

Projects considered by commission**ROE for FY 2020-21**

Sl. No.	Name of Station	Division/Zone	COD	Capital Cost (Rs. In Lakh)	RoE (Rs. In Lakh) for FY 2020-21
1	Nuranang	Western Zone	01-04-1996	985.00	51.89
2	Bramdhongchung	Western Zone	01-04-2008	105.30	5.55
3	Shakti Nallah	Western Zone	01-04-2008	109.32	5.76
4	Kitpi MHS Ph-II	Western Zone	01-04-2008	3373.83	177.73
5	Chellengkang Ph-II	Western Zone	01-04-2008	54.94	2.89
6	Bongleng	Western Zone	01-04-2009	114.27	6.02
7	Thimbu	Western Zone	01-04-2009	126.91	6.69
8	Bramdhongchung Ph-II	Western Zone	01-04-2010	134.71	7.10
9	Tsechu Nallah	Western Zone	01-04-2010	157.75	8.31
10	Sessa	Western Zone	01-04-1992	131.00	6.90
11	Domkhong	Western Zone	01-04-2008	2845.77	149.92
12	Sinchung	Western Zone	01-04-2008	54.48	2.87
13	Ankaling	Western Zone	01-04-2009	66.35	3.50
14	Khet	Western Zone	01-04-2009	144.27	7.60
15	Dikshi	Western Zone	01-04-2010	56.86	3.00
16	Khadiyabey	Western Zone	01-04-2011	282.91	14.90
17	Pacha MHS	Western Zone	01-04-2008	3992.80	210.34
18	Pakoti	Western Zone	01-04-2010	138.37	7.29
19	Patta Nallah	Western Zone	01-04-2010	140.80	7.42
20	Watte Mame	Western Zone	01-04-2010	145.50	7.66
21	Kade Nallah	Western Zone	01-04-2010	95.09	5.01
22	Koye	Western Zone	01-04-2009	98.00	5.16
23	Chambang	Western Zone	01-04-2009	109.55	5.77
24	Paya MHS at Hiya	Western Zone	01-04-2011	237.93	12.53
25	Sippi	Western Zone	01-04-2008	3832.92	201.92
26	Pinto Karo MHS	Western Zone	01-04-2011	83.11	4.38
27	Sikin Karo	Western Zone	01-04-2011	387.61	20.42
28	Sinyum Koro	Western Zone	01-04-2011	197.06	10.38
29	Kojin Nallah	Western Zone	01-04-2011	184.35	9.71
30	Kambang	Eastern Zone	01-04-2008	3832.92	201.92
31	Liromoba	Eastern Zone	01-04-2008	3073.73	161.92
32	Yingko Sikong at Rapum	Eastern Zone	01-04-2009	40.14	2.11
33	Angu	Eastern Zone	01-04-2010	39.46	2.08
34	Solegomang MHS	Eastern Zone	01-04-2011	88.83	4.68
35	Sirnyuk	Eastern Zone	01-04-1996	2464.32	129.82
36	Kopu at Tuting	Eastern Zone	01-04-2007	259.60	13.68
37	Silingri	Eastern Zone	01-04-2008	101.68	5.36
38	Singa	Eastern Zone	01-04-2008	122.98	6.48
39	Ngaming	Eastern Zone	01-04-2008	103.04	5.43
40	Sika	Eastern Zone	01-04-2008	50.00	2.63
41	Mayung	Eastern Zone	01-04-2009	22.22	1.17
42	Gosang	Eastern Zone	01-04-2011	826.00	43.51
Sub Total ==>				29411.68	1549.41

