

**Petition for Determination of Pooled Cost of Power Purchase
for FY 2017-18**

Submitted to

Rajasthan Electricity Regulatory Commission

By

JodhpurVidyutVitran Nigam Limited

Jodhpur

October 2017

BEFORE THE RAJASTHAN ELECTRICITY REGULATORY COMMISSION

JAIPUR, RAJASTHAN

Filing No.:

Case No.:

In the Matter of:

Filing a Petition for determination of pooled cost of power purchase for FY 2017-18 based on the actual accounts for FY 2016-17 as per the Rajasthan Electricity Regulatory Commission (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010.

The Petitioner respectfully submits its petition in the matter as follows:

Table of Contents

Definitions	4
Introduction.....	5
Pooled Cost	6
Determination of Pooled cost of Power Purchase for JdVNNL for FY 2017-18.....	7
Prayer	11
Annexure I Reconciliation statement.....	12
Annexure II Power Purchase Statement of FY 2016-17.....	13
Annexure III Audited Accounts.....	16

Definitions

1. **Distribution Licensee'** means a licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply as defined in the Act
2. **Floor Price:** The minimum price as determined by the Central Electricity Regulatory Commission in accordance with its (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 as amended from time to time, at and above which the certificate can be dealt in the power exchange;
3. **Forbearance Price:** The ceiling price as determined by the Central Electricity Regulatory Commission.
4. **Pooled Cost of Power Purchase:** The weighted average price at which the distribution licensee has purchased the electricity including cost of self-generation, if any, in the previous year from all the energy suppliers, excluding short term power purchases and those based on renewable energy.
5. **Preferential Tariff:** The tariff fixed / approved by the Hon'ble Commission for sale of energy to a distribution licensee from a generating station based on renewable energy sources.
6. **Renewable Energy Sources:** Includes non-conventional renewable generation sources such as mini-hydel, wind, solar including solar component of its integration with combined cycle, bio-mass, bio-fuel cogeneration, urban or municipal waste and other such sources as approved by MNRE, excluding the nuclear power stations and hydel power stations of capacity above 25 MW.

Introduction

1. In exercise of powers conferred under sections 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf, the Rajasthan Electricity Regulatory Commission framed Rajasthan Electricity Regulatory Commission (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010.
2. As per RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010, and RERC (Power Purchase and Procurement Process of Distribution Licensee) (4thAmendment) Regulations 2017, a Distribution Licensee including deemed licensee shall procure electricity generated from renewable energy sources as provided in following table:

Table 1: RPO expressed as percentage of energy consumption (%)

Sl. No.	Financial Year	Wind	Biomass	Solar	Total *
1.	2017-18	8.20	1.30	4.75	14.25

*Note: * As per RERC (Power Purchase and Procurement Process of Distribution Licensee) (4th Amendment) Regulations 2017 dated 7th June 2017*

3. As per the RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010, the effective electricity component price during the operating period for a distribution licensee(s) shall be equal to the Pooled cost of Power Purchase, which is the weighted average price at which the distribution licensee has purchased the electricity including cost of self-generation, if any, in the previous year from all the energy suppliers, excluding short term power purchases and those based on renewable energy.
4. JDVVNL is submitting this petition to the Hon'ble Commission for determination of Pooled Cost of Power Purchase for FY 2017-18 based on the audited accounts for FY 2016-17.

Pooled Cost

1. As per Clause 11 of the RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010, the tariff rate, tariff structure and other conditions for existing renewable energy projects for which long term PPA for purchase of renewable energy are already put in place, may participate in REC scheme after the expiry of the period of their existing PPA.
2. Provided further that such a generating company having entered into a power purchase agreement for sale of renewable energy at a preferential tariff shall not, in case of pre-mature termination of the agreement, be eligible for participating in the REC scheme for a period of three years from the date of termination of such agreement or till the scheduled date of expiry of PPA whichever is earlier.
3. All the new renewable energy projects commissioned during the Multiyear Control Period, after coming into force of RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010 and which do not have PPA prior to coming into effect of these Regulations for purchase of Renewable Energy shall have the option of either following the tariff structure and other conditions as stipulated in the RERC (Terms and Conditions for Determination of Tariff) Regulations, 2014, subject to agreement of licensee or adopt pricing of the REC mechanism.
4. In case REC mechanism is repealed / expires or RE generator on his own opts out of the REC mechanism, RE generator can switch over to preferential tariff mechanism subject to scope to accommodate the same in the RPO target of the licensee at a tariff to be determined by the Commission and/or sell renewable energy at mutually agreed price to other obligated entities.

