SL. No.	Name of the Stations	Units	Installed Capacity	Firm Capacity	Year of Commissioning
34	Patta Nallah	**2 x 50**	100	100	2010-11
35	Watte Mame	**50**	50	50	2010-11
36	Kade Nallah	**50**	50	50	2010-11
Kurung Kumey District					
37	Koye	**1 x 50**	50	50	2009-10
38	Paya MHS at Hiya	**2 x 50**	100	100	2011-12
39	Kidding MHS	**2 x 250**	500	500	2017-18
40	Dumi Dutte	**30**	30	30	2017-18
41	Payu MHS at Koloriang	**2 x 500**	1000	1000	2018-19
42	Patte MHS at Tali	**30**	30	30	2004-05
43	Chambang	**30**	30	30	2009-10
Lower Subansiri District					
44	Mai Ph-I	**4 x 500**	2000	1500	1977-78
45	Mai Ph-II	**2 x 500**	1000	500	1982-83
46	Tago	**3 x 1500**	4500	3000	1992-93
Upper Subansiri District					
47	Maro	**1 x 30**	30	30	2002-03
48	Sippi	**2 x 2000**	4000	4000	2008-09
49	Pinto Karo MHS	**1 x 25**	25	25	2011-12
50	Sikin Karo	**2 x 100**	200	200	2011-12
51	Sinyum Koro	**2 x 50**	100	100	2011-12
52	Dulom (Daporijo)	**4 x 100**	400	300	1981-82
53	Ayingmuri MHS	**2 x 125**	250	250	2012-13
54	Limeking MHS	**1 x 30**	30	30	2012-13
55	Kojin Nallah	**2 x 50**	100	100	2011-12
Estern Zone (EZ)					
West Siang District					
56	Pagi (Basar)	**2 x 50**	100	50	1972-73
57	Along	**3 x 100**	300	300	1975-76
58	Ego-Echi (Dali)	**4 x 100**	400	300	1987-88
59	Mechuka	**6 x 25**	150	150	2015-16
60	Yomcha	**50**	50	50	2001-02
61	Beye	**30**	30	30	2004-05
62	Kambang	**3 x 2000**	6000	6000	2008-09
63	Liromoba	**2 x 1000**	2000	2000	2008-09
64	Yingko Sikong at Rapum	**50**	50	50	2009-10
65	Angu	**50**	50	50	2010-11
66	Solegomang MHS	**50**	50	50	2011-12

SL. No.	Name of the Stations	Units	Installed Capacity	Firm Capacity	Year of Commissioning
67	Borung MHS	**50**	50	50	2011-12
68	Sirikorang MHS	**2x250**	500	500	2013-14
Upper Siang District					
69	Yingkiong Ph-I	**3 x 50**	150	100	1980-81
70	Yingkiong Ph-II	**2 x 100**	200	100	1992-93
71	Sikut/ Tuting	**2 x 50**	100	50	1984-85
72	Silli at Geku	**2 x 250**	500	250	1994-95
73	Sirnyuk	**2 x 1000**	2000	1000	1996-97
74	Kopu at Tuting	**250**	250	250	2007-08
75	Silingri	**50**	50	50	2008-09
76	Singa	**30**	30	30	2008-09
77	Ngaming	**50**	50	50	2008-09
78	Sika	**15**	15	15	2008-09
79	Mayung	**5**	5	5	2009-10
80	Gosang	**2 x 250**	500	500	2011-12
81	Kote MHS	**50**	50	50	2011-12
82	Sijen MHS at Adi pasi	**50**	50	50	2011-12
83	Pyabung MHS	**25**	25	25	2011-12
Siang District					
84	Yembung	**4 x 500**	2000	1500	1994-95
85	Subbung	**2 x 1500**	3000	3000	2018-19
East Siang District					
86	Pasighat	**2 x 100**	200	100	1974-75
87	Silli	**1 x 30**	30	30	2001-02
88	Rina	**2 x 1000**	2000	2000	2008-09
Lower Dibang Valley District					
89	Deopani Ph-I	**3 x 250**	750	750	1986-87
90	Deopani Ph-II	**3 x 250**	750	750	2004-05
91	Abhapani	**250 + 2 x 100**	450	350	1994-95
Dibang Valley District					
92	Anini/ Awapani Ph-I	**3 x 50**	150	150	1994-95
93	Awapani Ph-II	**2 x 250**	500	250	2005-06
94	Awapani at Gepuline	**2 x 250**	500	500	2014-15
95	Tah Ahfra Ph-I & Ph-II	**50 + 50**	100	100	2001-02 2009-10
96	Chini Afra	**250**	250	250	2001-02
97	Echi Ahfra	**2 x 200**	400	400	2005-06
98	Echito Nallah	**2 x 20**	40	40	2010-11

SL. No.	Name of the Stations	Units	Installed Capacity	Firm Capacity	Year of Commissioning
99	Rupapani	**2 x 20**	40	40	2010-11
100	Chu Nallah	**2 x 15**	30	30	2011-12
Lohit District					
101	Doorah Nallah	**5 x 100**	500	300	1976-77 2013-14
102	Tafragram	**250**	250	250	1984-85
Changlang District					
103	Tissue	**4 x 100**	400	300	1986-87
104	Jongkey Nallah	**25**	25	25	2011-12
105	Ngonalo at Vijaynagar	**2 x 50**	100	100	2010-11
106	Tinning	**2 x 30**	60	30	2010-11
107	Chicklong	**3 x 50**	150	150	2011-12
Tirap District					
108	Thiratju	**4 x 250**	1000	750	1978-79
109	Charju	**3 x 200**	600	400	1984-85
110	Sumhok Nallah	**2 x 50**	100	100	2009-10
111	Tahin Nallah	**2 x 50**	100	100	2011-12
112	Namchik -II MHS	**2 x 150**	300	300	2019-20
Anjaw District					
113	Kaho	**10**	10	10	2004-05
114	Kebitho	**30**	30	30	2004-05
115	Mati Nallah	**2 x 250**	500	500	2004-05
116	Yapak Nallah	**2 x 100**	200	200	2005-06
117	Teepani	**2 x 250**	500	500	2009-10
118	Krawti Nallah	**2 x 50**	100	100	2009-10
119	Hathipani	**2 x 50**	100	100	2009-10
120	Tah Nallah	**2 x 50**	100	100	2009-10
121	Maipani	**2 x 30**	60	60	2010-11
122	Ashapani	**2 x 30**	60	60	2011-12
123	Langpani	**2 x 200**	400	400	2011-12
124	Kachopani MHS	**2x100**	200	200	2014-15
	TOTAL		**75325**	**68395**	

2. ENERGY SALES WITHIN THE STATE TO POWER DEPARTMENT

The entire quantity of electricity generated by the HEPs is being sold within the State to the Power Department.

2. Performance during 2018-19

SL. No.	Name of the Stations	Units	Installed Capacity	Actual Net Generation
Western Zone (WZ)			**(KW)**	**(KWH)**
Tawang District				
1	Chellengkang Ph-I	**30**	30	34454
2	Chellengkang Ph-II	**30**	30	104932
3	Shakti Nallah	**2 x 50**	100	47231
4	Thimbu	**2 x 50**	100	58049
5	Khet	**2 x 50**	100	0
6	Tsechu Nallah	**2 x 50**	100	44650
7	Mago MHS	**2x50**	100	59676
8	Nuranang	**3 x 2000**	6000	7841071
9	Kitpi Ph-I	**3 x 500**	1500	131882
10	Kitpi MHS Ph-II	**2 x 1500**	3000	3369616
11	T. Gompa	**50**	50	86333
12	Bongleng	**2 x 50**	100	72859
13	Bramdhongchung	**2 x 50**	100	0
14	Bramdhongchung Ph-II	**2 x 50**	100	19669
15	Mukto MHS	**3 x 2000**	6000	11739017
16	Nuranang Ph- II	**2 x 500**	1000	
West Kameng District				
17	Rahung	**3 x 250**	750	1019049
18	Dirang	**4 x 500**	2000	2830166
19	Saktangrong	**3 x 100**	300	0
20	Zhongdongrong	**2 x 500**	1000	723200
21	Sessa	**3 x 500**	1500	516333
22	Rupa	**2 x 100**	200	62485
23	Dokumpani	**30**	30	0
24	Domkhrong	**2 x 1000**	2000	0
25	Sinchung	**30**	30	0
26	Ankaling	**30**	30	0
27	Dikshi	**30**	30	20133
28	Khadiyabey	**2 x 100**	200	0

