

Before

# UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 40 of 2017 (Suo-Motu)

**In the matter of:**

Suo-moto proceedings in the matter of application under Section 62 and 86 of Electricity Act, 2003 seeking modification of the project specific tariff determined by the Commission vide its Order dated 16.03.2017 consequent to the amendment in RE Regulations, 2013.

**In the matter of:**

Uttarakhand Power Corporation Ltd.

... Respondent

**CORAM**

**Shri Subhash Kumar      Chairman**

**Date of Order: November 24, 2017**

The Order relates to the suo-moto proceedings initiated by the Commission in the matter of application by M/s Uttar Bharat Hydro Power Pvt. Ltd. (hereinafter referred to as “the generator”) for modification of the project specific Tariff determined by the Commission vide its Order dated 16.03.2017 for its 10.5 MW Small Hydro Power Project on Sarju River at Kapkot, Bageshwar District, Uttarakhand, in pursuance to the sixth amendment to the RE Regulations 2013.

## **1. Background and submissions**

- 1.1 M/s Uttar Bharat Hydro Power Pvt. Ltd. (M/s UBHP) had filed a Petition for determination of its project specific Tariff of its 10.5 MW Sarju III SHP at Kapkote, Bageshwar and the Commission vide its Order dated 16.03.2017 determined the levelised tariff of Rs. 5.52 per unit for the said SHP.
- 1.2 Subsequently the Commission issued the Sixth amendment to the RE Regulations, 2013 notified on September 23, 2017 which inter alia amended Regulation 28 of the RE Regulations as under:

*“Small Hydro Generating Plant*

*The technology specific parameters for determination of generic tariffs for Small Hydro Generating Stations shall be as below:*

*Projects Commissioned on or after 01.04.2013*

Project Size	Capital Cost	O&M Expenses for the year of commissioning	Capacity Utilization Factor	Auxiliary Consumption
	(Rs. Lakh/MW)	(Rs. Lakh/MW)	(%)	(%)
Upto 5 MW	785	35.33	40%	1%
> 5 MW & upto 15 MW	750	30.00		
> 15 MW & upto 25 MW	715	25.03		

NOTE:

*For the purpose of this Regulation, normative CUF is based on Energy Sent Out at interconnection point and for tariff purposes energy net of free power to the home State, if any, committed by the developer shall be factored. For generic tariff determination, home State share has been taken as 18% from 16th year onwards.”*

- 1.3 The generator vide its letter dated 26.09.2017 represented before the Commission that tariff of their Sarju III SHP be calculated with the operation and maintenance expenses as specified in clause 28 as amended by the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) (Sixth Amendment) Regulations, 2017 in place of those specified in the principal Regulations.
- 1.4 Sarju III SHP of M/s UBHP got commissioned after the notification of RE Regulations, 2013 and, therefore, the Sixth amendment to RE Regulations, 2013 are applicable on the generator’s plant, and, hence this order is being issued under the RE Regulations, 2013.

## **2. Commission’s views and decision**

- 2.1 The Commission vide its Order dated 16.03.2017 while determining the project specific Tariff for 10.5 MW Sarju III SHP had considered the O&M expenses @ 22.73 Lakh/MW in accordance with the then prevailing RE Regulations, 2013. The relevant portion of the order is reproduced as below:

*“3.9.1 For projecting the O&M expenses, relevant provisions of RE Regulations, 2013 are as under:*

*“20. Operation and Maintenance expenses*

*(1) Operation and maintenance expenses for the year of commissioning shall be determined*

*based on normative O&M expenses specified by the Commission under Chapter 5 for different technologies for the first Year of Control Period, i.e. for FY 2013-14. These expenses shall be escalated @ 5.72% p.a. to arrive at O&M expenses for the ensuing years. (2) Normative O&M expenses allowed for the year of commissioning shall be escalated at the rate of 5.72% p.a. to determine the O&M expenses for the different years of the Tariff Period."*

3.9.2 Further, Regulation 28 of RE Regulations, 2013 specifies O&M expenses @ Rs 22.73 Lakh/MW for the SHPs commissioned on or after April 01, 2013 having capacity in the range of 5 MW to 15 MW. In accordance with the above referred Regulations O&M expenses as approved by the Commission for the tariff period of the project is shown in enclosed Appendix-I."

2.2 Subsequently the Commission vide its Sixth amendment to the RE Regulations, 2013 amended Regulation 28 of the RE Regulations as discussed above. In view of the said amendment, Regulation 28 of RE Regulations, 2013 specifies O&M expenses @ Rs 30.00 Lakh/MW for the SHPs commissioned on or after April 01, 2013 having capacity in the range of 5 MW to 15 MW. In accordance with the aforesaid amendment in the RE Regulations, 2013 the O&M expenses now approved by the Commission for the Tariff period of the generator is shown in enclosed **Appendix-I**.

2.3 Further, with respect to Interest on Working Capital, Regulation 19 of the RE Regulations, 2013 specifies as under:

*"19. Interest on Working Capital*

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

*(a) Operation & Maintenance expenses for one month;*

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

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

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

*..."*

2.4 In accordance with the above mentioned Regulations, components of working capital for

each financial year during tariff period have also been re-worked to give effect for the changes in the O&M expenses as brought out by the sixth amendment to the RE Regulations, 2013. Interest on Working Capital (IWC) now approved by the Commission is given in enclosed **Appendix-I**.

- 2.5 In light of the above discussions & computation, revised levelised tariff for the entire life of the project has been computed which comes out to Rs. 5.77 per unit against the already approved levelised tariff of Rs 5.52 per unit.
  - 2.6 The tariff so determined will be applicable w.e.f 23.09.2017 and shall be valid for the balance life of the project.
3. Ordered accordingly.

**(Subhash Kumar)**  
**Chairman**

**O&M expenses & Interest on Working Capital approved by the Commission for Sarju III SHP pursuant to sixth amendment to the RE Regulations, 2013.**

Particulars		Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Year			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
O&M Expenses	Approved vide order dated 16.03.2017	Rs.	239	252	267	282	298	315	333	352	372	394	416	440	465	492	520	550	581
Interest on Working Capital		Lakh	66	64	63	62	61	60	59	58	57	56	59	59	47	48	50	51	53
O&M Expenses	Now approved pursuant to sixth amendment in RE Regulations, 2013	Rs.	239	252	267	354	393	416	440	465	492	520	549	581	614	649	686	726	767
Interest on Working Capital		Lakh	66	64	63	66	66	66	65	64	64	63	66	66	55	56	59	61	63

Particulars		Unit	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
Year			18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
O&M Expenses	Approved vide order dated 16.03.2017	Rs.	614	650	687	726	768	811	858	907	959	1,014	1,072	1,133	1,198	1,266	1,339	1,415	1,496	1,582
Interest on Working Capital		Lakh	55	57	59	61	63	65	68	70	73	76	79	83	86	90	94	98	102	107
O&M Expenses	Now approved pursuant to sixth amendment in RE Regulations, 2013	Rs.	811	857	906	958	1,013	1,071	1,132	1,197	1,265	1,338	1,414	1,495	1,581	1,671	1,767	1,868	1,975	2,088
Interest on Working Capital		Lakh	65	68	70	73	76	79	83	86	90	94	98	102	107	112	117	122	128	134