

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 20 of 2015

In the matter of:

Petition seeking adjustment of tariff for Motighat Small Hydro Power Project (5 MW) unit of M/s Himalaya Hydro Pvt. Ltd. as per Section 61 and 62 of the Electricity Act, 2003 read with Regulation 15(9) of 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.

In the matter of:

Himalaya Hydro Power (P) Ltd.

... Petitioner

And

In the matter of:

Uttarakhand Power Corporation Ltd.

... Respondent

CORAM

Shri Subhash Kumar Chairman

Shri C.S. Sharma Member

Shri K.P. Singh Member

Date of Hearing: September 22, 2015

Date of Order: January 12, 2016

The Order relates to the Petition dated 27.08.2015 filed by M/s Himalaya Hydro Power Limited (hereinafter referred to as "Petitioner" or "M/s HHPL") seeking adjustment of tariff for Motighat Small Hydro Power Project (5 MW) of Himalaya Hydro Pvt. Ltd., due to additional capital expenditure incurred from 1st April, 2014 to 30th May, 2015, which was necessitated for rectifying catastrophic damages caused to the plant by the unprecedented natural calamity/

floods that occurred in Uttarakhand State in June, 2013.

1. Background and Submissions

- 1.1 A Petition was filed under section 61 and 62 of Electricity Act 2003 read with regulation 15(9) of UERC (Tariff and Other Terms for Supply of Electricity from Non-conventional and Renewable Energy Sources) Regulations, 2010 (“RE Regulations, 2010”) as amended from time to time.
- 1.2 The Petitioner had commissioned its Motighat SHP (5 MW) on the Seraghad River, near Seraghat Village, Munsiyari Block, District Pithoragarh, Uttarakhand in May, 2011.
- 1.3 The Petitioner submitted that the project was commissioned with great difficulty in May, 2011 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. The region also experiences heavy rainfall in the monsoon with extremely cold winters, and with such weather conditions there are less than 6 months (per annum) of working season available at the project site.
- 1.4 The Petitioner had entered into a PPA dated 05.02.2003 with UPCL for sale of power from the Motighat SHP (3 MW). Subsequently, the parties executed a Supplementary PPA on 07.12.2009, whereby the Petitioner agreed to sell and the distribution licensee agreed to purchase entire energy generated by Motighat SHP (with an enhanced project capacity of 5 MW) at the levelised rate specified under UERC (Tariff and Other Terms for Supply of Electricity from Non-conventional and Renewable Energy Sources), 2008, as amended from time to time. The said regulations were subsequently replaced and 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. Further on 12th June, 2015 another Supplementary PPA was executed between UPCL and the Petitioner as per the directions of Commission’s order dated 10th February, 2015.
- 1.5 The aforesaid UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010, were subsequently repealed and replaced by the UERC (Tariff and Other Terms for Supply of

Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2013 w.e.f. 15.04.2013.

- 1.6 However, subsequently by an amendment dated 15.10.2013, UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2013 were amended and Regulation 3 in Chapter 1, Chapter 4 and 5 of the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010 were reinstated and the Petitioner's project continued to be governed by the tariff principles specified in the 2010 Regulations.
- 1.7 The Petitioner submitted that from 14th June, 2013 and continuing for several days thereafter, Uttarakhand State experienced heavy rainfall, cloud bursts and flashfloods, which caused catastrophic damages to the life and property across the State.
- 1.8 The Petitioner submitted that Motighat SHP was supplying power to UPCL until the night of 15th June, 2013. The power plant was being operated normally and was generating power till about 12.00 AM on 16th June, 2013. The plant was shut down as a precautionary measure due to the heavy rainfall as also rising water levels in the river and barrage gates were lifted. However, during the early hours of 16th June, 2013, the water levels in the river were observed to be rising suddenly due to flash floods, and shortly thereafter the staff at intake and weir site were forced to move to a safer place due to the life threatening nature of the flood waters.
- 1.9 It was submitted that the Petitioner's staff could venture out to the weir site only two days later with great difficulty due to the heavy floods, landslides and damage to the approach roads. The Petitioner submitted that the damage assessment report and the DPR for project reconstruction revealed the full extent and nature of the destruction. There was no power supply at Motighat SHP switch yard from June, 2013 to May, 2014, until UPCL was able to restore/repair its 33 kV transmission line from Darathi 33/11 kV Substation. UPCL's 33 kV transmission line from Darathi Substation to Seraghat village was restored only in May, 2014, i.e. about 11 months after the flood, as UPCL had cited lack of approach roads for the delay, which further demonstrated the extent of damage suffered in the region in the calamity.

