

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 70 of 2018

In the matter of:

Supplementary Petition seeking adjustment of tariff for Vanala Small Hydro Power Project (15 MW) of M/s Him Urja Pvt. Ltd. as per Section 61 and 62 of the Electricity Act, 2003 read with Regulation 14 & 15 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 seeking revision of tariff.

In the matter of:

M/s Him Urja Pvt. Ltd.

... Petitioner

AND

In the matter of:

Uttarakhand Power Corporation Ltd.

... Respondent

CORAM

Shri Subhash Kumar Chairman

Date of Hearing: Dec. 18, 2018

Date of Order: 10 April, 2019

The Order relates to the Petition dated 23.11.2018 filed by M/s Him Urja Pvt. Ltd. (hereinafter referred to as "Petitioner") seeking adjustment of tariff for Vanala Small Hydro Power Project (15 MW) (hereinafter referred to as " Vanala SHP" or "Project") of the Petitioner, necessitated due to additional capital expenditure incurred from 07.07.2016 to 31.03.2018, for balance protection work and for rectifying catastrophic damages caused to the plant by the unprecedented natural calamity/floods that occurred in the State of Uttarakhand in June, 2016.

1. Background

1.1 The Petition was filed under 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 Non-

conventional and Renewable Energy Source) Regulations, 2010 (“RE Regulations, 2010”) as amended from time to time. The Petitioner had commissioned its project on river Nandakini, District Chamoli, Uttarakhand, having an installed capacity of 15 MW in December, 2009, which is presently connected to 66 kV Srinagar-Joshimath transmission line at Mangrauli sub-station near Nandprayag, Chamoli.

- 1.2 The Petitioner had entered into a PPA with Uttarakhand Power Corporation (hereinafter referred to as “Respondent” or “UPCL”) on 21.12.2012 for sale of power from its Vanala SHP to UPCL as per the directions of the Commission based on the project specific tariff in accordance with RE Regulations, 2010 and the project specific tariff was determined by the Commission vide Order dated 10.04.2014 at the rate of Rs. 4.00/kWh per unit in accordance with RE Regulations, 2010.
- 1.3 The Petitioner had filed a Petition before the Commission for adjustment of tariff on account of additional capital expenditure incurred for protection work and restoration done due to damages to the project because of disaster struck in June/ July 2013 causing widespread damages in the State of Uttarakhand. The Commission vide its Order dated 17.05.2018 had approved the additional tariff of Rs. 0.56/kWh on account of additional capital expenditure incurred till 07.07.2016 after prudence check in accordance with the RE Regulations, 2010 and additional tariff of Rs. 0.18/kWh was also approved in accordance with the third amendment to RE Regulations, 2010.
- 1.4 The Petitioner vide said Petition had also submitted that the disaster occurred once again in the project area on 20.06.2016 and 01.07.2016 causing widespread damage to the projects being operated by the Petitioner. The project was shut down since 20.06.2016 and repair works were being carried out. The Petitioner had sought relief to file a separate Petition for the cost to be incurred in restoration of the project due to disaster occurred in year 2016. Accordingly, the present Petition has been filed by the Petitioner seeking additional tariff on account of additional capital expenditure incurred from 07.07.2016 to 31.03.2018 for restoration and protection works required due to natural calamity occurred in June/July, 2016.

2. Petitioner’s submissions

- 2.1 The Petitioner submitted the company was incorporated on 01.02.1995 with a view to *inter*

alia, engage in the business of generation of electricity, and has been developing and operating small run of the river hydro projects in the State of Uttarakhand. The Petitioner has developed Vanala SHP having installed capacity of 15 MW on river Nandakini, Dist. Chamoli, Uttarakhand. The electricity is being supplied to UPCL from the said project in accordance with the terms and conditions of the PPA dated 21.12.2012 executed with UPCL.

- 2.2 The Petitioner submitted that in the evening of 20.06.2016 there was a land slide due to cloudburst on the upper side hills, heavy flood occurred in many Nalas (Gadheras) causing damage to the RCC Power Channel of the project due to which the generation of electricity stopped. The restoration work was immediately started to make the project operational once again however in the night of 30.06.2016 heavy inundation by floods occurred in Nandakini River and damaged weir/Diversion, Desilting Tank, Training walls, RCC Power Channel, Protection wall at river side, Transmission Tower etc. of the Vanala SHP. The entire area of Desilting Tank and Weir had submerged with the debris and very big boulders and the generation of electricity stopped in the project.
- 2.3 The Petitioner submitted that the work of restoration did not create any new asset capable of generating additional power capacity and no new generation capacity was added to the project. The capacity to generate power remains the same as before at 15 MW. The new assets were appended to the existing assets. The existing assets were strengthened, the under laying foundation strengthened and protection against future disaster to minimise the loss and consequent loss of generation.
- 2.4 The Petitioner submitted that most of the restoration work was carried out departmentally to save the cost by way of taxes and contractors' profit. The staff and hired equipments for the purpose were suitably employed on temporary basis. The Petitioner also submitted that the total cost of restoration/protection of disaster of 2013 and 2016 incurred from 07.07.2016 to 31.03.2018 is Rs. 20.12 Crore out of which an amount of Rs. 6.86 Crore has been received from the insurance company against the claim. Thus, the net additional capitalisation is of Rs. 13.26 Crore and the same has been capitalised in the books of accounts between 07.07.2016 to 31.03.2018.
- 2.5 The Petitioner also submitted that the Commission had appointed UREDA for verification

of the incident and damages to the project on 31.05.2017 and report of the same was submitted by UREDA. Subsequently, a committee consisting of Mr. Pramod Kumar, Sr. Project Officer UREDA and independent expert Mr. D. Das were appointed to assess the necessity of the restoration works and reasonableness of the cost incurred arising out of damages to the project due to disasters. The above committed has also submitted the report on 02.05.2018 to the Commission.

