


MADHYA PRADESH POWER GENERATING COMPANY LIMITED

(A GOVERNMENT OF M.P. UNDERTAKING)

CIN-U40109MP2001SGC014882

 BLOCK NO.9, SHAKTI BHAWAN, VIDYUT NAGAR, RAMPUR: JABALPUR (M.P.)482008
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No. 07-12/CS-MPPGCL/CERC/ 695

Jabalpur, Date: 22/05/18

To,

 ✓ The Secretary,
 Central Electricity Regulatory Commission.
 3rd Floor, Chanderlok Building,
 36,Janpath,
 New Delhi-110001.

 Sub: CERC Terms and Conditions of Tariff for the period starting from
 01.04.2019 to 31.03.2024

Ref: This office letter No. 07-12/CS-MPPGCL/CERC/659 dated 15.05.2018.

 In the subject matter and in the continuation to this office letter dated 15.05.2018,
 please find enclosed herewith balance information pertaining to Madhya Pradesh Power
 Generating Co.Ltd in prescribed formats.

Please acknowledge the receipt.

Encl: as above

 (S. K. Saxena)
 Chief Engineer (C.S.)
 MPPGCL: JABALPUR

STPS, Sarni							
S. No.	Particulars	Units	Year				
			2012-13	2013-14	2014-15	2015-16	2016-17
1	Name of Company		M.P.Power Generation Co. Ltd.				
2	Name of station		Satpura Thermal Power Station Sarni				
3	Installed Capacity and Configuration	MW	(1X200)+(3X210)+(2X250) =1330 MW				
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler)		Type of Boiler: - Pulverised coal fired , balance draught water tube boiler. Type of Turbine:- Tandam compounded reheat type LMZ design Impulse turbine BHEL- Make.				
5	Type of BFP		Multi Stage centrifugle pumps.				
6	Circulating water ststem		Open System (Once throught system)				
7	Any other site specific feature						
8	Fuels :						
8.1	Primary Fuel :		Coal				
8.1.1	Annual Allocation or/and Requirement	MT	WCL - 66 (LMT) for Old units and WCL - 18.513 (LMT) for New Units		SECL - 21.67 (LMT) for New Units / WCL- 47.95 (LMT) for Old Units		
8.1.2	Source of Supply / Procurement along with contracted quantity and grade of coal		SECL - WCL / 69.62 LMT / Grade - D/E/Washery Middling, G-8 to G-12				
8.1.2	FSA	MT	WCL - 66 (LMT) for Old units w.e.f 02.04.2009 and WCL - 18.513 (LMT) for New Units w.e.f. 02.01.2013		SECL - 21.67 (LMT) for New Units w.e.f. 01.01.2016 / WCL- 47.95 (LMT) for Old Units w.e.f. Nov-2015		
8.1.2	Imported	MT	267552	451836	107159	116406	51625
8.1.2	Spot Market / e-Auction	MT	--				
8.1.3	Transportation Distance of the station from the source of supply	KM	SECL - 735 to 906 / WCL - 8 to 458				
8.1.4	Mode of Transport		Rail / Road / Belt				
8.1.5	Maximum Station capability to stock primary fuel	Days & MT	7 LMT				
8.1.6	Maximum stock maintained for primary fuel		168847	622881	364136	696300	658739
8.1.7	Minimum stock maintained for primary fuel		39910	322729	47138	27305	96495
8.1.8	Average stock maintained for primary fuel		113943	453934	127496	402592	365797
8.2	Secondary Fuel:						
8.2.1	Annual requirement	KL					
	Furnace Oil	KL	49515	51500	12200	16000	6000
	LDO	KL	-	2000	1500	2600	2000
	HSD	KL	6708	11600	-	-	-
8.2.2	Source of supply						
	Furnace Oil		Mumbai	Mumbai	Mumbai	Mumbai	Mumbai
	LDO		-	Indore	Indore	Indore	Indore
	HSD		Itarsi/Bhopal	Itarsi/Bhopal	-	-	-
8.2.3	Transportation distance of the station from the source of supply	KM					
	Furnace Oil (From Mumbai)	KM	900	900	900	900	900
	LDO (From Indore)	KM	300	300	300	300	300
	HSD (Itarsi/Bhopal)	KM	90/190	90/190	-	-	-
8.2.4	Mode of Transportation	KM					
	Furnace Oil		Rail	Rail	Rail	Rail	Rail
	HSD/LDO		Road	Road	Road	Road	Road
8.2.5	Maximum station capability to stock secondary fuel						
	HFO (KL)		16049	16049	16049	16049	16049
	LDO(KL)		3052.5	3052.5	3052.5	3052.5	3052.5
	HSD(KL)		2552.5	2552.5	-	-	-
8.2.6	Maximum stock of secondary oil maintained						
	HFO (KL)		7000	7000	5000	5000	5000
	LDO(KL)		1000	1000	1000	1000	1000
	HSD(KL)		1000	1000	-	-	-
8.2.7	Minimum stock of secondary oil actually maintained						
	HFO (KL)		3000	3000	3000	3000	3000
	LDO(KL)		500	500	500	500	500
	HSD(KL)		500	500	-	-	-
8.2.8	Average stock maintained for Secondary fuel						
9	Cost of spares						
9.1	Cost of Spares capitalized in books of accounts						
9.2	Cost of Spares included in capital cost for the purpose of tariff						