- 1.10 The Petitioner submitted that it had engaged M/s Engineering Consultant Group to provide an initial damage assessment report and also a Detailed Project Report & cost estimate for reconstructing the Power Project. It was only after the initial road connectivity was restored in February, 2014, the Petitioner came into a position to bring in engineering and project management personnel at the site to begin planning of reconstruction activity.
- 1.11 The Petitioner submitted that it had faced several difficulties which were beyond its control during the reconstruction of the Motighat SHP. UPCL's grid power was not available at the Motighat project site after the floods till May, 2014, i.e. 11 months after the flood calamity. Even transporting diesel to the site was not possible until after the roads were restored and the Petitioner had no staff and engineers at the project site or its vicinity for several months, because they had to be evacuated after the flood calamity. The Petitioner submitted that since there were no skilled labours available at the project site given its remote location, the Petitioner contracted with labour contractors who were experienced in the construction of hydro power projects from Himachal Pradesh and Nepal at higher cost.
- 1.12 The Petitioner submitted that it was under the above mentioned extenuating circumstances that certain critical elements of reconstruction of the Motighat SHP were taken up on a priority basis so that at least partial power generation operations may be restored. Accordingly, trial runs of Unit-1 of the two 2.5 MW generating units were commenced on 6th November, 2014, and the same was intimated to the Commission. Unit-2's electro-mechanical systems had suffered damage and extensive repair/ replacement was needed and the original equipment manufacturer had to be engaged for this purpose. Furthermore, the Petitioner had to complete the reconstruction of the bulk of the remaining electro-mechanical, hydro-mechanical and civil works as per the DPR with the intention of completing them before the onset of the monsoon season of 2015 and as per availability of resources. These works were completed as per the Detailed Project Report prepared for the reconstruction of the Motighat and as needed for the overall safety of the plant and for restoring generation for full installed capacity of 5 MW (plus 10% overload).
- 1.13 The Petitioner also submitted that it had obtained and was maintaining an appropriate and adequate insurance cover for the project. Subsequent to the flash floods, the Petitioner

immediately intimated the insurance company of the losses. Thereafter, a claim was filed for Rs. 9.61 Crore in September, 2013 out of which the Petitioner received only Rs. 2.83 Crore as per the insurance norms in June, 2014.

- 1.14 The Petitioner also submitted that its engineering consultants finalized the DPR and designs with an estimated cost of Rs. 14.98 Crore only. Further, in an effort to at least restore partial power generation, the Petitioner had undertaken certain minimum critical works on a priority basis. Accordingly on November, 06, 2014 after completing the minimum necessary works, partial generation was restored by synchronizing Unit No. 1 of the two 2.5 MW generating units. Thereafter, the Petitioner started the bulk of the hydro-mechanical and civil construction works necessary for operating the plant's full 5 MW installed capacity and also all the other works necessary for the overall safety and future well being of the project as per the DPR. During this period, the Petitioner simultaneously completed the pending electro-mechanical works related to the second 2.5 MW generating unit as well.
- 1.15 The Petitioner submitted that additional capital expenditure on account of the damage incurred as a result of natural calamity is primarily due to increase in replacement cost and various new structures not previously envisaged, but necessary now for the overall safety and future well being of the plant, considering the altered conditions on the ground in the aftermath of the calamity. The Petitioner also submitted that it has availed the loan from Indian Renewable Energy Development Agency Ltd. (IREDA), New Delhi, a public sector enterprise, to construct Motighat SHP. The Petitioner submitted that it had earlier informed the Commission that the Motighat project was commissioned at higher than the normative capital expenditure, due to the extremely remote location of the plant and the hostile terrain and the difficult circumstances under which the project was executed. Due to this high capital cost and under recovery of its annual fixed charges, the Petitioner was already struggling to keep the project operational and meet its obligations to the financial institution.
- 1.16 The Petitioner submitted that as the full scale of the devastation suffered by Motighat SHP and the time/cost required to reconstruct the project became more apparent, IREDA and the Petitioner took steps to ensure that the project did not become a Non-Performing Asset

(NPA).

- 1.17 Further, the Petitioner also entered into an implementation agreement with the Govt. of Uttarakhand to develop another Small Hydro Project, namely the Tanga SHP (5MW). This project is also located on the Seraghad River and is downstream of the Motighat SHP. Tanga SHP was in an advanced stage of construction and was nearing commissioning when it also suffered extensive damage in the floods of June, 2013 in Uttarakhand State. IREDA is also the lending agency for the yet to be commissioned Tanga SHP. Since both Motighat SHP and Tanga SHP belong to the same company, i.e. the Petitioner herein, and as both projects are financed by IREDA, it became imperative that Motighat SHP did not become NPA, as that would automatically make the Tanga project's loan account with IREDA an NPA as per banking norms.
- 1.18 The Petitioner further submitted that if Motighat SHP's long-term financial viability was not restored, given the additional capital expenditure incurred in the project, then it would be almost impossible for the Petitioner to reconstruct and commission the Tanga SHP. This would have resulted in the loss of 10 MW of much needed renewable energy/hydro-power projects to the Uttarakhand State as well as the huge collateral social and infrastructure development, and direct and indirect employment for about 120 families supported by these projects in an extremely backward and underdeveloped part of the State.
- 1.19 The Petitioner submitted that IREDA sanctioned additional term loan to fund the interest during construction vide its letter dated 31.03.2014, whereby Rs. 337.42 Lakhs was sanctioned to fund the interest for the twelve month period from 01.04.2014 to 31.03.2015 when additional capital expenditure was being incurred. The Petitioner submitted that IREDA also sanctioned Rs. 233.41 Lakhs of funded interest for the period 15.06.2013 to 31.04.2014, which is not being claimed by the Petitioner as additional capital expenditure for the purpose of tariff adjustment. Accordingly, Petitioner submitted that it had incurred total Interest During Construction of Rs. 396.65 Lakhs which included IREDA's freshly sanctioned term loan of Rs. 337.42 Lakhs towards interest during construction from 01.04.2014 to 31.03.2015 and the additional interest of Rs. 59.23 Lakhs accrued during the period 01.04.2015 to 30.05.2015. The Petitioner submitted that Rs. 396.65 Lakhs of interest

accrued during construction is a part of the additional capital cost incurred and is a part of the project's annual fixed costs as it must be repaid to IREDA.