- 2.6 The Petitioner submitted that the Commission has allowed similar capitalization in the case of Himalayan Hydro Power (P) Ltd. allowing additional tariff of Rs. 1.34 per unit. The rates of works in the case of Petitioner are comparable with the rates adopted in the above case.
- 2.7 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 17.12.2018 which has been discussed in subsequent paras. The Commission held a hearing on 18.12.2018 and admitted the Petition vide Order dated 18.12.2018. Vide the said Order, the Petitioner was directed to submit the reply on the issues/comments raised by UPCL. The Petitioner has submitted its reply vide letter dated 05.01.2019.

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

- 3.1 UPCL vide letter dated 17.12.2018 submitted that the reliefs claimed in the Petition cannot be granted under the provisions of the Regulation in which the Petition has been filed and amendment in the Principal RE Regulations, 2010 would be required to allow the claim of the Petitioner. UPCL further submitted that the cause of action as stated by the Petitioner does not fall within the purview of RE Regulation, 2010 as amended from time to time and no additional capitalisation from retrospective effect can be granted. Hence, no additional capitalisation can be claimed for any cause that has occurred before 01.04.2014. Moreover, as far as the said regulation is concerned the bare reading of the same makes it abundantly clear that it does not apply to projects that have opted project specific tariff, there is no provision for any additional capitalisation for the project specific tariff in the regulations. The Commission has also held that the regulation 15(9) pertains to the projects having opted generic tariff and not project specific tariff.

In reply, the Petitioner submitted that it has not sought any deviation as such in the Petition before the Commission. The Petitioner also submitted that the basic principle of the interpretation of the statute is that the words written in the statute have to be read as such and no addition or substitution is allowed. The Regulation provides that the expenses incurred after 01.04.2014 are allowed. The Respondent wish to add and read few lines in the Regulations that, expenses incurred for any disaster prior to 01.04.2014 which is impermissible. The Petitioner also submitted that the Commission had allowed additional capitalisation for Vanala Project in 2014 and it was accepted by UPCL. The principle of *res judicata* applies in the present case. Since any interpretation of regulation has wide application to various cases, therefore, it has to apply across the board. There is no bar in the regulation to allow additional capitalisation. In project specific tariff the actual capital cost is permitted as basis of determination of tariff. The expenses claimed have been capitalised in the books of account.

In the matter, it is to be noted that the Commission vide its Order dated 17.05.2018 has already clarified that the second amendment to RE Regulations, 2010 came into force w.e.f. 01.04.2014 and the additional capitalisation incurred on or after 01.04.2014 due to natural calamity is allowable irrespective of date of occurrence of disaster. The relevant extract of the Order dated 17.05.2018 is as follows:

“As far as the Respondent’s submission that no capitalisation can be claimed or allowed for any cause occurred before 01.04.2014 as per the second amendment to RE Regulations, 2010 is concerned, it is pertinent to mention that the aforesaid amendment came into force w.e.f. 01.04.2014 and the additional capitalisation incurred on or after 01.04.2014 due to natural calamity is allowable irrespective of date of occurrence of disaster. However, as discussed in the above Para, the Vanala project tariff being “Project Specific”, it does not fall under the provisions of Regulation 15(9) of RE Regulations, 2010 as amended from time to time. Accordingly, the contention of UPCL that no additional capitalisation can be claimed for any cause that has occurred before 01.04.2014 is not relevant in the current scenario. Infact in the Order dated 10.04.2014, the Commission had considered additional capitalisation for works carried out by the Petitioner even after commissioning of the project.”

Moreover, in the present case, additional capitalisation incurred by the Petitioner also pertains to the restoration work necessitated for rectifying catastrophic damages

caused to the plant by the natural calamity that occurred in Chamoli District in June & July 2016. Further, the Commission has already held in the Order dated 17.05.2018 that Regulation 15(9) does not apply to the generators adopting project specific tariff and further, regulation does not bar generators adopting project specific tariff from incurring and claiming any additional capitalisation. Furthermore, since the generator has incurred expenses for restoration work because of damages caused to the project due to natural calamity and in the absence of any provision safeguarding the interest of the generator seeking project specific tariff, it is implicit that a view in favour of the generators, allowing additional capitalisation, be taken to ensure justice to it. Absence of any specific provision must not be a reason to deprive the Petitioner from its legitimate rights. Further, the Commission vide its Tariff Regulations, 2013 had inserted a provision in this regard for the sake of clarity. The relevant extract of the RE Regulations, 2013 is as follows:

“15. Financial Principles

(1) Capital Cost

(a) ... For calculation of project specific tariff the capital cost shall also include the expenditure incurred or projected to be incurred towards additional capitalisation.”

3.2 The Respondent submitted that the Petitioner has not disclosed the complete relevant facts and even the DPR for the work due to natural disaster alleged to have occurred in the year 2016 has not been filed.

In reply, the Petitioner submitted that DPR was not prepared as the damages were not visible or ascertainable immediately after the disaster of 2016 but the restoration works started soon after the disaster. Further, most of the damages were visible and no major alteration in the design work was stipulated except at Huen Gadera. Therefore, it was decided not to prepare the DPR. The works were inspected by the insurance surveyor after the disaster. The factum of loss, restoration and cost thereof is established by the insurance surveyor as well as by the Consultant appointed by the Commission.

In the matter, it is to be noted that the DPR is prepared for projecting capital expenditure required to be done for completion of the proposed work and also contains the detailed financial, economic & technical analysis and one of the purpose of DPR is to raise the funds from financial institutions. In present case, the Petitioner has not borrowed

any separate funds for the additional capitalisation incurred and claimed in the present Petition. Further, as far as technical and financial analysis is concerned, as discussed in Order dated 17.05.2018, the Commission had appointed Professor Devadutta Das, Former Professor, IIT Roorkee, an independent Consultant for establishing the necessity of works and reasonableness of the cost incurred by the Petitioner in coordination with the Project Officer, UREDA. The Consultant submitted its report to the Commission and later on the same was forwarded to the Respondent on 21.12.2018. The Consultant vide its report had submitted that there was a necessity for restoration of damaged civil works for smooth functioning of the project and protection works were also necessary to safeguard the project from future calamities. Further with regard to capital cost, the Consultant had submitted that the Petitioner had completed the restoration work at a cost which is less than the cost arrived in accordance with Uttarakhand Schedule of Rates. Moreover, the Commission has gone through the Insurance Surveyor Report, contracts and invoices submitted by the Petitioner to confirm the genuineness of the capital cost.