STPS, Sarni							
S. No.	Particulars	Units	Year				
			2012-13	2013-14	2014-15	2015-16	2016-17
10	Generation:						
10.1	Actual Gross Generation at generator terminals	MU	5379.634	4970.188	6161.151	5510.131	3644.829
10.2	Actual Net Generation Ex-bus	MU	4775.506	4391.141	5532.849	4959.335	3259.313
10.3	Scheduled Generation Ex-bus	MU	----				
11	Average Declared Capacity (DC)	MW	----				
12	Actual Auxiliary Energy Consumption excluding colony consumption	MU	604.129	579.047	628.302	550.796	385.516
13	Actual Energy supplied to colony from the station	MU					
14	Primary Fuel :						
14.1	Consumption :						
14.1.1	Domestic Coal from linked mines	MT	5181637	4466046	5406429	4410305	2632384
	Domestic Coal from Non-linked mines	MT			--		
14.1.2	Imported Coal	MT	253286	477036	110409	115788	51406
	Total		5434923	4943082	5516838	4526093	2683790
14.1.3	Spot Market / e-Auction Coal	MT			--		
14.2	Gross Calorific Value (GCV) :						
14.2.1	Domestic Coal (As Billed)	kcal/kg	4960	5060	4980	5040	5078
	Domestic Coal (As Received)	kcal/kg	3934	3942	3696	3614	3755
	Domestic Coal (As Fired)	kcal/kg	3808	3730	3341	3374	3583
14.2.2	Imported Coal (As Billed)	kcal/kg	6396	6420	6387	6343	6354
	Imported Coal (As Received)	kcal/kg	6396	6420	6387	6343	6354
14.2.3	Spot Market / e-Auction Coal (As Billed)	kcal/kg			--		
	Spot Market / e-Auction Coal (As Received)	kcal/kg			--		
14.2.4	Weighted Average Gross Calorific value (As Billed)	kcal/kg	5027	5181	5009	5069	5107
14.2.5	Weighted Average Gross Calorific value (As Received)	kcal/kg	4049	4163	3751	3675	3815
14.2.6	Weighted Average Gross Calorific value (As Fired)	kcal/kg	3808	3730	3341	3374	3583
14.3	Price of Coal:						
14.3.1	Weighted Average Landed price of Domestic coal	(Rs./MT)	2130	2296	2522	2779	3352
14.3.2	Weighted Average Landed price of Imported coal	(Rs./MT)	5384	6311	5898	7700	8233
14.3.3	Weighted Average Landed price of Spot Market / e-Auction Coal	(Rs./MT)			--		
14.3.4	Weighted Average Landed price of all the coals	(Rs./MT)	2282	2654	2592	2889	3465
14.4	Blending:	% and MT (of the total coal consumed)					
14.4.1	Blending ratio of imported coal with domestic coal	Equivalent to domestic coal	0.80	0.80	0.80	0.80	0.80
14.4.2	Proportion of e-auction coal in the blending				--		
14.4.3	Actual Average Coal Stock Maintained	Days and MT			NA		
14.5	Actual Transit & Handling Losses for Coal / Lignite:	(%)					
14.5.1	Pit-Head Station						
14.5.1.1	Transit loss from linked mines	(%)					
14.5.1.2	Transit loss from non-linked mines including e-auction coal mines	(%)			--		
14.5.1.3	Transit loss of imported coal	(%)					
14.5.2	Non-Pit Head Station						
14.5.2.1	Transit loss from linked mines	(%)	1.84	1.81	0.52	0.82	0.82
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines	(%)			--		
14.5.2.3	Transit loss of imported coal	(%)	Nil	0.64	0.11	0.53	0.42
15	Secondary Fuel Oil						
15.1	Consumption	KL	32878.997	33686.434	12998.679	5256.456	4445.992
	(a) HFO	KL	30630.730	30652.022	11041.132	3850.072	3306.806
	(b) LDO	KL	2248.267	3034.412	1756.509	1406.385	1140.186
	© HSD	KL			201.118	-	-
15.2	Weighted Average Gross Calorific Value	As received	-	-	-	-	-
	(a) HFO	Kcal/Kg	9921	9921	9921	9921	9921
	(b) LDO	Kcal/Kg	10700	10700	10700	10700	10700
	© HSD	Kcal/Kg	10400	10400	-	-	-
15.3	Weighted Average Price						
	(a) HFO	Rs/KL	46322.277	52189.4059	52671.67	45207.99	36470.12
	(b) LDO	Rs/KL	-	74905.35	71846.87	48375.11	38926.54
	© HSD	Rs/KL	51293.92	54878.85	70150.00	-	-
15.4	Actual average Stock maintained						
	(a) HFO	KL	5000	5000	3000	3000	3000