Projects considered by commission**ROE for FY 2020-21**

Sl. No.	Name of Station	Division/Zone	COD	Capital Cost (Rs. In Lakh)	RoE (Rs. In Lakh) for FY 2020-21
43	Kote MHS	Eastern Zone	01-04-2011	96.70	5.09
44	Sijen MHS at Adi pasi	Eastern Zone	01-04-2011	91.41	4.82
45	Pyabung MHS	Eastern Zone	01-04-2011	74.13	3.91
46	Rina	Eastern Zone	01-04-2008	3024.45	159.33
47	Deopani Ph-II	Eastern Zone	01-04-2004	290.10	15.28
48	Tah Ahfra Ph-I & Ph-II	Eastern Zone	01-04-2009	49.63	2.61
49	Echi Ahfra	Eastern Zone	01-04-2005	484.79	25.54
50	Awapani Ph-II	Eastern Zone	01-04-2005	714.46	37.64
51	Echito Nallah	Eastern Zone	01-04-2010	74.04	3.90
52	Rupapani	Eastern Zone	01-04-2010	74.65	3.93
53	Chu Nallah	Eastern Zone	01-04-2011	73.84	3.89
54	Mati Nallah	Eastern Zone	03-04-2004	598.56	31.53
55	Yapak Nallah	Eastern Zone	01-04-2005	317.71	16.74
56	Teepani	Eastern Zone	01-04-2009	675.47	35.58
57	KrawtiNallah	Eastern Zone	02-04-2009	119.07	6.27
58	Hathipani	Eastern Zone	03-04-2009	120.44	6.34
59	Tha Nallah	Eastern Zone	04-04-2009	122.99	6.48
60	Maipani	Eastern Zone	01-04-2010	98.14	5.17
61	Ashapani	Eastern Zone	02-04-2011	99.98	5.27
62	Langpani	Eastern Zone	01-04-2011	543.91	28.65
63	Tissue	Eastern Zone	01-04-1986	617.00	32.50
64	Jongkey Nallah	Eastern Zone	01-04-2011	144.50	7.61
65	Ngonalo at Vijaynagar	Eastern Zone	01-04-2010	408.45	21.52
66	Tinning	Eastern Zone	01-04-2010	99.98	5.27
67	Chicklong	Eastern Zone	02-04-2011	98.14	5.17
68	Sumhok Nallah	Eastern Zone	01-04-2009	198.90	10.48
69	Tahin Nallah	Eastern Zone	02-04-2011	222.98	11.75
70	Mago MHS	Western Zone	01-04-2014	140.44	7.40
71	Ayingmuri MHS	Western Zone	01-04-2011	175.00	9.22
72	Limeking MHS	Western Zone	01-04-2011	21.00	1.11
73	Mechuka	Eastern Zone	01-04-2012	113.02	5.95
74	Sirikorang MHS	Eastern Zone	01-04-2008	646.11	34.04
75	Awapani at Gepuline	Eastern Zone	01-04-2018	714.46	37.64
76	Dura Nallah	Western Zone	01-04-2009	404.87	21.33
77	Kachopani MHS	Eastern Zone	02-04-2009	393.33	20.72
78	Jigaon	Eastern Zone	01-04-2011	71.85	3.79
79	Zhongdongrong	Western Zone	01-04-2011	1406.44	74.09
Sub Total ==>				13620.94	717.56
Total				43032.62	2266.97

Projects considered by commission**O&M Cost for FY 2020-21**

Sl. No.	Name of Station	Division/Zone	Installed Capacity (MW)	O & M COST for FY 2020-21 (Rs. In Lakh)
1	Chellengkang Ph-I	Western Zone	0.03	1.28
2	Chellengkang Ph-II	Western Zone	0.03	1.28
3	Shakti Nallah	Western Zone	0.10	4.25
4	Thimbu	Western Zone	0.10	4.25
5	Khet	Western Zone	0.10	4.25
6	Tsechu Nallah	Western Zone	0.10	4.25
7	Mago MHS	Western Zone	0.10	4.25
8	Nuranang	Western Zone	6.00	191.38
9	Kitpi Ph-I	Western Zone	1.50	63.81
10	Kitpi MHS Ph-II	Western Zone	3.00	127.61
11	T. Gompa	Western Zone	0.05	2.12
12	Bongleng	Western Zone	0.10	4.25
13	Bramdhongchung	Western Zone	0.10	4.25
14	Bramdhongchung Ph-II	Western Zone	0.10	4.25
15	Rahung	Western Zone	0.75	31.91
16	Dirang	Western Zone	2.00	85.07
17	Saktangrong	Western Zone	0.30	12.76
18	Zhongdongrong	Western Zone	1.00	42.54
19	Sessa	Western Zone	1.50	63.81
20	Rupa	Western Zone	0.20	8.51
21	Dokumpani	Western Zone	0.03	1.28
22	Domkhrong	Western Zone	2.00	85.07
23	Sinchung	Western Zone	0.03	2.12
24	Ankaling	Western Zone	0.03	1.28
25	Dikshi	Western Zone	0.03	1.28
26	Khadiyabey	Western Zone	0.20	8.51
27	Jigaon	Western Zone	0.10	4.25
28	Seppa	Western Zone	0.30	12.76
29	Pakke Kessang	Western Zone	0.03	1.28
30	Pacha MHS	Western Zone	3.00	127.61
31	Pakoti	Western Zone	0.10	4.25
32	Patta Nallah	Western Zone	0.10	4.25
33	Watte Mame	Western Zone	0.05	2.12
34	Kade Nallah	Western Zone	0.05	2.12
35	Koye	Western Zone	0.05	2.12
36	Paya MHS at Hiya	Western Zone	0.10	4.25
37	Patte MHS at Tali	Western Zone	0.03	1.28
38	Chambang	Western Zone	0.03	1.28
39	Mai Ph-I	Western Zone	2.00	85.07
40	Mai Ph-II	Western Zone	1.00	42.54
41	Tago	Western Zone	4.50	191.43
42	Maro	Western Zone	0.03	1.28
Sub Total			30.95	1253.55