SL. No.	Name of the Stations	Units	Installed Capacity	Actual Net Generation
29	Jigaon	**2 x 50**	100	170460
East Kameng District				
30	Seppa	**3 x 100**	300	0
31	Pakke Kessang	**30**	30	0
32	Pacha MHS	**2 x 1500**	3000	721660
33	Pakoti	**2 x 50**	100	348611
34	Patta Nallah	**2 x 50**	100	349347
35	Watte Mame	**50**	50	330167
36	Kade Nallah	**50**	50	0
Kurung Kumey District				
37	Koye	**1 x 50**	50	0
38	Paya MHS at Hiya	**2 x 50**	100	178124
39	Kidding MHS	**2 x 250**	500	898837
40	Dumi Dutte	**30**	30	0
41	Payu MHS at Koloriang	**2 x 500**	1000	1283493
42	Patte MHS at Tali	**30**	30	0
43	Chambang	**30**	30	169
Lower Subansiri District				
44	Mai Ph-I	**4 x 500**	2000	375418
45	Mai Ph-II	**2 x 500**	1000	0
46	Tago	**3 x 1500**	4500	193739
Upper Subansiri District				
47	Maro	**1 x 30**	30	0
48	Sippi	**2 x 2000**	4000	6933039
49	Pinto Karo MHS	**1 x 25**	25	0
50	Sikin Karo	**2 x 100**	200	45386
51	Sinyum Koro	**2 x 50**	100	0
52	Dulom (Daporijo)	**4 x 100**	400	0
53	Ayingmuri MHS	**2 x 125**	250	0
54	Limeking MHS	**1 x 30**	30	0
55	Kojin Nallah	**2 x 50**	100	0
Estern Zone (EZ)				
West Siang District				
56	Pagi (Basar)	**2 x 50**	100	112407
57	Along	**3 x 100**	300	43147
58	Ego-Echi (Dali)	**4 x 100**	400	538238
59	Mechuka	**6 x 25**	150	207874
60	Yomcha	**50**	50	0

SL. No.	Name of the Stations	Units	Installed Capacity	Actual Net Generation
61	Beye	**30**	30	0
62	Kambang	**3 x 2000**	6000	10800
63	Liromoba	**2 x 1000**	2000	126518
64	Yingko Sikong at Rapum	**50**	50	56385
65	Angu	**50**	50	0
66	Solegomang MHS	**50**	50	56960
67	Borung MHS	**50**	50	0
68	Sirikorang MHS	**2x250**	500	1202235
Upper Siang District				
69	Yingkiong Ph-I	**3 x 50**	150	135884
70	Yingkiong Ph-II	**2 x 100**	200	476546
71	Sikut/ Tuting	**2 x 50**	100	125681
72	Silli at Geku	**2 x 250**	500	915004
73	Sirnyuk	**2 x 1000**	2000	4700828
74	Kopu at Tuting	**250**	250	945400
75	Silingri	**50**	50	129377
76	Singa	**30**	30	44377
77	Ngaming	**50**	50	148950
78	Sika	**15**	15	0
79	Mayung	**5**	5	4202
80	Gosang	**2 x 250**	500	339966
81	Kote MHS	**50**	50	0
82	Sijen MHS at Adi pasi	**50**	50	0
83	Pyabung MHS	**25**	25	0
Siang District				
84	Yembung	**4 x 500**	2000	1388200
85	Subbung	**2 x 1500**	3000	1447400
East Siang District				
86	Pasighat	**2 x 100**	200	192450
87	Silli	**1 x 30**	30	42075
88	Rina	**2 x 1000**	2000	1423428
Lower Dibang Valley District				
89	Deopani Ph-I	**3 x 250**	750	0
90	Deopani Ph-II	**3 x 250**	750	0
91	Abhapani	**250 + 2 x 100**	450	0
Dibang Valley District				
92	Anini/ Awapani Ph-I	**3 x 50**	150	0
93	Awapani Ph-II	**2 x 250**	500	1187301

SL. No.	Name of the Stations	Units	Installed Capacity	Actual Net Generation
94	Awapani at Gepuline	**2 x 250**	500	1323
95	Tah Ahfra Ph-I & Ph-II	**50 + 50**	100	0
96	Chini Afra	**250**	250	23817
97	Echi Ahfra	**2 x 200**	400	31226
98	Echito Nallah	**2 x 20**	40	61776
99	Rupapani	**2 x 20**	40	16431
100	Chu Nallah	**2 x 15**	30	46001
Lohit District				
101	Doorah Nallah	**5 x 100**	500	209418
102	Tafragram	**250**	250	161589
Changlang District				
103	Tissue	**4 x 100**	400	496367
104	Jongkey Nallah	**25**	25	11198
105	Ngonalo at Vijaynagar	**2 x 50**	100	0
106	Tinning	**2 x 30**	60	60648
107	Chicklong	**3 x 50**	150	78916
Tirap District				
108	Thiratju	**4 x 250**	1000	52581
109	Charju	**3 x 200**	600	785084
110	Sumhok Nallah	**2 x 50**	100	0
111	Tahin Nallah	**2 x 50**	100	0
112	Namchik -II MHS	**2 x 150**	300	
Anjaw District				
113	Kaho	**10**	10	4412
114	Kebitho	**30**	30	0
115	Mati Nallah	**2 x 250**	500	1114512
116	Yapak Nallah	**2 x 100**	200	645444
117	Teepani	**2 x 250**	500	828999
118	Krawti Nallah	**2 x 50**	100	24486
119	Hathipani	**2 x 50**	100	0
120	Tah Nallah	**2 x 50**	100	0
121	Maipani	**2 x 30**	60	0
122	Ashapani	**2 x 30**	60	45998
123	Langpani	**2 x 200**	400	337534
124	Kachopani MHS	**2x100**	200	98687
	TOTAL		**75325**	**61747335**

A. *DETERMINATION OF TARIFF FOR THE HEPS*

Regulation 7 of Renewable Regulations,2018 provides that project specific tariff is to be determined for SHPs of installed capacity of 1MW to 25MW. Further, Hon'ble Commission in the Tariff order for the FY 2017-18 Dt. 02.11.2018 has directed DHPD to file consolidated ARR and average tariff for plants commissioned before 31.03.2017.

Accordingly, consolidated ARR and average tariff has been submitted for plants commissioned before 31.03.2017. Project specific tariff has been proposed for SHPs with installed capacity of 1 MW and above commissioned during the FY 2018-19 & FY 2019-20. For SHPs below 1 MW, commissioned during the FY 2019-20, ARR & tariff has been calculated on generic parameters as defined in the APSERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2018.

The RE Regulations, 2018 provides that tariff for sale of electricity from a hydro power station shall be aimed at recovering the Annual Fixed Charges and various components of AFC has been defined in Regulation 9. Accordingly, following has been considered for calculating Annual Fixed Charges for the HEPs:

Annual Fixed Charges:

The Annual Fixed Charges (AFC) is determined based on following factors:-

a) Project Cost

b) Design Energy

c) Interest on Loan Capital.

d) Depreciation.

e) Return on Equity.

f) Operation & Maintenance Expenses.

g) Interest on Working Capital.

