile terrain where Tanga and Motighat SHPs are located and it is wrong for the Respondent to make any false and baseless allegations regarding the same merely to oppose the present Petition. The Petitioner submitted that it has submitted the details of the expenses towards the miscellaneous fixed assets incurred during the restoration works and requested that the same be allowed as part of capital cost of the respective projects.

2.8 The Respondent further submitted that the Petitioner has claimed an Administrative

Expenditure of Rs. 388 Lakh and Rs. 396 Lakh for Tanga and Motighat SHP respectively, which seems unnecessary and should not be allowed.

In response to the same, the Petitioner submitted that the administrative expenditure of Rs. 388 Lakh is based on actuals and was incurred from July, 2018 to August, 2021 in case of Tanga SHP, which is a period of about three years. Similarly, in case of Motighat SHP, the administrative expenditure of Rs. 396 Lakh is based on actuals and was incurred from July, 2018 to April, 2021. The Petitioner submitted that the said administrative expenditure consists primarily of the salary expense of staff/engineers who are absolutely critical and necessary, as well as travel, front end fees paid to IREDA for availing additional loans, office rents and other expenses that would be normally incurred during the project reconstruction period. The Petitioner submitted that any arbitrary reduction in the capital cost as suggested by the Respondent would result in the under-recovery of capital expense incurred and render the Petitioner's Tanga SHP unviable, which is against the interests of the state of Uttarakhand and the Respondent, who is the beneficiary of a long-term Power Purchase Agreement (PPA) with the Petitioner.

- 2.9 The Respondent submitted that the Petitioner is trying to garner sympathy by exaggerating the odd conditions, that any way is part of risk assessment of the generator before establishing the project in which the Petitioner has failed miserably. Moreover, the Petitioner also failed about effective planning for restoration that resulted into unwarranted high cost claimed by the generator. The Respondent further submitted that the Petitioner is giving the reasons which were well known to him even before signing the implementation agreement for the plant and counting the reasons like hurdles in reaching the location, transportation issues, risky zone, non-availability of various items etc. which simply suggested the escapist attitude of Petitioner and is simply an effort to cover the poor planning and even bad execution on part of the Petitioner. The Respondent submitted that it is expected from the developer, who have attained the project from the Government on competitive and commercial terms, to be aware of the site conditions before entering into implementation agreement with GoUK and the excuses mentioned in the Petition are either demonstrating the incompetence of the Petitioner or an attempt to gain undue benefits.

In response to the same the Petitioner submitted that the Petitioner had entered into an Implementation Agreement with Govt. of Uttarakhand to implement the Tanga and Motighat SHPs pursuant to its policy to promote hydro-power generation in the State and had also entered a long term PPA with the Respondent. The DPR of both Tanga and Motighat SHP was approved by the appropriate nodal agencies of the Government and, thereafter, the Petitioner had successfully commissioned the projects in 2017 and 2011 respectively and has been supplying power to the Respondent at the levelized tariff fixed by the Commission. The Petitioner submitted that small hydro projects such as the Tanga and Motighat are run of the river projects and are vulnerable to floods and it is wrong for the Respondent to make baseless allegations that the Petitioner has not assessed the risk in the project or has been inefficient in planning or with the restoration work.

The Petitioner submitted that even the state-owned Uttarakhand Jal Vidyut Nigam Ltd (UJVNL) which operates both large and small hydro power projects in Uttarakhand State have sustained losses to a large number of its small hydro projects at various times, for example, UJVNL's Kanchauti (2 MW) SHP, Kulagad (1.2 MW) SHP, Chhirkila (1.5 MW) SHP, Sobla Stage-I (6 MW) SHP and Relagad (3 MW) SHP are all located in Pithoragarh District of Uttarakhand and have been washed out in floods in June, 2013. Further, UJVNL's Kaliganga-I (4 MW), Kaliganga-II (4.5 MW) and Madhamaheshwar (15 MW) SHPs have also suffered damage in the floods. It is, therefore, apparent that even UJVNL with the vast resources and expertise at its command has designed and established SHPs which have also suffered flood damage at various times, and for reasons unknown the afore mentioned projects are yet to be restored by UJVNL Ltd. despite the passage of over 10 years which demonstrates the immense difficulties, both technical and financial, faced by the developers, in reviving SHPs after they have been devastated by floods, as otherwise UJVNL should have easily restored the above-mentioned projects by now having invested hundreds of crores in the said projects. The Petitioner further submitted that Uttarakhand Renewable Energy Development Agency's (UREDA) Bhikhurigad SHP which is located upstream of the Petitioner's Motighat SHP has been completely washed away in the floods of June, 2013 and July, 2017, and as per UREDA the said SHP has now been abandoned, which once again demonstrates the difficulty in reviving flood damaged small hydro projects, as otherwise UREDA would not have

abandoned the project and its huge investment.

The Petitioner submitted that UJVN Ltd. has projected its cost for Kaliganga-I SHP (4.5 MW) to be about Rs. 17 Crore/MW, for Kaliganga-II SHP the cost is estimated to be Rs. 25 Crore/MW, for Madhmaheswar SHP to be Rs. 22 Crore/MW. Further, UJVNL has incurred cost of Rs. 28.76 Crore for its Dunao SHP (1.5 MW) which is Rs. 19.17 Crore/MW way back in 2017, i.e. almost 6 years back. The Petitioner submitted that UJVN Ltd. borrows funds at extremely low interest rates from governmental and multilateral entities such as NABARD, Asian Development Bank etc. which keeps its interest costs extremely low as compared to the Petitioner who has to pay interest at commercial rates. The costs incurred by UJVN Ltd. is indicative of the actual cost of construction of SHPs in Uttarakhand State and the same cannot be denied by the Respondent. The Petitioner submitted that despite knowledge of all the above facts and also of the extent of damage suffered by the Petitioner's Tanga and Motighat SHP in the floods of July, 2018 and the various difficulties that were faced by the Petitioner in the restoration of the project which have been laid out in detail in the Petition, the Respondent has made false allegations that the Petitioner has exaggerated the risks and has not been efficient in planning or that the cost is too high. The Petitioner denied all the baseless allegations made by the Respondent and submitted that the Petitioner has made extraordinary effort to restore the project in the middle of the Covid-19 pandemic with all its attendant challenges, while keeping the cost lower than what was estimated in the DPR and on an absolute basis when considering comparative cost of projects commissioned by UJVNL over the past few years.

- 2.10 The Respondent submitted that with regard to the evacuation problem as stated by the Petitioner, UPCL earlier informed the Commission that reliable evacuation of power would be possible by connecting a 33 kV feeder to the proposed 220/33 kV Baram S/s, and the Petitioner seems to be agreed by the progress of the said Sub-station. The Respondent submitted that construction of the same is not within the control of UPCL as it is for the transmission licensee to construct the same, however, the Respondent has taken all the possible steps for smooth evacuation of the power viz. conductor on 33 kV line from 132 kV S/s Pithoragarh to Didihat has been upgraded in the month of December 2022, 33 kV network in the area has been upgraded by additionally

constructing 33 kV line from Joljibi to Seraghat which provides alternate option to maintain, supply and power evacuation in the area in case of breakdown of main 33 kV feeder.

In response to the same, the Petitioner submitted that the Respondent being the state distribution utility and having entered into a long term PPA with the Petitioner has the obligation to evacuate the full installed capacity of 5 MW +10% overload factor as per the terms of the PPA on a consistent and reliable basis, and the Respondent cannot shirk its responsibility by simply stating that reliable evacuation of power is only possible by a connecting a 33 kV feeder to the Baram 220/33 kV S/s and blame the State transmission licensee for the long delay in the commissioning of the Baram sub-station. The Petitioner submitted that the fact remains that the Petitioner is suffering huge generation and financial losses due to the constraint in the evacuation capacity of the Respondent's 33 kV network at its Darati 33/11 kV sub-station. The Petitioner further submitted that neither the upgradation of the conductor from Didihat to Pithoragarh nor the additional 33 kV line from Jauljibi to Seraghat has improved the power evacuation capacity or reliability of the Respondent's 33 kV network, and the Petitioner continues to suffer due to the abnormally high voltage conditions exceeding the 33 kV + 6% permitted under the Regulations which is causing generation and financial losses. Moreover, the losses due to the breakdowns in the Respondent's 33 kV line have not been reduced by the so-called alternate route and the same can be verified from the data recorded in the MRI meter reading reports of Tanga and Motighat SHP.

- 2.11 The Commission analysed the comments submitted by the Respondent and observed that they are more of general nature without pointing to any specific issues based on the information/documents submitted by the Petitioner. The Respondent at various places in its comments has suggested the Commission to analyse the claims made by the Petitioner carefully and on prudent basis, which is obvious as the Commission analyses the claims based on the applicable Regulations and the provisions of the Act and no costs are allowed to be passed on without prudence analysis of the same. The Commission expects the Respondent to be more specific on the issues rather than giving general information/suggestion. The Commission, accordingly, has not responded on the individual comments submitted by the Respondent as they are of general nature and have

been covered in subsequent paras of this Order at the time of analysis of the additional capitalization claims made by the Petitioner for its Tanga and Motighat SHPs.

3. Analysis & admissibility of the additional capitalization

3.1 Applicability of the Regulations

3.1.1 Before going into the merits of the Petition, the Commission first refers to the relevant provisions of the Regulations applicable in the present Petition. The relevant extracts of 2nd and 3rd proviso to Regulation 14(7) of the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2018 are reproduced hereunder:

“Provided that any additional expenditure of capital nature which becomes necessary for restoration works only on account of damages caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company), after prudence check by the Commission, shall be allowed as additional capitalisation after duly adjusting the proceeds from any insurance scheme for all the generating stations covered under these Regulations. For additional capital expenditure admitted, as above, appropriate adjustment in tariff shall be allowed for balance life of that project based on the norms given in Chapters 4 & 5 of the Regulations;

Provided that additional capitalisation on this account would only be allowed if appropriate and adequate insurance cover was available for the generating station at the time of occurrence of natural calamities referred to above. The generating company shall intimate the Commission and Distribution Licensee within seven days from the occurrence of any such force majeure event resulting into shut down of plant. The Commission may in such case direct the distribution licensee and State nodal agency to visit the damaged plant and assess the nature & type of damages and restoration works required in coordination with the generator/developer.”

2nd and 3rd proviso to Regulation 14(7) of the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2018 is only to enable the Petitioner to recover the additional capital expenditure incurred by it due to damages caused by natural calamity, which is an extension of the already existing regulatory framework/

mechanism which also allows UPCL, Large Hydro projects and other utilities to recover their additional capital expenditure due to damages from natural calamities

- 3.1.2 The Commission is aware of the intensity & volume of the flood that occurred in the first week of July, 2018, especially 02.07.2018, in the hilly region of the State of Uttarakhand that had resulted in severe damages to man & machines, manmade structures such as roads, bridges including power generating stations and transmission lines.
- 3.1.3 The Petitioner's Tanga and Motighat SHP is situated at a hilly terrain of Uttarakhand State where natural calamity occurred in July, 2018 which led to extensive damages to several structures. Hence, loss/damage to the said SHP cannot be ruled out. Further, reports of various authorities like SDM's Report, UPCL's own reports, UREDA's reports and other documents, extract of newspaper and photographs corroborate the Petitioner's averment in the matter. UPCL has infact made plain statements regarding the damages and the capital expenditure incurred by the Petitioner without corroborating the same. Infact as a Respondent, if they alleged some wrong doing by the Petitioner, the burden of proof was on them to produce the evidence that would have proved the claims they made against the Petitioner. Under judicial proceedings, they cannot be allowed to follow the shoot and scoot policy. They must prove whatever they have alleged. In the absence of any proof by the Respondent, the Commission while examining prudence would be guided by the facts and relevant information available with it.