- 3.3 The Respondent also submitted that there is no specific provision in the regulation for granting additional capitalisation to the projects having opted project specific tariff, the Commission in the Order dated 17.05.2018 has although deliberated upon the fact that Regulation 15(9) of RE Regulations, 2010 pertains to generic tariff and not to the project specific tariff however the Commission in the said order has not specified as to under what provision such petition would fall. The Respondent also submitted that although the interpreting Regulation 15(9) of RE Regulations, 2010 so as to limit only to project having opted generic tariff would be discriminatory yet the Commission has carved out a distinction and which gives an impression that the said discrimination was interned at the time of framing of the Regulations however it is humbly submitted that the interpretation does not appear to be correct as Tariff being based on normative principle cannot mean to apply to generic tariff only as apart from normative capital cost and the CUF of the project rest of the parameters for both type of tariffs are same as has been mentioned in the regulation itself hence the tariff appears to mean both generic and project specific tariff, there is no such word as normative tariffs in the regulation, the provisions of the regulation when construed harmoniously clearly show that as per the regulations the intent was explicitly clear that no revision of tariff was permissible for any generator opting either

generic or project specific tariff and the tariff once determined continued to be applicable for the entire life of the project and provisions for additional capitalisation were only incorporated in the principle regulation by way of amendment which cannot be retrospective as has been held also by the Commission in the SOR of the second amendment regulation of RE Regulations, 2010. Further, the Commission has recently notified the new RE Regulations, 2018 and the corresponding paragraphs of the said regulation also fortifies the stand of the Respondent as the change in language incorporated in the new regulation does not create any right but only uses words to clearly specify the intents of the regulation.

In reply, the Petitioner submitted that UPCL is arguing that there is no distinction between generic tariff and project specific tariff which is contrary to contention raised by UPCL in Para 4 of its reply which says that the Regulations is not applicable to the project specific. The Petitioner also submitted that the Regulations clearly specify different set of rules for generic and project specific tariff. The norms set out in the regulations are applicable only to generic tariff, hence, it may be called as normative tariff. This distinction is clearly spelt out in the Regulations which are reproduced below:

“11. Tariffs

- (1) The tariff determination under these Regulations shall be applicable for sale of electricity to the distribution licensee and to local rural grids only.*
- (2) The RE Based Generating Stations and Co-generating Stations, except those mentioned under Proviso 1 & 2 to sub-Regulation (1) of Regulation 2, may opt for the generic tariff, as determined based on norms specified in these Regulations for different technologies, or may file a petition before the Commission for determination of “Project Specific Tariff”*
- (3) Project Specific Tariff, on case to case basis, shall be determined by the Commission in following cases:*
 - a. For projects opting to have their tariffs determined on the basis of actual capital cost instead of normative capital cost as specified for different technologies under Chapter 5, the CUF (generation) for recovery of fixed charges shall be taken as that envisaged in the approved DPR or the normative CUF specified under Chapter 5 for the relevant technology, whichever is higher.....*

b. ...

c. ...

...

Provided that the Commission while determining the Project Specific Tariff shall be guided by the provisions of Chapter 4 & 5 of these Regulations for technologies specified therein."

With regard to the Respondent's objection, the Commission would like to mention that the Respondent has made contradictory statements in its submission. In one paragraph, the Petitioner has submitted that as far as the Regulation 15(9) of RE Regulations, 2010 is concerned the bare reading of the same makes it abundantly clear that it does not apply to projects that have opted project specific tariff, there is no provision for any additional capitalisation for the project specific tariff in the regulations whereas in the other paragraph of its submission stated that the said regulations limits only the project having opted generic tariff would be discriminatory and should be interpreted in harmony and hence the tariff appears to mean both generic and project specific.

With regard to the applicability of Regulation 15(9) of RE Regulations, 2010 and admissibility of additional capitalisation to the generator adopting project specific tariff, the Commission would like to mention that it has already dealt with the issue vide Para 3.1 of this Order. Further, as far as discrimination between generators adopting generic tariff or project specific tariff is concerned, the Commission would like to mention that it appears from the submissions of the Respondent that it is raising objections to the provisions of the Regulations, 2010. In the matter, the Respondent should understand any objection pertaining to provisions of the Regulation cannot be undertaken by the Commission through its Order.

3.4 The Respondent submitted that there are certain grounds which have been raised by the Respondent in an Appeal before the Hon'ble ATE against the Order dated 17.05.2018, hence, the present reply be considered without prejudice to the said grounds and further the grounds in the appeal may kindly be also considered in the present Petition.

In the matter, it is to be noted that UPCL in the Appeal filed before the Hon'ble ATE has contested that the RE Regulations, 2010 cannot be applied retrospectively. In the

present Petition, the Petitioner has claimed the additional capitalisation pertaining to the restoration works and protection works done due to damages occurred to the project because of natural calamity in year 2016. The question of applicability of provisions of the RE Regulations, 2010 retrospectively does not arise in the present case. Further, the common issues raised by the Respondent in the Appeal before the Hon'ble ATE has been dealt in the above paragraphs of this Order.

4. Analysis & admissibility of the additional capitalization

4.1 Applicability of the Regulations

4.1.1 Before going into the merits of the Petition, the Commission first refers to the relevant provisions of the Regulations applicable in the present Petition. Regulation 14(1) of RE Regulations, 2010 specifies as follows:

“14. Petition and proceedings for determination of Project Specific Tariff

(1) *The RE Based Generating Stations and non-fossil fuel based Co-generating Stations may make an application for fixation of Project specific Tariff based on actual Capital Cost in respect of the complete units of the RE Based Generating Stations and C-generating Stations in such formats and along with such information as the Commission may require from time to time.*

Provided that for Project Specific Tariff determination, the RE Based Generating Stations and Co-generating Stations shall submit the breakup of Capital Cost items along with its petition.”