STPS, Sarni							
S. No.	Particulars	Units	Year				
			2012-13	2013-14	2014-15	2015-16	2016-17
	(b) LDO	KL	800	800	600	600	600
	© HSD	KL	800	800	-	-	-
16	Weighted Average duration of outages (Unit wise details)		PH II				
			2012-13	2013-14	2014-15	2015-16	2016-17
16.1	Planned outage	days	1915.58	880/25	1720/57	1850/35	529/24
16.2	Forced outage	days	2004.08	979/15	1216/37	834/54	210/46
16.3	Number of trippings		58	60	36	34	28
16	Weighted Average duration of outages (Unit wise details)		PH III				
			2012-13	2013-14	2014-15	2015-16	2016-17
16.1	Planned outage	days	37	70	71	37	0
16.2	Forced outage	days	56	109	73	262	9
16.3	Number of trippings		48	52	28	12	8
16.4	Number of start-ups		48	52	28	12	8
16.4.1	Cold start-up		24	26	18	9	5
16.4.3	Hot Start-up		25	29	10	3	3
16	Weighted average duration of outages (unit-wise details) :		PH IV				
16.1	Planned Outages	Days/Hrs.	--	--	--	0:44:00	823:02:00
16.2	Forced Outages	Days/Hrs.		2756:15:00	5225:50:00	7775:38:00	4714:48:00
16.3	Number of trippings			42	88	52	33
16.4	Number of start-ups:						
16.4.1	Cold Start-up		--	2	7	6	3
16.4.2	Warm Start-up			3	1	6	1
16.4.3	Hot Start-up			37	80	40	29
17	Nox, Sox, and other particulate emission in:						
17.1	Design value of emission control Equipment	ppm or mg/Nm					
17.2	Actual emission	ppm or mg/Nm					
19	Details of Ash Utilization % of fly as produced	%	25.87	39.01	42.13	34.80	47.97
19.1	Conversion of value added product	%	3.99	11.20	34.81	86.22	79.01
19.2	For making roads & embarkment	%	38.86	38.09	0.04	2.03	2.00
19.3	Land filling	%	Nil	8.46	38.65	Nil	Nil
19.4	Used in plant site in one or other form or used in some other site	%	57.13	25.22	6.00	1.59	2.37
19.5	Any other use - Used in other form	Qty. and Usage	17.00	0.03	20.41	16.60	5.00
20	Cost of spares actually consumed						