3.2 Additional Capitalisation due to damage

- 3.2.1 The Petitioner submitted that the restoration works on the project were started soon after the calamity occurred in July 2018, however, due to advent of Covid-19 pandemic in the year 2020, the restoration works were interrupted several times and it was with great difficulty it has been restoring the project so that it is able to sustain its operations safely over the long term. The Petitioner submitted that after the flood calamity, the Petitioner engaged design and engineering consultants to assist in the early restoration of the project. The Petitioner submitted that it started restoration activity by first reconstructing the internal approach roads to the project headworks

site after the end of the monsoon season, and initial road access for small vehicles was restored in December, 2018. The Petitioner submitted the breakup of expenditures for reconstruction of project after natural calamity as per DPR as follows:

Table-3.1 : Breakup of Projected Expenditure as per DPR

Particulars	Tanga SHP (Rs. In Lakhs)	Motighat SHP (Rs. In Lakhs)
Civil Works	2361.00	3012.00
Hydro Mechanical Works	278.00	290.00
Transmission Line	-	30.00
Project Management & Pre-operative expenses	350.00	350.00
Engineering & Consultancy	30.00	30.00
Total	3019.00	3712.00

- 3.2.2 The Petitioner submitted that immediately after the approach roads were restored, the Petitioner had to divert river waters away from the left bank of the river where all civil structures were located as the river had changed course at various places and it was necessary to ensure no further erosion or damage could happen to remaining civil structures. The Petitioner submitted that due to the extensive damage suffered by the plant and the massive quantities of debris and boulders deposited all along the project site by the river, debris removal itself was a very difficult and time-consuming process. The flood had deposited massive boulders near all locations which needed to be removed using mechanical breakers which were obvious from the photographs submitted by the Petitioner. The damaged civil works had to be dismantled using mechanical breakers which was time consuming and expensive. The entire area had to be excavated and debris from damaged structure had to be mechanically dismantled and removed before reconstruction could be attempted, involving great cost and time.
- 3.2.3 The Petitioner submitted that due to COVID-19 pandemic, there were severe restrictions in movement of people with mandatory quarantines required by the Government. Furthermore, all public transport in the form of trains, buses etc. was also not available, and there was no labour willing to travel outside their hometowns/villages and it was especially difficult for the Petitioner and its contractors who had to mobilize labour from other states and bring them to the remotely located Tanga and Motighat SHPs. The Petitioner submitted that it had to

incur huge expenditure during this entire effort and had to compensate contractors who demanded higher prices for the works to be executed during the pandemic. Furthermore, the monsoons of 2019, 2020 and 2021 also caused disruption as there were heavy rains, landslides etc. which made construction activity very dangerous and sometimes impossible at the project site.

- 3.2.4 The Petitioner submitted that it had obtained and was maintaining an appropriate and adequate insurance cover for the project, and, accordingly, insurance company settled the Petitioner's insurance claim in February, 2020, for Rs. 909.66 Lakh for Tanga SHP and Rs. 773 Lakh for Motighat SHP as per the norms.
- 3.2.5 The Commission, in order to assess the intensity of the damage caused to the Petitioner's projects, examined the reports of various authorities. As discussed in previous paras, the loss assessment report submitted by UPCL, wherein it had conducted a joint visit alongwith the officials of UJVN Ltd., categorically states that extensive damage was caused to both Tanga and Motighat SHP of the Petitioner due to the flood occurred on 02.07.2018.

Further, as discussed in the preceding paras, the Commission directed UREDA to inspect and submit a report on the losses suffered by the Petitioner's Tanga and Motighat SHP, in response to which UREDA submitted that both the Tanga and Motighat SHP suffered extensive damages and due to the damages suffered both the plants required major repairs to restart the generation.

Further, the Petitioner submitted the site inspection report dt. 07.08.2018 issued by SDM, Dharchula for Tanga and Motighat SHPs after suffering the flood loss on 02.07.2018 which categorically states that cloud burst/flash floods had occurred in the region on 02.07.2018 and that this was a natural calamity and that Tanga SHP's Stilling basin, 400 meter pipeline, Pipeline protection structure, switchyard, powerhouse protection wall structure were completely damaged and Motighat SHP's weir, intake, tail-race, tail-pool, D-tank, power house protection walls were completely damaged.

- 3.2.6 The Commission also takes note of the fact that the onset of COVID-19 pandemic has been very detrimental for the entire nation with its multiple waves further disrupting the normal course of business, and the Petitioner is no exception to that. Infact the

Respondent Company also faced disruptions in carrying out its operations smoothly. Accordingly, the Petitioner's claim that its work got disrupted and delayed due to on set of COVID-19 pandemic and its further waves cannot be denied, and the Commission has considered the situation arising out of the same while finalizing the capital cost for the Petitioner's Tanga and Motighat SHPs.

- 3.2.7 The Petitioner submitted that it has restored the generation from Tanga SHP in the month of August, 2021 by completing the most critical works, however, the reconstruction of Tanga SHP was finally completed on 20.02.2023 at a total capital outlay of Rs. 3519.58 Lakh including IDC of Rs. 1168.10 Lakh. The Petitioner submitted that the same has been funded through term loan of Rs. 1457.27 Lakh, insurance receipts of Rs. 908.97 Lakh and balance through internal accruals and creditors payable amounting to a total of Rs. 1153.34 Lakh.

Similarly for Motighat SHP, the Petitioner submitted that it has restored the generation from Motighat SHP in the month of April, 2021 by completing the most critical works, however, the reconstruction of Motighat SHP was finally completed on 30.09.2022 at a total capital outlay of Rs. 3377.65 Lakh including IDC of Rs. 607.65 Lakh. The Petitioner submitted that the same has been funded through term loan of Rs. 849.06 Lakh, insurance receipts of Rs. 772.13 Lakh and balance through internal accruals and creditors payable amounting to a total of Rs. 1756.46 Lakh.

- 3.2.8 The Petitioner submitted that it had endeavoured to restore critical works required to resume power generation operations at an early date and, thereafter, completed the remaining works as per the detailed project report, the advice of the engineering consultants and keeping in view, the extreme disruption, and extraordinary circumstances, arising out of the Covid-19 pandemic. The Petitioner submitted that even though certain works were completed after the resumption of power generation, all the works restored by the Petitioner form an integral part of the overall project and necessary for continued safety and long-term operations of the project, and given the disruptions and constraints caused by the multiple waves of Covid-19 pandemic the Petitioner submitted that while certain critical works were perforce prioritized, the Petitioner had also endeavoured to keep the restoration work of all the other works ongoing at various times. The Petitioner submitted that the restoration work of

various components and their full completion, therefore, spans across the periods before and after the resumption of power generation operations, and under the above circumstances, the measurements, and bills for some of the components that were executed across the different working periods could be raised by the contractors and certified by the project engineers only after the works were fully completed.

- 3.2.9 The Petitioner submitted that in order to resume power generation operations of Tanga SHP at an early date, critical works such as the head works (Link Canal/Approach Channel/Stilling Basin), Cross Drainage works and Civil Works for HR Pipeline, Guide-wall near Approach channel stilling basin, HR Pipeline Flood Protection works, Powerhouse & Switchyard Protection works, Approach Road works, HR Tunnel repair works, Tail-race/Tail-pool etc. were prioritized and completed by August, 2021. Further, from Aug-2021 to the final date of completion the Petitioner restored the remaining Cross Drainage works, Guide-wall near Approach channel and stilling basin, HR Pipeline Flood Protection works, Powerhouse & Switch yard Protection works that had been damaged/washed away in the floods of July, 2018.

The Petitioner submitted that for Tanga SHP, the expenditure incurred till the date of restoration of power supply in August, 2021 is Rs. 3049 Lakh of which Rs. 1450 Lakh is civil works, Rs. 24 Lakh is miscellaneous fixed assets, administrative expenses of Rs. 388 Lakh, IDC of Rs. 1168 Lakh, engineering & consultancy of Rs. 19 Lakh. Further, expenditure incurred post restoration of generation till date of final completion of restoration works is Rs. 470 Lakh of which Rs. 448 Lakh is towards civil works, Rs. 13 Lakh towards miscellaneous fixed assets and Rs. 9 Lakh towards engineering & consultancy.

- 3.2.10 Further, the Petitioner w.r.t. Motighat SHP submitted that the Petitioner in order to resume power generation operations at an early date, critical works such as the left bank portion of the head works (about 20 m wide portion of the diversion weir, intake/desander, gates, feeder duct, guide walls), desilting tank, HR Pipeline, Approach Road works, Tail-race/Tail-pool etc. were prioritized and completed by April, 2021. Further, from April, 2021 to the final date of completion the Petitioner restored the remaining part of the diversion weir, i.e. the right bank portion, the guide

walls and protection works that had been damaged/washed away in the floods of July, 2018.

The Petitioner submitted that for Motighat SHP, the expenditure incurred till the date of restoration of power supply in April, 2021 is Rs. 2459 Lakhs of which Rs. 1399 Lakhs is towards civil works, Rs. 12.27 Lakhs is miscellaneous fixed assets, project management expenses of Rs. 404 Lakhs, IDC of Rs. 608 Lakhs, engineering & consultancy of Rs. 35 Lakhs. Further, expenditure incurred post restoration of generation till date of final completion of restoration works is Rs. 919 Lakhs towards civil works.

3.2.11 For determination of capital cost, the Commission has examined the bills/details submitted by the Petitioner in support of the costs claimed by it for restoration of Tanga and Motighat SHPs. The Commission has also taken into consideration the certificate from the Petitioner's statutory auditors in support of the completed cost of the restoration works carried on by the Petitioner. Based on the submissions made by the Petitioner and comments received from the Respondent on the same, analysis of the capital cost of the project has been done and the same is discussed in following Paras.

3.2.12 The Commission has gone through the DPR for restoration of both Tanga and Motighat SHP and directed the Petitioner to submit a comparative of executed cost vis-à-vis the DPR cost alongwith reasons/justification for variances. The Petitioner submitted the head-wise cost break up of final executed cost of Tanga and Motighat SHPs as follows:

Table-3.2: Component wise summary of cost as per DPR vis-à-vis Actual Expenditure incurred for Tanga SHP (Rs. In Lakhs)

S. No.	Particulars	Original DPR Cost	Actual Cost claimed by the Petitioner
1.	Head Works (Link canal between Motighat D/S transition and Tanga/Approach Channel / Stilling Basin /Head Regulator	668.00	469.40
2.	Guide Wall Near Approach Channel / Stilling Basin	349.00	189.00
3.	Crossing Drainage works and civil works for HR pipe line	305.00	291.00
4.	HR Pipe line Flood protections works	231.00	222.00

5.	Downstream Transition/ Tail Race Channel	89.00	36.00
6.	Flood Protection Wall for Power House / Switchyard	390.00	322.00
7.	Approach Road works	75.00	77.00
8.	HR Tunnel	74.00	68.00
9.	Excavation, Debris removal & Dismantling *	150.00	-
10.	Refurbishment/Recommission of Electro Mechanical Equipments and H R Pipe Line Works	308.00	223.00
11.	Misc.Fixed Assets	-	37.00
12.	Total Hard Cost	2639.00	1934.40
13.	Project Management (Incl.front end fee)	350.00	388.00
14.	Engineering & Consultancy	30.00	28.16
15.	Total IEDC	380.00	416.16
16.	Total Cost (12+15)	3019.00	2350.56

* Excavators and other machinery were rented, and the rental cost has been apportioned to each civil component.

