

Chapter-IV

Tariff of Long-term Sources of Power

1. Background

Section 61 & 62 of the Electricity Act, 2003 provide for tariff regulation and determination of tariff of generation, transmission, wheeling and retail sale of electricity by the Appropriate Commission. The CERC has the responsibility to regulate the tariff of generating companies owned or controlled by the Central Government. The CERC specifies the terms and conditions for the determination of tariff for the generating companies guided by the principles and methodologies specified. The principles of the tariff are based on: (a) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments; (b) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner; (c) rewarding efficiency in performance; (d) the tariff progressively reflects the cost of supply of electricity and also reduces and eliminates cross-subsidies; and (e) the promotion of co-generation and generation of electricity from renewable sources of energy.

Section 63 of the Act states that “Notwithstanding anything contained in section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government”. Competitive procurement of power requirement by the Distribution Licensees reduces the overall cost of power procurement and in turn leads to significant benefits to consumers.

2. Guidelines and Standard Bidding Documents (SBDs) for Procurement of Electricity by Distribution Licensees through Tariff based bidding process

In compliance with section 63 of the Electricity Act 2003, the Central Government has notified Guidelines for Procurement of Power by Distribution Licensees through Competitive Bidding.



i) **Long Term procurement of Power:** Central Government had initially issued the Standard Bidding Documents (SBDs) containing Request for Qualification (RfQ), Request for Proposal (RfP) and Power Purchase Agreement (PPA) for long-term procurement of power from Case 2 projects (having specified site and location) through tariff based competitive bidding in 2006 and amended it from time to time. The Standard Bidding Documents for long-term procurement of power from Case-1 projects (where the location, technology or fuel is not specified) were issued in the year 2009 and amended it in 2010. In pursuance of the decision of the EGoM on Ultra Mega Power Projects (UMPPs) having specified site and location, the SBDs for Case-2 have been further reviewed and the Model Bidding Documents (MBDs) comprising the Model RFQ, Model RFP and the Model PPA for construction and operation of power generation projects/ UMPPs on design, Build, Finance, Operate and Transfer (DBFOT) basis have been issued on 20th September, 2013. The Guidelines for procurement of electricity from Thermal Power Stations set up on DBFOT basis for Case-2/UMPPs have been published in the Gazette of India on 21st September, 2013. Model Bidding Documents (MBDs) for Thermal Power Stations set up on Design, Build, Finance, Own and Operate (DBFOO) basis for Case-1 issued on 8.11.2013. Further, amendments have been issued in the Documents on 5.5.2015. In order to facilitate use of linkage coal in the long-term procurement of power by Distribution Licensees as per the provisions of SHAKTI Policy, SBDs and Guidelines for long-term Procurement of Electricity from Thermal Power Stations set up on DBFOO basis have been revised and issued in March, 2019.

ii) **Medium Term Procurement of Power:** Model Bidding Documents (MBDs) for procurement of electricity for medium-term from power generating stations set up and/or operated on Finance, Own and Operate (FOO) basis was issued on 29.1.2014. Further, amendments have been issued in the Documents of 20.8.2015. Model Bidding Documents (MBDs) for procurement of peaking power for medium term issued on 20.2.2014. In order to introduce e-bidding process along with reverse action, revised Guidelines and Model Bidding Documents for medium-term procurement of power by Distribution Licensees through tariff based competitive bidding process was notified on 17 January, 2017. Introduction of e-bidding process along with reverse auction will result in greater transparency and fairness in the procurement process for ultimate

benefit of the consumers. Further, for enabling the use of linkage coal as per the new coal linkage policy (SHAKTI Policy) of Ministry of Coal, Revised MBDs and revised Guidelines for Procurement of Electricity for Medium Term were issued on 29.01.2019 and 30.01.2019 respectively.

iii) **Short Term procurement of Power:** The Central Government has issued Guidelines for short-term procurement of electricity i.e. for a period of less than or equal to one year under section 63 of the Electricity Act, 2003 on 16 May, 2012. For introduction of e-reverse auction, the revised guidelines for short-term procurement of electricity were also issued on 30th March, 2016.

The power procurement through competitive bidding resulted in significant capacity addition by private sector. The details on tariff determined by CERC for interstate power generating companies, mainly the tariff of central public sector power generating companies are discussed in the followings sections.