4.1.2 The Petitioner's Vanala SHP is situated at a hilly terrain of Uttarakhand State where natural calamity occurred in June/July, 2016 which led to extensive damages to several structures. Hence, loss/damage to the said SHP cannot be ruled out. Further, documents like report of Tehsildar and Insurance Surveyor Report; extract of newspaper and photographs corroborate the Petitioner's averment in the matter.

4.2 Additional Capitalisation due to damage

4.2.1 As mentioned in the above paragraphs of this Order, the Commission has approved the additional capitalisation incurred upto 07.07.2016 for restoration and protection works due to damages occurred to the project because of natural calamity in year 2013 vide Order dated 17.05.2018. Further, during the proceeding of the said Order, the Petitioner

had sought leave of the Commission to file details of the expenditure to be incurred for the disaster of June/July, 2016 as and when cost to be incurred in restoration of the project and the claim to be received from the insurance company is crystallised.

4.2.2 In the present Petition, the Petitioner has submitted the details of damages and additional capitalisation incurred for restoration and protection works for rectifying the damages occurred to the project because of natural calamity that happened in June & July, 2016. The Petitioner submitted that in the evening of June, 2016, a land slide due to cloudburst on the upper side of hills and heavy flood occurred in many Gadheras causing damage to the RCC Power channel of the Project. The restoration work was immediately started to make the power plant operational. However, in July, 2016 heavy inundation by floods occurred in Nandakini River and damaged many components like Diversion/weir, Desilting tanks, Training walls, RCC Power Channel, Trestle at Heun Gadhera, MS Water pipe Line, Protection wall at Power House, Protection wall at riverside, Transmission Towers, approach roads, bridges etc. of the project. The entire area of Desilting Tank and Weir had submerged with the debris and very big boulders and the generation of electricity stopped in the plant. The Petitioner submitted that the entire restoration work got completed by 31.03.2018. Details of the additional capitalisation claimed by the Petitioner are as follows:

Table-1: Capital cost incurred from 08.07.2016 to 31.03.2018 (Rs. in Crore)

S.No.	Particulars	Direct Expenses	Incidental Expenses	Total
1	Material	1.80	-	1.80
2	Salary & Wages	3.88	0.42	4.30
3	Other Expenses	1.69	0.04	1.73
4	Bill of Contractor for restoration	12.24	-	12.24
5	Total Civil Works (1+2+3+4)	19.61	0.46	20.07
6	Less: Amount received from Insurance Co.	-	-	6.86
7	Net Amount spent (5-6)	-	-	13.21
8	Interest during construction	-	-	0.04
9	Total Expenses incurred (7+8)	-	-	13.26

4.2.3 The Petitioner submitted that the entire project was covered under insurance and, accordingly, amount of Rs. 7.51 Crore was claimed against the damages which were settled at Rs. 6.86 Crore by the insurance company.

4.2.4 For determination of capital cost, the Commission has examined the capital cost as claimed by the Petitioner. Based on the submissions made by the Petitioner and comments received from the Respondent on the same, analysis of the additional

capitalisation of the project has been done and the same is discussed in following paragraphs.

4.2.5 During the proceedings of the Petition filed by the Petitioner seeking adjustment of tariff due to additional capitalisation incurred for rectifying damages caused to the project because of natural calamity of year 2013, the Commission had appointed a Consultant for reviewing the need and reasonableness of cost claimed by the Petitioner for its project for restoration and protection works carried in its project affected due to natural calamity/catastrophe that occurred in the year 2013. In the matter, the Commission directed UREDA to depute its Project Officer to coordinate with the Consultant for valuation of the work. The Consultant submitted its report on 02.05.2018 segregating the capital cost incurred from year 2013 to 07.07.2016 and from 08.07.2016 to 04.04.2018. Further, the Consultant submitted that the Generator had completed the restoration and protection works at a cost which is less than the rates as worked out in accordance with Uttarakhand Schedule of Rates. Detailed breakup of additional capitalisation as provided by the Consultant is as follows:

Table-2 Statement of Additional capitalisation done for Vanala Project (Rs. in Crore)

S. No.	Particular	Cost of works as per books of accounts		Cost of Civil Works as per rates in DPR	
		Till 07.07.2016 as claimed in Petition	07.07.2016 to 04.04.2018	15.06.2013 to 07.07.2016	07.07.2016 to 04.04.2018
1(a)	Material	8.65	1.83		
1(b)	Salary & Wages	7.44	3.88		
1(c)	Other Expenses	1.65	1.73		
2	Bill of Contractor for restoration	7.03	12.24		
3	Total Civil Works	24.77	19.68	26.42	21.06
4	NAP Land	0.12			
5	Electro Mechanical Equipments	0.82			
6	Total	25.71	19.68		
7	Less: Amount recd from Insurance co.	5.57	6.86		
8	Net Amount Spent (6-7)	20.14	12.82		
9	Interest during Construction	1.91	0.05		
10	Total Expenses incurred (8+9)	22.05	12.86		

4.2.6 The Commission observed that the Consultant has submitted that additional capitalisation incurred from 07.07.2016 to 04.04.2018 is Rs. 12.86 Crore whereas the Petitioner, as stated under Table-1, has claimed additional capitalisation of Rs. 13.26 Crore for the same period in the present Petition. The Commission observed that there

is a variation in the head of 'Material' and 'Salary & Wages'. In this regard, the Commission directed the Petitioner to submit the reasons for variation in the capital cost.