Table-3.3: Component wise summary of cost as per DPR vis~a~vis Actual Expenditure incurred for Motighat SHP (Rs. In Lakhs)

S. No.	Particulars	Original DPR Cost	Actual Cost claimed by the Petitioner
1.	Head Works (Diversion Weir / Weir Guide wall/ Wing walls, Head Regulator /Intake/Desander/ Feeder Cannal)	2206.00	1799.40
2.	Left Bank Formation / Backfilling Approach Road Weir and Intake	75.00	35.40
3.	Desilting Tank	140.00	98.95
4.	Cross Drainage works Protection & Other Civil works	121	-
5.	Tail pool, Tail Race Channel, Protection Works	245	120.52
6.	HR Pipeline	20	19.65
7.	Gate & Hoists	290	224.02
8.	Excavation & Debris removal *	175	-
9.	Misc.Fixed Assets (including Transmission Line & Refurbishment/Recommission of Electro Mechanical Equipments)	60	42.63
11.	Total Hard Cost	3332.00	2340.57
12.	Project Management (Incl.front end fee)	350.00	396.03
13.	Engineering & Consultancy	30.00	33.67
14.	Total IEDC	380.00	429.70
15.	Total Cost (11+14)	3712.00	2770.27

* Excavators and other machinery were rented, and the rental cost has been apportioned to each civil component.

3.2.13 The Petitioner, later through a separate submission, submitted that it had restarted power generation operations of Tanga SHP in August, 2021 and, thereafter, had

continued to restore the remaining works and completed the same in February, 2023, and since the restoration works had continued until February, 2023 the Petitioner has also incurred IEDC and IDC till this period, however, due to an inadvertent oversight, the aforementioned additional IEDC and IDC for the period Sept, 2021 to February, 2023 and few bills pertaining to civil works totalling to Rs. 90.87 Lakhs were not included in the final project restoration cost submitted earlier. The Petitioner submitted that the afore mentioned cost and relevant bills have been considered by the Petitioner's statutory auditor during the course of the annual audit process and revised cost has been certified vide auditor's certificate dated 25.08.2023.

The Petitioner submitted that till August, 2021 it incurred expenses of Rs. 1729.49 Lakh which included Rs. 1060.80 Lakh towards civil works, Rs. 24.35 Lakh towards Misc. fixed assets, Rs. 388.36 Lakh in IEDC, Rs. 18.93 Lakh in Eng & Consultancy and IDC of Rs. 237.05 Lakh (on loan Nos. 1714FI2 and 1714 GECL). The Petitioner submitted that the final cost of restoration incurred till February, 2023 is Rs. 3052.90 Lakh including IDC of Rs. 514.12 Lakh (on loan Nos. 1714 FI2 and 1714 GECL), and claimed that the same be considered as total capital expense incurred for restoration of Tanga SHP after the floods of July, 2018.

3.2.14 Similarly for Motighat SHP, the Petitioner, later through a separate submission, submitted that it had restarted power generation operations of Motighat SHP in April, 2021 and, thereafter, had continued to restore the remaining works and completed the same in September, 2022, and since the restoration works had continued until September, 2022 the Petitioner has also incurred IEDC and IDC till this period, however, due to an inadvertent oversight, the corresponding expenses for the period May, 2021 to September, 2022 were not included in project restoration cost submitted earlier. The Petitioner submitted that the revised cost has been duly certified by Petitioner company's statutory auditor vide the auditor certificate dated 25.08.2023.

The Petitioner submitted that till April, 2021, the Petitioner incurred expense of Rs. 2066.94 Lakh which included Rs. 1418.24 Lakh towards civil works, Rs. 42.04 Lakh towards Misc. fixed assets, Rs. 396.03 Lakh in IEDC, Rs. 33.67 Lakh in Eng & Consultancy, Rs. 176.95 Lakh in IDC (on loan Nos. 1715 FI2, 1715-3 bridge loan, 1715 GECL). The Petitioner submitted that the final cost of restoration incurred till

September, 2022 is Rs. 3182.26 Lakh including IDC of Rs. 329.54 Lakh (on loan Nos. 1715FI2, 1715-3 bridge loan, 1715 GECL) and claimed that the same be considered as total capital expense incurred for restoration of Motighat SHP after the floods of July, 2018.

3.2.15 The Petitioner also gave the yearly breakup of total cost incurred for restoration of Tanga & Motighat SHP as summarized in the table below:

Table- 3.4: Capital Cost of Tanga SHP claimed by the Petitioner (Rs. In Lakh)

Particulars	Till August, 2021	From August 2021 to March, 2022	From April 2022 to February, 2023	Total cost incurred till February, 2023
Hard Cost	1085.14	431.40	509.29	2025.84
Incidental Expenditure During Construction (including engineering and consultancy)	407.29	0.00	105.64	512.94
Sub-total	1,492.44	431.40	614.93	2538.77
Interest During Construction	237.05	110.29	166.79	514.12
Total	1729.49	541.69	781.72	3052.90

Table-3.5: Capital Cost of Motighat SHP claimed by the Petitioner (Rs. In Lakh)

Particulars	Till April, 2021	From May 2021 to March, 2022	From April 2022 to September, 2022	Total cost incurred till September, 2022
Hard Cost	1460.29	304.90	575.11	2340.29
Incidental Expenditure During Construction (including engineering and consultancy)	429.70	0.00	82.72	512.43
Sub-total	1,889.99	304.90	657.84	2,852.72
Interest During Construction	176.95	98.99	53.60	329.54
Total	2066.94	403.88	711.44	3182.26

3.2.16 The Petitioner further submitted that the measurements of civil works are generally finalized and verified by site engineers after a particular component is fully completed and this process can take several weeks, and in the present case since the civil works were ongoing, it was not feasible for the Petitioner's contractors to complete the measurement, raise all the bills and for the site engineers to certify the same on the date the project restarted power generation operations. Furthermore, given the extreme disruption caused by the Covid-19 pandemic some bills were raised after

restoration of generation of the respective project, even though the works were executed in the intervening period.

3.2.17 The Commission analysed the details submitted by the Petitioner w.r.t. to the costs claimed by it, wherein the Commission examined the bills/vouchers of various suppliers as produced by the Petitioner, alongwith the work orders/contracts given to various suppliers/ contractors. The Commission also examined the audited financial statements of the relevant period for both Tanga and Motighat SHPs, alongwith Statutory Auditor's certificate regarding executed cost of Tanga and Motighat SHPs.

3.2.18 Further, the Respondent in its comments submitted that the Petitioner has submitted the work allotment orders to local vendors, and no such evidence has been produced to ascertain that the selection of the vendors has been done through competitive bidding process. In response to the same the Petitioner submitted that it had obtained quotations from multiple contractors/vendors for both civil and hydro-mechanical works. The Petitioner also submitted that though there is no requirement for competitive bidding, the Petitioner obtained quotations from multiple vendors to ensure prudence and competitive rates and awarded the contracts accordingly. The Petitioner also submitted that a small proportion of the works were given to some labour contractors who supplied labour and locally available materials such as stone aggregates etc., and by procuring such materials locally when feasible, the Petitioner was able to reduce the cost of logistics/cost of the civil works as otherwise it would have been more expensive and inefficient to procure certain materials from longer distances such as Pithoragarh which is more than 100 km away or Haldwani which is about 250 km away. The Petitioner submitted that it was able to save time by engaging some labour contractors as this enabled the Petitioner to simultaneously undertake restoration works in multiple locations in the project site. Further, since large portion of the restoration work was done in the aftermath of the Covid-19 pandemic, the Petitioner used labour contractors to mobilize the required labour force to supplement the main contractors as required to complete the restoration works speedily. The Petitioner submitted that by using labour contractors, the Petitioner was in fact able to reduce both cost and time in view of the lockdowns imposed by the government during the Covid-19 pandemic and the disruption in movement of men and material.

The Petitioner submitted that the rates charged by the labour contractors are competitive given the extremely remote location and hostile terrain where Tanga and Motighat SHPs are located.

The Commission analysed the submissions made by the Petitioner and the Respondent and found the submissions made by the Petitioner to be satisfactory since there is no particular requirement for the Petitioner company under the Regulations to award its reconstruction works based on competitive bidding. However, based on the documents submitted by the Petitioner it is apparent that the quotes have been invited from the multiple vendors before awarding the final work order to the respective bidder. Further, it can also not be denied that the nature of work related to reconstruction of Tanga and Motighat SHPs would definitely call for employment of local contractors considering the reluctance of outside contractors to carry out works in such remote areas comprising of geographically difficult terrain and also to speed up the reconstruction works. Moreover, the advent of covid-19 pandemic during the reconstruction phase would have made the things a lot more difficult as the movement of people from one place to another was severely restricted during the period when the pandemic was at its peak and the employment of local work force to carry out the reconstruction works of the respective SHP appears to be prudent.

3.2.19 The Petitioner submitted CA certificate dated 25.08.2023 regarding executed capital cost for restoring the Tanga SHP. As per the aforesaid certificate the application of funds has been shown as below:

Table-3.6: Capital cost of Tanga SHP as per CA certificate

Sl. No.	Particulars	Amount (Rs. In Lakhs)
1.	Building & Civil Works including Penstock	1988.87
2.	Miscellaneous Fixed Assets	36.97
3.	Project Management (Including front end fee)	484.77
5.	Engineering & Consultancy	28.16
6.	Sub- total	2538.77
7.	Interest During Construction	1168.10
	Total Cost	3706.87

The actual cost claimed by the Petitioner for Tanga SHP and the cost as per auditor's certificate is varying on account of the amount claimed under the head Interest During Construction. The Petitioner in its submissions had explained that the

IDC considered in the auditor's certificate includes interest amount accrued on the existing loans, related to the Petitioner's project, during the construction period till the date of restoration of generation. However, the Petitioner while claiming final executed cost for reconstruction of its Tanga SHP has considered only the fresh funding from IREDA for the purpose of reconstruction. The Commission, accordingly, considers the capital cost of Rs. 2538.77 Lakh (excluding IDC) as claimed by the Petitioner and also certified by its statutory auditors for analysing the claims made by the Petitioner. Further, the analysis of IDC claim of the Petitioner has been dealt separately in the later part of this Order.