Projects considered by commission**O&M Cost for FY 2020-21**

Sl. No.	Name of Station	Division/Zone	Installed Capacity (MW)	O & M COST for FY 2020-21 (Rs. In Lakh)
43	Sippi	Western Zone	4.00	170.16
44	Pinto Karo MHS	Western Zone	0.03	1.28
45	Sikin Karo	Western Zone	0.20	8.51
46	Sinyum Koro	Western Zone	0.10	4.25
47	Dulom (Daporijo)	Western Zone	0.40	17.01
48	Ayingmuri MHS	Western Zone	0.25	10.64
49	Limeking MHS	Western Zone	0.03	1.28
50	Kojin Nallah	Western Zone	0.10	4.25
51	Pagi (Basar)	Easter Zone	0.10	4.25
52	Along	Easter Zone	0.30	17.01
53	Ego-Echi (Dali)	Easter Zone	0.40	17.01
54	Mechuka	Easter Zone	0.15	6.39
55	Yomcha	Easter Zone	0.05	2.12
56	Beye	Easter Zone	0.03	1.28
57	Kambang	Easter Zone	6.00	191.38
58	Liromoba	Easter Zone	2.00	85.07
59	Yingko Sikong at Rapum	Easter Zone	0.05	2.12
60	Angu	Easter Zone	0.05	2.12
61	Solegomang MHS	Easter Zone	0.05	2.12
62	Sirikorang MHS	Easter Zone	0.50	21.27
63	Yingkiong Ph-I	Easter Zone	0.15	6.39
64	Yingkiong Ph-II	Easter Zone	0.20	8.51
65	Sikut/ Tuting	Easter Zone	0.10	4.25
66	Silli at Geku	Easter Zone	0.50	21.27
67	Sirnyuk	Easter Zone	2.00	85.07
68	Kopu at Tuting	Easter Zone	0.25	10.64
69	Silingri	Easter Zone	0.05	2.12
70	Singa	Easter Zone	0.03	1.28
71	Ngaming	Easter Zone	0.05	2.12
72	Sika	Easter Zone	0.02	0.85
73	Mayung	Easter Zone	0.01	0.21
74	Gosang	Easter Zone	0.50	21.27
75	Kote MHS	Easter Zone	0.05	2.12
76	Sijen MHS at Adi pasi	Easter Zone	0.05	2.12
77	Pyabung MHS	Easter Zone	0.03	1.28
78	Yembung	Easter Zone	2.00	85.07
79	Pasighat	Easter Zone	0.20	8.51
80	Silli	Easter Zone	0.03	1.28
81	Rina	Easter Zone	2.00	85.07
82	Deopani Ph-I	Easter Zone	0.75	31.91
	Sub Total		23.74	950.89

Projects considered by commission**O&M Cost for FY 2020-21**

Sl. No.	Name of Station	Division/Zone	Installed Capacity (MW)	O & M COST for FY 2020-21 (Rs. In Lakh)
83	Deopani Ph-II	Easter Zone	0.75	31.91
84	Abhapani	Easter Zone	0.45	19.15
85	Anini/ Awapani Ph-I	Easter Zone	0.15	6.39
86	Awapani Ph-II	Easter Zone	0.50	21.27
87	Awapani at Gepuline	Easter Zone	0.50	21.27
88	Tah Ahfra Ph-I & Ph-II	Easter Zone	0.10	2.22
89	Chini Afra	Easter Zone	0.25	10.64
90	Echi Ahfra	Easter Zone	0.40	17.01
91	Echito Nallah	Easter Zone	0.04	1.70
92	Rupapani	Easter Zone	0.04	1.70
93	Chu Nallah	Easter Zone	0.03	1.28
94	Doorah Nallah	Easter Zone	0.50	21.27
95	Tafragram	Easter Zone	0.25	10.64
96	Tissue	Easter Zone	0.40	17.01
97	Jongkey Nallah	Easter Zone	0.03	1.07
98	Ngonalo at Vijaynagar	Easter Zone	0.10	4.25
99	Tinning	Easter Zone	0.06	2.55
100	Chicklong	Easter Zone	0.15	6.39
101	Thiratju	Easter Zone	1.00	42.54
102	Charju	Easter Zone	0.60	25.52
103	Sumhok Nallah	Easter Zone	0.10	4.25
104	Tahin Nallah	Easter Zone	0.10	4.25
105	Kaho	Easter Zone	0.01	0.42
106	Kebitho	Easter Zone	0.03	1.28
107	Mati Nallah	Easter Zone	0.50	21.27
108	Yapak Nallah	Easter Zone	0.20	8.51
109	Teepani	Easter Zone	0.50	21.27
110	Krawti Nallah	Easter Zone	0.10	4.25
111	Hathipani	Easter Zone	0.10	4.25
112	Tah Nallah	Easter Zone	0.10	4.25
113	Maipani	Easter Zone	0.06	2.55
114	Ashapani	Easter Zone	0.06	2.55
115	Langpani	Easter Zone	0.40	17.01
116	Kachopani MHS	Easter Zone	0.20	8.51
	Sub Total		8.76	370.38
TOTAL AMOUNT (Rs. In Lakh)			63.45	2574.82

Annexure - 9.