3. The assumptions considered for the HEPs are given below:

Sl. No.	Particulars	Unit	Value	
1	**Auxiliary Consumption**	%	1	
2	**O&M Expenses**	Below 5MW – 38.06 Lakh/MW 5MW-25MW- 28.54 Lakh/MW		
	Escalation	%	5.72% per annum	
3	**Depreciation**		Project commissioned before March,2012, rate of depreciation taken @2.57%	Project commissioned after March,2012, rate of depreciation taken @5.28% as per RE Regulations,2018
	Plant Life	years	35	
	Residual	%	10	
4	**Working Capital**			
	Receivable(2 months Fixed Cost)	Months	2	
	O & M Expenses	Months	1	
	Spares for Maintenance	%	15	O&M Expenses
	Rate of Interest	%	SBI MCLR (One year Tenor) + 300 basis point	
5	**Return on Equity**	%	14, grossed up by applicable MAT	

6	**Equity**	%	30	Net Project Cost
	Loan	%	70	Net Project Cost
7	**Interest**	%	SBI MCLR (One Year Tenor) + 200 basis point	
8	**Moratorium**		No moratorium after COD	

a) Capital Cost

Clause 12 of APSERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2018 provides that the capital cost as specified in the technology specific chapters of the Regulation shall be considered for determination of AFC & Tariff. Capital as approved by the Commission shall be considered for project specific tariff.

In the instant petition project cost of 79 HEPs as considered by the Hon'ble Commission in the Tariff order for the FY 2019-20 has been considered.

For balance projects commissioned before 31.03.2017, project cost as determined as per APSERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 and submitted in the tariff petition for the FY 2019-20 has been considered.

Regulation 7 of Renewable Regulations,2018 provides that project specific tariff is to be determined for SHPs of installed capacity of 1MW to 25MW. For SHPs below 1MW normative capital as provided in the Regulation 25 of Renewable Regulations,2018 is to be considered. DHPD has commissioned 3 SHPs with installed capacity of 1 MW & above during the FY 2018-19 & 1 SHP of installed capacity below 1MW and 1 SHP of 1 MW during the FY 2019-20. The details of capital cost considered is provided below:

i. Payu SHP -1 MW: The project was commissioned in FY 2018-19. However, the capital cost of the SHP has not been finalised. Therefore, for the purpose of determining provisional tariff, capital cost was considered on the parameters provided in the APSERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 and submitted in the Tariff Petition for the FY 2019-20. The Hon'ble Commission did not approve the same. However, it is resubmitted for kind consideration of the Hon'ble Commission and is requested that the Hon'ble Commission may kindly consider & approve the provisional tariff till finalisation of capital cost of the SHP. DHPD shall submit the petition for approval of final capital cost & tariff subsequent to the finalisation of capital cost. of the SHP.

ii. Subbung SHP -3 MW: The project was commissioned in FY 2018-19. However, the capital cost of the SHP has not been finalised. Therefore, for the purpose of determining provisional tariff, capital cost was considered on the parameters provided in the APSERC (Terms & Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012 submitted in the Tariff Petition for the FY 2019-20. The Hon'ble Commission did not approve the same. However, it is resubmitted for kind consideration of the Hon'ble Commission and is requested that the Hon'ble Commission may kindly consider & approve the provisional tariff till finalisation of capital cost of the SHP. DHPD shall submit the petition for approval of final capital cost & tariff subsequent to the finalisation of capital cost. of the SHP.

iii. Mukto HEP -6 MW: The project was commissioned in FY 2018-19. However, the capital cost of the SHP has not been finalised. Therefore, for the purpose of determining provisional tariff, capital cost has been taken as considered by the Hon'ble Commission in the Tariff Order Dt. 02.11.2018 for the FY 2017-18. It is requested that the Hon'ble Commission may kindly consider & approve the provisional tariff till finalisation of capital cost of the SHP. DHPD shall submit the petition for approval of final capital cost & tariff subsequent to the finalisation of capital cost. of the SHP.

iv. Nuranang Ph-II SHP-1MW: The project was commissioned in FY 2019-20 However, the capital cost of the SHP has not been finalised. The RE Regulation, 2018 does not provide normative capital cost of HEPs with installed capacity of 1 MW and above. However, for determination of provisional tariff DHPD has calculated the capital cost on normative basis (considering per MW capital cost) in accordance with the Regulation 25 of APSERC RE Regulation, 2018. It is submitted that the Hon'ble Commission may kindly consider & allow the provisional tariff to be determined based on the normative capital cost as detailed above. DHPD shall submit the petition for approval of final capital cost & tariff subsequent to the finalisation of capital cost of the SHP.

Summary of the projects & capital cost is provided in the table below. The project wise details of capital is attached as Annexure- 1 & 2.

Table No- 4. Capital Cost - Projects Commissioned upto -31.03.2017

Sl. No.	Particular	Installed Capacity (MW)	Capital Cost IN (Lakhs)
1	79 HEPs	42.77	43032.62
2	37 HEPs	20.70	15439.63
	Total ======>	**63.47**	**58472.25**

Table No- 4.1. Capital Cost : Projects Commissioned in FY 2018-19			
Sl. No.	**Name of Station**	**Installed Capacity (MW)**	**Capital Cost IN (Lakhs)**
1	Mukto MHS	6.00	7798.70
2	Payu MHS at Koloriang	1.00	747.32
3	Subbung	3.00	2241.96

Table No- 4.2. Capital Cost : Projects Commissioned in FY 2019-20			
Sl. No.	**Name of Station**	**Installed Capacity (MW)**	**Capital Cost IN (Lakhs)**
1	Nuranang Ph- II	1.00	1200.00

b) Design Energy

Design energy of the HEPs has been calculated in accordance with the APSERC Regulations. Design energy of the HEPs is provided in the table below. The total design energy for all the HEPs is 626.85 MUs. Regulation 27 of RE Regulations, 2018 provides that CUF for SHPs is to be considered as 45%. However, in the instant petition CUF has been taken as 36 as considered/approved by the Hon'ble APSERC in the Tariff order for the FY 2018-19.

5. Design Energy

SL. No.	**Name of the Stations**	**Installed Capacity**	**Design Energy (Annual)**
Western Zone (WZ)		**(KW)**	**(MU)**
Tawang District			
1	Chellengkang Ph-I	30	0.25
2	Chellengkang Ph-II	30	0.25
3	Shakti Nallah	100	0.83
4	Thimbu	100	0.83
5	Khet	100	0.83
6	Tsechu Nallah	100	0.83
7	Mago MHS	100	0.83
8	Nuranang	6000	49.93
9	Kitpi Ph-I	1500	12.48

SL. No.	Name of the Stations	Installed Capacity	Design Energy (Annual)
10	Kitpi MHS Ph-II	3000	24.97
11	T. Gompa	50	0.42
12	Bongleng	100	0.83
13	Bramdhongchung	100	0.83
14	Bramdhongchung Ph-II	100	0.83
15	Mukto MHS	6000	49.93
16	Nuranang Ph- II	1000	8.32
West Kameng District			
17	Rahung	750	6.24
18	Dirang	2000	16.64
19	Saktangrong	300	2.50
20	Zhongdongrong	1000	8.32
21	Sessa	1500	12.48
22	Rupa	200	1.66
23	Dokumpani	30	0.25
24	Domkhrong	2000	16.64
25	Sinchung	30	0.25
26	Ankaling	30	0.25
27	Dikshi	30	0.25
28	Khadiyabey	200	1.66
29	Jigaon	100	0.83
East Kameng District			
30	Seppa	300	2.50
31	Pakke Kessang	30	0.25
32	Pacha MHS	3000	24.97
33	Pakoti	100	0.83
34	Patta Nallah	100	0.83
35	Watte Mame	50	0.42
36	Kade Nallah	50	0.42
Kurung Kumey District			
37	Koye	50	0.42
38	Paya MHS at Hiya	100	0.83
39	Kidding MHS	500	4.16
40	Dumi Dutte	30	0.25
41	Payu MHS at Koloriang	1000	8.32
42	Patte MHS at Tali	30	0.25
43	Chambang	30	0.25
Lower Subansiri District			