4.2.7 With regard to variation in the capital cost claimed under the head of Material, the Petitioner in its reply submitted that Consultant's report dated 02.05.2018 covers the period from 07.07.2016 to 04.04.2018 and due to this cost of Rs. 0.03 Crore of 800 bags cement purchased on 04.04.2018 is also included in the Consultant's report which has not been considered in the capital cost as claimed in the Petition. In the matter, the Commission observed that the entire restoration and protection work was completed by 31.03.2018. Therefore, any expenditure thereafter shall not be capitalised. Accordingly, the Commission approves the capital cost of material amounting to Rs. 1.80 Crore (excluding the cost of Rs. 0.03 Crore for 800 bags) after prudence check of invoices submitted by the Petitioner.

4.2.8 With regard to payment to Contractor, the Commission observed that the Petitioner has claimed Rs. 12.24 Crore which reconciles with the amount mentioned in the Consultant's report. In the matter, the Commission directed the Petitioner to submit the basis/mode of selection of the Contractor and all the contracts and amendment thereof, if any. In reply, the Petitioner submitted that they had invited quotations from various contractors for repair/renewal/replacement of damaged works and for restoration and in response received three quotations from the contractors as detailed below:

Table-3 Details of Quotation received

S. No.	Name of Contractor	Period required for completion of work in days	Amount in Crore
1	M/s Ramose Infra Pvt. Ltd.	102	9.26
2	M/s Bhawana Associates Pvt. Ltd.	160	8.97
3	M/s Gurmeet Earthmovers Co. Ltd.	140	10.16

In the matter, the Commission asked the Petitioner to submit the reason for selection of M/s Ramose Infra Pvt. Ltd. with quotation of Rs. 9.26 Crore whereas M/s Bhawana Associates Pvt. Ltd. had quoted least amount of Rs. 8.97 Crore. In reply, the Petitioner submitted that M/s Ramose Infra Pvt. Ltd. had quoted higher than M/s Bhawana Associates Pvt. Ltd., however, it was taking less time than the time proposed by M/s Bhawana Associates Pvt. Ltd. The Petitioner also submitted that since the

original structure was built by M/s Ramose Infra Pvt. Ltd. therefore it had full knowledge and awareness of the difficulties and ways to surmount them. Further, equipments of M/s Ramose Pvt. Ltd. were lying near the site therefore mobilisation was easy. The time period required for completion of works by M/s Ramose Pvt. Ltd. was less than others and therefore higher price was offset by the gain in generation and assurance to complete the work satisfactorily.

The Commission examined the contracts executed by the Petitioner with M/s Ramose Infra Pvt. Ltd. and observed that the Contract price was amended to Rs. 11.07 Crore excluding taxes against the actual payment of Rs. 11.52 Crore. In reply, the Petitioner submitted that the amended contract was executed on the basis of quantity assessed by the site engineers during the course of execution of work after the water level receded, but the contractor's bills were based on the actual quantity of work executed.

The Commission also observed that the amended Contract price value was Rs. 11.07 Crore which was even higher than the maximum price quoted by the M/s Gurmeet Earthmovers Co. Ltd. In reply, the Petitioner submitted that the damages at the site were not visible soon after the disaster. The site was covered with debris and the river under flood conditions thereby making the site inaccessible. The full impact of disaster unfolds only after all the debris was removed from the site and water in the river recedes. The Petitioner also submitted that the revised contract was executed with M/s Ramose Infra Pvt. Ltd. on 26.09.2016 with increased quantities for total value of Rs. 11.07 Crore excluding taxes. The time period for execution of works were also increased to 31.03.2017 in view of the increase quantities and adverse conditions obtained due to high floods continuing till September, 2016. The Petitioner also submitted that the explanation was given to Insurance Surveyor for delay which was accepted by it. Further, the Petitioner submitted that the contractor work was completed on 31.03.2018 as per submission dated 25.03.2019 against the revised scheduled completion date of 31.03.2017.

The Commission understands that M/s Ramose Infra Pvt. Ltd. was selected by the Petitioner so that works could be completed as soon as possible. In the original contract, M/s Ramose Infra Pvt. Ltd. had offered 102 days for completion of the works

whereas in the revised contract time period was extended to 31.03.2017, i.e. 211 days from schedule start date. The Commission understands the intention of the Petitioner to get the work done as soon as possible, however, it can also not be denied that the instead of 102 days as offered by M/s Ramose in the tender documents, the work completion took more than 200 days. Hence, the purpose of selection of M/s Ramose Infra Pvt. Ltd., i.e. based on least number of days, was defeated. Ms/ Bhawana Associates Pvt. Ltd. might have completed the entire work in the offered time in tender document. The Commission also observed that the unit rates claimed by M/s Ramose Infra Pvt. Ltd. were higher, in comparison to the unit rates for same specifications/type of work, as quoted by M/s Bhawana Associates Pvt. Ltd. Accordingly, the Commission is of the view to consider the unit rates as quoted by M/s Bhawana Associates Pvt. Ltd. and the actual quantity of work executed to determine the revised contract cost.

Accordingly, based on the above discussion, considering the units rates as offered by M/s Bhawana Associates Pvt. Ltd. and actual quantity of work executed, the Commission has worked out revised amount of Rs. 11.83 Crore against the actual payment of Rs. 12.24 Crore (inclusive taxes) to the Contractor.

- 4.2.9 Before examining the capital cost claimed under other heads, it is necessary to examine the time taken by the Petitioner for completion of the entire work. As discussed in earlier paragraphs of this Order, the Petitioner has not prepared any DPR for the executed work. The Commission had appointed a consultant to check the reasonableness and genuineness of the work executed. However, it was not practically possible for the Consultant to determine/specify the period by which the work should have been completed. In the absence of the DPR, the Commission has examined contracts executed by the Petitioner. The Commission observed that the actual scheduled completion time was 102 days as per original contract which was revised to 31.03.2017, i.e. 211 days whereas the entire work was completed by 31.03.2018, i.e. 595 days based on the actual start date, i.e. 14.08.2016 as per submission dated 25.03.2019 of the Petitioner. With regard to delay in completion of the work, the Petitioner submitted that the work site was totally sub-merged in the water and it was not possible to commence the work till water recedes and therefore the work in Huen Gadhera which was critical component, could start by 14.09.2016. During the course of execution of

work it was found that the actual quantity of work to be executed was more than the estimated quantity as per the awarded Contract and accordingly, the contract was revised on 26.09.2016. Further, some of the works were executed departmentally.