3. Tariff of Central Public Sector Power Generating Companies

In 2022-23, the central public sector power generating companies (NTPC, NHPC, NLC, NEEPCO, etc.)/central government-owned generating companies accounted for about 40% of the total power generation in the country, which was mainly procured by the various distribution companies through long-term Power Purchase Agreements.

The price paid by distribution companies to procure power from central government-owned thermal generating stations and hydro generating stations in 2022-23 is given in Table-38 and Table-39, respectively.

Table-38: Tariff of Central Thermal Power Stations, 2022-23

S No.	Name of the Station	Installed Capacity (MW) as on 31.03.2023	Normative Fixed Charges (Rs/kwh) @ 85% SG	ECR (Rs/ kWh)	Total Tariff (Rs/ kWh)
NTPC Generating Stations					
1	Singrauli STPS	2000	0.660	1.492	2.152
2	Rihand STPS-I	1000	0.844	1.522	2.366
3	Rihand STPS-II	1000	0.768	1.562	2.330
4	Rihand STPS-III	1000	1.443	1.544	2.987
5	FGUTPS Unchahar-I	420	1.024	4.407	5.431
6	FGUTPS Unchahar-II	420	1.096	4.134	5.230
7	FGUTPS Unchahar-III	210	1.193	4.391	5.584
8	FGUTPS Unchahar-IV	500	1.655	4.131	5.786
9	Tanda-I	440	1.264	5.025	6.290
10	Tanda-II	660	1.469	3.880	5.350
11	NCTPS Dadri-I	840	0.973	4.868	5.841
12	NCTPS Dadri-II	980	1.393	4.788	6.181
13	Korba STPS-I&II	2100	0.743	1.529	2.272
14	Korba STPS-III	500	1.349	1.471	2.820
15	Sipat STPS-I	1980	1.280	1.989	3.270
16	Sipat STPS-II	1000	0.986	2.240	3.225
17	Vindhyachal STPS-I	1260	0.896	1.621	2.517
18	Vindhyachal STPS-II	1000	0.769	1.534	2.304
19	Vindhyachal STPS-III	1000	0.912	1.546	2.458
20	Vindhyachal STPS-IV	1000	1.565	1.532	3.097
21	Vindhyachal STPS-V	500	1.672	1.585	3.256
22	Lara	1600	1.674	2.531	4.205
23	Solapur	1320	1.720	4.962	6.683
24	Mouda STPS-I	1000	1.723	4.240	5.963
25	Mouda STPS-II	1320	1.495	4.298	5.793
26	Gadarwara	1600	2.077	4.230	6.307
27	Khargone	1320	1.813	4.865	6.678
28	Talcher STPS-I	1000	0.959	1.917	2.875
29	Talcher STPS-II	2000	0.714	1.937	2.651
30	Talcher TPS	460	1.662	1.164	2.825

31	Darlipali	800	1.048	3.707	4.755
32	Kahalgaon STPS-I	840	1.089	3.530	4.619
33	Kahalgaon STPS-II	1500	0.824	3.840	4.664
34	Farakka STPS-I&II	1600	1.492	3.730	5.222
35	Farakka STPS-III	500	2.424	3.174	5.598
36	Barh STPS-II	1320	1.840	3.432	5.272
37	Barauni-I	220	0.767	4.583	5.350
38	Barauni-II	250	1.760	2.729	4.489
39	Bongaigaon TPS	750	2.406	3.823	6.229
40	Ramagundam STPS-I&II	2100	0.728	4.024	4.751
41	Ramagundam STPS-III	500	0.833	3.710	4.543
42	Simhadri STPS-I	1000	0.962	4.479	5.441
43	Simhadri STPS-II	1000	1.450	4.350	5.800
44	Kudgi	2400	1.668	5.573	7.241
45	Nabinagar STPS-I	1980	2.174	2.756	4.930
46	Muzaffarpur TPS-II	390	2.741	2.766	5.507
47	North Karanpura-I	660	2.412	1.608	4.020
NTPC Gas Stations Tariff for 2022-23					
48	Faridabad	431.59	0.746	4.080	4.826
49	Auraiya	663.36	0.635	19.134	19.769
50	Dadri	829.78	0.515	14.218	14.733
51	Anta	419.33	0.709	19.270	19.979
52	Gandhar	657.39	0.856	11.741	12.597
53	Kawas	656.20	0.878	17.525	18.402
54	Kayamkulam	359.58	0.384	0.000	0.384
NTPC -JV Stations Tariff for 2022-23					
55	MUNPL, Meja	1320	1.990	3.125	5.114
56	APCPL, Jhajjar	1500	1.585	4.606	6.191
57	NTECL, Vellur	1500	1.727	3.532	5.259
Maithon Power Limited					
58	Maithon Power Limited	1050	1.389	2.741	4.13
NLC Stations					



