

BIOMASS RANKINE

Description	CERC	Assam	Bihar	Chhattisgarh	Gujarat*	Haryana	J & K	Karnataka*	Madhya Pradesh	Maharashtra	Manipur	Meghalaya	Mizoram	Nagaland	Punjab*	Rajasthan	Sikkim	Tripura	Uttarakhand	JERC(For Goa & Union Territories)	Uttar Pradesh	
Regulation	2020	2017	2017	2019	Order No.-1 of 2018	2017	2013	2018	2017	2019	2010	2014	2010	2011	2017	2015	2012	2015	2018	2019	2019	
Dated	23.06.2020	04.09.2018	24.10.2017	29.11.2019		24.07.2018	17.05.2013	14.05.2018	06.07.2017	30.12.2019	31.05.2010	11.11.2014	31.05.2010	30.08.2011	31.10.2017	07.05.2015	28.06.2012	16.10.2015	06.09.2018	24.07.2019	25.07.2019	
Last Amendment	na	na	13.07.2018	na	na	27.08.2018	20.04.2016	na	na	08.08.201	na	na	08.08.201	14.10.2016	na	March, 2019	na	28.09.2016	na	na	na	
Tariff Period (Yrs)	20	20	20	20	20	20	20	20	25	25	13	20	13	13	20	20	20	13	20	20	20	
Control Period(yrs)	3	3	3	3	3	4	5	5	5	5	3	3	5	3	3	5	3	3	5	3	3	
w.e.f.	2020-21	2017-18	2017-18	2019-20	2019-20	2017-18	2013-14	2018	2017	2020-21	2012-13	2014	2012-13		2017-18	2015	2012	2015	2018-19	2019-20		
Financial Parameters																						
Debt Equity Ratio	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	70:30	
Loan Tenure(Yrs)	15	13	10	13	10	13	12		10	12	12	12	12	10	13	13	12	12	13	12	12	
Interest rate on loan capital (SBI basis points)	200	200	200	200	11.40%	200	300	10.50%	det. by comm.	MCLR of previous year+200	300	150	300	300	200	200	150	300	300	For Mainland Area-200; For Island Area-300		
Depreciation																						
(i)Starting Years	4.67%(15yrs)	5.28%(13yrs)	7%(10yrs)	5.28%(13yrs)	7% (10 Yrs)	5.38%(13yrs)	5.83% (12 Yrs)	5.28%(13yrs)	7% (10 Yrs)	5.83% (12 Yrs)	5.83% (12 Yrs)	5.83% (12 Yrs)	5.83% (12 Yrs)	5.83% (12 Yrs)	5.28%(13yrs)	5.28% (13 Yrs)	5.83% (12 Yrs)	5.83% (12 Yrs)	5.38% (13 Yrs)	5.83% (12 Yrs)	5.83% (12 Yrs)	
(ii)Remaining years					2% (11-20 Yrs)																	
Salvage Value(%)	10%	10%	10%	10%		10%	10%		10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Max Depreciation (% of capital cost)	90%	90%	90%	90%		90%	90%		90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	
Return on Equity																						
Value base of Cap. Cost	det. by comm.	30%	30%	30%		30%	30%		30%	30%	30%	30%	30%		30%	30%	30%	30%			30%	
% Normative ROE	14%	14%	14%	16%	14%	14%		14%	20%	14%		16%			14%	14%				16%	For Mainland Area-14%; For Island Area- 16%	
For 10 yrs							18%				20%		20%	20%			20%	20%	20%			
After 10 yrs							22%				24%		24%	24%			24%	24%	22%			
Capital Cost (in Lakh/MW)									475	Prevailing market trends		445					445		445		Petition filed by Project Developer	
Water cooled condenser (other than rice straw & jujiflora/with rice straw & jujiflora)	559/611	559.03/610.80	559.03/610.80	Prevailing market trends	477	559	540/590	576			540/590		540/590	403	559.03/610.80	540		610.44	559.03/610.80			
Air cooled condenser (other than rice straw & jujiflora/with rice straw & jujiflora)	600/ 652	600.44/ 652.20	600.44/ 652.20		507	600	580/ 630	586			580/ 630		580/ 630		600.44/ 652.20	575			600.44/652.20			
O&M Expenses (Rs Lakh/MW)	46.42	40	40			40	40		4% of C.C.	5.32% of C.C.	40	24	40		40		24		42.29	5% of C.C.		
Water cooled condenser				4470%	5% of C.C.			5% of C.C.						21.41		35.64		44.71				
Air cooled condenser					5% of C.C.			4% of C.C.								38						
Escalation (%) p.a	3.84%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.72%	5.85%	5.72%	5.72%	5.72%	5.72%	average inflation factor of previous 3 Yrs considering 60% weightage	