Assumption and Tariff Sheet for Namchik II MHS

Sl. No.	Assumption Head	Sub-Head	Sub-Head (2)	Unit	Arunachal Pradesh upto 1 MW
1	Power Generation	Capacity	Installed Power Generation Capacity	MW	0.30
			Capacity Utilization Factor	%	45%
			Auxiliary Consumption	%	1%
			Useful Life	Years	35
2	Project Cost	Capital Cost/MW	Power Plant Cost	₹ Lacs/ MW	420.00
3	Period		Tariff Period	Years	35
4	Sources of Fund	Debt : Equity	Debt	%	70%
			Equity	%	30%
			Total Debt Amount (Normative)	₹ Lacs	294.00
			Total Equity Amount	₹ Lacs	126.00
		Debt Component	Actual Loan Amount	₹ Lacs	0.00
			Moratorium Period	Years	0
			Repayment Period (include Moratorium)	Years	0
			Interest Rate	%	9.91%
		Equity Component	Equity Amount	₹ Lacs	126.00
			Return on Equity shall be 14%, to be grossed up by prevailing	% p.a.	15.60%
			Minimum Alternate Tax(MAT) as on 1st April of previous year for the entire useful life		
5	Financial Assumptions	Depreciation	Allowed Depreciation	%	90%
			Depreciation Rate for first 13 years	%	5.28%
			Depreciation Rate 14th year onwards	%	0.97%
		Incentive	Generation based incentive if any	₹ Lakh	NIL
			Period for GBI	Years	
6	Working Capital	For Fixed Charges			
		O&M Charges		Months	1
		Maintenance Spare	(% of O&M expenses)		15%
		Receivables for Debtors		Months	2
		Interest On Working Capital		%	10.91%
7	Operation & Maintenance	O&M Expenses (2020-21)		₹ Lacs	12.76
		Total O & M Expenses Escalation		%	5.72%
8	Generation and Sale of Energy			Hrs	
		Total No. of Hours			

Annexure - 9.

Tariff Sheet for Namchik - II MHS

RE Tariff (Small Hydro Project, Solar PV, Wind Power)																																					
Units Generation	Unit	Year-->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Installed Capacity	MW		0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Gross Generation	MU		1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183	1.183
Auxiliary Consumption	MU		0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Net Generation	MU		1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171	1.171
Fixed Cost	Unit	Year-->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
O&M Expenses	Rs Lakh		12.76	13.49	14.26	15.08	15.94	16.85	17.82	18.84	19.91	21.05	22.26	23.53	24.88	26.30	27.80	29.39	31.08	32.85	34.73	36.72	38.82	41.04	43.39	45.87	48.49	51.27	54.20	57.30	60.58	64.04	67.70	71.58	75.67	80.00	84.58
Depreciation	Rs Lakh		22.18	22.18	22.18	22.18	22.18	22.18	22.18	22.18	22.18	22.18	22.18	22.18	22.18	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08
Interest on Term Loan	Rs Lakh		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	Rs Lakh		1.36	1.39	1.42	1.46	1.50	1.54	1.58	1.63	1.67	1.72	1.78	1.83	1.89	1.62	1.69	1.76	1.83	1.91	2.00	2.08	2.18	2.28	2.38	2.49	2.61	2.73	2.86	3.00	3.15	3.30	3.46	3.63	3.82	4.01	4.21
Return On Equity	Rs Lakh		20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39	20.39
Total Fixed Cost	Rs Lakh		56.68	57.45	58.25	59.11	60.01	60.96	61.97	63.03	64.16	65.34	66.60	67.93	69.34	53.96	55.62	57.38	59.24	61.20	63.27	65.47	67.79	70.24	72.83	75.57	78.47	81.53	84.77	88.19	91.81	95.64	99.68	103.96	108.48	113.26	
Per Unit Cost of Generation	Unit	Year-->	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
O&M Expenses	Rs/k Wh		1.09	1.15	1.22	1.29	1.36	1.44	1.52	1.61	1.70	1.80	1.90	2.01	2.12	2.25	2.37	2.51	2.65	2.81	2.97	3.14	3.32	3.51	3.71	3.92	4.14	4.38	4.63	4.89	5.17	5.47	5.78	6.11	6.46	6.83	7.22
Depreciation	Rs/k Wh		1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	1.89	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	
Int. on Term Loan	Rs/k Wh		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Int. on Working Capital	Rs/k Wh		0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.14	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.22	0.23	0.24	0.26	0.27	0.28	0.30	0.31	0.33	0.34	0.36
RoE	Rs/k Wh		1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	
Total COG	Rs/k Wh		4.84	4.91	4.98	5.05	5.13	5.21	5.29	5.38	5.48	5.58	5.69	5.80	5.92	4.47	4.61	4.75	4.90	5.06	5.23	5.40	5.59	5.79	6.00	6.22	6.45	6.70	6.96	7.24	7.53	7.84	8.17	8.51	8.88	9.27	9.67
Discount Factor			1.00	0.89	0.80	0.71	0.64	0.57	0.51	0.45	0.41	0.36	0.32	0.29	0.26	0.23	0.21	0.18	0.16	0.15	0.13	0.12	0.10	0.09	0.08	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
Discounted Tariff			4.84	4.38	3.97	3.60	3.26	2.96	2.69	2.44	2.22	2.02	1.84	1.68	1.53	1.03	0.95	0.87	0.81	0.74	0.69	0.63	0.59	0.54	0.50	0.46	0.43	0.40	0.37	0.34	0.32	0.30	0.28	0.26	0.24	0.22	0.21
Levelled Tariff	Rs/Unit		5.29																																		



Annexure-10 & 11

BE, 2019-20

Name of Department: Hydropower

(Rs. in lakh)