1.20 The Petitioner submitted that in view of the huge additional capital expenditure required to reconstruct the project after the calamity, IREDA had sanctioned additional term loan of Rs. 300 Lakh vide its letter dated 17th March, 2015 towards Motighat SHP's flood protection works and for completion of the project's reconstruction.

1.21 IREDA's total financial assistance for reconstruction of Motighat SHP after 01.04.2014, therefore, included Rs. 337.42 Lakh fresh term loan sanctioned towards interest during construction and the additional term loan of Rs. 300 Lakh for civil works. This total financial assistance/loans of Rs. 637.42 Lakh from IREDA, for the period after 01.04.2014, is a part of the total additional capital expenditure being incurred by the Petitioner to reconstruct the project after the damages due to natural calamity. The Petitioner submitted that the Commission may take into consideration the fact that these additional loans can only be repaid to IREDA from the project's future cash-flows and the tariff be kindly adjusted accordingly.

1.22 The Petitioner submitted that between 01.04.2014 and 30.05.2015, it had incurred total additional capital expenditure of Rs. 1654.55 Lakh (after adjusting for the insurance claim proceeds) to reconstruct Motighat SHP after the damage suffered in the natural calamity. The source of funds is as follows:

- Additional term loans of Rs. 337.42 Lakh sanctioned by IREDA to fund interest during construction from 01.04.2014 to 31.03.2015.
- Rs. 240 Lakh of loan disbursed by IREDA out of the total Rs. 300 Lakh sanctioned on 17.03.2015.
- The Petitioner's (promoter) contribution of Rs. 135 Lakh of fresh equity, internal accruals of Rs. 257.12 Lakh and inter-unit transfers of Rs. 223.57 Lakh. In view of the urgency to complete reconstruction and restart the generation of Motighat SHP, the Petitioner had utilised inter-unit transfers of Rs. 223.57 Lakh (from its Tanga SHP unit) including Rs. 72.02 Lakh worth electro-mechanical/turbine related equipment, which would otherwise have taken suppliers more than a year to manufacture,

supply and erect.

- 1.23 The Petitioner submitted that current payables to sundry creditors including various suppliers, contractors, vendors etc. are about Rs. 461.43 Lakh, which will be paid from the IREDA loan to be disbursed and additional promoter contribution and/or internal accruals.
- 1.24 Copy of the aforesaid petition was forwarded to the Respondent (UPCL) for submission of its reply on the same. The Respondent submitted its reply vide letter dated 21.09.2015 as discussed in subsequent paras. The Commission held a hearing on 22.09.2015 and admitted the Petition vide Order dated 22.09.2015. Vide the said Order, the Petitioner was asked to submit information regarding details of loan disbursement, cash flow, contract award documents and IDC computation etc. UPCL was also asked to submit its reply on the information submitted by Petitioner latest by 30.10.2015. UPCL vide its letter dated 30.10.2015 submitted that it had raised objection on the aforesaid petition filed by M/s HHPL, hence, necessary correction be incorporated in the Order dated 22.09.2015. UPCL also requested for extension of time for submission of its reply till 30.11.2015. The Commission vide letter dated 05.11.2015 allowed extension of time as requested by UPCL, however, UPCL was also asked to file a review petition if any correction was required in the aforesaid Order dated 22.09.2015. Regulation 54(1) of UERC (Conduct of Business) Regulations, 2015 provides that the Commission may on its own or on the application of any of the parties concerned, within 60 days of the making of any Order, review such order. However, since UPCL did not chose to file any review petition in respect of the said Order, the Commission continued with the proceedings in the matter.
- 1.25 The Commission also appointed a Consultant to examine the damages pertaining to civil structures of the project and also to carry out the prudence check of the expenditure incurred by the Petitioner in this regard. The Consultant submitted his report on 17.12.2015. The Commission has taken cognizance of the said report while finalizing the capital expenditure as discussed in subsequent paras.

2. Submissions made by the Respondent and the Petitioner and the Commission's views on the same

- 2.1 UPCL submitted that the Petition has been filed with insufficient data and lacks authentic

evidence with respect to the damage to the SHP. In this regard, the Petitioner submitted that in accordance with the regulations it had submitted all the necessary & authentic evidences such as detailed newspaper reports, photographs and loan sanction details by IREDA etc. in support of damages caused to its SHP in June, 2013.

The Commission has analysed all the submissions made by the Petitioner, and is of the view that details/reports/documents alongwith photographs clearly depicts the damages caused to the SHP of the Petitioner. Moreover, UPCL instead of making a general statement should have corroborated the same with documentary evidences. It has its field officers posted in the vicinity of the project site and they could be asked to visit the site and produce evidences in support of its claims. Hence, UPCL's comments in the matter cannot be conceded.