Determination of Pooled cost of Power Purchase for JdVVNL for FY 2017-18

1. The RERC (Renewable Energy Certificate and Renewable Purchase Obligation Compliance Framework) Regulations, 2010 requires the Distribution licensee to purchase renewable energy and/ or renewable energy certificates (RECs) for discharge of the above specific mandatory obligation.
2. The Distribution licensee can purchase the renewable energy and/ or certificate as per REC Mechanism as follows:
 - a. The effective electricity component price shall be equal to the Pooled Cost of Power Purchase.
 - b. The Certificate could be purchased at price discovered in the Power Exchanges.
3. For the determination of Pooled cost of Power Purchase for FY 2017-18, the Discom has considered the power purchase cost and quantum as per the audited accounts for FY 2016-17.
4. Further, while determining the Final Pooled cost of Power Purchase, the Discom has not considered the short-term power purchase and renewable energy, while the power purchased from nuclear power stations, hydel power stations of capacity above 25 MW and thermal component of bundled power purchased through NVVN has been considered.
5. On the basis of power purchase cost and quantum available for FY 2016-17, Pooled cost for FY 2017-18 works out to **Rs. 3.6914 per unit**. The reconciled power purchase statement for FY 2016-17 is attached as **Annexure I**.
6. The detailed computation of Pooled cost of Power Purchase for FY 2017-18 is as follows:

Pooled Power Purchase Cost for JDVVNL for FY 2017-18 based on Actual Accounts of FY 2016-17

S.No	Power Purchase Station (Source Wise)	Energy Purchased (MU's)	Power Purchase Cost (Rs. Cr)				Weighted Avg Cost per unit (Rs/kWh)
			Fixed Charges	Energy Charges	Total Cost	Rate (Rs/kWh)	
A	NTPC						
1	ANTA GTPS	38.4651	13.7507	10.9091	24.6598	6.4110	0.0125
2	AURIYA GTPS	14.2483	9.1813	4.7472	13.9285	9.7756	0.0071
3	DADRI GTPS	61.9158	10.4836	16.5635	27.0471	4.3684	0.0138
4	FGUTTPS -I	19.1829	4.5439	5.7068	10.2507	5.3437	0.0052
5	FGUTTPS -II	42.1956	8.1485	12.5619	20.7103	4.9082	0.0105
6	FGUTPP III	28.1381	6.8547	8.2007	15.0554	5.3505	0.0077
7	F.S.T.P.S	16.9425	1.9007	4.4596	6.3603	3.7540	0.0032
8	K.H.S.T.P.S. I	35.9560	5.4943	8.7398	14.2341	3.9588	0.0072
9	K.H.S.T.P.S. & II	167.2422	26.8784	37.9983	64.8768	3.8792	0.0330
10	RHIND STPS	175.3998	17.4262	28.8586	46.2848	2.6388	0.0235
11	RIHAND II	230.4512	19.6381	36.4558	56.0938	2.4341	0.0285
12	RIHAND III	263.6430	38.8426	41.9123	80.7549	3.0630	0.0411