Actual 2017-18	2018-19 Budget Estimate	Revised	Sl. No.	Head of Development / Account	Budget Estimate 2019- 20
1	2	3	4	5	6
			A	DEVELOPMENT ACTIVITIES	
			I	On-going Schemes	
			a)	Hydel Generation	
50.00	200.00	200.00	1	Khajalong MHS at Khajalong (2 x 1000 Kw)	306.61
	45.91	45.91	2	Rapo MHS at Jayang Bagang (2 x 100 Kw)	32.00
50.00	100.00	100.00	3	Wari MHS at Khenewa Circle (2x 25 kW)	83.00
	30.00	30.00	4	Babung MHS (2 x 25 kW) at Bengde	40.00
100.00	100.00	100.00	5	Kush MHS at Sangram (2 x 1000 Kw)	571.00
			6	Parlo MHP at Parsiparlo (2 x 250 kW)	46.61
252.00	200.00	200.00	7	Pagu MHS under Palin Circle (2 x 1000 Kw)	265.00
130.08	300.00	300.00	8	Angong Nallah MHS near Janbo (3 x 1500 Kw)	106.04
	10.00	10.00	9	Sirikorang MHS Ph-II (3 x 100 kW) under Mechuka Sub-Division	10.00
132.00			10	Subbung SHP near Subsing village (3x1000 kW)	50.00
250.00	350.00	350.00	11	C/o Tissu MHS Ph-II (2 x 250 kW)	377.00
964.08	1335.91	1335.91		Total of Hydel Gen (a)	1887.26
			b)	Hydel Improvement	
60.00	200.00	200.00	1	Special repair & maintenance of Damaged Unit - III of Nuranang SHP Ph-I (3 x 2000 kW)	50.00
300.00	200.00	200.00	2	Special repair of 2 x 500 kW Domkhong Hydro Power Project at Kalaktang	87.00
		100.00	3	Renovation & Modernization work of Sessa MHS (3 x 500 kW)	500.00
	80.00	80.00	4	Reconstruction of rain damaged water conductor system of Khajalong MHS (2 x 750 kW) at Nafra	17.00
	82.00	82.00	5	Repair & maintenance of TG Unit-II of Pacha SHP (2 x 1500 kW); synchronising of both units i/c supply of Governor panel	90.00
	55.00	55.00	6	R & M of Pacha SHP (2 x 1500 kW) (SH: Civil Works & EM works)	50.00
50.00	50.00	50.00	7	Special Repair of Tago MHS (3 x 1500 kW) (SH: Replacement of penstock pipe) i/c EM works - 3 Units	103.00
	30.00	30.00	8	Special repair and maintenance of Sippi SHP (2 x 2000 kW) (SH: Raising height of Power channel, Spillway and cover slab on sliding zone)	10.00
	25.00	25.00	9	Restoration of flood damage works at Weir intake, feeder channel, escape channel, desilting tank, silt flushing channel, power channel, forebay tank etc of Kamba SHEP (3 x 2 MW)	20.00
	20.00	20.00	10	Special repair & maintenance of Dali MHS (4x100 kW) (SH: Civil works)	10.00
257.00	212.16	212.16	11	Protection of Forebay tank and Improvement in Power Evacuation system of Rina SHP (2 x 1000 kW)	10.00
	30.00	30.00	12	C/o New Desilting Tank & Feeder Channel and EM work for Pasighat MHS (2 x 100 kW)	20.00
31.00	44.49	44.49	13	Special repair of Doorah Nallah MHS (4 x 100 kW)	6.10
30.00	20.00	20.00	14	Special repair of Krawti nallah MHS (SH: Intake Weir)	20.00
30.00	15.00	15.00	15	Special Repair of Charju MHS (3 x 200 kW)	15.00
758.00	1063.65	1163.65		Total of Hydel Improv. (b)	1008.10
			c)	Buildings	
87.75			1	C/o HT/SPT Residential Building for staff of Lhou Division (SH:- T-V/1 No., T-IV/2 Nos., T-III/3 Nos., T-II/7 Nos., T-I/3 Nos. & B/Barrack- 10 Units)	45.00
20.00	40.00	40.00	2	Approach road to DHPD Residential complex at Itanagar	30.00

Name of Department: Hydropower



(Rs. in lakh)