Annexure-IV

PLANT AVAILABILITY ACHIEVED						
Generating company:	M.P.POWER GENERATING CO. LTD.					
Name of station:	STPS PH II& III					
Installed Capacity (MW) :	830 MW					
Normative Annual Plant Availability Factor (%) approved by Commission : 75%						
Month	2012-13	2013-14	2014-15	2015-16	2016-17	Reasons for shortfall in PAF achieved vis-a-vis NAPAF may be specified
April	66.1	67.9	71.5	45.5	82.86	----
May	62.70	55.35	58.40	64.85	87.72	----
June	56.47	47.21	52.38	65.68	89.69	----
July	48.40	31.44	39.00	53.70	68.06	----
August	43.23	31.38	42.23	47.52	74.94	----
September	36.97	44.48	43.74	61.35	87.42	----
October	53.05	56.66	62.28	59.86	90.40	----
November	61.59	55.72	64.86	61.32	90.19	----
December	66.95	68.53	61.62	62.34	87.41	----
January	69.59	71.48	57.63	66.73	90.50	----
February	69.19	71.19	69.03	77.12	91.78	----
March	66.21	79.55	74.60	88.88	93.71	----
Annual	58.14	55.70	58.01	62.87	86.16	----

PLANT AVAILABILITY ACHIEVED						
Generating company:	M.P.POWER GENERATING CO. LTD.					
Name of station:	STPS PH IV					
Installed Capacity (MW) :	500 MW					
Normative Annual Plant Availability Factor (%) approved by Commission :85%						
Month	2012-13	2013-14	2014-15	2015-16	2016-17	Reasons for shortfall in PAF achieved vis-a-vis NAPAF may be specified
April	----	----	25.03	56.07	91.61	----
May	----	----	33.32	59.55	97.66	----
June	----	----	46.65	96.09	97.56	----
July	----	----	65.13	59.06	99.30	----
August	----	23.58	68.45	17.20	80.38	----
September	----	37.09	54.19	39.81	49.35	----
October	----	27.76	59.41	45.98	78.53	----
November	----	59.33	37.74	48.70	95.42	----
December	----	67.50	50.71	41.35	75.00	----
January	----	38.92	48.44	49.14	72.71	----
February	----	0.00	34.56	44.16	79.00	----
March	----	28.28	61.96	74.69	100.44	----
Annual	----	36.00	49.00	52.61	84.81	----

Note: Units of STPS PH-4 commissioned during FY 2013-14.

