

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 45 of 2017 (Suo-Motu)

In the matter of:

Suo-moto proceedings in the matter of application seeking revision of tariff of Mohammadpur and Pathri SHPs of UJVN Ltd. determined by the Commission vide its Order dated 30.11.2016 & 25.05.2017 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: December 12, 2017

The Order relates to the suo-moto proceedings initiated by the Commission in the matter of application by UJVN Ltd. (hereinafter referred to as “the generator”) for modification of the project specific Tariff determined by the Commission vide its Order dated 30.11.2016 & 25.05.2017 for its 20.4 MW Pathri SHP and 9.3 MW Mohammadpur SHP, in pursuance to the sixth amendment to the RE Regulations 2013.

1. Background and submissions

- 1.1 Uttarakhand Jal Vidyut Nigam Ltd. (UJVN Ltd.) had filed a Petition for re-determination of generic Tariff for its 20.4 MW Pathri SHP and 10.3 MW Mohammadpur SHP and the Commission vide its Order dated 30.11.2016 determined the levellised tariff of Rs. 1.37 per unit and Rs. 1.85 per unit respectively for the Pathri & Mohammadpur SHPs.
- 1.2 Subsequently UJVN Ltd. filed a Petition for review of the Commission’s Order dated 30.11.2016 and the Commission vide its order dated 25.05.2017 while partially allowing the review, revised the levellised tariff of Pathri & Mohammadpur SHP as Rs. 1.42 per unit and Rs. 1.92 per unit respectively.

- 1.3 Subsequently the Commission issued the Sixth amendment to the RE Regulations, 2013 which was 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.”

- 1.4 The generator vide its letter dated 28.11.2017 represented before the Commission that tariff of their Pathri & Mohammadpur SHP be calculated in accordance with the amendments brought out 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.
- 1.5 Pathri & Mohammadpur SHPs of UJVN Ltd. had outlived their lives and after RMU activities started generation after the notification of RE Regulations, 2013 and, therefore, the Commission determined their tariffs in accordance with the operational norms specified under RE Regulations, 2013. Accordingly, 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 30.11.2016 & 25.05.2017 while determining the project specific Tariff for 20.4 MW Pathri SHP and 10.3 MW Mohammadpur SHP had

considered the O&M expenses @ Rs. 19.03 Lakh/MW and @ Rs. 22.73 Lakh/MW in accordance with the then prevailing RE Regulations, 2013. The relevant portion of the order is reproduced as below:

“4.4 Operation and Maintenance expenses

As specified in the Regulations, the base year normative operation and maintenance expense has been fixed based on the project size, as given below, and is subject to an annual escalation of 5.72% per annum for the ensuing years.

<i>Project Size</i>	<i>O&M Expenses for year of Commissioning (Rs. Lakh/MW)</i>
<i>Upto 5 MW</i>	<i>26.43</i>
<i>>5 MW & upto 15 MW</i>	<i>22.73</i>
<i>>15 MW & upto 25 MW</i>	<i>19.03</i>

*Based on the above, Pathri SHP having capacity of 20.4 MW (3*6.8 MW), the O&M expenses have been considered as Rs. 19.03 lakh/MW which has been escalated for ensuing years @ 5.72% per annum upto the life of the project. Similarly, for Mohammadpur SHP having capacity of 9.3 MW (3*3.1 MW), the O&M expenses have been considered as Rs. 22.73 lakh/MW which has been escalated for the ensuing years @ 5.72% per annum upto the life of the project. O&M expenses as approved by the Commission for Pathri & Mohammadpur SHPs has been shown in enclosed Appendix-I & II respectively.”*

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 for the SHPs commissioned on or after April 01, 2013, @ Rs. 30.00 Lakh/MW having capacity in the range of 5 MW to 15 MW and @ Rs. 25.03 lakh/MW having capacity in the range of 15 MW to 25 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’s Pathri & Mohammadpur SHPs 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. 1.53 per unit for Pathri SHP against the already approved levelised tariff of Rs. 1.42 per unit and Rs. 2.04 per unit for Mohammadpur SHP against the already approved levelised tariff of Rs. 1.92 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 Pathri & Mohammadpur SHP of UJVN Ltd. pursuant to sixth amendment to the RE Regulations, 2013.

Pathri SHP

Particulars		Unit	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Year			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
O&M Expenses	Approved vide order dated 25.05.2017	Rs.	227	410	434	459	485	513	542	573	606	640	677	716	757	800	846	894	945	999
Interest on Working Capital		Lakh	38	64	64	64	63	63	63	63	63	63	63	68	70	65	63	65	68	71
O&M Expenses	Now approved pursuant to sixth amendment in RE Regulations, 2013	Rs.	227	410	434	534	638	674	713	754	797	842	891	941	995	1052	1112	1176	1243	1315
Interest on Working Capital		Lakh	38	64	68	71	72	72	72	73	73	74	79	82	78	77	80	83	87	91

Particulars		Unit	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Year			19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
O&M Expenses	Approved vide order dated 25.05.2017	Rs.	1057	1117	1181	1248	1320	1395	1475	1560	1649	1743	1843	1948	2060	2177	2302	2434	2573	1133
Interest on Working Capital		Lakh	77	80	83	87	91	95	99	104	109	114	119	125	131	137	144	151	159	69
O&M Expenses	Now approved pursuant to sixth amendment in RE Regulations, 2013	Rs.	1390	1469	1553	1642	1736	1835	1940	2051	2169	2293	2424	2562	2709	2864	3028	3201	3384	1490
Interest on Working Capital		Lakh	95	99	104	108	113	119	125	130	137	144	151	158	166	174	183	193	202	89

Mohammadpur SHP

Particulars		Unit	2014	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	18
O&M Expenses	Approved vide order dated 25.05.2017	Rs.	147	223	236	250	264	279	295	312	330	349	369	390	412	436	461	487	515	544
Interest on Working Capital		Lakh	25	37	37	36	35	35	35	36	37	38	40	42	37	36	37	39	40	42
O&M Expenses	Now approved pursuant to sixth amendment in RE Regulations, 2013	Rs.	147	223	236	250	308	368	390	412	435	460	487	514	544	575	608	643	679	718
Interest on Working Capital		Lakh	25	37	37	38	40	40	40	41	42	44	47	48	44	44	46	47	49	52

Particulars		Unit	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
Year			19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
O&M Expenses	Approved vide order dated 25.05.2017	Rs.	575	608	643	680	719	760	803	849	898	949	1003	1061	1121	1186	1253	1325	1401	450
Interest on Working Capital		Lakh	44	46	47	49	52	54	56	59	62	64	67	70	74	77	81	85	89	28
O&M Expenses	Now approved pursuant to sixth amendment in RE Regulations, 2013	Rs.	759	803	849	897	949	1003	1060	1121	1185	1253	1324	1400	1480	1565	1654	1749	1849	594
Interest on Working Capital		Lakh	54	56	59	61	64	67	70	74	77	81	85	89	94	98	103	108	114	36