Actual 2017-18	2018-19		No.	Head of Development / Account	Budget Estimate 2019-20
	Budget Estimate	Revised			
1	2	3	4	5	6
	35.00	35.00	3	C/o Second Floor on Govt. Accommodation for DHPD at Itanagar (SH: T-IV/2 Nos, T-III/2 Nos., T-II/2 Nos. & T-I/2 Nos.)	15.00
	15.00	15.00	4	Providing external electric service connection for Govt. accommodation of DHPD at Itanagar.	15.00
	15.00	15.00	5	C/o Boundary wall cum protection wall at Hydro Power Office Complex at Itanagar	10.00
25.00	25.00	25.00	6	C/o RCC Boundary wall around Civil & EM Division office/Residential Hydro Power Complex at Manpoliang	20.00
	20.00	20.00	7	C/o Security fencing around Power House of Sippi SHP	10.00
	10.00	10.00	8	C/o Office Building for AE (E&M), Daporijo EM Sub-Division, DHPD	10.00
15.00	30.00	30.00	9	C/o Newly created Office building for Koloriang Civil Division, DHPD at Koloriang	10.00
16.00	30.00	30.00	10	C/o Residential Building for Civil Division staffs at Koloriang (T-IV-2 nos., T-III-3 nos. & Bachelor Barrack 5 Men	10.00
5.00	20.00	20.00	11	C/o T-V residential building for EE(C), Koloriang	6.53
	20.00	20.00	12	C/o Security fencing around Power House of complex of Payu MHS at Koloriang	10.00
	31.16	21.16	13	C/o Boundary wall of Division office at Aalo	28.84
	10.00	10.00	14	C/o foot suspension bridge at Sirikorang MHS (2 x 250 kW)	10.00
	35.30	35.30	15	Infrastructure development of newly created Electro-Mechanical Sub Division & Civil Sub Division at Tirbin	25.00
103.00	116.51	116.51	16	C/o SE Office Building cum Residential buildings for newly created Pasighat Circle / Lower Siang-Dibang Basin (SH: Office Bldg.-1 No. T-V/1 No., T-III/2 Nos., T-II/4 Nos. & Bachelor Barrack - 5 Units)	34.00
	25.00	25.00	17	C/o Compound wall for newly created SE office for Lower Siang and Dibang Basin Circle	5.00
	34.00	34.00	18	C/o Security fencing wall around DHPD complex Rock land, Tezu with M.S Gate area 850R/Mts	51.00
			19	C/o Office building Changlang Sub-Division	10.00
	5.00	5.00	20	C/o 1 (one) unit B/Barrack 4 unit for operational staff for Yapak Nallah MHS (2 X 100 KW)	5.00
	10.96	10.96	21	C/o Security fencing / compound wall for Division office at Hawaii Hydro power Division at Hawaii	16.44
	8.00	8.00	22	C/o 2 Unit Bachelor Barrack for Operational staff of Kachopani MHS (2 x 100 kW)	12.00
	8.18	8.18	23	C/o R.C.C office building at Khonsa EM Sub-Division	41.82
271.75	544.11	534.11		Total of Buildings (c)	430.63
				d) Survey & Investigation	
	2.00	2.00	1	Survey & Investigation of MHP at Sakio Nallah (Amen Nallah) near Veo Village	2.00
	3.00	3.00	2	Survey & Investigation of MHP at Passa river (Ph-II) at Passa Valley Circle	3.00
	1.00	1.00	3	Survey & Investigation over Takesidang River at Ruhi Village under Tali ADC Hq.	2.00
0.00	6.00	6.00		Total of Survey & Invest (d)	7.00
1993.83	2949.67	3039.67		Sub-Total (I)	3332.99
				II New Schemes	
				a) Hydel Improvement	
			1	Repairing of Damaged generator (2500 KVA) of Unit No. II of Nuranang Ph-I (3 x 2 MW)	50.00



Name of Department: Hydropower

(Rs. in lakh)

Actual 2017-18	2018-19		Sl. No.	Head of Development / Account	Budget Estimate 2019- 20
	Budget Estimate	Revised			
1	2	3	4	5	6
			2	Reconstruction of Spillway and Power Channel of Mago MHS (2 x 50 kW) at Mago (SH: Length of Spillway = 50.0 mtr. & Power Channel = 150.0 mtr.)	20.00
			3	Realignment of Power Channel and feede channel of Shakti Hydel Station (2 x 50 kW)	20.00
			4	Reconstruction of Power Channel, Spillway and Sluice Valve of Tsechu MHS (2 x 50 kW) at Tsechu	20.00
			5	Reconstruction of Spillway Channel, Scour Pipe and Forebay Tank of Thingbu MHS (2 x 50 kW)	20.00
			6	C/o Desilting Tank of Chellengkang Ph-I & Ph-II (1 x 30 kW)	20.00
			7	Reconstruction of rain damages of Power Channel of Zhagdongrong Hydel Station (2 x 500 kW) (SH: Length of Power Channel = 35.00 mtr., Retaining wall = 25.0 mtr. & slip clearance = 40.0 mtr.)	35.00
			8	Complete replacement of old turbine and generator set of Unit-III of Rahung Hydel Station (3x250 kW) and improvement of switchyard and external protection system.	95.00
			9	Special repair of Angkaling MHS (1 x 30 kW)	15.00
			10	Special repair of Dokumpani MHS (1 x 30 kW)	15.00
			11	Reconstruction of flood damage of Power Channel of Pacha SHP (2 x 1500 kW) (SH: Length of Power Channel = 47.0 mtr., Aqueduct = 1 No. of span 15.0 mtr with abutment & length Retaining wall = 85.0 Mtr. with 4.5 mtr. depth)	150.00
			12	Augmentation of Pakke Kessang MHS (30 kW) to 100 kW (procurement of new TG 2x50 kW) srts with its control panel and protection panel, board and C/o 0.415/1.1 kv step up sub-station.	50.00
			13	Reconstruction of rain damages of Spillway Channel of Sippi SHP (2 x 2000 kW) (SH: Length of Spillway Channel = 35.20 mtr. & Retaining wall 35.20 mtr.)	30.00
			14	Special repair of Penstock pipes, expansion joints and other hydromechanical equipments of Dulom MHS (2 x 200 kW) including extension of Spillway Channel & Protection work (SH: Expansion Joints = 5 Nos. & length of Spillway Channel = 118.00 mtr.)	20.00
			15	Special repairs & maintenance of Sikin Koro MHS (2x100 kW) at Bui (SH: Re-construction of rain damaged Power Channel & EM works).	15.00
			16	Re-construction of rain damaged water conductor structures of Payu MHS (2 x 250 kW) at Pinchi (SH: Length Weir = 12.0 mtr., Feeder Channel = 35.0 mtr., Power Channel = 50.0 mtr. & Retaining Wall = 105.0 mtr.)	75.00
			17	Special repair of Chate MHS (1 x 30 kW)	7.00
			18	C/o Cross drainage works (Aqueducts & culvert) at Pagu MHS (2 x 1000 kW) at Choba	75.00
			19	Repair, replacement & refurbishment of damaged EM equipments of Angong Nallah MHS	200.00
			20	Rectification works of spillway of Angong Nallah SHP (3 x 1500 kW)	90.00
			21	Special repair of Singha MHS (1 x 30 kW)	10.00
			22	Special repair of Sirnyuk SHP (2 x 1000 kW) (SH: Supply, erection, testing and commissioning of electronic governor & SEU panel)	30.00