SL. No.	Name of the Stations	Installed Capacity	Design Energy (Annual)
44	Mai Ph-I	2000	16.64
45	Mai Ph-II	1000	8.32
46	Tago	4500	37.45
Upper Subansiri District			
47	Maro	30	0.25
48	Sippi	4000	33.29
49	Pinto Karo MHS	25	0.21
50	Sikin Karo	200	1.66
51	Sinyum Koro	100	0.83
52	Dulom (Daporijo)	400	3.33
53	Ayingmuri MHS	250	2.08
54	Limeking MHS	30	0.25
55	Kojin Nallah	100	0.83
Estern Zone (EZ)			
West Siang District			
56	Pagi (Basar)	100	0.83
57	Along	300	2.50
58	Ego-Echi (Dali)	400	3.33
59	Mechuka	150	1.25
60	Yomcha	50	0.42
61	Beye	30	0.25
62	Kambang	6000	49.93
63	Liromoba	2000	16.64
64	Yingko Sikong at Rapum	50	0.42
65	Angu	50	0.42
66	Solegomang MHS	50	0.42
67	Borung MHS	50	0.42
68	Sirikorang MHS	500	4.16
Upper Siang District			
69	Yingkiong Ph-I	150	1.25
70	Yingkiong Ph-II	200	1.66
71	Sikut/ Tuting	100	0.83
72	Silli at Geku	500	4.16
73	Sirnyuk	2000	16.64
74	Kopu at Tuting	250	2.08
75	Silingri	50	0.42
76	Singa	30	0.25
77	Ngaming	50	0.42

SL. No.	Name of the Stations	Installed Capacity	Design Energy (Annual)
78	Sika	15	0.12
79	Mayung	5	0.04
80	Gosang	500	4.16
81	Kote MHS	50	0.42
82	Sijen MHS at Adi pasi	50	0.42
83	Pyabung MHS	25	0.21
Siang District			
84	Yembung	2000	16.64
85	Subbung	3000	24.97
East Siang District			
86	Pasighat	200	1.66
87	Silli	30	0.25
88	Rina	2000	16.64
Lower Dibang Valley District			
89	Deopani Ph-I	750	6.24
90	Deopani Ph-II	750	6.24
91	Abhapani	450	3.74
Dibang Valley District			
92	Anini/ Awapani Ph-I	150	1.25
93	Awapani Ph-II	500	4.16
94	Awapani at Gepuline	500	4.16
95	Tah Ahfra Ph-I & Ph-II	100	0.83
96	Chini Afra	250	2.08
97	Echi Ahfra	400	3.33
98	Echito Nallah	40	0.33
99	Rupapani	40	0.33
100	Chu Nallah	30	0.25
Lohit District			
101	Doorah Nallah	500	4.16
102	Tafragram	250	2.08
Changlang District			
103	Tissue	400	3.33
104	Jongkey Nallah	25	0.21
105	Ngonalo at Vijaynagar	100	0.83
106	Tinning	60	0.50
107	Chicklong	150	1.25

SL. No.	Name of the Stations	Installed Capacity	Design Energy (Annual)
Tirap District			
108	Thiratju	1000	8.32
109	Charju	600	4.99
110	Sumhok Nallah	100	0.83
111	Tahin Nallah	100	0.83
112	Namchik -II MHS	300	2.50
Anjaw District			
113	Kaho	10	0.08
114	Kebitho	30	0.25
115	Mati Nallah	500	4.16
116	Yapak Nallah	200	1.66
117	Teepani	500	4.16
118	Krawti Nallah	100	0.83
119	Hathipani	100	0.83
120	Tah Nallah	100	0.83
121	Maipani	60	0.50
122	Ashapani	60	0.50
123	Langpani	400	3.33
124	Kachopani MHS	200	1.66
	TOTAL	**75325**	**626.85**

c) Interest on Loan Capital

Clause 14 of APSERC RE Regulations,2018 provides that interest on loan taken to fund the cost of project shall be recovered through tariff. Project cost of the HEPs of DHPD has been funded by the budgetary support/central & state sponsored schemes and the department has not taken any loan for financing the projects. In view of the above, no interest on loan has been claimed. DHPD submits that it will claim interest on loan in accordance with the above regulation in case loan is availed for financing of projects in future.

d) Depreciation

Regulation 15 of APSERC RE Regulations,2018 provides that depreciation is to be calculated on the capital cost admitted by the Commission considering salvage value as 10%. The depreciation is to be calculated at 5.28% for the first 13 years and remaining depreciation to be spread over remaining useful life of the project. In line with the principle followed by the Hon'ble Commission in the tariff order for the FY 2019-20, depreciation for the HEPs commissioned before March,2012 has been calculated @ 2.57%. In respect of the projects commissioned after 2012, rate of depreciation has been considered at 5.28% as per RE Regulation,2018. Summary of the depreciation of the FY 2020-21 is provided below. SHP wise depreciation is provided in the Annexure – 3, 4 & 5.

Table No- 6. Depreciation for the FY 2020-21

Projects Commissioned upto -31.03.2017

Sl. No.	Particular	Capital Cost IN (Lakhs)	Depreciation Amount (Rs in Lakhs) for FY 2020-21
1	Depreciation as approved in last TO- HEPs commissioned before 2012	38946.10	1000.91
2	Depreciation as approved in last TO- HEPs commissioned after 2012	4086.52	194.19
3	Other HEPs commissioned before 2012	15439.63	396.80
	Total =======>	**58472.25**	**1591.90**

Table No- 6.1. Depreciation for the FY 2020-21

Projects Commissioned in FY 2018-19

Sl. No.	Particular	Capital Cost IN (Lakhs)	Depreciation Amount (Rs in Lakhs) for FY 2020-21
1	Mukto MHS	7798.70	411.77
2	Payu MHS at Koloriang	747.32	39.46
3	Subbung	2241.96	118.38
	Total =======>	**10787.98**	**569.61**

Table No- 6.2. Depreciation for the FY 2020-21			
Projects Commissioned in FY 2019-20			
Sl. No.	Particular	Capital Cost IN (Lakhs)	Depreciation Amount (Rs in Lakhs) for FY 2020-21
1	Nuranang Ph- II	1200.00	63.36

e) **Return on Equity (ROE)**

As per provision under Regulation 16 of APSERC Regulations, 2018, Return on Equity has been considered @ 14% per annum grossed up by MAT as on 1st April of previous year for each of HEP i.e 15.6%. Accordingly, Return on Equity has been considered at 16.18%. The capital for calculation of ROE has been considered as discussed in the previous section.

The Equity for the purpose of calculation of ROE has been computed as per Regulation 13 of APSERC RE Regulations, 2018. Accordingly, Debt-Equity ratio of 70:30 has been considered. Summary of ROE of SHPs is provided below. The SHP wise details of ROE is provided in Annexure – 6 & 7.

Table No- 7. Return on Equity (ROE) for the FY 2020-21			
Projects Commissioned upto -31.03.2017			
Sl. No.	Particular	Capital Cost (Rs. In Lakh)	RoE (Rs. In Lakh) for FY 2020-21
1	79 HEPs	43032.62	2089.32
2	37 HEPs	15439.63	749.62
	Total ======>	**58472.25**	**2838.94**

Table No- 7.1. Return on Equity (ROE) for the FY 2020-21			
Projects Commissioned in FY 2018-19			
Sl. No.	Particular	Capital Cost (Rs. In Lakh)	RoE (Rs. In Lakh) for FY 2020-21
1	Mukto MHS	7798.70	378.64
2	Payu MHS at Koloriang	747.32	36.28
3	Subbung	2241.96	108.85
	Total ======>	**10787.98**	**523.78**

Table No- 7.2. Return on Equity (ROE) for the FY 2020-21			
Projects Commissioned in FY 2019-20			
Sl. No.	**Particular**	**Capital Cost (Rs. In Lakh)**	**RoE (Rs. In Lakh) for FY 2020-21**
1	Nuranang Ph- II	1200.00	58.26

f) Operation & Maintenance Expenses

Regulation 29 of APSERC RE Regulations, 2018 provides that normative O&M for SHPs below 5 MW shall be Rs. 38.06 Lakh/MW & SHP between 5MW to 25 MW shall be Rs.28.54Lakh/MW for the base year of 2018-19. The regulation further provides for an escalation of 5.72% per annum on the above normative O&M for subsequent years. O&M expenses for the FY 2020-21 has been calculated as per the above regulation. The summary of O&M expenses is provided below. The SHP wise O&M expenses is provided in the Annexure – 8.