3.2.20 The Commission analysed the submissions made by the Petitioner and observed that the hard cost of restoring the Tanga SHP, as claimed by the Petitioner, is Rs. 2025.84 Lakh which includes Building & Civil Works (including penstock) and Miscellaneous Fixed Assets. The Commission analysed the bills of various works/items submitted by the Petitioner in support of the cost claimed for Tanga SHP and found that the Petitioner had submitted bills for more than 73% of the hard cost incurred for restoration of the project. The Commission is of the view that the same is a sufficient sample size to analyse the claims made by the Petitioner and on examination of the said documents, the Commission finds the costs claimed by the Petitioner to be in line with the submissions made by it. Moreover, the Petitioner had also submitted the breakup of the total cost claimed for Tanga SHP (including IEDC) as appearing in its CA certificate which appears to be satisfactory, and the Commission, therefore, has placed reliance on the costs as per CA certificate submitted by the Petitioner for determination of tariff for the additional capital cost incurred by the Petitioner for restoration of the Tanga SHP.

3.2.21 Accordingly, the Commission considers and allows Rs. 2025.84 Lakh as hard cost of Tanga SHP as on 20.02.2023, i.e. the date of completion of restoration works of Tanga SHP in line with the amount claimed by the Petitioner and CA Certificate provided by it in support of its claims.

3.2.22 Further, w.r.t. to Motighat SHP the Petitioner submitted the CA certificate dated 25.08.2023 regarding executed capital cost for restoring the project. As per the

aforesaid certificate the application of funds has been shown as below:

Table-3.7: Capital cost of Motighat SHP as per CA certificate

Sl. No.	Particulars	Amount (Rs. In Lakh)
1.	Building & Civil Works including Penstock	2297.67
2.	Miscellaneous Fixed Assets (including	42.63
3.	Project Management (Including front end fee)	478.75
5.	Engineering & Consultancy	33.67
6.	Sub-total	2852.72
7.	Interest During Construction	607.65
	Total Cost	3460.37

The actual cost claimed by the Petitioner for Motighat SHP and the cost as per auditor's certificate is varying on account of the amount claimed under the head Interest During Construction. The Petitioner in its submissions had explained that the IDC considered in the auditor's certificate includes interest amount accrued on the existing loans, related to the Petitioner's project, during the construction period till the date of restoration of generation. However, the Petitioner while claiming final executed cost for reconstruction of its Motighat SHP has considered only the fresh funding from IREDA for the purpose of reconstruction. The Commission, accordingly, considers the capital cost of Rs. 2852.72 Lakh (excluding IDC) as claimed by the Petitioner and also certified by its statutory auditors for analysing the claims made by the Petitioner. Further, the analysis of IDC claim of the Petitioner has been dealt separately in the later part of this Order.

3.2.23 The Commission analysed the submissions made by the Petitioner and observed that, the hard cost of restoring the Motighat SHP, as claimed by the Petitioner, is Rs. 2340.29 Lakh which includes Building & Civil Works (including penstock) and Miscellaneous Fixed Assets. The Commission analysed the bills of various works/items submitted by the Petitioner in support of the cost claimed for Motighat SHP and found that the Petitioner had submitted bills for more than 80% of the hard cost incurred for restoration of the project. The Commission is of the view that the same is a sufficient sample size to analyse the claims made by the Petitioner and on examination of the said documents, the Commission finds the costs claimed by the Petitioner to be in line with the submissions made by it. Moreover, the Petitioner had also submitted the breakup of the total cost claimed for Motighat SHP (including IEDC) as appearing in

its CA certificate which appears to be satisfactory, and the Commission, therefore, has placed reliance on the costs as per CA certificate submitted by the Petitioner for determination of tariff for the additional capital cost incurred by the Petitioner for restoration of the Motighat SHP.

3.2.24 Accordingly, the Commission considers and allows Rs. 2340.29 Lakh as hard cost of Motighat SHP as on 30.09.2022, i.e. the date of completion of restoration works of Motighat SHP in line with the claims made by the Petitioner and CA Certificate provided by it in support of its claims.

3.2.25 The Petitioner submitted that in case of Tanga SHP an amount of Rs. 10 Crore has been written off from the head of Building & Civil Works in FY 2018-19 which pertains to the losses/damages incurred to various components of the project such as the head works, i.e. the link canal/approach channel/stilling basin, cross drainage works and civil works for HR pipeline, guide-wall near approach channel/stilling basin, HR pipeline flood protection works, powerhouse & switchyard protection works, HR tunnel works, tail-race/tail-pool, protection works.

The Petitioner submitted that it had maintained sufficient insurance cover for its Tanga SHP, and it had made a claim for estimated loss of around Rs. 32 Crore for Tanga SHP. The Petitioner submitted that the insurance company as per its norms had appointed a surveyor who had submitted its report directly to the insurance company regarding the assessment of damages. Moreover, as per its norms the insurer does not cover the cost of removal of external debris, even though the river had changed course and flood waters had deposited huge amounts of debris and boulders. Further, the insurance company settled the claim on the depreciated value as per its norms/policy terms. The Petitioner submitted that the insurance company settled the claim at Rs. 908.97 Lakh on 25.02.2020 for Tanga SHP.

3.2.26 Similarly, for Motighat SHP the Petitioner submitted that an amount of Rs. 10.50 Crore has been written off from the head of Building, Plant & Equipment and Transmission Line in FY 2018-19 which pertains to the losses/damages incurred to various components of the project such as the head works, i.e. the diversion weir, wing walls/guide walls, intake, feeder canal, gates and hoists, cross drainage works,

transmission line, tail-race/tail-pool, protection works etc.

The Petitioner submitted that it had maintained sufficient insurer cover for its Motighat SHP, and it had made a claim for estimated loss of around Rs. 39 Crore for Motighat SHP. The Petitioner submitted that the insurance company as per its norms had appointed a surveyor who had submitted its report directly to the insurance company regarding the assessment of damages. Moreover, as per its norms the insurer does not cover the cost of removal of external debris, even though the river had changed course and flood waters had deposited huge amounts of debris and boulders. Further, the insurance company settled the claim on the depreciated value as per its norms/policy terms. The Petitioner submitted that the insurance company settled the claim at Rs. 772.13 Lakh on 14.02.2020 for Motighat SHP.

3.2.27 The Commission has analysed all the submissions made by the Petitioner and is of the view that relevant details and documents have been provided by the Petitioner w.r.t. the insurance claims made by it. Further, w.r.t. to the Respondent's comment regarding the document pertaining to the inspection by the insurance agency, the Petitioner submitted that the insurance surveyor had submitted its report directly to the insurance company and the said report was not shared with the Petitioner.

The Commission analysed the insurance policy of Tanga SHP covering the period 23.03.2018 to 22.03.2019 and observed that the sum insured as per the aforesaid policy was Rs. 76.98 Crore and apart from that the Petitioner had taken additional cover for earthquake, STFI cover and debris removal.

Similarly, for Motighat SHP the insurance policy covering the period 09.05.2018 to 08.05.2019 was analysed and the Commission observed that the sum insured for Motighat SHP was Rs. 62.59 Crore and apart from that additional cover was taken for earthquake, STFI cover and debris removal.

The Commission is of the view that sufficient insurance cover was taken by the Petitioner for protecting its Tanga and Motighat SHP from any eventualities. Further, w.r.t. to additional cover for debris removal the relevant clause of both the policy states as follows:

"On costs and expenses necessarily incurred by the insured

a) In the removal of debris from the premises of the Insured;

b) dismantling or demolishing;

c) shoring up or popping;

of the portion of the property insured by (Items of) this policy destroyed or damaged by perils hereby insured against but not exceeding in the aggregate Rs. 13,360.00”

From a reading of the aforesaid clause, it appears that removal of debris or dismantling etc. of the portion/portions of the property insured by the respective policy is covered by the insurance policy and the removal of external debris and boulders, as also submitted by the Petitioner, are out of the purview of the policy.

3.2.28 Further, the Commission analysed the submissions made by the Petitioner and observed that for Tanga SHP, in the claim settlement intimation voucher from insurance company a sum of Rs. 909.66 Lakh was settled by the insurer subject to AML, agreed bank clause and deduction of reinstatement premium. Similarly, for Motighat SHP, the insurer settled the claim for Rs. 772.98 Lakh subject to AML, agreed bank clause and deduction of reinstatement premium. However, the Petitioner has claimed the insurance receipt for Tanga and Motighat SHP as 908.97 Lakh and Rs. 772.13 Lakh respectively. In this regard, the Petitioner submitted that the insurance company as per their norms and after applicable deductions/transaction costs, paid the Petitioner Rs. 908.97 Lakh and Rs. 772.13 Lakh respectively for Tanga and Motighat SHP as the full and final discharge of the claim.

3.2.29 The Commission has therefore considered the insurance receipts in line with claims made by the Petitioner and as appearing in its CA Certificate, and accordingly the insurance receipts of Rs. 908.97 Lakhs and Rs. 772.13 Lakhs has been reduced from the capital cost of Tanga and Motighat SHP respectively for arriving at the levelized tariff for restoration of respective SHPs

3.2.30 The Commission further analysed the insurance claim form of the Petitioner for Tanga and Motighat SHPs and observed that the Petitioner therein had mentioned that Loss of profit claim for respective SHP shall be made separately. In this regard, the information was sought from the Petitioner, in response to which it submitted that it

had received a total sum of Rs. 1348.96 Lakhs on account of loss of Profit insurance policy due to the flood loss suffered by its Tanga and Motighat SHPs in July, 2018, which are both located on the Seraghat river and are upstream and downstream of each other. The Petitioner submitted that the Petitioner has incurred losses much greater than the loss of profit insurance received since its Tanga and Motighat SHPs were severely damaged in the floods in July, 2018 and power generation operations were restored in August, 2021 and April, 2021 respectively and as such the plant was not operating for more than three years. The Petitioner submitted that during this period when the plant was not in a running condition the Petitioner has incurred interest expenses and repaid the dues of its loans which is a recurring additional interest burden to the Petitioner.

The Petitioner further submitted that the loss of profit received should only be adjusted against the additional capital expenses incurred for project restoration if the Respondent had paid the Petitioner as per applicable tariff regulations/orders of the Commission with respect to respective SHP, during the period when the plants were shut down because of the damage suffered due to natural calamity. The Petitioner submitted that it has not been paid by the Respondent during the period when the plants were not operational and it will be unjustified to share the insurance amount received on account of loss of profit when in fact the Petitioner has incurred much higher expenses in interest and loan repayments. The Petitioner also made reference to the Order of the Commission in case of Vanala SHP wherein loss of profit insurance payment was not adjusted against the cost of restoration works/additional capex incurred by M/s Him Urja in the restoration of its Vanala SHP (15MW) which was damaged in floods in June/July, 2013. The Petitioner submitted that it has incurred total expenses of Rs. 3446 Lakh (i.e. Rs. 2314 Lakh in Tanga SHP and Rs. 1132 Lakh in Motighat SHP) on the interest and repayment of loan in the period when the Tanga and Motighat SHPs were not in running condition from July, 2018 to August, 2021/ April, 2021 respectively, and against these expenses, a total amount of Rs. 1348 Lakh has been received from the insurance company towards loss of profit, and as such the Petitioner has suffered huge financial losses which must also be compensated

3.2.31 The Commission analysed the submissions made by the Petitioner and is of the view

that the adjustment of amount received from insurance company against the loss of profit policy could have been adjusted from the capital expenditure incurred for restoration of respective SHPs, only if the Respondent had paid the Petitioner as per the applicable levelized tariff for the period when no power was provided by the Petitioner due to shut down of the plants because of natural calamity that occurred in July 2018, however, the Petitioner has not received any revenue from the Respondent during the aforesaid period. Accordingly, the Commission has not adjusted the insurance amount received on account of loss of profit from the capital expenditure incurred for restoration of Tanga and Motighat SHP respectively.