Interest rate on working capital SBI basis points	350	30000%	300	300	11.40%	200	350	11.50%	det. By comm.	MCLR of previous year+150	350	100	350	350	300	300	350	300	350	For Mainland Area-300; For Island Area-400		
Normative Parameters																						
PLF/CUF(%)	80%							75%(for both water & air cooled)														
During stabilisation (6 month)		60%	60%	60%		60%				60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	
During remaining period of 1st Yrs		70%	70%	70%	70% (during 1st yr)	65%(during 1st)	70%		65%(during 1st yr)	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%(during 1st yr)	
2nd Yr onwards		80%	80%	80%	80%	80%	80%		80%	80%	80%	80%	80%	80%	80%	75%	80%	80%	80%	80%	80%	
Aux. Consumption (%)					10%				10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
Water cooled condenser	10%	11%(1st yr), 13%(>2yr)	11%(1st yr), 10%(>2yr)	10%		10%	1st Yr-11%, 2nd Yr on.-10%	10%			1st Yr-11%, 2nd Yr on.-10%		1st Yr-11%, 2nd Yr on.-10%		11%(1st yr), 13%(>2yr)	DS-10.5%, AS-10%		DS-11%, AS-10%	1st Yr-11%, 2nd Yr on.-10%	1st Yr-11%, 2nd Yr on.-10%		
Air cooled condenser	12%	13%(1st yr), 12%(>2yr)	13%(1st yr), 12%(>2yr)			12%	1st Yr-13%, 2nd Yr on.-12%	10%			1st Yr-13%, 2nd Yr on.-12%		1st Yr-13%, 2nd Yr on.-12%		13%(1st yr), 12%(>2yr)	DS-12.5%, AS-12%			1st Yr-13%, 2nd Yr on.-12%	1st Yr-13%, 2nd Yr on.-12%		
Station Heat Rate(kCal/kWh)				4000(for water cooled)	water cooled-3800, air cooled-3950				3800(for both water and air cooled)	4200		4000		3800(for water cooled)			4000(for both water and air cooled)	4200(for both water and air cooled)	4000(for both water and air cooled)	4000(for both water and air cooled)		
Grate Boilers	4200	4200	4200			4126	4126				4200		4200		4200	DS-4300, AS-4200				4200	4200	
AFBC Boilers	4125	4125	4125			4063	4063				4125		4125		4125	DS-4540, AS-4440				4125	4125	
Specific Fuel consumption(kg/kWh)								1.21														
Water cooled condenser								1.18														
Air cooled condenser																						
Calorific Value(kCal/kg)	3100	3100	3174	3100	4423 (for both air cooled&water cooled)	3100	3174		3600	3100	3100	3467	3100	3467	3100	3400	3300	3144.8	3100			
Fuel Cost(Rs/MT)	3326 (A.P.), 3786 (Haryana), 3872 (Maharashtra), 3960 (Punjab), 3305 (Rajasthan), 3272 (Tamil Nadu), 3328 (Telangana), 3384 (Uttar Pradesh), 3557 (Other States)	3073.05	3073.05	3388	3764 (for both air cooled&water cooled)	3270	2500	2500(for both water and air cooled)	25	Prevailing Prices	2476	2018	2476	1855	3420.56	2550	2476				2355 (with 5% escalation factor)	
Rebate																						
Through LoC (%)	1.5% within 5 days of representation of bills	2%	2%	2%		2%	2%		2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
other than LoC within one month (%)	1% after 5 days of representation of bills	1%	1%	1%		1%	1%		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
Late Payment Surcharge(%) Beyond 60 days	1.5% p.m. (beyond 45 days)	1.25%	1.25%	1.25%		1.25%	1.25%			MCLR of same month +350	1.25%	1.25%	1.25%	1.25%	1.25%	1.25%(beyond 45 days)	1.25%		1.25%	1.25%	1.25%	

Biomass Existing (rice husk based) Projects Commissioned during FY 2014-15 to 2018-19; Total Tariff for FY 2018-19 year of Commissioning, FY 2014-15: 7.14, FY 2015-16: 7.23, FY 2016-17: 7.33, FY 2017-18: 7.45, FY 2018-19: 7.54