Table No- 8. O&M Expenses for the FY 2020-21			
Projects Commissioned upto -31.03.2017			
Sl. No.	**Particular**	**Installed Capacity (MW)**	**O & M COST for FY 2020-21 (Rs. In Lakh)**
1	**O&M Expenses**	**63.45**	**2574.82**

Table No- 8.1. O&M Expenses for the FY 2020-21			
Projects Commissioned in FY 2018-19			
Sl. No.	**Particular**	**Installed Capacity (MW)**	**O & M COST for FY 2020-21 (Rs. In Lakh)**
1	Mukto MHS	**6.00**	**191.39**
2	Payu MHS at Koloriang	**1.00**	**42.54**
3	Subbung	**3.00**	**127.62**
	Total ======>	**10.00**	**361.54**

Table No- 8.2. O&M Expenses for the FY 2020-21			
Projects Commissioned in FY 2019-20			
Sl. No.	Particular	Installed Capacity (MW)	O & M COST for FY 2020-21 (Rs. In Lakh)
1	Nuranang Ph- II	1.00	42.54

g) Interest on Working Capital

The requirement of Working Capital & Interest thereon has been computed as per Clause 17 - "Interest on Working Capital" of the APSERC RE Regulations,2018. Interest @ 10.91 % per annum on working capital has been considered which is 300 basis points above the SBI MCLR(One year tenor) for last six months. The average SBI MCLR(One year tenor) for last six months is 7.91%. The summary of IWC is provided below.

Table No- 9. Interest on Working Capital for the FY 2020-21		
Projects Commissioned upto -31.03.2017		
S. No.	Particulars	FY 2020-21 Amount (Rs. In lakhs)
1	2	3
1	Operation & Maintenance Expenses (1 month)	214.57
2	Maintenance of Spares(15% of O&M)	386.22
3	Recceivables (2 months of fixed cost)	1200.36
4	**Total**	**1801.15**
5	Interest on Working Capital@10.91%	196.48

Table No- 9.1. Interest on Working Capital for the FY 2020-21 - Mukto MHS		
Projects Commissioned in FY 2018-19		
S. No.	**Particulars**	**FY 2020-21 Amount (Rs. In lakhs)**
1	**2**	**3**
1	Operation & Maintenance Expenses (1 month)	15.95
2	Maintenance of Spares(15% of O&M)	28.71
3	Recceivables (2 months of fixed cost)	167.49
4	**Total**	**212.15**
5	Interest on Working Capital@10.91%	23.14

Table No- 9.2. Interest on Working Capital for the FY 2020-21 - Payu MHS at Kolariang		
Projects Commissioned in FY 2018-19		
S. No.	**Particulars**	**FY 2020-21 Amount (Rs. In lakhs)**
1	**2**	**3**
1	Operation & Maintenance Expenses (1 month)	3.54
2	Maintenance of Spares(15% of O&M)	6.38
3	Recceivables (2 months of fixed cost)	20.26
4	**Total**	**30.19**
5	Interest on Working Capital@10.91%	3.29

Table No- 9.3. Interest on Working Capital for the FY 2020-21 - Subbang		
Projects Commissioned in FY 2018-19		
S. No.	**Particulars**	**FY 2020-21 Amount (Rs. In lakhs)**
1	**2**	**3**
1	Operation & Maintenance Expenses (1 month)	10.63
2	Maintenance of Spares(15% of O&M)	19.14
3	Recceivables (2 months of fixed cost)	60.79
4	**Total**	**90.56**
5	Interest on Working Capital@10.91%	9.88

Table No- 9.4. Interest on Working Capital for the FY 2020-21 - Nuranang Ph - II		
Projects Commissioned in FY 2019-20		
S. No.	**Particulars**	**FY 2020-21 Amount (Rs. In lakhs)**
1	**2**	**3**
1	Operation & Maintenance Expenses (1 month)	3.54
2	Maintenance of Spares(15% of O&M)	6.38
3	Receivables (2 months of fixed cost)	28.05
4	**Total**	**37.98**
5	Interest on Working Capital@10.91%	4.14

3. TOTAL ANNUAL FIXED CHARGES (AFC) FOR THE HEPS

Based on the above parameters, AFC for the Financial Year 2020-21are given in the table below.

Table No- 10. Annual Fixed Charge (AFC) for the FY 2020-21		
Projects Commissioned upto -31.03.2017		
		(Rs in Lakhs)
SL. No.	**Financial Year**	**2020-21**
1	Depreciation	1591.90
2	Return on Equity	2838.94
3	O&M Expenses	2574.82
4	Interest on Working Capital	196.48
5	**Total Annual Fixed Cost**	7202.14

Table No- 10.1. Annual Fixed Charge (AFC) for the FY 2020-21 - Mukto MHS		
Projects Commissioned in FY 2018-19		
		(Rs in Lakhs)
SL. No.	**Financial Year**	**2020-21**
1	Depreciation	411.77
2	Return on Equity	378.64
3	O&M Expenses	191.39
4	Interest on Working Capital	23.14
5	**Total Annual Fixed Cost**	1004.95

Table No- 10.2. Annual Fixed Charge (AFC) for the FY 2020-21 - Payu MHS at Kolariang		
Projects Commissioned in FY 2018-19		
		(Rs in Lakhs)
SL. No.	**Financial Year**	**2020-21**
1	Depreciation	39.46
2	Return on Equity	36.28
3	O&M Expenses	42.54
4	Interest on Working Capital	3.29
5	**Total Annual Fixed Cost**	121.57

Table No- 10.3. Annual Fixed Charge (AFC) for the FY 2020-21 - Subbang		
Projects Commissioned in FY 2018-19		
		(Rs in Lakhs)
SL. No.	**Financial Year**	**2020-21**
1	Depreciation	118.38
2	Return on Equity	108.85
3	O&M Expenses	127.62
4	Interest on Working Capital	9.88
5	**Total Annual Fixed Cost**	364.72

Table No- 10.4. Annual Fixed Charge (AFC) for the FY 2020-21 - Nuranang Ph - II		
Projects Commissioned in FY 2019-20		
		(Rs in Lakhs)
SL. No.	**Financial Year**	**2020-21**
1	Depreciation	63.36
2	Return on Equity	58.26
3	O&M Expenses	42.54
4	Interest on Working Capital	4.14
5	**Total Annual Fixed Cost**	168.30

3. a) Tariff

Based on the Annual Fixed Charges and the 36 % CUF , the tariff for the year 2020-21 is worked out as under: -

Table No- 11. Tariff for the FY 2020-21		
Projects Commissioned upto - 31.03.2017		
		(Rs in Lakhs)
SL. No.	**Particulars**	**FY 2020-21**
1	Annual Fixed Charges	7202.14
2	Installed Capacity	63.47
3	CUF considered (%)	0.36
4	Gross Energy (MU)	200.14
5	Auxiliary Power Consumption (1%)	2.00
6	Saleable Energy (MU)	198.14
7	Tariff (Rs./kWh)	3.63

Table No- 11.1. Tariff for the FY 2020-21 - Mukto MHS		
Project Commissioned in FY 2018-19		
		(Rs in Lakhs)
SL. No.	**Particulars**	**FY 2020-21**
1	Annual Fixed Charges	1004.95
2	Installed Capacity	6.00
3	CUF considered (%)	0.36
4	Gross Energy	18.92
5	Auxiliary Power Consumption (1%)	0.19
6	Saleable Energy (MU)	18.73
7	Tariff (Rs./kWh)	5.36

Table No- 11.2. Tariff for the FY 2020-21 - Payu MHS at Kolariang		
Project Commissioned in FY 2018-19		
		(Rs in Lakhs)
SL. No.	**Particulars**	**FY 2020-21**
1	Annual Fixed Charges	121.57
2	Installed Capacity	1.00
3	CUF considered (%)	0.36
4	Gross Energy	3.15
5	Auxiliary Power Consumption (1%)	0.03
6	Saleable Energy (MU)	3.12
7	Tariff (Rs./kWh)	3.89