Annexure-IV

PLANT LOAD FACTOR						
Generating company:	M.P.POWER GENERATING CO. LTD.					
Name of station:	STPS PH II& III					
Installed Capacity (MW) :	830					
Normative Annual Plant Load Factor (%) approved by Commission : 75%						
Month	2012-13	2013-14	2014-15	2015-16	2016-17	Reasons for shortfall in PLF achieved vis-a-vis NAPLF may be specified
April	67.8	59.3	68.9	41.6	65.8	----
May	64.0	56.2	59.0	60.4	9.8	----
June	58.3	43.0	52.9	37.9	0.0	----
July	47.4	32.4	38.9	15.0	0.4	----
August	32.5	32.1	42.1	36.8	3.5	----
September	37.5	45.2	43.5	58.3	17.7	----
October	54.8	52.9	61.9	57.4	24.7	----
November	62.9	51.3	63.6	55.0	18.3	----
December	66.0	69.0	58.1	58.8	27.3	----
January	68.3	67.8	53.5	47.4	19.2	----
February	61.5	63.8	63.9	71.3	19.7	----
March	52.8	36.3	61.5	42.9	6.0	----
Annual	55.77	50.3	55.6	48.5	17.6	----

PLANT LOAD FACTOR						
Generating company:	M.P.POWER GENERATING CO. LTD.					
Name of station:	STPS PH IV					
Installed Capacity (MW) :	500 MW					
Normative Annual Plant Load Factor (%) approved by Commission :85%						
Month	2012-13	2013-14	2014-15	2015-16	2016-17	Reasons for shortfall in PLF achieved vis-a-vis NAPLF may be specified
April			23.2	48.9	83.13	----
May			32.6	52.7	45.74	----
June			45.2	72.0	24.90	----
July			64.4	50.9	4.51	----
August		22.4	68.0	5.5	0.00	----
September		36.1	54.2	37.2	29.43	----
October		28.2	60.3	44.2	73.32	----
November		59.4	38.7	45.2	93.09	----
December		66.7	51.7	38.1	71.84	----
January		36.1	49.2	43.9	67.73	----
February		0.0	35.1	39.9	68.14	----
March		24.4	55.8	62.2	87.65	----
Annual		34.6	48.4	45.0	53.97	----

Note: Units of STPS PH-4 commissioned during FY 2013-14.

Details of Water Charges

Name of the Company: M. P. Power Generating Co. Ltd.
 Name of the Power Station and stage/Phase: Amarkantak TPS, Chachai

Rs in Lakh

S.No.	Item	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Plant					
1	Type of plant	Coal basedTPS				
2	Type of Cooling Tower	IDCT (1x210 MW extn. unit)				
3	Type of Cooling Tower System	Close cycle open system				
4	Any Spacial features which can increase/reduce water consumption	-	-	-	-	-
(B)	Quantam of water (Cubic Meter)					
5	Contracted Quantam	-	2,23,26,151	2,23,26,151	2,23,26,151	2,23,26,151
6	Allocation of water	2,23,26,151	2,23,26,151	2,23,26,151	2,23,26,151	2,23,26,151
7	Actual water consumption	48,10,781	24,23,443	20,13,062	20,94,098	67,06,418
8	Rate of water charges	1.35/1.55	1.55	1.55	1.55	1.55
9	Other Charges/Fees, if paid as part of water charges	-	-	-	-	-
10	Total water charges paid	66,04,203	2,42,28,065	3,11,44,756	3,11,44,753	3,11,44,756
Note:	(i) Allocation of water for ATPS, chachai is 0.0181 MAF/Year (1 MAF=1233.489 MCM). (ii) Agreement has been signed between MPPGCL and WRD for aforesaid quantity on dated 28.12.2013. (iii) Water consumption indicated above is as per data provided to WRD for billing purpose.					

Annexure - VI (C)

Details of Water Charges

Name of the Company: M. P. Power Generating Co. Ltd.
 Name of the Power Station and stage/Phase: Sanjay Gandhi TPS, Birsinghpur