3.2.32 With regard to the schedule completion period of the works, the DPR for restoration of Tanga SHP states as follows:

*“Since the projects have suffered extensive damage and requires complete reconstruction of all the headworks. The headworks includes the link canal from the upstream project, i.e. Motighat SHP’s tail race channel, the approach channel, stilling basin, head regulator, the guide walls etc. Large section of the HR pipeline is also completely damaged alongwith the protection wall. Since tail water of Motighat SHP is drawn into the intake of Tanga SHP headworks, it is imperative that upstream project be completed before power generation of Tanga SHP can be restored. **It is therefore estimated that it will take at least 24 months to restore power generation.** Since approach road is breached in several places it must first be repaired after the monsoon season before taking up other restoration works. It may be noted that project is situated in remote region of Uttarakhand Himalayan region which experiences heavy monsoon which will disrupt civil works. Most of the damaged structures are situated in/adjacent to the river bed. These works cannot be taken up during the monsoon season. The water flows in the Seraghat river rise sharply during the monsoon season and sudden flash floods can occur. This project site also has frequent landslides and even the main state highway experiences road connectivity problems during monsoon season. **Since the monsoon season will disrupt civil works it is estimated that power generation can be resumed by about December, 2020 after Motighat SHP is recommissioned.** To minimize losses it is necessary to complete critical works including the head works, water conductor, tail race etc. first so resume power generation. Remaining works can be completed subsequently.*

Similarly, the DPR for restoration of Motighat SHP states as follows:

*“Since the project has suffered extensive damage and requires complete reconstruction of the headworks, feeder channel etc. **it is estimated that it will take about 24 months to restore power generation.** Since approach road is breached in several places it must first be repaired after the monsoon season before taking up other restoration works. It may be noted that project is situated in remote region of Uttarakhand Himalayan region which experiences heavy monsoon which will disrupt civil works. The weir, intake and other headworks are located in the river bed and these works cannot be taken up during the monsoon season. The water flows in the Seraghat river rise sharply during the monsoon season and sudden flash floods can occur. This project site also has frequent landslides and even the main state highway experiences road connectivity problems during monsoon season. **With proper planning critical works such as headworks, feeder channel, desilting tank, tail race must be to be completed first so that power generation can be resumed by December, 2020.** All remaining works can be completed subsequently.*

3.2.33 As per the DPR of both Tanga and Motighat SHP the estimated time for restoration of power generation was about 24 months and the power generation was projected to be resumed by December, 2020. However, the power generation for Tanga SHP was resumed in the month of August, 2021 and for Motighat SHP in the month of April, 2021. In this regard the Commission analysed the reasons submitted by the Petitioner for delay in completion of the works of both Tanga and Motighat SHP and one of the major reasons for setback as submitted by the Petitioner was the advent of COVID-19 pandemic in the year 2020 and its subsequent waves thereafter.

The Commission analysed the submissions made by the Petitioner, and is of the view that it is an undisputed fact that the advent of COVID-19 alongwith its subsequent waves had affected all kinds of activities, including the construction works across the nation, and the construction activity for restoration of the Petitioner's projects is no exception to that. The Commission, accordingly, accepts the delay in restoration of generation from the Petitioner's Tanga and Motighat SHP vis-à-vis as projected in the DPR in line with the reasons/justifications submitted by the Petitioner as discussed in preceding paras.

3.2.34 The Petitioner has claimed IEDC of Rs. 512.94 Lakh till February, 2023 for Tanga SHP and Rs. 512.43 Lakh till September, 2022 for Motighat SHP as summarized in the Table below:

Table- 3.8 : Summary of IEDC claimed by the Petitioner for Tanga SHP

S. No.	Particulars	Amount
1.	Professional & Consultancy	0.59
2.	Employee Benefit Expenses	392.79
3.	Rent & Maintenance expenses	16.85
4.	Traveling & Conveyance & Transport charges	30.98
5.	Rent Machinery	22.93
6.	Telephone & Internet expenses	0.52
7.	Printing & Stationery	1.58
8.	General & Miscellaneous Expenses	5.41
9.	Bank Charges	0.60
10.	Consumables & Spares	0.77
11.	Insurance	7.43
12.	Postage & Courier	0.14
13.	Rates & Taxes	0.65
14.	Fee-IREDA	3.54
15.	Engineering & Consultancy	28.16
	Total	512.94

Table-3.9: Summary of IEDC claimed by the Petitioner for Motighat SHP

S. No.	Particulars	Amount
1.	Professional & Consultancy	17.05
2.	Employee Benefit Expenses	341.88
3.	Rent & Maintenance expenses	21.60
4.	Traveling & Conveyance & Transport charges	41.17
5.	Rent Machinery	8.01
6.	Telephone & Internet expenses	3.41
7.	Printing & Stationery	1.28
8.	General & Miscellaneous Expenses	11.21
9.	Consumables & Spares	8.75
10.	Insurance	10.31
11.	Postage & Courier	0.43
12.	Rates & Taxes	0.43
13.	Fee-IREDA	13.24
14.	Engineering & Consultancy	33.67
	Total	512.43

3.2.35 The Petitioner submitted that it had strived to keep the IEDC expenses low in the initial period after the flood calamity of July, 2018 commensurate with the restoration works being undertaken. In the initial stages of restoration, the Petitioner had to complete the planning activity, restore the internal roads, excavate the debris,

dismantle the damaged civil works, and mobilize the contractors to the site and, thereafter, as the pace of restoration gathered momentum and in order to complete the restoration as early as possible the Petitioner had to increase the number of labour and supervisory staff at the project site. Furthermore, this was also the period when the restoration works were disrupted by the Covid-19 pandemic lockdowns wherein the Petitioner had to stop and restart works as per government guidelines.

3.2.36 The Petitioner submitted that in case of Tanga SHP, IEDC incurred till the date of restoration of generation, i.e. August, 2021 was Rs. 407.29 lakh and from April, 2022 to February, 2023 the IEDC of Rs. 105.64 Lakh was incurred, totalling to an amount of Rs. 512.94 Lakh. The Petitioner submitted that IEDC of Rs. 105.64 Lakh incurred during the period from April, 2022 to Feb, 2023, majorly comprised of expenses incurred towards wages and other related expenses for labour, supervisory staff, engineers etc. amounting to Rs. 85.40 Lakh, which were required for the completion of the restoration works of the project during the afore mentioned period. The Petitioner submitted that apart from the above, expenses have been incurred towards travel, transportation & other general expenses, renting machinery, engineering & consultancy etc. which was required towards the restoration works of the project. The Petitioner further clarified that the above mentioned IEDC are capital expenses required for the restoration of the project after suffering damage from the force majeure event/July, 2018 floods and it is separate and in addition to the normal O&M expenses that were incurred after power generation operations were resumed in August, 2021. The Petitioner submitted that the project reconstruction/restoration activity necessarily requires separate labour and staff along with various other expenses, and accordingly, all the expenses incurred towards labour, staff and overheads form part of IEDC and therefore capitalised. The Petitioner further submitted that though restoration activities were ongoing for Tanga SHP after August 2021 also, however, for the period September 2021 to March 2022, no IEDC has been booked as no bills were received from contractors and also due to the disruption caused by the second wave and third wave of Covid pandemic and the intervening monsoon season.

3.2.37 The Petitioner submitted that in case of Motighat SHP, IEDC incurred till the date of

restoration of generation, i.e. April, 2021 was Rs. 429.70 lakh and from April, 2022 to September, 2022 the IEDC of Rs. 82.72 Lakh was incurred, totalling to an amount of Rs. 512.43 Lakh. The Petitioner submitted that IEDC of Rs. 82.72 Lakh incurred during the period from April, 2022 to September, 2022, majorly comprised of expenses incurred towards wages and other related expenses for labour, supervisory staff, engineers etc. amounting to Rs. 55.92 Lakh, which were required for the completion of the restoration works of the project during the afore mentioned period. The Petitioner submitted that apart from the above expenses have been incurred towards renting of machinery, site rents and maintenance expenses, travel & transportation expenses, consumables, spares & general expenses, engineering & consultancy etc. which was required towards the restoration works of the project. The Petitioner further clarified that the above mentioned IEDC are capital expenses required for the restoration of the project after suffering damage from the force majeure event/July, 2018 floods and it is separate and in addition to the normal O&M expenses that were incurred after power generation operations were resumed in April, 2021. The Petitioner submitted that the project reconstruction/restoration activity necessarily requires separate labour and staff along with various other expenses, and accordingly, all the expenses incurred towards labour, staff and overheads forms part of IEDC and, therefore, capitalised. The Petitioner further submitted that though restoration activities were ongoing for Motighat SHP after April, 2021 also, however, for the period May, 2021 to March, 2022, no IEDC has been booked as no bills were received from contractors and also due to the disruption caused by the second wave and third wave of Covid pandemic and the intervening monsoon season.

- 3.2.38 The Commission considered the submissions of the Petitioner that magnitude of damages to the projects were quite extensive and site of the projects were very remote even approach to the project site was washed away, hence, expenses for hiring of services of experts for monitoring and management of reconstruction works was necessary and essential. Further, the major portion of IEDC comprises of employee related expenses which the Commission understands that the Petitioner is liable to incur to upkeep the works of the plant running. Accordingly, the Commission, relying on the costs as per CA Certificate submitted by the Petitioner has allowed the IEDC

claimed by the Petitioner for restoration of Tanga and Motighat SHP.