Table No- 11.3. Tariff for the FY 2020-21 - Subbang		
Project Commissioned in FY 2018-19		
		(Rs in Lakhs)
SL. No.	**Particulars**	**FY 2020-21**
1	Annual Fixed Charges	364.72
2	Installed Capacity	3.00
3	CUF considered (%)	0.36
4	Gross Energy	9.46
5	Auxiliary Power Consumption (1%)	0.09
6	Saleable Energy (MU)	9.37
7	Tariff (Rs./kWh)	3.89

Table No- 11.4. Tariff for the FY 2020-21 - Nuranang Ph - II		
Project Commissioned in FY 2019-20		
		(Rs in Lakhs)
SL. No.	**Particulars**	**FY 2020-21**
1	Annual Fixed Charges	168.30
2	Installed Capacity	1.00
3	CUF considered (%)	0.36
4	Gross Energy	3.15
5	Auxiliary Power Consumption (1%)	0.03
6	Saleable Energy (MU)	3.12
7	Tariff (Rs./kWh)	5.39

4. LEVELLISED TARIFF FOR NAMCHIK-II MHS

4.1 GENERAL

The DHPD has proposed the levellised tariff for the entire life of the above project as per RE, Regulation 2018 and all other factors of fixed cost for tariff determination such as Capital cost, O&M expenses, Return on Equity, Interest on Loan, Interest on Working Capital and Depreciation considered as per the said regulation. Normative CUF i.e 45% considered for determination of tariff.

4.2 CAPITAL COST - COMMISSION ANALYSIS

The capital cost for Namchik-II MHS has been determined as per the clause 25 of the RE Regulation, 2018.

As per clause 25 of RE regulation 2018 the normative capital cost for small hydro projects during first year of Control Period (FY 2018-19) shall be as follows:

Region	Project Size	Capital Cost (Rs.Lakh/MW)
Arunachal Pradesh	Below 500kW	1400
	500kW – below 1MW	1200

The Regulation further provides that the Capital Cost for SHP as specified for first year of control period will remain valid for the entire duration of the control period (2018-2021') unless reviewed earlier by the Commission based on market information.

The capital cost of Namchik -II MHS commissioned in FY 2019-20 has been considered in accordance with the above Regulations. The capital cost for the SHP is provided below:

Table - Capital Cost of Namchik-II

Table No-12. Capital Cost : Project Commissioned in FY 2019-20			
Sl. No.	**Name of Station**	**Installed Capacity (MW)**	**Capital Cost IN (Lakhs)**
1	Namchik -II MHS	0.30	420.00

4.3 DEBT-EQUITY RATIO

1. Clause 13 of the RE Regulations 2012, provides that the debt-equity ratio of 70:30 is to be considered for determination of tariff.

2. Based on the debt equity ratio of 70:30, the debt and equity components of the normative capital cost for determination of tariff for the RE projects have been worked out as under:

Small Hydro Projects	Debt (Rs. Lakhs)	Equity (Rs. Lakhs)
Namchik-II	294	126

4.4 RETURN ON EQUITY

Sub-Regulation (1) of Regulation 16 of the RE Tariff Regulations provides that the value base for the equity shall be 30% of the capital cost for generic tariff determination. Sub- Regulation (2) of the said Regulation stipulates the normative Return on Equity (ROE) as 14%, to be grossed up by prevailing Minimum Alternate Tax (MAT) as on 1st April of previous year for the entire useful life of the project.

In terms of the above Regulation, Return on Equity has been considered @ 14% per annum grossed up by MAT as on 1st April of previous year for each of HEP i.e 15.6%. Accordingly, Return on Equity has been considered at 16.18%.

4.5 INTEREST ON LOAN CAPITAL

DHPD has not claimed the interest on Loan Capital as Project cost of the HEPs has been funded by the budgetary support/central & state sponsored schemes and the department has not taken any loan for financing the projects.

4.6 DEPRECIATION

The DHPD has proposed depreciation as per clause 15 of RE regulation 2018. The Regulation provides as follows:

1. The value base for the purpose of depreciation shall be the Capital Cost of the asset admitted by the Commission- The Salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the Capital Cost of the asset.

2. Depreciation rate of 5.28%per annum for first 13 years and remaining depreciation to be spread during remaining useful life of the RE projects considering the salvage value of the project as 10% of project cost shall be considered.

Accordingly, depreciation has been considered as below:

Details	SHP
Useful life in years	35
Rate of Depreciation – 1st 13 Years (%)	5.28
Rate of Depreciation – after 13 Years (%)	0.97

4.7 O&M EXPENSES

As per clause 29 of RE regulation 2018, the normative O&M expenses for the first year of the control period (i.e. FY 2018-19) shall be as follows:-

Region	Project Size	O&M Expenses (Rs.Lakh/MW)
Arunachal Pradesh	Below 5 MW	38.06
	5 MW to 25 MW	28.54

The Regulation further provides that the normative O&M expenses allowed under these Regulations shall be escalated at the rate of 5.72% per annum for the Tariff Period for the purpose of determination of levellised tariff.

Accordingly, the normative O&M Expenses considered by the DHPD for the project for the FY 2020-21 is as follows:-

Project Size	O&M Expenses (Rs. Lakh/MW)
Below 5 MW	42.54

4.8 INTEREST ON WORKING CAPITAL

The Working Capital requirement has been calculated in accordance with the clause 17(1) of the APSERC RE Regulation,2018 ,with the following:

a) Operation & Maintenance expenses for one month;
b) Receivables equivalent to 2 (Two) months of energy charges for sale of electricity calculated on the normative CUF;
c) Maintenance spare @ 15% of operation and maintenance expenses.

Further, clause 17(3) of the APSERC RE Regulation,2018 provides as follows:
"Interest on Working Capital shall be at interest rate equivalent to the normative interest rate of three hundred (300) basis points above the average State Bank of India MCLR (One Year Tenor) prevalent during the last available six months for the determination of tariff."

Interest rate has been considered as weighted average of State Bank of India MCLR (One Year Tenor) prevalent during the last available six months of the previous year plus 300 basis points.

Accordingly, Interest @ 10.91 % per annum on working capital has been considered which is 300 basis points above the SBI MCLR(One year tenor) for last six months. The average SBI MCLR(One year tenor) for last six months is 7.91%.

4.9 CAPACITY UTILISATION FACTOR (CUF)

Clause 27 of the RE Regulations 2018, provides that CUF for the small hydro projects shall be 45%.

Further, clause 18 of the RE Regulations 2018 provides as follows:

"The number of hours for calculation of CUF/PLF (wherever applicable) for various RE technologies shall be 8766."

CUF for the project has been considered as per the above Regelation.

4.10 AUXILIARY POWER CONSUMPTION

Regulations 28 of the RE Regulations 2018 provides as follows:

"Normative Auxiliary Consumption for the small hydro projects shall be 1 %"

The above rate of auxiliary consumption has been considered for calculation of saleable energy for the project.

4.11 LEVELISED TARIFF PROPOSED FOR THE NAMCHIK-II MHS

On the basis of the component wise details provided above, the proposed levellised tariff for the Namchik -II MHS is provided below. The assumptions & and detailed calculation of the levellised tariff is provided as Annexure – 9.

Name of the SHP	Levellised Tariff (Rs./kWh)
Namchik-II	5.29

PRAYER

It is respectfully prayed that the Hon'ble Commission may be pleased to:

(a) Approve the Annual Fixed Charges & Tariff as submitted in Para 3 & 4

(b) Pass such other and further order(s) as are deemed fit and proper in the facts and circumstances of the case.

Authorised Signatory

Place: Itanagar

Date:

ANNEXURES

Annexure - 1.