Name of Department: Hydropower



(Rs. in lakh)

Actual 2017-18	2018-19		Sl. No.	Head of Development / Account	Budget Estimate 2019- 20
	Budget Estimate	Revised			
1	2	3	4	5	6
			23	Special repair of Kopu MHS (1 x 250 kW) (SH: Supply, erection, testing and commissioning of TG control panel i/c OPU)	25.00
			24	Repair and maintenance of Gossang MHS (2 x 250 kW) (SH: Repairing of Electronic governor and synchronizing panel)	10.00
			25	Special repair of Yingkong Ph-II MHS (2 x 100 kW) (SH: supply, erection, testing & commissioning of ELC panel with dummy load tank)	15.00
			26	Special repair of Sille MHS (2 x 250 kW) at Geku	15.00
			27	Special repair of E&M equipments of Pasighat MHS (2 x 100 kW)	30.00
			28	Upgradation of existing switchyard for Pasighat MHS (2 x 100 kW)	15.00
			29	Special repair of Electro-Mechanical equipments of Kamba SHEP (3 x 2 MW) including replacement of all worn out equipments like CT, PT, LA and insulators etc. and Installation of New Electronic Governor for Unit-I.	24.00
			30	Special repair of Liromoba SHP (2 x 1000 kW) (SH:- Repairing of AVR panel and CT/PT) i/c EM works	40.00
			31	Special repair of Aalo MHS (4 x 100 kW)	10.00
			32	Special repair of Dali MHS (4 x 100 kW) (SH:- Civil and E&M Works)	60.00
			33	Special repair of Pagi SHP (2 x 50 kW) (SH:- E & M Works)	25.00
			34	Special repair of Sirikorong MHS (2 x 250 kW) (SH: Weir Intake)	10.00
			35	Modification of Spillway of Subbung SHP (2x1500Kw)	50.00
			36	Special repair of Yembung SHP (4 x 500 kW) (SH: Restoration of weir & intake, protection structures to power channel and including repair & replacement of EM Equipment)	50.00
			37	Spl. Repair of Awapani MHS (2 x 250 KW) at Gepuline	30.00
			38	Special repair of damaged weir intake at Chini Afra MHS (1 x 250 kW)	15.00
			39	Restoration works of Chu Nallah MHS (2 x 15 kW)	8.00
			40	Modification of Turbine Governing system of Tafragam MHS (1x250Kw)	15.00
			41	Repairing of Penstock pipe and Governing system maintenance of Tafragam MHS (1 x 250Kw)	25.00
			42	Special repair of Mati Nallah MHS (2 x 250 KW) (EM Works)	10.00
			43	Special repair ing of Teepani MHS (2 x 250 kW) (SH: E&M works)	35.00
			44	Renovation of control panel of Charju MHS (3 x 250 kW)	20.00
			45	Restoration of damaged power channel and improvement of governing system of Unit-I of Tirathju MHS (4 x 250 kW)	25.26
			46	Special repair of Tinning MHS (2 x 30 kW) (SH: Reconstruction of feeder channel)	30.00
			47	Special repair of Tissue MHS Ph-I (4 x 100 kW)	116.24
				Total of Hydel Improv. (a)	1770.50
				b) Buildings	
			1	C/o Office Building of Jang Civil Sub-Division at Jang	15.00