2.2 UPCL submitted that M/s HHPL's insurance claim of Rs. 9.61 Crore was not approved by the concerning insurance company and only Rs. 2.83 Crore has been received by the Petitioner as insurance claim. UPCL further submitted that insurance company must have carried out detailed investigation regarding the damages occurred in the SHP, therefore, the damage as assessed by the independent insurance agency would be the most relevant documents to justify the actual damage but the Petitioner had not filed the relevant document pertaining to the inspection by the insurance the amount of insurance given, the component on which the insurance amount was refused, the reason for refusing the amount as claimed by the Petitioner. Moreover, if the ground of refusing the insurance is due to the reasons attributable to generator, the Petitioner cannot take benefit of such amount hence the Petition in absence of relevant document cannot be admitted and considered. Also, the Petitioner needs to give a separate bifurcation of the totally damaged parts/components, partially damage parts and the parts and components which were unaffected, and the expenditure that would be incurred for reinstating the SHP.

The Petitioner submitted that the mere fact that the insurance company has paid Rs. 2.83 Crore to settle the claim does not mean that the same was the extent of damage to the plant, or that the amount was sufficient to reinstate and reconstruct the plant. The insurance company is neither competent nor is it its job to decide how the project would be reconstructed and revived after a major calamity, which in fact is the domain expertise

of trained engineering consultants and designers of hydro-electric projects, and construction experts. Insurance companies are only concerned with settlement of claims at minimal cost to themselves, using their own norms such as depreciated asset value etc., and they are not experts in determining how hydro power project can be reconstructed in the aftermath of a calamity. The Petitioner submitted that after the river had deposited huge quantities of boulders and muck for about 100 meters upstream and downstream of the weir, to a height of about 9 to 10 meters. This entire area had to be excavated and the muck carted away. The insurance company did not consider the cost of this muck removal and had similarly refused to consider the cost of removing the muck and silt inside the head-race pipeline and the penstock. Further, insurance company did not take the cost of new structure into account which has been constructed for overall safe & smooth operation of the SHP. The Petitioner denied that the insurance company has specified any grounds attributable to the Petitioner, for refusing any specific part of the insurance claim and the insurance company has made a one-time settlement based on its own norms and no fault has been attributed to the Petitioner.

The Commission observes that prima-facie the Petitioner was required to have a suitable coverage in respect of its aforesaid SHP which the Petitioner had already obtained as evident from the copy of the standard fire & special perils policy dated 09.05.2013. Further, insurance companies usually settle claims of the damages at minimum possible amount in accordance with their own clauses/norms mentioned in the policies which by any measure cannot be equated to actual cost of damages and requisite cost for reconstruction of the assets. Further, IREDA, a financial institution has also recognized the claim of insurance received by the Petitioner and sanctioned additional loan for reconstruction of the damaged SHP. Hence, UPCL's argument in this regard is not being considered by the Commission.

Further, the Commission has carried out the examination and due prudence check of the expenditure incurred by the Petitioner in reconstruction of the project before allowing the same. Moreover, it should also be realized that during the unprecedented natural calamity during 2013, the insurance companies were reluctant to settle the claims. Infact the assets of not only UPCL but also of PTCUL and UJVN Ltd. suffered heavy losses

whose reconstruction were subsidized by GoU or else the same were allowed as pass through as additional capitalization in the tariffs.

- 2.3 The Respondent submitted that the generator has not provided the comparative details accompanied with the chart regarding the structures and components which were originally present in the SHP and those which the generator is at present proposing to construct. 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 as necessarily such benefit is to be passed on to the beneficiaries. The Petitioner denied the above comment of respondent and submitted that Detailed Project Report, the photographs and various other annexures provides all details with respect to the structures and components constructed as needed for generating power and for safe operations of the plant going forward for the rest of its life, taking into view the altered ground conditions prevailing at the project site after the natural calamity.

The Commission has taken cognizance of all the submissions & documents submitted by the Petitioner and is of the view that damages caused by natural calamity of the magnitude that occurred in June, 2013 had enough power to result in change in natural course of flow of river and other geographical conditions compelling the change in original design in civil &/or water conductor system of the SHPs. Accordingly, change in original design can be incorporated specific to site condition for safe operation of the SHP. Hence, the Commission accepts & accedes to the reply submitted by the Petitioner in the matter.

- 2.4 The Respondent submitted that the provisions under which the Petition has been filed are not applicable in the present case. UPCL submitted that the Petitioner has not disclosed as to how the Petitioner had considered the Petition as within limitation as per Limitation Act, 1963 as the delay in filing the Petition was very relevant. The Petitioner denied the same and submitted that the petition has been duly filed under regulation 15(9) of UERC Tariff RE Regulations, 2010 as amended from time to time and the petition has been filed within the provisions of Limitation Act, 1963 and is not time barred. The Petitioner had also kept the Respondent, the State Commission and the State Government informed of the destruction and the reconstruction of Motighat SHP after the calamity.