Capital Cost not Approved by APSERC

Sl. No.	Name of Station	Installed Capacity (MW)	Capital Cost IN (Lakhs)
1	Kitpi Ph-I	1.50	1120.98
2	T. Gompa	0.05	37.37
3	Chellengkang Ph-I	0.03	22.42
4	Rahung	0.75	560.49
5	Dirang	2.00	1494.64
6	Saktangrong	0.30	224.20
7	Rupa	0.20	149.46
8	Dokumpani	0.03	22.42
9	Seppa	0.30	224.20
10	Pakke Kessang	0.03	22.42
11	Patte MHS at Tali	0.03	22.42
12	Mai Ph-I	2.00	1494.64
13	Mai Ph-II	1.00	747.32
14	Tago	4.50	3362.94
15	Maro	0.03	22.42
16	Dulom (Daporijo)	0.40	269.04
17	Pagi (Basar)	0.10	74.73
18	Along	0.30	224.20
19	Ego-Echi (Dali)	0.40	298.93
20	Yomcha	0.05	37.37
21	Beye	0.03	22.42
22	Yingkiong Ph-I	0.15	112.10
23	Yingkiong Ph-II	0.20	149.46
24	Sikut/ Tuting	0.10	74.73
25	Selli at Geku	0.50	373.66
26	Pasighat	0.20	149.46
27	Silli	0.03	22.42
28	Yembung	2.00	1494.64
29	Deopani Ph-I	0.75	560.49
30	Abhapani	0.45	336.29
31	Anini/ Awapani Ph-I	0.15	112.10
32	Chini Afra	0.25	186.83
33	Tafragram	0.25	186.83
34	Kaho	0.01	7.47
35	Kebitho	0.03	22.42
36	Thiratju	1.00	747.32
37	Charju	0.60	448.39
	Total =========>	**20.70**	**15439.63**

Annexure - 2.

Capital Cost Approved by APSERC

Sl. No.	Name of Station	Installed Capacity (MW)	Capital Cost IN (Lakhs)
1	Nuranang	6.00	985.00
2	Bramdhongchung	0.10	105.30
3	Shakti Nallah	0.10	109.32
4	Kitpi MHS Ph-II	3.00	3373.83
5	Chellengkang Ph-II	0.03	54.94
6	Bongleng	0.10	114.27
7	Thimbu	0.10	126.91
8	Bramdhongchung Ph-II	0.10	134.71
9	Tsechu Nallah	0.10	157.75
10	Khet	0.10	144.27
11	Mago MHS	0.10	140.44
12	Zhongdongrong	1.00	1406.44
13	Sessa	1.50	131.00
14	Domkhrong	2.00	2845.77
15	Sinchung	0.05	54.48
16	Ankaling	0.03	66.35
17	Dikshi	0.03	56.86
18	Khadiyabey	0.20	282.91
19	Jigaon	0.10	71.85
20	Pacha MHS	3.00	3992.80
21	Pakoti	0.10	138.37
22	Patta Nallah	0.10	140.80
23	Watte Mame	0.05	145.50
24	Kade Nallah	0.05	95.09
25	Koye	0.05	98.00
26	Paya MHS at Hiya	0.10	237.93
27	Chambang	0.03	109.55
28	Sippi	4.00	3832.92
29	Pinto Karo MHS	0.03	83.11
30	Sikin Karo	0.20	387.61
31	Sinyum Koro	0.10	197.06
32	Ayingmuri MHS	0.25	175.00
33	Limeking MHS	0.03	21.00
34	Kojin Nallah	0.10	184.35
35	Mechuka	0.15	113.02
36	Kambang	6.00	3832.92
37	Liromoba	2.00	3073.73
38	Yingko Sikong at Rapum	0.05	40.14
39	Angu	0.05	39.46
40	Solegomang MHS	0.05	88.83
41	Sirikorang MHS	0.50	646.11
42	Sirnyuk	2.00	2464.32
43	Kopu at Tuting	0.25	259.60
44	Silingri	0.05	101.68

Annexure - 2.

Capital Cost Approved by APSERC

Sl. No.	Name of Station	Installed Capacity (MW)	Capital Cost IN (Lakhs)
45	Singa	0.03	122.98
46	Ngaming	0.05	103.04
47	Sika	0.02	50.00
48	Mayung	0.01	22.22
49	Gosang	0.50	826.00
50	Kote MHS	0.05	96.70
51	Sijen MHS at Adi pasi	0.05	91.41
52	Pyabung MHS	0.03	74.13
53	Rina	2.00	3024.45
54	Deopani Ph-II	0.75	290.10
55	Awapani Ph-II	0.50	714.46
56	Awapani at Gepuline	0.50	714.46
57	Tah Ahfra Ph-I & Ph-II	0.10	49.63
58	Echi Ahfra	0.40	484.79
59	Echito Nallah	0.04	74.04
60	Rupapani	0.04	74.65
61	Chu Nallah	0.03	73.84
62	Doorah Nallah	0.50	404.87
63	Tissue	0.40	617.00
64	Jongkey Nallah	0.03	144.50
65	Ngonalo at Vijaynagar	0.10	408.45
66	Tinning	0.06	99.98
67	Chicklong	0.15	98.14
68	Mati Nallah	0.50	598.56
69	Yapak Nallah	0.20	317.71
70	Teepani	0.50	675.47
71	Krawti Nallah	0.10	119.07
72	Hathipani	0.10	120.44
73	Tah Nallah	0.10	122.99
74	Maipani	0.06	98.14
75	Ashapani	0.06	99.98
76	Langpani	0.40	543.91
77	Kachopani MHS	0.20	393.33
78	Sumhok Nallah	0.10	198.90
79	Tahin Nallah	0.10	222.98
	Total =========>	**42.77**	**43032.62**

Annexure - 3.

Projects not considered by commission

Depreciation for Plant Commissioned before FY 2012

Sl. No.	Name of Station	Division/Zone	Date of COD	Installed Capacity (MW)	Capital Cost IN (Lakhs)	Depreciation Amount 2.57% P.A. (Rs in Lakhs) for FY 2020-21
1	Kitpi Ph-I	Western Zone	01-04-1977	1.50	1120.98	28.81
2	T. Gompa	Western Zone	01-04-2001	0.05	37.37	0.96
3	Chellengkang Ph-I	Western Zone	01-04-2004	0.03	22.42	0.58
4	Rahung	Western Zone	01-04-1972	0.75	560.49	14.40
5	Dirang	Western Zone	01-04-1977	2.00	1494.64	38.41
6	Saktangrong	Western Zone	01-04-2011	0.30	224.20	5.76
7	Rupa	Western Zone	01-04-1997	0.20	149.46	3.84
8	Dokumpani	Western Zone	01-04-2000	0.03	22.42	0.58
9	Seppa	Western Zone	01-04-1980	0.30	224.20	5.76
10	Pakke Kessang	Western Zone	01-04-2001	0.03	22.42	0.58
11	Patte MHS at Tali	Western Zone	01-04-2004	0.03	22.42	0.58
12	Mai Ph-I	Western Zone	01-04-1982	2.00	1494.64	38.41
13	Mai Ph-II	Western Zone	01-04-1982	1.00	747.32	19.21
14	Tago	Western Zone	01-04-1992	4.50	3362.94	86.43
15	Maro	Western Zone	01-04-2002	0.03	22.42	0.58
16	Dulom (Daporijo)	Western Zone	01-04-1981	0.40	269.04	6.91
17	Pagi (Basar)	Eastern Zone	01-04-1972	0.10	74.73	1.92
18	Along	Eastern Zone	01-04-1975	0.30	224.20	5.76
19	Ego-Echi (Dali)	Eastern Zone	01-04-1987	0.40	298.93	7.68
20	Yomcha	Eastern Zone	01-04-2001	0.05	37.37	0.96
21	Beye	Eastern Zone	01-04-2004	0.03	22.42	0.58
22	Yingkiong Ph-I	Eastern Zone	01-04-1980	0.15	112.10	2.88
23	Yingkiong Ph-II	Eastern Zone	01-04-1992	0.20	149.46	3.84
24	Sikut/ Tuting	Eastern Zone	01-04-1984	0.10	74.73	1.92
25	Selli at Geku	Eastern Zone	01-04-1994	0.50	373.66	9.60
26	Pasighat	Eastern Zone	01-04-1974	0.20	149.46	3.84
27	Silli	Eastern Zone	01-04-2001	0.03	22.42	0.58
28	Yembung	Eastern Zone	01-04-1994	2.00	1494.64	38.41
29	Deopani Ph-I	Eastern Zone	01-04-1986	0.75	560.49	14.40
30	Abhapani	Eastern Zone	01-04-1994	0.45	336.29	8.64
31	Anini/ Awapani Ph-I	Eastern Zone	01-04-1994	0.15	112.10	2.88
32	Chini Afra	Eastern Zone	01-04-2001	0.25	186.83	4.80
33	Tafragram	Eastern Zone	01-04-1984	0.25	186.83	4.80
34	Kaho	Eastern Zone	01-04-2004	0.01	7.47	0.19
35	Kebitho	Eastern Zone	02-04-2004	0.03	22.42	0.58
36	Thiratju	Eastern Zone	01-04-1978	1.00	747.32	19.21
37	Charju	Eastern Zone	01-04-1984	0.60	448.39	11.52
Total =====>				20.70	15439.63	396.80

Annexure - 4.