Name of Department: Hydropower

Actual 2017-18	2018-19		Sl. No.	Head of Development / Account	(Rs. in lakh)
	Budget Estimate	Revised			Budget Estimate 2019- 20
1	2	3	4	5	6
			2	C/o residential building for staff quarter under Lumla Civil Sub-Division (T-III/1 No. & T-II/1 No.)	12.76
			3	CC Flooring to DHPD Residential complex at Itanagar	20.00
			4	Slab cover on Nallah of DHPD Residential Complex	25.00
			5	C/o Boundary wall cum protection Wall at Hydro Power Office complex, Itanagar, Chainage between Culvert point to 47.95 m (SH: RCC river training wall and RCC protection cum boundary wall)	25.00
			6	C/o SE's Office Building Cum Residential buildings for newly shifted Subansiri Basin to Ziro (SH: Office Bldg.-1 No. T-V/1 No., T-III/2 Nos., T-II/4 Nos. & Bachelor Barrack - 5 Units)	12.75
			7	C/o Staff Quarter for JE at Tali (SH: T-III/1 No.)	10.00
			8	C/o staff quarter at intake & forebay tank of Angong nallah (SH: 4 men B/barrack)	12.00
			9	Infrastructure development of Division office complex at Geku.	10.00
			10	Security Fencing around Hydro Power Complex at Namsai	100.00
				Total of Buildings (b)	242.51
			c)	Survey & Investigation	
			1	S&I of Pemashulfu MHS (3 x 250 kW) near Mechuka	2.00
			2	S&I Pibung MHS (2 x 250 kW) over Pibung river at Tumbin	2.00
				Total of Survey & Invest (c)	4.00
0.00	0.00	0.00		Sub-Total (II)	2017.01
			III	Maintenance of Assets	
700.00	800.00	800.00	1	Hydel Station, Building, Petty Works etc.	800.00
			2	Logistic support for strengthening of the Chief Engineer (P&D) - Establishment (SH: Design Tools & Equipment, Drawing Tools & Equipment, Training Equipment / Accessories, Exposure Technical Tour within the Country and Abroad etc.)	200.00
700.00	800.00	800.00		Sub-Total (III)	1000.00
2693.83	3749.67	3839.67		Total : (A)	6350.00
			B	Budget Announcement	
				New	
			1	Capacity Building, Public Sensitization / awareness / Confidence Building, Development of Software for Monitoring System and Legal / Consultancy Services for Hydro Power Development in Arunachal Pradesh	500.00
0.00	0.00	0.00		Total : (B)	500.00
2693.83	3749.67	3839.67		GRAND TOTAL : (A) + (B) + (C)	6850.00



APPLICATION

FOR

ANNUAL REVENUE REQUIREMENT (ARR)

&

TARIFF PETITION FOR

FY 2020-21

PART – B

Submitted by:
Department of Hydro Power Development - 2020

Index

Check list of forms and other documents for Annual Revenue Requirement filing by Generation Licencee		
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Format - HG2	Design Energy and MW Continuous (month-wise) Run of River Type Stations	page ii (1) - ii (124)
Format - HG3	Annual Revenue Requirement	page iii
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Name of the Hydro Generating Station : Chellengkang Ph-I

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Chellengkang Ph-II

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Shakti Nallah

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Thimbu

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Khet
State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Tsechu Nallah

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Mago MHS

State/ Distt. Arunachal Pradesh/ West Kameng

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Nuranang

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF) & other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	6000	6000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	49.93	49.93
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	6000	6000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Kitpi Ph-I

State/ Dist.: Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	1500	1500
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	12.48	12.48
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC			
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2019	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (No. of Units x KW)	KW	1500	1500
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Kitpi MHS Ph-II

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	3000	3000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	24.97	24.97
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	3000	3000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : T. Gompa

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	50	50
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.42	0.42
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	50	50
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Bongleng

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Bramdhongchung

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Bramdhongchung Ph-II

State/ Distt. Arunachal Pradesh/ Tawang District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Format - HG 1.

Name of the Hydro Generating Station : Mukto

State/ Distt. Arunachal Pradesh/ Dibang Valley District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)

& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	6000	6000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking MHS			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	49.93	49.93
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	6000	6000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Format - HG 1.

Name of the Hydro Generating Station : Nuranag Ph-II

State/ Distt. Arunachal Pradesh/ Dibang Valley District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	1000	1000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking MHS			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	8.32	8.32
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	1000	1000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Rahung
State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	750	750
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	6.24	6.24
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	750	750
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Dirang
State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	2000	2000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
	Unit – 4			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	16.64	16.64
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	2000	2000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Format - HG 1.

Name of the Hydro Generating Station : Saktangrong MHS

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	300	300
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	2.50	2.50
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	300	300
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Format - HG 1.

Name of the Hydro Generating Station : Zhongdongrong
State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	1000	1000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	8.32	8.32
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	1000	1000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Sessa

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	1500	1500
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	12.48	12.48
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	1500	1500
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Rupa

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	200	200
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	1.66	1.66
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	200	200
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Dokumpani
 State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Domkhong
 State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	2000	2000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	16.64	16.64
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	2000	2000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Sinchung

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	50	50
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.42	0.42
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	50	50
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Ankaling

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Dikshi

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Khadiyabey
State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	200	200
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	1.66	1.66
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	200	200
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Jigaon

State/ Distt. Arunachal Pradesh/ West Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Seppa

State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	300	300
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	2.50	2.50
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	300	300
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Pakke Kessang

State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Pacha MHS

State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	3000	3000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	24.97	24.97
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	3000	3000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Pakoti

State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Patta Nallah
 State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	100	100
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Watte Mame

State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	50	50
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.42	0.42
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	50	50
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Kade Nallah

State/ Distt. Arunachal Pradesh/ East Kameng District

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)				
& other normative parameters considered for Tariff				
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	50	50
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
4	Type of Station			
	a) Surface/ underground			
	b) Purely ROR/ Pondage/ Storage			
	c) Peaking/ non-peaking			
	d) No of hours of peaking			
	e) Overload capacity (MW) & period			
5	Type of excitation			
	a) Rotating exciters on generator			
	b) Static excitation			
6	Design Energy (Annual)	Mus	0.42	0.42
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Type			
10.2	Installed Capacity (Bo of Units x MW)	KW	50	50
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			