The Commission observes that the provisions of the RE Regulations, 2010 as amended from time to time, allows the Petitioner filing of such petition seeking approval of additional capitalization caused by damages in generating stations due to natural calamity like flood. Further, no time frame has been specified for seeking adjustment of additional capitalization due to such calamities. Moreover, the Hon'ble Supreme Court in the case of T.N. Generation and Distribution Corporation Ltd. Vs. PPN Power Generating Company Pvt. Ltd., Civil Appeal No. 4126 of 2013 has taken a clear view that the Limitation Act, 1963 is not applicable to the proceedings under the Electricity Act. The relevant extract of the Judgment is reproduced hereunder:

"29.On the issue of limitation, it is submitted that neither the Limitation Act nor the principle of delay and laches would apply to the present case. It is submitted by Mr. Salve and Mr. Bhushan that the provision of Limitation Act, 1963 would not be applicable to the proceedings before the State Commission. The Electricity Act, 2003 being a complete code, which is self contained and comprehensive, the provision of Limitation Act, 1963 would not apply. Mr. Salve and Mr. Bhushan relied on the Consolidated Engineering Enterprises Vs. Principal Secretary, Irrigation Department & Ors.[13] In support of this submission, the Limitation Act would be inapplicable to Tribunals and quasi-judicial authorities. Replying to the submission of Mr. Nariman that in arbitration proceedings, the appellant would be entitled to the benefit of Limitation Act, 1963, Mr. Salve and Mr. Bhushan submit that in view of the specific provisions contained in Section 2(4) of the Arbitration and Conciliation Act, 1996, Section 43 of the Arbitration Act would not be applicable. In any event, the matter is squarely covered by the judgment in Gujarat Urja (supra). Mr. Salve and Mr. Bhushan reiterated that the issue of limitation does not even arise in the present dispute due to the FIFO adjustment effected by the respondent.

48..... According to learned senior counsel, the plea is an afterthought and has been rightly rejected by the State Commission as well as the APTEL. We also have no hesitation in rejecting the submission of Mr. Nariman on this issue. In any event, the Limitation Act is inapplicable to proceeding before the State Commission."

- 2.5 In response to UPCL's submission regarding wrong details of the damages incurred and segregation of costs the Petitioner denied the same. M/S HHPL submitted that it has given details of the damages incurred by various components of the Motighat SHP as well as Detailed Project Report which describes the damages suffered by each component and

the cost for doing so. Also the Petitioner stated that duly verified certificates have been submitted in support of the expenditure incurred.

The documents/reports submitted by the Petitioner have been examined that clearly depicts the components wise damages occurred to SHP, hence, UPCL's submission is not being considered by the Commission.

- 2.6 UPCL raised objection on inclusion of the amount of interest which M/s HHPL had to pay on the initial loan taken for establishing the project. In this regard the Petitioner clarified that the interest cost incurred during the period of reconstruction, from 01.04.2014 to 30.05.2015 is interest during construction and has been added to the project cost. Further the Petitioner submitted that the interest was funded by the Petitioner's lending agency by way of additional loan sanctioned by IREDA and disbursed in two installments, i.e. on 30.09.2014 and 31.03.2015, without which the project would have become NPA and it would have been impossible for the Petitioner to either reconstruct or revive the Project. The interest during construction period has been funded by the additional loan from IREDA and capitalized and is a part of Annual Fixed Charge that must necessarily be recovered through the tariff adjustment, otherwise the project would become financially unviable and become an NPA.

The Commission while accepting UPCL's argument in the matter clarifies that any unpaid liability for servicing of main loan cannot be included in the expenditure as additional capitalization, however, interest on the loan for the reconstruction of the project shall be treated as IDC and will be a part of additional capitalization.

3. Analysis & admissibility of the additional capitalization and decision on the same.

3.1 Powers of the Commission and Grounds for Review

- 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 Regulation 15(9) of the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) (Second Amendment) Regulations, 2014 are reproduced hereunder:

“Provided that any additional expenditure of capital nature which becomes necessary 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 capitalization after 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 in first proviso above."

Regulation 15(9) of the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) (Second Amendment) Regulations, 2014 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 mid of June, 2013 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 Motighat SHP is situated at a hilly terrain of Uttarakhand State where natural calamity occurred in June, 2013 which led to extensive damages to several structures. Hence, loss/damage to the said SHP cannot be ruled out. Further, documents, extract of newspaper and photographs corroborate the Petitioner's averment in the matter.
- 3.1.4 The Petitioner submitted that it had started reconstruction work related to SHP after detailed assessment of damages and preparation of DPR. The Petitioner submitted the breakup of expenditures for reconstruction of project after natural calamity in two phases: a) expenditure incurred upto March, 2014 and b) expenditure incurred from April, 2014 to May, 2015 as follows:

Table-1: Break-up of expenditures incurred on additional capitalisation (Rs. Lakh)

Particulars	Expenditure upto March, 2014	Expenditure from April, 2014 to May, 2015
Building & Civil Works inc Penstock	10.4	1312.33
Misc Fixed Asset (including T/m line)	2.34	24.86
E&M(including installation & Taxes)	-	137.59
Proj Mgmt (including front end fee)	48.5	66.96
Funded IDC	233.41	396.65
Less: Insurance Claim Received	-	283.85
	294.65	1654.54