In the matter, the Commission would like to mention that all the facts and geographical status of the project site was very well known to the Petitioner and the Petitioner itself has revised the scheduled period for completion from 102 days to 211 days i.e. by 31.03.2017 when it was found that the actual quantity of work to be executed was more than the estimated quantity as per original contract. The Petitioner executed a revised contract vide which the schedule completion date was revised to 31.03.2017. Moreover, the Petitioner submitted that remaining protection works had been executed departmentally. In the matter, the Commission is of the view that such works could have been executed parallelly alongside the contractor's works. The Petitioner was well aware of the works to be done as the Petitioner has amended the original contract factoring into the revision of work and revised completion period. However, the Petitioner failed to complete the works by 31.03.2017 and completed the works by 31.03.2018 taking 595 days. Accordingly, considering the actual start date of 14.08.2016 as per submission of the Petitioner, there is delay of 384 days in completion of the work. Further, the Petitioner was given opportunity to submit the reasons for delay in completion of the restoration and protection works; however, the Petitioner submitted the reasons for revising the schedule completion date without providing any documentary evidence. Accordingly, the delayed period has been considered as controllable factor, hence, time overrun is not allowable.

4.2.10 With regard to Salary & Wages, the Commission observed that the Consultant vide its Report submitted that the Petitioner has incurred Rs. 3.88 Crore under the head of 'Salary & Wages' whereas the Petitioner has claimed Rs. 4.30 Crore. With regard to the variation, the Petitioner submitted that salary paid to the managerial staff from 01.04.2017 to 31.03.2018 was not included in the Consultant's report, however, the same has been claimed as incidental expenses. The Commission has followed the same view as taken in Order dated 17.05.2018. The Commission vide its Order dated 10.04.2014 had already allowed normative O&M expenses which includes employees salary also, based on the prevailing Regulations wherein such expenses had already been factored

in while specifying the norms for O&M expenses. Further, if the amount as claimed for managerial staff is considered for tariff determination, it will eventually result in double recovery of the same expenses. Accordingly, expenses pertaining to Managerial Staff have not been considered.

4.2.11 Further, as discussed in the above paragraphs of this Order, there is a delay of 384 days in completion of the entire work which was within the control of the Petitioner. With regard to determination of 'Salary & Wages' for the admissible period, the Commission has adopted the same methodology as adopted by the Commission in its Order dated 17.05.2018 considering the fact that additional labour would not be required to be paid if the Petitioner had efficiently and effectively deployed its employees and executed the entire work within the scheduled time period. Further, the Commission vide its review Order dated 17.09.2018, has elaborated its view in the matter. The relevant extract of the Order is as follows:

"4.7 The Commission would like to point out that the terminology IEDC used in the Order be read as 'Other charges' namely Salary & wages, Hire Charges of Equipment & Vehicles, Repair & maintenance of Equipments & vehicles, running expenses of vehicles, Freight & cartage and Mining Royalty, whose increase have definite Correlation with the delay in completion of construction activity. Further, it is worth mentioning that corporate accounting concepts are different from Regulatory accounting, therefore, certain modifications are required in the accounting principle while applying the same under regulatory regime. The 1st Proviso of Regulation 15(9) of RE Regulations, 2010 provides as follows:

*"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 capitalisation 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."*

(Emphasis added)

As per the above provision of the Regulations, additional capitalisation is allowed subject

to prudence check by the Commission. Further, prudence check is a vast area which includes analysis of DPR, technical parameters, comparison of proposed quantity consumption and rate of material/labour with the actuals, price & quantity variation, cost overrun, time overrun etc. The Accounting Standards are silent about the treatment of cost overrun and time overrun. Infact as per the accounting principles all the direct costs related to an asset should be capitalised with the cost of the asset and other indirect costs for creation of multiple assets should be apportioned to different category of assets. Accordingly, all the direct costs namely Labour, equipment hiring charges etc. should have been capitalised as part of the asset under civil works or plant and machinery as applicable.

Further, as per Tariff policy, one of the objectives is to ensure availability of electricity to consumers at reasonable and competitive rates and it is one of the responsibilities of the Commission to make sure that any cost which could have been avoided by taking timely actions, should not be pass through to the consumer of the State. In the present case, if the developer would have completed the work within the scheduled time as per DPR, no additional labour/salary, hire & other charges would be required beyond the schedule date of completion.

Further, the Petitioner has also submitted that the Consultant appointed by the Commission have compared the rates at which works have been executed with the rates in the schedule of rate and have come to conclusion that the rates adopted by the Petitioner in the DPR are lower. In this regard, it is to be noted that the Commission has not disallowed any amount towards material/supplies on account of cost overrun. However, the Commission has disallowed those costs pertaining to labour, construction equipment charges etc that would have not been required to be spent additionally on account of time overrun if the Petitioner had completed the project within the scheduled completion period as mentioned in the DPR.”

Accordingly, the Commission has worked out the admissible capital cost under the head of ‘Salary & Wage’ amounting to Rs. 1.38 Crore excluding amount claimed pertaining to salary of Managerial Staff and salary & wages pertaining to disallowed period against the claim of Rs. 4.30 Crore.

4.2.12 With regard to ‘Other expenses’, it is to be noted that the Petitioner has claimed an amount of Rs. 1.73 Crore which reconciles with the amount submitted by the Consultant in its report. Further, other expenses are inclusive of Hire charges, Freight & cartage, Vehicle running expenses, Oil & Lubricant, etc. The Commission observed that the ‘Other expenses’ are inclusive of the charges which are directly linked to time. As

mentioned in above paragraphs of this Order, there is a delay of 384 days in completion of the entire work. The Commission has proportionately disallowed the other charges. Accordingly, the Commission has approved other expenses amounting to Rs. 0.61 Crore against the claim of Rs. 1.73 Crore.