Pooled Power Purchase Cost for JDVVNL for FY 2017-18 based on Actual Accounts of FY 2016-17							
S.No	Power Purchase Station (Source Wise)	Energy Purchased (MU's)	Power Purchase Cost (Rs. Cr)				Weighted Avg Cost per unit (Rs/kWh)
			Fixed Charges	Energy Charges	Total Cost	Rate (Rs/kWh)	
13	SINGUARLI	676.8340	37.1391	100.8795	138.0186	2.0392	0.0702
14	TALCHAR STPS	0.0000	0.0000	0.0000	0.0000		
15	KHPS-I	111.0610	27.0185	23.9904	51.0089	4.5929	0.0259
16	NCTPS 1	0.0000	0.0000	0.0000	0.0000		
17	NCTPS 2	4.0192	1.0416	1.2519	2.2935	5.7064	0.0012
	TOTAL	1885.6947	228.3421	343.2354	571.5775	3.0311	0.2907
	Prior Period Expenses	0.0000	6.0993	-77.7232	-71.6239		
	Total (with Adjustment)	1885.6947	234.4414	265.5122	499.9537	2.6513	0.2543
B	NHPC						
1	TANAKPUR HEP	10.2287	2.5063	1.7030	4.2093	4.1151	0.0021
2	SALAL HEP	30.5404	1.8662	5.2698	7.1360	2.3366	0.0036
3	CHAMERA-I	134.3731	12.1266	15.6719	27.7984	2.0688	0.0141
4	CHAMERA-II	47.3238	5.3108	5.0095	10.3203	2.1808	0.0052
5	CHAMERA-III	33.2024	8.2105	7.0563	15.2668	4.5981	0.0078
6	URI HEP	78.3293	6.5676	11.0721	17.6397	2.2520	0.0090
7	URI HEP II	55.1671	15.1631	16.2988	31.4619	5.7030	0.0160
8	DHOLIGANGA	30.4300	5.1439	7.0350	12.1789	4.0023	0.0062
9	DULHASTI	81.5415	21.6865	26.3142	48.0007	5.8867	0.0244
10	PARBATI III	24.6982	5.5978	6.7792	12.3770	5.0113	0.0063
11	SEWA II	17.5413	4.9119	4.1297	9.0416	5.1545	0.0046
	TOTAL	543.3757	89.0912	106.3396	195.4307	3.5966	0.0994
	Prior Period Expenses	0.0000	-1.5205	8.6861	7.1656		
	Total (with Adjustment)	543.3757	87.5707	115.0256	202.5963	3.7285	0.1030
C	NEYVELI LIGNITE CORPORATION LTD	406.7590	98.9236	63.1279	162.0515	3.9840	0.0824
D	SJVNL-NATHPA-JHAKRI	177.7415	28.0561	24.9666	53.0228	2.9831	0.0270
	Rampur	49.9698	9.7862	8.2705	18.0567	3.6135	0.0092
	Total	227.7112	37.8424	33.2371	71.0795	3.1215	0.0362
	Prior Period Expenses	0.0000	0.0000	-0.0513	-0.0513		
	Total (with Adjustment)	227.7112	37.8424	33.1858	71.0282	3.1192	0.0361
E	NPICIL						
E1	NAPP	104.8817	0.0000	27.0509	27.0509	2.5792	0.0138
	Prior Period Expenses	0.0000	0.0000	0.4670	0.4670		
	Total (with Adjustment)	104.8817	0.0000	27.5178	27.5178	2.6237	0.0140
E2	RAPP						
	RAPP-I & II	275.7612	0.0000	79.4645	79.4645	2.8816	0.0404
	RAPP-III&IV	343.4534	0.0000	98.7248	98.7248	2.8745	0.0502
	RAPP-V & VI	168.9650	0.0000	59.6350	59.6350	3.5294	0.0303

Pooled Power Purchase Cost for JDVVNL for FY 2017-18 based on Actual Accounts of FY 2016-17							
S.No	Power Purchase Station (Source Wise)	Energy Purchased (MU's)	Power Purchase Cost (Rs. Cr)				Weighted Avg Cost per unit (Rs/kWh)
			Fixed Charges	Energy Charges	Total Cost	Rate (Rs/kWh)	
	RAPP-V	0.0000	0.0000	0.0000	0.0000		
	TOTAL (RAPP)	788.1797	0.0000	237.8243	237.8243	3.0174	0.1210
	Prior Period Expenses	0.0000	0.0000	8.8930	8.8930		
	Total (with Adjustment)	788.1797	0.0000	246.7173	246.7173	3.1302	0.1255
F	State Generation & Others						
	KTPS(1 to 7)	2121.0425	153.4912	641.3091	794.8003	3.7472	0.4042
	STPS(1 to 6)	1287.4506	268.6720	450.8186	719.4906	5.5885	0.3659
	DCCPP	30.3538	16.5396	10.3448	26.8844	8.8570	0.0137
	CTPP (1&2))	979.0286	157.3920	226.1553	383.5473	3.9176	0.1951
	CTPP (3)	484.9139	93.4560	114.5156	207.9716	4.2888	0.1058
	CTPP (4)	498.8684	83.0745	117.7694	200.8439	4.0260	0.1022
	RGTP(1&2)	138.1678	8.8556	29.6924	38.5480	2.7899	0.0196
	RGTP(3)	299.5680	45.8491	91.1271	136.9762	4.5725	0.0697
	KaTPP#1	1092.9448	282.7039	276.0988	558.8027	5.1128	0.2842
	KaTPP#2	677.0810	150.4208	172.5023	322.9231	4.7693	0.1642
	MAHI	66.7361	13.1627	2.0021	15.1648	2.2724	0.0077
	Others	0.0000	0.0000	74.2753	74.2753		
	GPTPP	-2.9370	6.4371	3.4311	9.8682	-33.6002	0.0050
	RAJWEST POWER LIMITED	1864.4309	416.9535	389.4796	806.4331	4.3254	0.4102
	Total	9537.6494	1697.0080	2599.5215	4296.5295	4.5048	2.1853
G	Coastal Gujarat	809.1538	77.1243	116.3640	193.4883	2.3912	0.0984
H	Total Shared Projects/Others						
	Tehri	78.3224	22.2922	17.8866	40.1788	5.1299	0.0204
	Koteshwar	34.0519	6.7201	6.4530	13.1731	3.8685	0.0067
	Total	112.3743	29.0123	24.3395	53.3519	4.7477	0.0271
	Prior Period Expenses	0.0000	0.0000	-6.4509	-6.4509		
	Total THDC (with Adjustment)	112.3743	29.0123	17.8886	46.9010	4.1736	0.0239
	TALA THROUGH PTC (BHUTAN)	15.5586	0.0000	3.1518	3.1518	2.0258	0.0016
	Prior Period Expenses	0.0000	0.0000	0.0000	0.0000		
	Total (with Adjustment)	15.5586	0.0000	3.1518	3.1518	2.0258	0.0016
	BBMB(BHAKRA,DEHAR&PONG)	690.9605	0.0000	33.0788	33.0788	0.4787	0.0168
	CHAMBAL/SATPURA	241.8922	0.0000	0.0000	0.0000	0.0000	0.0000
	Total	1060.7855	29.0123	54.1193	83.1316	0.7837	0.0423
I	NVVN Bundled Power (Thermal)	621.5283	68.4277	117.8287	186.2564	2.9967	0.0947
J	Aravali Power Limited	2.7511	4.4912	1.9805	6.4717	23.5242	0.0033