3.1.5 To analyze submissions of the Petitioner, the Commission, as discussed above, appointed a Consultant to ascertain the hard cost of additional capitalisation for reconstruction of the SHP, primarily related to civil & electro-mechanical works as they comprised the major portion of the claims made by the Petitioner, more specifically post March, 2014 since the second amendment to RE Regulations, 2010 allowing additional capitalization are applicable w.e.f. 01.04.2014. Hence, admissibility of the expenses have been considered for the works & expenses carried out after 01.04.2014, and the expenses upto 31.03.2014 have not been discussed since the same are not permitted to be adjusted in tariffs in accordance with the Regulations. Therefore, as discussed above, prudence check of additional capitalization have been carried out for the period after 01.04.2014. The Consultant after carrying out the scrutiny and prudence check of the expenses incurred by the Petitioner in this regard, submitted the break-up of overall expenses vide its report dated 17.12.2015 as follows:

Table-2: Details of Amount recommended by the Consultant

Sl. No.	Category	Bills/Vouchers submitted by Petitioner (Rs. Lakh)	Amount recommended (Rs. Lakh)
1	Civil Works	1313.60	1312.80
2	E & M Works	148.23	138.16
3	Transmission Lines	24.87	24.87
	Grand Total	1486.70	1475.84

3.1.6 From the submissions made by the Petitioner, it has been observed that the works carried out by the Petitioner not only included restoration of the existing assets of the Petitioner's SHP but also for constructing additional protection works which were necessary to mitigate the catastrophe of such nature in future. The Commission further observed that there is variation in details of expenditures towards hard cost,

i.e. civil works, E&M & T/m line submitted by the Petitioner in its Petition as well as in the bills submitted which were examined by the Consultant. Details of expenditures submitted alongwith the Petition reconciled with the audited accounts & CA certificate as mentioned at Table-1 is Rs. 1474.78 Lakh. However, details alongwith the bills/vouchers submitted by the Petitioner during scrutiny/analysis by the Consultant as mentioned at Table-2 is Rs. 1486.70 Lakh, however, the consultant has recommended Rs. 1475.84 Lakh towards the hard cost of additional capitalisation. The Petitioner it appears has incurred more expenses than that capitalized by it in its accounts. The Commission, hence, is of the view that lower of the two, i.e. expenses claimed by the Petitioner and that recommended by the consultant should be allowed, as the expenditure allowed cannot exceed that capitalized in the Petitioner's accounts.

- 3.1.7 In addition, the Petitioner had claimed a IDC of Rs. 396.65 Lakh which was included as part of the total expenditure on additional capitalization. IDC as claimed by the Petitioner includes interest on unpaid liabilities on servicing of the main loan of the SHP commissioned in 2011. The Petitioner submitted that IREDA, the lending agency, refinanced the unpaid interest in respect of its main loan. Moreover, interests which also remain unpaid during the period of reconstruction works of the SHP was also refinanced by the IREDA. Hence, total interest according to the Petitioner during the reconstruction work was around Rs. 757.14 Lakh which works to about Rs. 396 Lakhs for the period from April, 2014 to May, 2015.

The Commission is of the view that any unpaid liabilities (interest for the main loan) pending as on 01.04.2014 cannot be considered for the purpose of determination of IDC in respect of additional capitalization for reconstruction of SHP.

- 3.1.8 The Commission observed that equity infusion including internal resources in the work was about Rs. 1077 Lakh whereas total loan of Rs. 577 Lakh has been sanctioned by IREDA for reconstruction work of SHP as depicted in CA certificate submitted by the Petitioner. For the purpose of computation of IDC the Commission has considered the loan amount of Rs. 337.42 Lakh for the period from April, 2014 to May, 2014 and Rs. 240 Lakh from mid of March, 2015 to May, 2015. Accordingly,

allowable IDC for the aforesaid period works out to Rs. 57.37 Lakh based on the average rate of interest for the relevant period against the Petitioner claim of Rs. 396.65 Lakh.

- 3.1.9 Expenditure incurred in respect of project management and front end fee has been claimed as Rs. 66.96 Lakh for the period 01.04.2014 to 31.05.2015 against a DPR cost of Rs. 75 Lakh. M/s HHPL submitted the following details of the said expenditure:

S. No	Description	Rupees (Lakh)
1	Salaries of Project Managers & Engineers	39.68
2	Staff Boarding & Lodging Expense at project	10.91
3	Travel Expenses	9.82
4	Office Rents/Expense, Communication Expense & others	3.85
5	IREDA Front End Fee	2.70
Total		66.96

The Commission while considering the submissions of the Petitioner that since magnitude of damages was quite extensive and site of the project was 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. Accordingly, the Commission has allowed the same. Hence, the additional capitalisation approved by the Commission is as follows:

Table-3: Additional Capitalisation approved by the Commission (Rs. Lakh)

Particulars	DPR Cost	Amount Claimed	Amount recommended by the Consultant	Amount approved
Building & Civil Works inc Penstock	1206.38	1312.33	1312.81	1312.33
Misc Fixed Asset(Inc T/m line)	24.85	24.86	24.87	24.86
E&M(Inc installation & Taxes)	120.5	137.59	138.16	137.59
Proj Mgmt (inc front end fee)	75.00	66.96	-	66.96
Funded IDC	0.00	396.65	-	57.37
Less: Insurance Claim Received		283.85	-	283.85
Total	1426.73	1654.54	1475.84	1315.26

- 3.1.10 The Commission noted that the debt-equity ratio as provided in CA certificate is 35:65. Regulation 16(2)(b) of RE Regulations, 2010 specifies as under:

“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.