4.2.13 With regard to accounting treatment for damaged assets in the books of accounts, during the proceedings for approval of additional capitalisation incurred for rectifying the damages occurred to the project due to natural calamity in year 2013, the Petitioner had submitted that there was no substantial basis for arriving at the cost of the abandoned assets as it appeared in the books of accounts since in the books of accounts it appeared as block of asset and from this block of asset it was not possible to segregate/identify the cost of abandoned assets out of the block. Accordingly, the Commission had analysed the insurance claim to work out the cost of de-capitalised assets. It was observed from the report that the insurance claim had been made according to the replacement cost and not as per the historical cost.

The Commission has examined the Insurance Surveyor Report on damages caused to the project due to natural calamity of year 2016. The Commission observed that in the present case also the insurance claim has been made accordingly based on the replacement cost and not as per the historical cost. Further, the Petitioner has submitted that it has received an amount of Rs. 6.86 Crore against the claim of Rs. 7.51 Crore. The Commission has adopted the same methodology as adopted in Order dated 17.05.2018 in the absence of availability of historical cost of the damaged assets. The Relevant extract of the Order dated 17.05.2018 is as follows:

“... Ideally the asset which is not usable or does not exist should be written off from the GFA at the original cost/WDV. However, instead of submitting actual/ historical cost of assets written off, the Petitioner submitted an estimate of Rs. 7.34 Crore as amount claimed from insurance company at the replacement or current market cost. The current cost cannot be deducted from the gross block as it is an indicator of what would be the replacement cost of an asset and cannot be the historical cost at the time of commissioning of the project earlier. Besides, if the cost of an asset damaged would have been higher than what the insurance company settled, even in such scenario such loss will have to be allowed as uncontrollable in accordance with the prudent accounting principles and the same would apply vice-versa.”

Hence, as discussed above, the Commission has decided to reduce the amount of loss equivalent to the claim settled by the insurance company of Rs. 5.57 Crore as that was the amount which was part of the capital cost as on the date of commissioning on which the tariff has already been fixed earlier. Now since the amount of loss does not form part of the GFA of the Petitioner and to recoup the same the Petitioner has claimed additional capitalisation, hence, it would not be reasonable to allow any portion of the lost asset as part of the GFA. Accordingly, the same has been reduced from the additional capitalisation allowed to the Petitioner. “

The Petitioner has reduced the insurance amount received from the total additional capital cost claimed. Based on the above discussion, the Commission has decided to reduce the amount of loss equivalent to the claim settled by the insurance company of Rs. 6.86 Crore from the admissible additional capital cost.

4.2.14 With regard to IDC, it is to be noted that that the Petitioner has claimed amount of Rs. 0.05 Crore under the head of IDC. In this regard, the Petitioner was directed to submit the month wise and yearly phasing (Debt-Equity) of the project cost along with the loan documents. In reply, the Petitioner submitted that IDC amount be ignored as no loan was deployed for restoration or protection work and the entire work has been done from internal accruals. The Commission has gone through the audited annual accounts of the Petitioner and observed that no long term debt has been raised by the Petitioner during the construction work. Accordingly, the Commission is of the view that the entire work has been executed with the internal funds/accruals, therefore, nil IDC has been considered for the determination of admissible additional capital cost.

Based on the above discussion, details of additional capital cost claimed and approved is as follows:

Table-4: Details of additional capital cost claimed and approved from 08.07.2016 to 31.03.2018 (Rs. in Crore)

S.No.	Particulars	Claimed	Approved
1	Material	1.80	1.80
2	Salary & Wages	4.30	1.38
3	Other Expenses	1.73	0.61
4	Bill of Contractor for restoration	12.24	11.83
5	Total Civil Works (1+2+3+4)	20.07	15.63
6	Less: Amount received from Insurance Co.	6.86	6.86
7	Net Amount spent (5-6)	13.21	8.77
8	Interest during construction	0.04	0.00
9	Total Expenses incurred (7+8)	13.26	8.77

4.3 Debt-Equity Ratio

4.3.1 The Commission noted that the Petitioner has considered a Debt-Equity ratio as 70:30. In this regard, Regulation 16(2)(b) of RE Regulations, 2010 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.

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.”

4.3.2 As discussed in above paragraphs of this Order, the entire work has been executed with internal funds. Therefore, the Commission has considered equity equivalent to 30% of the admissible additional capital cost and equity in excess of the 30%, i.e. 70% has been considered as normative debt in the present case in accordance with the aforesaid regulation.

4.3.3 Accordingly, based on the above discussions, Debt-Equity claimed by the Petitioner and approved by the Commission is as follows:

Table-5: Debt:Equity Ratio Claimed and Approved

Particular	Claimed		Approved	
	Rs. In Crore	%	Rs. In Crore	%
Debt	9.28	70.00	6.14	83.07
Equity	3.98	30.00	2.63	16.93
Total	13.26	100.00	8.77	100.00

4.4 Adjustment in existing tariff

4.4.1 Since the Petitioner had adopted project specific levellised tariff in accordance with the RE Regulations, 2010 as amended from time to time, hence, additional capitalisation for restoration works 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. 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.

- 4.4.2 The Petitioner submitted that since beginning the O&M Charges have been allowed as percentage of capital cost as it is accepted that the O&M expenses are proportionate to the capital cost. Accordingly, the Petitioner requested the Commission to allow the proportionate O&M expenses as the capital cost of the project has increased due to additional capitalisation. The Petitioner has claimed the O&M expenses @ 4% of the capital cost.