Rs in Lakh

S.No.	Item	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Plant					
1	Type of plant	Coal basedTPS				
2	Type of Cooling Tower	Not available				
3	Type of Cooling Tower System	-	-	-	-	-
4	Any Spacial features which can increase/reduce water consumption	-	-	-	-	-
(B)	Quantam of water (Cubic Meter)					
5	Contracted Quantam	-	8,09,16,878	8,09,16,878	8,09,16,878	8,09,16,878
6	Allocation of water (MCM)	8,09,16,878	8,09,16,878	8,09,16,878	8,09,16,878	8,09,16,878
7	Actual water consumption	47,46,425	39,81,755	50,52,193	19,69,560	1,72,35,737
8	Rate of water charges	1.35/1.55	1.55	1.55	1.55	1.55
9	Other Charges/Fees, if paid as part of water charges	-	-	-	-	-
10	Total water charges paid	66,24,432	8,69,77,346	11,28,78,392	11,28,78,390	11,28,78,392
Note:	(i) Allocation of water for SGTPS, Birsinghpur is 0.0656 MAF/Year (1 MAF=1233.489 MCM). (ii) Agreement has been signed between MPPGCL and WRD for aforesaid quantity on dated 28.12.2013. (iii) Water consumption indicated above is as per data provided to WRD for billing purpose.					

Details of Water Charges

Name of the Company:

M. P. Power Generating Co. Ltd.

Name of the Power Station and stage/Phase:

Satpura TPS, Sarni

Rs in Lakh

S.No.	Item	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Plant					
1	Type of plant	Coal basedTPS				
2	Type of Cooling Tower	NDCT (2x250 MW extrn. units)				
3	Type of Cooling Tower System	Close cycle open system				
4	Any Spacial features which can increase/reduce water consumption	-	-	-	-	-
(B)	Quantam of water (Cubic Meter)					
5	Contracted Quantam	-	4,17,75,000	4,17,75,000	4,17,75,000	4,17,75,000
6	Allocation of water	-	-	-	-	-
7	Actual water consumption	1,33,18,309	1,18,03,264	1,93,62,172	1,71,08,247	1,92,50,558
8	Rate of water charges	1.35/1.55	1.55	1.55	1.55	1.55
9	Other Charges/Fees, if paid as part of water charges	-	-	-	-	-
10	Total water charges paid	1,84,15,478	4,72,80,933	5,82,76,122	5,82,76,123	5,82,76,122
Note:	(i) There is no allocation of water for STPS, Sarni. (ii) Quantity of 41.775 MCM is arrived as per norms of MP, WRD i.e. 30 MCM/1000 MW (ii) Agreement has been signed between MPPGCL and WRD for aforesaid quantity on dated 28.12.2013. (iii) Water consumption indicated above is as per data provided to WRD for billing purpose.					

Annexure - VI (C)

Details of Water Charges

Name of the Company:

M. P. Power Generating Co. Ltd.

Name of the Power Station and stage/Phase:

ShriSingaji TPP, Dongalia, Distt.- Khandwa

Rs in Lakh

S.No.	Item	2012-13	2013-14	2014-15	2015-16	2016-17
1	2	3	4	5	6	7
(A)	Plant					
1	Type of plant	Coal basedTPS				
2	Type of Cooling Tower	NDCT				
3	Type of Cooling Tower System	Close cycle open system				
4	Any Spacial features which can increase/reduce water consumption	-	-	-	-	-
(B)	Quantam of water (Cubic Meter)					
5	Contracted Quantam	-	-	-	7,56,00,000	7,56,00,000
6	Allocation of water	7,56,00,000	7,56,00,000	7,56,00,000	7,56,00,000	7,56,00,000
7	Actual water consumption	-	6,58,439	64,82,585	1,26,23,784	88,12,752
8	Rate of water charges	5.00/5.50	5.50	5.50	5.50	5.50
9	Other Charges/Fees, if paid as part of water charges	-	-	-	-	-
10	Total water charges paid	-	2,48,14,769	22,40,68,026	34,14,60,509	37,42,20,007
Note:	(i) Allocation of water for SSTPP, khandwa is 75.60 MCM/Year. (ii) Agreement has been signed between MPPGCL and WRD for aforesaid quantity on dated 05.02.2015. (iii) Water consumption indicated above is as per data provided to WRD for billing purpose.					