Provided further that subsidy available from MNRE, to the extent specified under Regulation 25, shall be considered to have been utilized towards pre-payment of debt leaving balance loan and 30% equity to be considered for determination of tariff.

Provided further that it shall be assumed that the original repayments shall not be affected by this prepayment."

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.

3.2 Adjustment in existing tariff

3.2.1 Since the Petitioner had adopted generic levelised tariff 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, 2010. Determination of these components is discussed in subsequent paras.

3.2.2 **Depreciation:** For the purpose of computation of depreciation, Regulation 18(1) of RE Regulations, 2010 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.*
- (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) Depreciation per annum shall be based on "Differential Depreciation Approach" over loan tenure and period beyond loan tenure over useful life computed on "Straight Line Method. For generic tariff the depreciation rate for the first 10 years of the Tariff Period shall be 7%*

per annum and the remaining depreciation shall be spread over the remaining useful life of the project from 11th year onwards.

- (d) Depreciation shall be chargeable from the first year of commercial operation.*
- (e) Provided that in case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."*

The Petitioner submitted that the project was commissioned in May, 2011, hence, the remaining useful life of the project is 31 years. Accordingly, depreciation has been computed on additional capitalisation by applying the rate of 7% for the first 10 years from the CoD of the project and the remaining depreciation has been spread over the remaining useful life of the project, i.e. for remaining 21 years.

In accordance with the above referred Regulations, depreciation has been computed on the approved additional capitalisation. Depreciation as claimed by the Petitioner & approved by the Commission have been shown in enclosed **Appendix-I**.

3.2.3 **Return on Equity (RoE)**

With regard to computation of RoE, Regulation 19 of the RE Regulation, 2010 specifies as under:

- "(1) The value base for the equity shall be as determined under Regulation 16(2).*
- (2) The Return on Equity shall be:*
 - (a) Pre-tax 19% per annum for the first 10 years.*
 - (b) Pre-tax 24% per annum 11th year onwards."*

The Petitioner has computed the RoE in accordance with the above regulation. The Commission has considered equity of 30% on the amount of additional capitalisation as approved above. Accordingly, return on equity on the equity deployed towards the additional capital cost has been computed in accordance with the Regulations. The approved RoE vis-à-vis claimed by the Petitioner have been shown in enclosed **Appendix-I**.

3.2.4 **Interest on Loan**

Computation of interest on loan has been worked out in accordance with Regulation 17 of RE Regulations, 2010 which is reproduced hereunder:

“17. Interest on loan capital

(1) The loans arrived at in the manner indicated in Regulation 16(2) shall be considered as gross normative loan for calculation for interest on loan. The normative loan outstanding as on April 1st of every year shall be worked out by deducting the cumulative repayment up to March 31st of previous year from the gross normative loan.

(2) For the purpose of computation of tariff, the normative interest rate shall be considered as average prime lending rate (PLR) (rounded off to 25 basis points) of State Bank of India (SBI) prevalent during the previous five years immediately preceding the control period plus 150 basis points, which works out to be 13.25%.

(3) 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.

(4) Normative period of loan repayment shall be taken as 10 years.”

Accordingly, the Commission has worked out the interest on loan including interest on normative loan at the rate of 13.25%. The approved interest amount vis-à-vis interest claimed by the Petitioner have been shown in enclosed **Appendix-I**.

3.2.5 Interest on Working Capital

Regulation 20 of the RE Regulations, 2010 specifies as under:

20. Interest on Working Capital

(1) The Working Capital requirement in respect of wind energy projects, small hydro power, Solar PV and Solar thermal 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;

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

.....

3) Interest on Working Capital shall be at interest rate equivalent to average State Bank of India PLR (rounded off to 25 basis points) of State Bank of India (SBI) prevalent during the previous five years immediately preceding the control period plus 100 basis points, which works out to be 12.75%.

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

specified in above mentioned Regulation, the rate of interest has been considered as 12.75% p.a. instead of 13.50% as requested by the Petitioner for working out the interest on working capital. Interest on Working Capital (IWC) as approved by the Commission against the IWC claimed by the Petitioner is given in enclosed **Appendix-I**.

3.2.6 Saleable Energy

For the purpose of computation of annual tariff, saleable energy has been fixed based on the plant capacity and normative PLF specified in the RE Regulations, 2010 as amended from time to time. In this regard Regulation 27 of UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) (Second Amendment) Regulations, 2014 specifies as under:

“27. Applicability of Tariff

The tariff shall be allowed to be recovered in the following manner:

- (i) Till the actual CUF is less than or equal to annual CUF of 40%, tariffs would be payable at the levelised generic rates specified in this Amended Regulations arrived at based on the normative CUF of 40%.*
- (ii) For generation beyond annual CUF of 40%, following will apply:*
 - (a) For generation beyond annual CUF of 40% but upto annual CUF of 45%, tariff shall be Rs. 1.50/kWh.*
 - (b) For generation beyond annual CUF of 45%, incentive shall be equal to the levelised generic rates specified in the Principal Regulations at CUF of 45% reduced by Rs. 0.75 per kWh. Such reduction of Rs. 0.75/kWh shall be made from the subsequent monthly bills only till the actual annual CUF reaches 55%.
*Provided further that for generation beyond actual annual CUF of 55%, incentive shall be equal to the levelised generic rates specified in the Principal Regulations at CUF of 45%.**
 - (c) The annual CUF shall be calculated in accordance with the principles specified in Regulation 3(1)(e) of the Principal Regulations.”*

The saleable energy, accordingly, at 40% CUF works out as 17.34 MUs and at 45% CUF works out to 19.51 MUs and the same has accordingly, been adjusted for the royalty of 18% payable to State Government after the end of 15 years from CoD. Accordingly, in the instant case, since a period of 4 years has already elapsed from CoD, royalty power of

18% shall be payable to GoU from 12th year onwards.