The Commission has dealt with the request of the Petition for adjustment of existing tariff based on the third amendment in the subsequent paragraphs. Further, with regard to the claim of the O&M expenses for the additional capitalisation, it is pertinent to mention that the Normative O&M expenses are linked to the capacity of the Small Hydro Plant and not with the capital cost of the plant. Further, the Petitioner vide Para 3.19 of the Petition has admitted that the work of restoration did not create any new asset capable of generating additional power capacity and no new generation capacity was added to the project. The capacity to generate power remains the same as before at 15 MW. The new assets were appended to the existing assets. According, the Petitioner's project is not eligible for any additional normative O&M expenses as no increase in installed capacity has resulted from these restoration and protection works.

Moreover, under the RE Regulations, 2010, there is no separate provision for O&M expenses on additional capitalisation.

- 4.4.3 Based on the approved additional capitalisation and tariff structure specified under RE Tariff Regulations, 2010, determination of the components is discussed in subsequent paragraphs.

4.4.3.1 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 has claimed capitalisation till 31.03.2018, hence, the remaining useful life of the project is 26 years. Accordingly, depreciation has been computed on additional capitalisation by applying the rate of 7% for the first 10 years from the date of additional capitalisation to the project and the remaining depreciation has been spread over the remaining useful life of the project, i.e. for remaining 16 years.

In accordance 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**.

4.4.3.2 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."*

As mentioned under the head of 'Debt-Equity Ratio', the Commission has considered 30% of the total admissible additional capital expenditure as Equity, i.e. Rs. 2.63 Crore. The said project was put to commercial operation in FY 2009-10 and accordingly, 10 years for the project gets completed in FY 2018-19. Therefore, return

on equity on the equity deployed towards the additional capital cost has been computed considering pre-tax rate of 19% p.a. till FY 2018-19 and pre-tax rate of 24% p.a. from FY 2019-20 for the balance useful life of the project in accordance with the RE Regulations, 2010. The approved RoE has been shown in enclosed **Appendix-I**.

4.4.3.3 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 on working capital has been shown in enclosed **Appendix-I**.

4.4.3.4 Interest on Working Capital

Regulation 20 of 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. for working out the interest on working capital. Interest on Working Capital (IWC) as approved by the Commission is given in enclosed **Appendix-I**.

4.4.4 Design Energy

The Commission vide Order dated 10.04.2014 has calculated the design energy and the same has been considered for the purpose of computation of increase in annual tariff due to additional capitalisation.

4.4.5 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 26 years have been computed after considering the applicable rates of MAT & corporate tax and the same has been shown in enclosed **Appendix-I**.

4.4.6 Based on the above discussion, additional tariff to be charged for additional capitalisation of Vanala SHP has been detailed in the enclosed **Appendix-I**. Accordingly, the Commission approves the levellised tariff of Rs. 0.25/kWh against the Petitioner’s claim of Rs. 0.52/kWh over and above the approved levellised tariff of Rs.

4.74/kWh by the Commission vide Order dated 10.04.2014 read with Order dated 17.05.2018 in respect of its Vanala SHP.

4.4.7 Increase in levellised tariff (i.e. Rs. 0.25/kWh) due to additional capitalisation shall be applicable w.e.f. 01.04.2018. The Commission directs the Respondent to pay the arrears to the Petitioner on account of increase in levellised tariff in three equal monthly instalments commencing from 01.05.2019 in accordance with this Order.

4.5 Ordered accordingly.

(Subhash Kumar)
Chairman

Particulars	Unit	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Year		1	2	3	4	5	6	7	8	9	10	11	12
Installed Capacity	MW	15	15	15	15	15	15	15	15	15	15	15	15
Net Generation	MU	60.56	60.56	60.56	60.56	60.56	60.56	60.56	60.56	49.66	49.66	49.66	49.66
Annual Fixed Charges (AFC)													
O&M Expenses	Rs. Crore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	Rs. Crore	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.11	0.11
Interest on Term Loan	Rs. Crore	0.77	0.69	0.61	0.53	0.45	0.37	0.28	0.20	0.12	0.04	0.00	0.00
Interest on Working Capital	Rs. Crore	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02
Return on Equity	Rs. Crore	0.50	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Total Fixed Cost	Rs. Crore	1.93	1.98	1.89	1.81	1.73	1.65	1.56	1.48	1.40	1.31	0.76	0.76
Per Unit Tariff Components													
PU O&M Expenses	Rs. p.u.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PU Depreciation	Rs. p.u.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.02	0.02
PU Interest on Term Loan	Rs. p.u.	0.13	0.11	0.10	0.09	0.07	0.06	0.05	0.03	0.02	0.01	0.00	0.00
PU Interest on Working Capital	Rs. p.u.	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
PU Return on Equity	Rs. p.u.	0.08	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total Fixed PU Components	Rs. p.u.	0.32	0.33	0.31	0.30	0.29	0.27	0.26	0.24	0.23	0.22	0.12	0.12
Levelling Tariff													
WACC (%)		11.83%	11.99%	12.21%	12.47%	12.78%	13.16%	13.64%	14.26%	15.10%	16.28%	17.08%	17.08%
Discounting Factor	Rs./kWh	1.00	0.89	0.80	0.71	0.63	0.55	0.49	0.43	0.37	0.32	0.27	0.23
Levelling Tariff	Rs./kWh	0.25											

Particulars	Unit	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Balance Life		13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Installed Capacity	MW	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Net Generation	MU	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66	49.66
Annual Fixed Charges (AFC)																	
O&M Expenses	Rs. Crore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	Rs. Crore	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Interest on Term Loan	Rs. Crore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	Rs. Crore	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Return on Equity	Rs. Crore	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Total Fixed Cost	Rs. Crore	0.76															
Per Unit Tariff Components																	
O&M Expenses	Rs. p.u.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Depreciation	Rs. p.u.	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Interest on Term Loan	Rs. p.u.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	Rs. p.u.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Return on Equity	Rs. p.u.	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total Fixed PU Components	Rs. p.u.	0.12															
Levelling Tariff																	
WACC (%)		17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%	17.08%
Discounting Factor	Rs./kWh	0.20	0.17	0.15	0.12	0.11	0.09	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.20	0.17