- 3.2.39 The Petitioner submitted that due to the devastation suffered by its Tanga and Motighat SHP and to restore the projects as early as possible, it approached its lending agency M/s IREDA for financial assistance to restore the projects. M/s IREDA, in view of the extensive damage suffered by the project and in order to enable the Petitioner to restore the project, IREDA sanctioned term loan of Rs. 1095 Lakhs and Rs. 599.99 Lakhs in March, 2019 respectively for Tanga and Motighat SHP. The Petitioner further submitted that M/s IREDA also sanctioned additional loan of Rs. 1100 Lakhs in March, 2021 towards restoration of the damaged Tanga and Motighat SHP, of which Rs. 662.71 Lakh was charged to the Tanga project loan account and Rs. 437.29 Lakh was charged to the Motighat SHP loan account.
- 3.2.40 The Petitioner initially claimed IDC of Rs. 1168.10 Lakhs for Tanga SHP from April, 2019 to August, 2021, i.e. till the date of restoration of generation. Similarly, the Petitioner initially claimed IDC of Rs. 607.65 Lakhs for Motighat SHP from April, 2019 to April, 2021, i.e. till the date of restoration of generation. However, the Petitioner, subsequent to the query raised, through a separate submission revised its claim for IDC for both Tanga SHP and Motighat SHP and claimed the revised amount of IDC as Rs. 514.12 Lakh for the period July, 2018 to February, 2023 for Tanga SHP, and Rs. 329.54 Lakh for the period July, 2018 to September, 2022 for Motighat SHP, after excluding the interest accrued on the existing loans of the respective SHP's from the commencement of construction activities till the date of commencement of generation.
- 3.2.41 The Petitioner submitted that after Tanga SHP was damaged in floods on July, 2018, IREDA had sanctioned the 1714-FI2 loan and GECL Loan in order to enable the Petitioner to restore the project. The Petitioner submitted that it has incurred total interest expense of Rs. 514.12 Lakh on the above two loans during the period from July, 2018 to February, 2023. The Petitioner further submitted that interest due on the original loans for the quarters ending 30.09.2018, 31.12.2018 and 31.03.2019 was funded by the first disbursement of 1714-FI2 loan in March, 2019, and this also included interest of Rs. 8.33 Lakh on the 1714-FI2 disbursed for the above mentioned period. The Petitioner, accordingly, claimed IDC of Rs. 237.05 Lakh for the period from July, 2018 till August, 2021, IDC of Rs. 110.29 Lakh for the period from

September, 2021 to March, 2022, and IDC of Rs. 166.79 Lakh for the period from April, 2022 to February, 2023 amounting to a total IDC of Rs. 514.12 Lakh with respect to Tanga SHP.

3.2.42 Similarly for Motighat SHP the Petitioner submitted that after Motighat SHP was damaged in the floods on July, 2018, IREDA had sanctioned the 1715-FI2 loan, bridge loan 1715-3 and GECL Loan in order to enable the Petitioner to restore the project. The Petitioner submitted that it has incurred total interest expense of Rs. 329.54 Lakh on the above three loans during the period from July, 2018 to September, 2022. The Petitioner further submitted that interest due on the original loans for the quarters ending 30.09.2018, 31.12.2018 and 31.03.2019 was funded by the first disbursement of 1715-FI2 loan in March, 2019, and this also included interest of Rs. 4.53 Lakh on the 1715-FI2 disbursed for the above mentioned period. The Petitioner, accordingly, claimed IDC of Rs. 176.95 Lakh for the period from July, 2018 till April, 2021, IDC of 98.99 Lakh for the period from May, 2021 to March, 2022, and IDC of Rs. 53.60 Lakh for the period from April, 2022 to September, 2022 amounting to a total IDC of Rs. 329.54 Lakh.

3.2.43 The Commission in order to analyse the claims made by the Petitioner examined the loan documents submitted by the Petitioner for both Tanga and Motighat SHP. The Commission observed that the Petitioner while claiming the IDC for both the projects had claimed the interest for the period from July, 2018 to March, 2019 under the FITL loan account of respective project amounting to Rs. 8.33 Lakh for Tanga SHP and Rs. 4.54 Lakh for Motighat SHP, however, the Petitioner's lending agency sanctioned the FITL loan for both Tanga & Motighat SHP in March, 2019. The Petitioner during the discussions explained that the said interest amount represents the interest on the accrued interest of existing loans of respective SHPs on account of the inability of the Petitioner to fulfil its debt obligation due to occurrence of natural calamity and ongoing reconstruction works.

In this regard, the Commission is of the view that the aforesaid interest of Rs. 8.33 Lakh for Tanga SHP and Rs. 4.54 Lakh for Motighat SHP pertaining to the period July, 2018 to March, 2019 cannot be allowed to the Petitioner company as the same is related to existing debt obligation of the respective projects and cannot be said to be

directly attributable to the reconstruction works of respective SHP. Therefore, the same has not been considered by the Commission while allowing the IDC of Tanga SHP and Motighat SHP for the works related to reconstruction of the respective projects.

- 3.2.44 Accordingly, the Commission, analysed the submissions made by the Petitioner w.r.t. the IDC of Tanga SHP and observed that the Petitioner's lending agency IREDA had sanctioned two loans, i.e. 1714-FITL2 and 1714 GECL for the purpose of reconstruction of Tanga SHP post the natural calamity of July, 2018. The loan 1714-FITL2 was sanctioned vide IREDA sanction letter dated 29.03.2019 to fund the existing interest dues of the Petitioner from the quarter 30.09.2018 to quarter ending December, 2020 and the loan 1714 GECL was sanctioned vide IREDA sanction letter dated 19.03.2021 for the purpose of meeting the operational liabilities. The Commission, as discussed above, has considered the interest accruing in the loan account 1714-FITL2 for the period April, 2019 to February, 2023, i.e. till the date of completion of reconstruction works of the Tanga SHP as the said loan was basically to defer the existing interest liabilities of the Petitioner in order to meet its fund requirement for reconstruction of the project. Similarly, the Commission has considered the interest on loan account 1714 GECL for the period April, 2021 to February, 2023 as the said loan was to meet the operational liabilities of the project under reconstruction.

The Commission has worked out the IDC for the Petitioner's Tanga SHP in three parts, i.e. IDC incurred till the date of restoration of generation, i.e. August, 2021, IDC incurred post the date of restoration, i.e. September, 2021 and till March, 2022, and IDC incurred from April, 2022 till final completion of works, i.e. February, 2023.

The Petitioner claimed that it had incurred IDC of Rs. 237.05 Lakh till the date of restoration of generation, i.e. August, 2021 on its Tanga SHP including Rs. 8.33 Lakh for the period July, 2018 to March, 2019. The Commission, as discussed above, is not allowing Rs 8.33 Lakh claimed by the Petitioner as the same relates to the interest on interest obligation of the existing loans of Tanga SHP prior to the sanction of FITL2 loan account by the Petitioner's lending agency, i.e. IREDA. The Commission, accordingly, allows IDC of Rs. 228.72 Lakh (Rs. 237.05 Lakh – Rs. 8.33 Lakh) for Tanga SHP for the period April, 2019 to August, 2021 which includes interest during the

construction period till the date of restoration of generation for both FITL2 loan and GECL loan of Tanga SHP.

Further, the Petitioner has claimed IDC of Rs. 110.29 Lakh for the period from September, 2021 to March, 2022, and IDC of Rs. 166.79 Lakh for the period from April, 2022 to February, 2023, i.e. till the date of final completion of works related to the reconstruction of Tanga SHP. The Commission analysed the submissions made by the Petitioner and is of the view that the FITL2 loan sanctioned for Petitioner's Tanga SHP cannot be attributed to works done post the date of restoration of generation because the said loan basically comprised of deferment of interest liability of existing loans till December, 2020 and the said loan ought to have been utilised till restoration of generation and no additional amount was funded thereafter for the reconstruction purpose under the said loan. Therefore, interest on aforesaid FITL2 loan post August, 2021 is not allowed by the Commission as part of capital cost of restoration in the form of IDC. Further, the GECL loan was sanctioned by IREDA in March, 2021 of which Rs. 662.71 Lakh was apportioned to Tanga SHP. As discussed above, the Hard Cost and IEDC incurred by the Petitioner during the period from September, 2021 to February, 2023 for Tanga SHP totals to Rs. 1046.34 Lakh and considering 70% debt requirement for the same the Petitioner would require around 732.44 Lakh for funding the same. Accordingly, it can safely be assumed that proceeds of GECL have been mainly utilized for the purpose of reconstruction activities post the date of restoration of generation. The Commission, therefore, has allowed the interest cost on GECL loan from September, 2021 to February, 2023 amounting to Rs. 44.61 Lakh for the period from September, 2021 to March, 2022, and Rs. 63.18 Lakh for the period from April, 2022 to February, 2023 which totals to Rs. 107.79 Lakh against the Petitioner's claim of Rs. 277.08 Lakh for the same period.

3.2.45 Similarly, the Commission, analysed the submissions made by the Petitioner w.r.t. IDC of Motighat SHP and observed that the Petitioner's lending agency IREDA had sanctioned three loans, i.e. 1715-FITL2, 1715 GECL and 1715-3 for the purpose of reconstruction of Motighat SHP post the natural calamity of July, 2018. The loan 1715-FITL2 was sanctioned vide IREDA sanction letter dated 29.03.2019 to fund the existing interest dues of the Petitioner from the quarter 30.09.2018 to quarter ending December,

2020, the loan 1715 GECL was sanctioned vide IREDA sanction letter dated 19.03.2021 for the purpose of meeting the operational liabilities, and the loan 1715-3 was sanctioned vide IREDA sanction letter dated 08.01.2020 as an interim bridge loan against insurance claim to M/s HHPL for mobilization of project site for restoration of Tanga SHP and Motighat SHP. The Commission observed that the entire interest related to loan account 1715-3 has been claimed by the Petitioner in its Motighat SHP, however, the loan was sanctioned for both Motighat SHP and Tanga SHP. In this regard, the Petitioner during the discussions informed that the proceeds of said loan were primarily used for reconstruction activities related to Motighat SHP and for that reason the entire interest related to the same has been considered under Motighat SHP. The Petitioner further submitted that loan account 1715-3 was of interim nature and served as a bridge loan until the insurance company settled the material damage claim so that the Petitioner could continue with the project restoration activities, and the bridge loan amount of Rs. 700 Lakh was disbursed by IREDA on 29.01.2020 and the same was returned by the Petitioner to IREDA after receipt of insurance payment towards the material damage claim. The Commission, as discussed above, has considered the interest accruing in the loan account 1715-FITL2 for the period April, 2019 to September, 2022, i.e. till the date of completion of reconstruction works of the Tanga SHP as the said loan was basically to defer the existing interest liabilities of the Petitioner in order to meet its fund requirement for reconstruction of the project. Similarly, the Commission has considered the interest on loan account 1715 GECL for the period April, 2021 to September, 2022 as the said loan was to meet the operational liabilities of the project under reconstruction. Further, the Commission has considered the entire interest on loan account 1715-3 for the period January, 2020 to March, 2021 in Motighat SHP as the said loan served the interim financial requirement of the Petitioner till the time of receipt of insurance claim amount.

The Commission has worked out the IDC for the Petitioner's Motighat SHP in three parts, i.e. IDC incurred till the date of restoration of generation, i.e. April, 2021, IDC incurred post the date of restoration, i.e. May, 2021 and till March, 2022, and IDC incurred from April, 2022 till final completion of works, i.e. September, 2022.

The Petitioner claimed that it had incurred IDC of Rs. 176.95 Lakh till the date

of restoration of generation, i.e. April, 2021 on its Motighat SHP including Rs. 4.54 Lakh for the period July, 2018 to March, 2019. The Commission, as discussed above, is not allowing Rs. 4.54 Lakh claimed by the Petitioner as the same relates to the interest on interest obligation of the existing loans of Motighat SHP prior to the sanction of FITL2 loan account by the Petitioner's lending agency, i.e. IREDA. The Commission, accordingly, allows IDC of Rs. 172.41 Lakh (Rs. 176.95 Lakh – Rs. 4.54 Lakh) for Motighat SHP for the period April, 2019 to April, 2021 which includes interest during the construction period till the date of restoration of generation for FITL2 loan, 1715-3 loan and GECL loan of Motighat SHP.