3.2.7 Discounting Factor

Regulation 15 of the RE Regulations, 2010 specifies as under:

“ ...

(6) *For the purpose of levellised tariff computation, the discount factor equivalent to weighted average cost of capital shall be considered.*

(7) *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 remaining 31 years have been computed after considering the applicable rates of MAT and the same has been shown in enclosed **Appendix-I**.

3.2.8 Based on the above discussion, additional tariff to be charged for additional capitalisation of Motighat SHP has been detailed in the enclosed **Appendix-I**. Accordingly, the Commission approves the levellised tariff of Rs. 1.34 per unit over and above 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%, 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%, additional incentive shall be equal to the levelised rate of Rs. 1.19 per unit determined at a CUF of 45%.

3.2.9 The additional tariff shall be payable from the date of completion of reconstruction work of the SHP, i.e. from 30.05.2015. The Commission directs UPCL to pay the arrears to the Petitioner for the additional levelised tariff determined by this Order in six equal monthly instalments commencing from January, 2016.

3.2.10 Ordered accordingly.

(K.P. Singh)
Member

(C.S. Sharma)
Member

(Subhash Kumar)
Chairman

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

Year	Depreciation (Rs. Lakh)		RoE (Rs. Lakh)		Interest (Rs. Lakh)		IWC (Rs. Lakh)		Total AFC (Rs. Lakh)		Discounting Factor		Saleable Energy (MU)		Annual tariff (Rs./kWh)		
	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved	
1.	115.82	92.07	94.31	74.97	143.03	111.73	8.13	6.05	361.29	284.82	1.00	1.00	17.34	17.34	2.08	1.64	
2.	115.82	92.07	94.31	74.97	127.98	105.63	7.78	5.92	345.89	278.59	0.88	0.88	17.34	17.34	1.99	1.61	
3.	115.82	92.07	94.31	74.97	112.92	93.43	7.44	5.66	330.48	266.12	0.77	0.77	17.34	17.34	1.91	1.53	
4.	115.82	92.07	94.31	74.97	97.87	81.23	7.09	5.39	315.08	253.66	0.68	0.68	17.34	17.34	1.82	1.46	
5.	115.82	92.07	94.31	74.97	82.81	69.03	6.74	5.13	299.68	241.20	0.59	0.59	17.34	17.34	1.73	1.39	
6.	115.82	92.07	94.31	74.97	67.75	56.83	6.40	4.86	284.28	228.73	0.52	0.52	17.34	17.34	1.64	1.32	
7.	115.82	92.07	94.31	74.97	52.70	44.64	6.05	4.60	268.87	216.27	0.46	0.45	17.34	17.34	1.55	1.25	
8.	115.82	92.07	94.31	74.97	37.64	32.44	5.70	4.33	253.47	203.80	0.40	0.40	17.34	17.34	1.46	1.18	
9.	115.82	92.07	94.31	74.97	22.58	20.24	5.36	4.07	238.07	191.34	0.35	0.35	17.34	17.34	1.37	1.10	
10.	115.82	92.07	94.31	74.97	7.53	8.04	5.01	3.80	222.66	178.88	0.30	0.30	17.34	17.34	1.28	1.03	
11.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.26	0.11	17.34	17.34	0.80	0.63	
12.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.22	0.09	14.22	17.34	0.97	0.63	
13.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.19	0.08	14.22	14.22	0.97	0.63	
14.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.16	0.07	14.22	14.22	0.97	0.63	
15.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.14	0.06	14.22	14.22	0.97	0.77	
16.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.12	0.05	14.22	14.22	0.97	0.77	
17.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.11	0.04	14.22	14.22	0.97	0.77	
18.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.09	0.04	14.22	14.22	0.97	0.77	
19.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.08	0.03	14.22	14.22	0.97	0.77	
20.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.07	0.03	14.22	14.22	0.97	0.77	
21.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.06	0.02	14.22	14.22	0.97	0.77	
22.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.05	0.02	14.22	14.22	0.97	0.77	
23.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.04	0.02	14.22	14.22	0.97	0.77	
24.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.04	0.02	14.22	14.22	0.97	0.77	
25.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.03	0.01	14.22	14.22	0.97	0.77	
26.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.03	0.01	14.22	14.22	0.97	0.77	
27.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.02	0.01	14.22	14.22	0.97	0.77	
28.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.02	0.01	14.22	14.22	0.97	0.77	
29.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.02	0.01	14.22	14.22	0.97	0.77	
30.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.01	0.01	14.22	14.22	0.97	0.77	
31.	15.76	12.53	119.13	94.70			3.10	2.33	137.99	109.55	0.01	0.01	14.22	14.22	0.97	0.77	
	Levelised Tariff															1.59	1.34