59	TS-II St.1	630	2.733	0.71	3.44
60	TS-II St.2	840	2.737	0.74	3.47
61	TPS-I Expansion	420	2.443	0.99	3.43
62	BTPS	250			
63	TPS-2 Expansion	500	2.614	2.13	4.75
64	NTPL	1000			
65	NNTPP	1000	2.202	1.80	4.01
DVC					
66	MTPS (1-3)	630	1.04	3.66	4.69
67	MTPS (4)	210	1.00	3.39	4.40
68	MTPS (5-6)	500	1.13	3.78	4.91
69	MTPS (7-8)	1000	1.49	3.58	5.07
70	CTPS (7-8)	500	1.73	3.62	5.35
71	DSTPS (1-2)	1000	1.53	3.79	5.32
72	KTPS (1-2)	1000	1.68	3.54	5.22
73	RTPS (1-2)	1200	1.63	3.88	5.51
74	BTPS A	500	2.20	2.77	4.97
PPCL Bawana					
75	PPCL Bawana TPS	1371.2	1.32	6.759	8.079
ONGC Tripura Power Company Ltd, Palatana Project					
76	Palatana	726.6	1.31	1.95	3.26
NEEPCO Gas Plants					
77	AGBP	291.00	1.8835	2.062	3.9455
78	AGTCCP	135.00	1.884	2.582	4.466
79	TGBP	101.00	2.5354	1.583	4.1184

Table-39: Tariff of Central Hydro Power Stations, 2022-23

S No	Power Station	Installed Capacity (MW)	Annual DE (MU)	Composite Tariff (including water tax for J&K) (Rs/kWh)
NHPC				
1	BAIRASIUL	180	779.28	2.23
2	SALAL	690	3082	1.5
3	TANAKPUR	94.2	452.19	4.76
4	CHAMERA-I	540	1664.55	2.22
5	URI-I	480	2587.38	1.64
6	CHAMERA-II	300	1499.89	2.01
7	DHAULIGANGA	280	1134.69	2.51
8	DULHASTI	390	1906.8	4.57
9	LOKTAK	105	448	3.89
10	RANGIT	60	338.61	3.9
11	TEESTA-V	510	2572.7	2.33
12	Uri-II	240	1123.77	4.26
13	NIMOO BAZGO	45	239.33	9.13
14	CHUTAK	44	212.93	8.9
15	SEWA-II	120	533.53	5.3
16	CHAMEERA-III	231	1108.17	4.21
17	PARBATI-III	520	1963.29	3.08
18	TLDP-III	132	594.07	5.3
19	TLDP-IV	160	720	4.35
20	KISHANGANGA	330	1712.96	3.94
SJVNL				
21	NATHPA JHAKRI	1500	6612	2.406
22	RAMPUR	412	1878.08	4.162
NEEPCO				
23	RANGANADI	405	1509.69	2.745
24	KOPILI ST-I	200	1186.14	1.421
25	KOPILI ST-II	25	86.3	2.96
26	KHANDONG	50	227.61	1.775
27	DOYANG	75	227.24	6.751
28	TUIRIAL	60	250.63	5.124
29	Pare*	110	506.42	5.27
30	Kameng*	600	3353	4
THDC				
31	TEHRI	1000	2797	3.81
32	KOTESHWAR	400	1154.82	5.29
NHDC				
33	INDIRA SAGAR	1000	1442.7	3.8
34	OMKARESHWAR	520	677.47	4.63

DVC				
35	MAITHON	63.2	137	2.999
36	PANCHET	80	237	1.608
37	TALIYA	4	9.97	12.235
IPP				
38	KARCHAM WANGTOO	1000	4559.77	2.798
NTPC				
39	Koldam	800	3054.79	7.332

*Mutually agreed by NEEPCO and its beneficiaries.