Further, the Petitioner has claimed IDC of Rs. 98.99 Lakh for the period from May, 2021 to March, 2022, and IDC of Rs. 53.60 Lakh for the period from April, 2022 to September, 2022, i.e. till the date of final completion of works related to the reconstruction of Motighat SHP for FITL2 loan and GECL loan of Motighat SHP. The Commission analysed the submissions made by the Petitioner and is of the view that the FITL2 loan sanctioned for Petitioner's Motighat SHP cannot be attributed to works done post the date of restoration of generation because the said loan basically comprised of deferment of interest liability of exiting loans till December, 2020 and the said loan ought to have been utilised till restoration of generation and no additional amount was funded thereafter for the reconstruction purpose under the said loan. Therefore, interest on aforesaid FITL2 loan post April, 2021 is not allowed by the Commission as part of capital cost of restoration in the form of IDC. Further, the GECL loan was sanctioned by IREDA in March, 2021 of which Rs. 437.29 Lakh was apportioned to Motighat SHP. As discussed above, the Hard Cost and IEDC incurred by the Petitioner during the period from May, 2021 to September, 2022 for Motighat SHP totals to Rs. 962.73 Lakh and considering 70% debt requirement for the same the Petitioner would require around 673.91 Lakh for funding the same. Accordingly, it can safely be assumed that proceeds of GECL have been mainly utilized for the purpose of reconstruction activities post the date of restoration of generation. The Commission, therefore, has allowed the interest cost on GECL loan from May, 2021 to September, 2022 amounting to Rs. 46.31 Lakh for the period from May, 2021 to March, 2022, and Rs. 24.49 Lakh for the period from April, 2022 to September, 2022 which totals to Rs.

70.80 Lakh against the Petitioner's claim of Rs. 152.59 Lakh for the same period.

In view of the above, the total IDC allowed for Tanga SHP and Motighat SHP is summarized in the table below:

Table- 3.10: IDC allowed for Tanga SHP and Motighat SHP for reconstruction works

Tanga SHP		Motighat SHP	
Period	Amount (Rs. Lakhs)	Period	Amount (Rs. Lakhs)
April, 2019 to August, 2021	228.72	April, 2019 to April, 2021	172.41
September, 2021 to March, 2022	44.61	May, 2021 to March, 2022	46.31
April, 2022 to February, 2023	63.18	April, 2022 to September, 2022	24.49
Total	336.51	Total	243.21

3.2.46 The Commission further analysed the audited financial statements submitted by the Petitioner for the construction period and observed that miscellaneous income of Rs. 243.77 Lakh was appearing in the books of Tanga SHP and Rs. 121.99 Lakh in the books of Motighat SHP during the period FY 2018-19 to FY 2021-22. The Petitioner in this regard submitted that out of the total Rs. 243.77 Lakh as appearing under the head Other Income in Tanga SHP, Rs. 207.52 Lakh relates to arrear income against the power bills and balance 36.25 Lakh relates to interest income. Similarly, for Motighat SHP, the Petitioner submitted that out of Rs. 121.99 Lakh as appearing under the head Other Income, Rs. 80.16 Lakh relates to arrear income against power bills and Rs. 41.83 lakh relate to interest income. Further, the Petitioner informed that interest income earned in FY 2022-23 w.r.t. Tanga SHP is Rs. 10.46 Lakh and for Motighat SHP is 14.51 Lakh. The Commission is of the view that it would not be prudent to consider the entire interest income of FY 2022-23 for the respective SHPs as the works related to the Tanga SHP were completed in February, 2023 and works related Motighat SHP were completed in September, 2022. The Commission has, therefore, considered Rs. 9.59 Lakh ($10.46 \times 11/12$) for Tanga SHP and Rs. 7.26 Lakh ($14.51 \times 6/12$) for Motighat SHP as other income for FY 2022-23. The Commission has, accordingly, reduced Rs. 45.84 Lakh and Rs. 49.09 Lakh from the capital cost of Tanga and Motighat SHP respectively for the purpose of determination of tariff related to reconstruction works.

3.2.47 Based on the above discussion, the additional capital expenditure claimed and

approved is as follows:

**Table-3.11: Additional Capital Expenditure Claimed and Approved for Tanga SHP
(Rs. in Lakhs)**

S. No.	Particulars	Claimed	Approved
1.	From July, 2018 to August, 2021		
	- Hard Cost	1085.14	1085.14
	- IEDC	407.29	407.29
	- IDC	237.05	228.72
	- Less: Insurance Proceeds	908.97	908.97
	- Less: Miscellaneous Income	0.00	36.25
	Net Capital Cost as on August, 2021 (A)	820.52	775.93
2.	From September, 2021 to March, 2022		
	- Hard Cost	431.40	431.40
	- IEDC	0.00	0.00
	- IDC	110.29	44.61
	Net Additions from Sep, 2021 to Mar, 2022 (B)	541.69	476.01
3.	From April 2022 to February, 2023		
	- Hard Cost	509.29	509.29
	- IEDC	105.64	105.64
	- IDC	166.79	63.18
	- Less: Miscellaneous Income	0.00	9.59
	Net Additions from Apr, 2022 to Feb, 2023 (B)	781.72	668.53
4.	Total Additional Capital Expenditure (A+B+C)	2143.93	1920.47

Table-3.12: Additional Capital Expenditure Claimed and Approved for Motighat SHP (Rs. in Lakhs)

S. No.	Particulars	Claimed	Approved
1.	From July, 2018 to April, 2021		
	- Hard Cost	1460.29	1460.29
	- IEDC	429.70	429.70
	- IDC	176.95	172.41
	- Less: Insurance Proceeds	772.13	772.13
	- Less: Miscellaneous Income	0.00	40.73
	Net Capital Cost as on April, 2021 (A)	1294.81	1249.54
2.	From May, 2021 to March, 2022		
	- Hard Cost	304.90	304.90
	- IEDC	0.00	0.00
	- IDC	98.99	46.31
	- Less: Miscellaneous Income	0.00	1.10
	Net Additions from May, 2021 to Mar, 2022 (B)	403.88	350.11
3.	From April 2022 to September, 2022		
	- Hard Cost	575.11	575.11

	- IEDC	82.72	82.72
	- IDC	53.60	24.49
	- Less: Miscellaneous Income	0.00	7.26
	Net Additions from Apr, 2022 to Sep, 2022 (B)	711.44	675.07
4.	Total Additional Capital Expenditure (A+B+C)	2410.13	2274.72

3.3 Debt-Equity Ratio

3.3.1 The Commission noted the debt-equity ratio as provided in the CA certificate is 52:48 for Tanga SHP. Similarly for Motighat debt-equity ratio as provided in the CA certificate is 32:68. In this regard, Regulation 15(2)(b) of RE Regulations, 2018 specifies as under:

“(b) For project specific tariff, the following provisions shall apply:

If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

”

In accordance with the Regulations, equity is capped to 30% of the amount of additional capitalisation admitted by the Commission and equity in excess of 30% is treated as normative loan for Tanga SHP and Motighat SHP.

Adjustment in existing tariff

3.3.2 Since the Petitioner had adopted project specific levellised tariff for Tanga SHP in accordance with the RE Regulations, 2013 as amended from time to time, hence, additional capitalisation for restoration work and protection works, as approved above, shall be adjusted by way of providing additional tariff for recovery of AFC on account of such additional capitalisation till the balance life of the project in accordance with the Regulations. Further, the AFC in this regard would include depreciation, RoE, interest on loan and corresponding interest on working capital based on the norms specified in RE Regulations, 2018. Determination of these components is discussed in subsequent paras.

- 3.3.3 Further, the Petitioner had adopted generic levelised tariff for Motighat SHP in accordance with the RE Regulations, 2010 as amended from time to time, hence, additional capitalisation for reconstruction works as approved above shall be adjusted by way of providing additional tariff for recovery of AFC on account of such additional capitalisation till the balance life of the project in accordance with the Regulations. The AFC in this regard would include depreciation, RoE, interest on loan and corresponding interest on working capital based on the norms specified in RE Regulations, 2018. Determination of these components is discussed in subsequent paras.
- 3.3.4 Based on the approved additional capitalisation and tariff structure specified under RE Tariff Regulations, 2018 determination of the components is discussed in subsequent paras respectively for Tanga and Motighat SHPs.
- 3.3.5 Further, while allowing tariff under various cost components for Tanga and Motighat SHP, the Commission has considered the pro-rata impact of financial year wise additional cost post the date of restoration of generation and till the date of final completion of the reconstruction works of the Tanga and Motighat SHP respectively.

3.4 Depreciation

- 3.4.1 For the purpose of computation of depreciation, Regulation 17(1) of RE Regulations, 2018 specifies as under:

- “For the purpose of tariff, depreciation shall be computed in the following manner, namely:*
- (a) The value base for the purpose of depreciation shall be the capital cost of the project as admitted by the Commission in accordance with sub-regulation (2) below.*
 - (b) 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.*
 - (c) The depreciation rate for the first 13 years of the Tariff Period shall be 5.38% per annum and the remaining depreciation shall be spread over the remaining useful life of the project from 14th year onwards considering salvage value of the project as 10% of the project cost.*
 - (d) Depreciation shall be chargeable from the first year of commercial operation.”*

The Petitioner has claimed that the generation from Tanga SHP was restored in the month of August, 2021 and the works related to reconstruction were finally completed in the month of February, 2023. The Petitioner has claimed the balance useful life to Tanga SHP as 30 years.

Similarly, for Motighat SHP, the Petitioner has claimed that the generation was restored in the month of April, 2021 and the works related to reconstruction were finally completed in the month of September, 2022. The Petitioner has claimed balance useful life of Motighat SHP as 25 years.

Accordingly, depreciation has been computed on additional capitalisation by applying the rate of 5.38% for the first 13 years from the date of additional capitalisation to the project after taking into account the sanction of loan by the Petitioner's lending agency for respective projects on capitalization till the date of restoration of generation and capitalization post the date of restoration of generation till the date of final completion of works. The remaining depreciation has been spread over the remaining useful life of the respective projects, i.e. Tanga and Motighat SHP. In line with the above referred Regulations, depreciation has been computed on the approved additional capitalisation. Depreciation as approved by the Commission has been shown in enclosed **Appendix-I**.

3.5 Return on Equity (RoE)

3.5.1 With regard to computation of RoE, Regulation 18 of RE Regulation, 2018 specifies as under:

" (1) The value base for the equity shall be as determined under Regulation 15(2).

(2) The Return on Equity (Post tax) shall be 16% for the Renewable energy source based power projects.

(a) Pre-tax RoE shall be 20% per annum for the first 10 years considering Average MAT rate as on 1st April, 2018.

(b) Pre-tax RoE shall be 22% per annum from 11th year onwards considering Average Corporate Tax as on 1st April, 2018."

The Commission has considered equity of 30% of the amount of additional capitalisation as approved above respectively for Tanga and Motighat SHP. Accordingly, return on equity on the equity deployed towards the additional

capital cost has been computed in accordance with the Regulations. The approved RoE have been shown in enclosed Appendix-I.

3.6 Interest on Loan

3.6.1 Computation of Interest on Loan has been worked out in accordance with Regulation 16 of RE Regulations, 2018 which is reproduced hereunder:

“16. Interest on loan capital

(1) The loans arrived at in the manner indicated in Regulation 15(2) shall be considered as gross normative loan for calculation of interest on loan. The normative loan outstanding as on 1st April of every year shall be worked out by deducting the cumulative repayment up to 31st March of previous year from the gross normative loan.