Pooled Power Purchase Cost for JDVVNL for FY 2017-18 based on Actual Accounts of FY 2016-17							
S.No	Power Purchase Station (Source Wise)	Energy Purchased (MU's)	Power Purchase Cost (Rs. Cr)				Weighted Avg Cost per unit (Rs/kWh)
			Fixed Charges	Energy Charges	Total Cost	Rate (Rs/kWh)	
K	ADANI Power Rajasthan	2518.7147	381.7684	568.4447	950.2131	3.7726	0.4833
L	Sasan Power Ltd	822.7409	14.2611	124.0954	138.3565	1.6817	0.0704
M	Karcham Wangtoo	131.7539	0.0000	112.2874	112.2874	8.5225	0.0571
N	PTC (DB)	160.2704	41.9790	25.9692	67.9481	4.2396	0.0346
O	PTC (Maruti)	39.4520	6.8873	6.4673	13.3546	3.3850	0.0068
	Grand Total	19661.4021	2779.7375	4478.1646	7257.9021	3.6914	3.6914

Prayer

In view of the above submission, the Discom prays as under:

1. The Hon'ble Commission to accept this petition as submitted by the Discom
2. The Hon'ble Commission may kindly determine the Pooled cost of Power Purchase for FY 2017-18 as per the Discom's submission and allow Discom to recover pooled cost of power purchase at Rs. **3.6914**per unit.
3. The Hon'ble Commission may kindly condone any inadvertent omission/ errors/ shortcomings and permit the Discom to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date
4. The Hon'ble Commission pass such further and other orders, as it may deem fit and proper keeping in view the facts and circumstances of the case.

Annexure-I

FY 2016-17		
Figures shown in audited accounts		
Particulars	Units in MU	Rs. Crore
Purchase of energy	23,667.54	10,334.34
Less : Sale of energy through power exchange	91.18	25.51
Net availability before transmission loss	23,576.36	10,308.82
Power Purchase Reconciliation		
Particulars	Power Purchase (MU)	Cost (Rs. Crore)
Total power purchase and cost as furnished by Discom (A)	23,667.56	10,334.34
Less: Transmission Charges		
PGCIL	--	499.42
MARU		12.06
RVPNL		632.99
SLDC		(5.40)
ARAVALI	--	7.93
NRLDC POSCO	--	0.82
Transmission Charges (B)	--	1,147.81
Less: the following		
Short Term Purchase	174.98	49.21
RE Power	2,530.51	1,192.71
NVVN Solar	148.25	157.60
Inter Discom	1,084.58	481.78
UI	34.93	12.91
RVUN Hydel Stations below 25 MW	2.72	1.03
Service Charge to RUVNL	--	2.86
Banking	30.18	30.52
Total (C)	4,006.15	1,928.63
Power Purchase considered for Pooled cost =(A)-(B)-(C)	19,661.40	7,257.90
Power purchase (MU)	Total cost (Rs. Crore)	Weighted average price (Rs./kwh)
19,661.40	7,257.90	3.6914