(2) For the purpose of computation of generic tariff, the normative interest rate shall be considered as average State Bank of India (SBI) Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months from the date of Petition plus 300 basis points.

For the purpose of computation of project specific tariff, interest rate shall be considered as lower of the actual interest payable to the financial institutions or the average State Bank of India (SBI) Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months plus 300 basis points.

(3) Notwithstanding any moratorium period availed by the generating company, the repayment of loan is being considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

While calculating project specific tariff, notwithstanding any moratorium period availed by the generating company, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed or actual repayment made, whichever is higher.

(4) Normative period of loan repayment shall be taken as 13 years.”

The Commission has worked out the normative rate of interest in accordance with Regulation 16(2) of RE Regulations 2018, which works out to 10.10% for both

Tanga and Motighat SHP. As per the Petitioner's submission, the weighted average rate of interest levied by its lender, i.e. M/s IREDA is 11.45% for both Tanga and Motighat SHP. Since the normative rate of interest is lower than the actual rate payable to the financial institution, therefore, the Commission has allowed interest on loan from the date of commissioning of the respective project at the rate of 10.10% per annum in accordance with the above provisions of the Regulations. Further, loan repayment has been considered as annual depreciation allowed for both Tanga and Motighat SHP. The approved interest on loan for Tanga and Motighat SHP is shown in the enclosed Appendix-I.

3.7 Interest on Working Capital

3.7.1 Regulation 19 of RE Regulations, 2018 specifies as under:

"19. Interest on Working Capital

(1) The Working Capital requirement in respect of wind energy projects, small hydro power, Solar PV, Canal Bank and Canal Top Solar PV, Solar thermal and grid interactive roof top and small solar PV power projects shall be computed in accordance with the following:

(a) Operation & Maintenance expenses for one month;

(b) Receivables equivalent to 2 (Two) months of energy charges for sale of electricity calculated on the normative CUF;

Provided for determination of project specific tariff sale of electricity will be calculated based on the CUF envisaged in the approved DPR or the normative CUF specified for the relevant technology under Chapter 5, whichever is higher.

(c) Maintenance spare @ 15% of operation and maintenance expenses ...

3) Interest on Working Capital shall be at interest rate equivalent to the average State Bank of India (SBI) Marginal Cost of Funds based Lending Rate (MCLR) (one year tenor) prevalent during the last available six months from the date of Petition plus 350 basis points."

In accordance with the above-mentioned Regulations, components of working capital for each financial year during the tariff period have been computed

for both Tanga and Motighat SHP. Further, as specified in the above-mentioned Regulations, the rate of interest as computed based on the aforesaid regulation works out to 10.60%, which has been considered for working out the interest on working capital of both Tanga and Motighat SHP. Interest on Working Capital (IWC) as approved by the Commission is given in enclosed Appendix-I.

3.8 Saleable Energy

- 3.8.1 The Commission vide Order dated 10.04.2014 has calculated the saleable energy for Tanga SHP and the same has been considered for the purpose of computation of increase in annual tariff due to additional capitalisation.
- 3.8.2 Further, the Commission vide Order dated 12.01.2016 while adjusting the tariff of Motighat SHP due to damages caused to the plant by the unprecedented natural calamity/ floods that occurred in Uttarakhand State in June, 2013 had determined the saleable energy for the Motighat SHP and the has been considered for the purpose of computation of increase in annual tariff due to additional capitalisation.

3.9 Discounting Factor

- 3.9.1 Regulation 14 of the RE Regulations, 2018 specifies as under:

“ ...

(6) For the purpose of levelised tariff computation, the discount factor equivalent to weighted average cost of capital shall be considered. For determination of weighted average cost of capital, the pre-tax return on equity would be adjusted for tax at the applicable rates. ...”

Based on the above referred Regulation, the Discounting Factor for Tanga SHP for 30 years and for Motighat SHP for 25 years has been worked out for each year based on the post tax weighted average cost of capital (WACC) of each year during the life of the respective project and the same has been shown in enclosed Appendix-I.

- 3.9.2 Based on the above discussion, additional tariff to be charged for additional capitalisation of Tanga and Motighat SHP has been detailed in the enclosed **Appendix-I.**

3.9.3 The levelized tariff based on the applicable norms in accordance with the capital expenditure claimed by the Petitioner for reconstruction of Tanga SHP works out to Rs. 1.49/kWh, against which the Commission approves the levelized tariff of Rs. 1.34/kWh over and above the approved levelized tariff for Tanga SHP and the same shall be applicable from 14.08.2021, i.e. the date of restoration of generation, however, arrears due, if any, shall be paid by the Respondent in three equal instalments commencing from October, 2023.

3.9.4 Further, the levelized tariff based on the applicable norms in accordance with the capital expenditure claimed by the Petitioner for reconstruction of Motighat SHP works out to Rs. 2.23/kWh, against which the Commission approves the levelized tariff of Rs. 2.11/kWh over and above the approved applicable generic tariff adopted in respect of its Motighat SHP till the actual CUF is less than or equal to annual CUF of 40%. Since the Fixed cost on account of additional capitalisation is recovered at the CUF of 40%, the Petitioner would only be entitled to a rate of Rs. 1.50/kWh in accordance with Regulations 26(1)(A)(b) of RE Regulations, 2018 and no additional tariff shall be payable for generation beyond annual CUF of 40% but upto annual CUF of 45%. However, for generation beyond annual CUF of 45%, the incentive shall be equal to the levelised rate of Rs. 1.87 per unit determined at a CUF of 45% after necessary adjustments provided in Regulations 26(1)(A)(b) of RE Regulations, 2018. The additional tariff shall be applicable from 19.04.2021, i.e. the date of restoration of generation, however, arrears due, if any, shall be paid by the Respondent in three equal instalments commencing from October, 2023.

3.10 Ordered accordingly.

(M.K. Jain)
Member (Technical)

(D.P. Gairola)
Member (Law)/Chairman (I/c)

Approved AFC on account of additional capitalisation in respect of Tanga SHP, 5 MW

Year	Depreciation	RoE	Interest	IWC	Total AFC	Discounting Factor	Saleable Energy	Annual Tariff
	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh		MU	Rs./kWh
1	54.60	60.84	68.89	3.31	187.64	1.00	20.34	0.92
2	85.41	95.17	102.27	5.08	287.93	0.90	20.34	1.42
3	103.41	115.23	116.36	6.02	341.02	0.81	20.34	1.68
4	103.41	115.23	105.92	5.83	330.39	0.73	20.34	1.62
5	103.41	115.23	95.48	5.65	319.76	0.65	20.34	1.57
6	103.41	126.75	85.04	5.67	320.87	0.59	20.34	1.58
7	103.41	126.75	74.60	5.48	310.24	0.53	20.34	1.53
8	103.41	126.75	64.16	5.29	299.61	0.48	20.34	1.47
9	103.41	126.75	53.72	5.10	288.99	0.43	20.34	1.42
10	103.41	126.75	43.28	4.92	278.36	0.38	20.34	1.37
11	103.41	126.75	32.84	4.73	267.73	0.34	18.30	1.46
12	103.41	126.75	22.40	4.54	257.10	0.30	18.30	1.40
13	103.41	126.75	11.96	4.35	246.48	0.26	18.30	1.35
14	66.81	126.75	3.37	3.54	200.48	0.23	18.30	1.10
15	24.01	126.75	0.00	2.71	153.47	0.20	18.30	0.84
16	24.01	126.75	0.00	2.71	153.47	0.17	18.30	0.84
17	24.01	126.75	0.00	2.71	153.47	0.15	18.30	0.84
18	24.01	126.75	0.00	2.71	153.47	0.13	18.30	0.84
19	24.01	126.75	0.00	2.71	153.47	0.11	18.30	0.84
20	24.01	126.75	0.00	2.71	153.47	0.10	18.30	0.84
21	24.01	126.75	0.00	2.71	153.47	0.08	18.30	0.84
22	24.01	126.75	0.00	2.71	153.47	0.07	18.30	0.84
23	24.01	126.75	0.00	2.71	153.47	0.06	18.30	0.84
24	24.01	126.75	0.00	2.71	153.47	0.05	18.30	0.84
25	24.01	126.75	0.00	2.71	153.47	0.05	18.30	0.84
26	24.01	126.75	0.00	2.71	153.47	0.04	18.30	0.84
27	24.01	126.75	0.00	2.71	153.47	0.03	18.30	0.84
28	24.01	126.75	0.00	2.71	153.47	0.03	18.30	0.84
29	24.01	126.75	0.00	2.71	153.47	0.03	18.30	0.84
30	24.01	126.75	0.00	2.71	153.47	0.02	18.30	0.84
Levelized Tariff								1.34

Approved AFC on account of additional capitalisation in respect of Motighat SHP, 5 MW

Year	Depreciation	RoE	Interest	IWC	Total AFC	Discounting Factor	Saleable Energy	Annual Tariff
	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh	Rs. Lakh		MU	Rs./kWh
1	76.64	94.24	96.80	4.81	272.49	1.00	17.34	1.57
2	104.22	128.14	123.89	6.40	362.66	0.91	17.34	2.09
3	122.38	150.47	136.31	7.35	416.51	0.83	17.34	2.40
4	122.38	150.47	123.95	7.13	403.94	0.75	17.34	2.33
5	122.38	150.47	111.60	6.91	391.36	0.68	17.34	2.26
6	122.38	150.47	99.25	6.69	378.79	0.61	14.22	2.66
7	122.38	150.47	86.89	6.47	366.21	0.55	14.22	2.58
8	122.38	150.47	74.54	6.24	353.63	0.50	14.22	2.49
9	122.38	150.47	62.18	6.02	341.06	0.45	14.22	2.40
10	122.38	150.47	49.83	5.80	328.48	0.40	14.22	2.31
11	122.38	150.47	37.47	5.58	315.90	0.35	14.22	2.22
12	122.38	150.47	25.12	5.36	303.33	0.31	14.22	2.13
13	122.38	150.47	12.77	5.13	290.75	0.27	14.22	2.04
14	65.26	150.47	3.29	3.94	222.96	0.24	14.22	1.57
15	41.36	150.47	0.00	3.45	195.28	0.20	14.22	1.37
16	41.36	150.47	0.00	3.45	195.28	0.18	14.22	1.37
17	41.36	150.47	0.00	3.45	195.28	0.15	14.22	1.37
18	41.36	150.47	0.00	3.45	195.28	0.13	14.22	1.37
19	41.36	150.47	0.00	3.45	195.28	0.11	14.22	1.37
20	41.36	150.47	0.00	3.45	195.28	0.10	14.22	1.37
21	41.36	150.47	0.00	3.45	195.28	0.09	14.22	1.37
22	41.36	150.47	0.00	3.45	195.28	0.07	14.22	1.37
23	41.36	150.47	0.00	3.45	195.28	0.06	14.22	1.37
24	41.36	150.47	0.00	3.45	195.28	0.06	14.22	1.37
25	41.36	150.47	0.00	3.45	195.28	0.05	14.22	1.37
Levelized Tariff								2.11