Projects considered by commission

Depreciation for plant Commissioned before FY 2012

Sl. No.	Name of Station	Division/Zone	Date of COD	Installed Capacity (MW)	Capital Cost (Rs. In Lakh)	Depreciation Amount @2.57% P.A. (Rs. In Lakh) for FY 2020-21
1	Nuranang	Western Zone	01-04-1996	6.00	985.00	25.31
2	Bramdhongchung	Western Zone	01-04-2008	0.10	105.30	2.71
3	Shakti Nallah	Western Zone	01-04-2008	0.10	109.32	2.81
4	Kitpi MHS Ph-II	Western Zone	01-04-2008	3.00	3373.83	86.71
5	Chellengkang Ph-II	Western Zone	01-04-2008	0.03	54.94	1.41
6	Bongleng	Western Zone	01-04-2009	0.10	114.27	2.94
7	Thimbu	Western Zone	01-04-2009	0.10	126.91	3.26
8	Bramdhongchung Ph-II	Western Zone	01-04-2010	0.10	134.71	3.46
9	Tsechu Nallah	Western Zone	01-04-2010	0.10	157.75	4.05
10	Sessa	Western Zone	01-04-1992	1.50	131.00	3.37
11	Domkhrong	Western Zone	01-04-2008	2.00	2845.77	73.14
12	Sinchung	Western Zone	01-04-2008	0.05	54.48	1.40
13	Ankaling	Western Zone	01-04-2009	0.03	66.35	1.71
14	Khet	Western Zone	01-04-2009	0.10	144.27	3.71
15	Dikshi	Western Zone	01-04-2010	0.03	56.86	1.46
16	Khadiyabey	Western Zone	01-04-2011	0.20	282.91	7.27
17	Pacha MHS	Western Zone	01-04-2008	3.00	3992.80	102.61
18	Pakoti	Western Zone	01-04-2010	0.10	138.37	3.56
19	Patta Nallah	Western Zone	01-04-2010	0.10	140.80	3.62
20	Watte Mame	Western Zone	01-04-2010	0.05	145.50	3.74
21	Kade Nallah	Western Zone	01-04-2010	0.05	95.09	2.44
22	Koye	Western Zone	01-04-2009	0.05	98.00	2.52
23	Chambang	Western Zone	01-04-2009	0.03	109.55	2.82
24	Paya MHS at Hiya	Western Zone	01-04-2011	0.10	237.93	6.11
25	Sippi	Western Zone	01-04-2008	4.00	3832.92	98.51
26	Pinto Karo MHS	Western Zone	01-04-2011	0.03	83.11	2.14
27	Sikin Karo	Western Zone	01-04-2011	0.20	387.61	9.96
28	Sinyum Koro	Western Zone	01-04-2011	0.10	197.06	5.06
29	Kojin Nallah	Western Zone	01-04-2011	0.10	184.35	4.74
30	Kambang	Eastern Zone	01-04-2008	6.00	3832.92	98.51
31	Liromoba	Eastern Zone	01-04-2008	2.00	3073.73	78.99
32	Yingko Sikong at Rapum	Eastern Zone	01-04-2009	0.05	40.14	1.03
33	Angu	Eastern Zone	01-04-2010	0.05	39.46	1.01
34	Solegomang MHS	Eastern Zone	01-04-2011	0.05	88.83	2.28
35	Sirnyuk	Eastern Zone	01-04-1996	2.00	2464.32	63.33
36	Kopu at Tuting	Eastern Zone	01-04-2007	0.25	259.60	6.67
37	Silingri	Eastern Zone	01-04-2008	0.05	101.68	2.61
38	Singa	Eastern Zone	01-04-2008	0.03	122.98	3.16
39	Ngaming	Eastern Zone	01-04-2008	0.05	103.04	2.65
40	Sika	Eastern Zone	01-04-2008	0.02	50.00	1.29
41	Mayung	Eastern Zone	01-04-2009	0.01	22.22	0.57
42	Gosang	Eastern Zone	01-04-2011	0.50	826.00	21.23
43	Kote MHS	Eastern Zone	01-04-2011	0.05	96.70	2.49
44	Sijen MHS at Adi pasi	Eastern Zone	01-04-2011	0.05	91.41	2.35
45	Pyabung MHS	Eastern Zone	01-04-2011	0.03	74.13	1.91
Total =====>				**32.64**	**29673.92**	**762.63**

Annexure - 4.

Projects considered by commission

Depreciation for plant Commissioned before FY 2012

Sl. No.	Name of Station	Division/Zone	Date of COD	Installed Capacity (MW)	Capital Cost (Rs. In Lakh)	Depreciation Amount @2.57% P.A. (Rs. In Lakh) for FY 2020-21
46	Rina	Eastern Zone	01-04-2008	2.00	3024.45	77.73
47	Deopani Ph-II	Eastern Zone	01-04-2004	0.75	290.10	7.46
48	Tah Ahfra Ph-I & Ph-II	Eastern Zone	01-04-2009	0.10	49.63	1.28
49	Echi Ahfra	Eastern Zone	01-04-2005	0.40	484.79	12.46
50	Awapani Ph-II	Eastern Zone	01-04-2005	0.50	714.46	18.36
51	Echito Nallah	Eastern Zone	01-04-2010	0.04	74.04	1.90
52	Rupapani	Eastern Zone	01-04-2010	0.04	74.65	1.92
53	Chu Nallah	Eastern Zone	01-04-2011	0.03	73.84	1.90
54	Mati Nallah	Eastern Zone	03-04-2004	0.50	598.56	15.38
55	Yapak Nallah	Eastern Zone	01-04-2005	0.20	317.71	8.17
56	Teepani	Eastern Zone	01-04-2009	0.50	675.47	17.36
57	KrawtiNallah	Eastern Zone	02-04-2009	0.10	119.07	3.06
58	Hathipani	Eastern Zone	03-04-2009	0.10	120.44	3.10
59	Tha Nallah	Eastern Zone	04-04-2009	0.10	122.99	3.16
60	Maipani	Eastern Zone	01-04-2010	0.06	98.14	2.52
61	Ashapani	Eastern Zone	02-04-2011	0.06	99.98	2.57
62	Langpani	Eastern Zone	01-04-2011	0.40	543.91	13.98
63	Tissue	Eastern Zone	01-04-1986	0.40	617.00	15.86
64	Jongkey Nallah	Eastern Zone	01-04-2011	0.03	144.50	3.71
65	Ngonalo at Vijaynagar	Eastern Zone	01-04-2010	0.10	408.45	10.50
66	Tinning	Eastern Zone	01-04-2010	0.06	99.98	2.57
67	Chicklong	Eastern Zone	02-04-2011	0.15	98.14	2.52
68	Sumhok Nallah	Eastern Zone	01-04-2009	0.10	198.90	5.11
69	Tahin Nallah	Eastern Zone	02-04-2011	0.10	222.98	5.73
	Sub-Total			**6.82**	**9272.18**	**238.31**
Total				**39.46**	**38946.10**	**1000.91**

Annexure - 5.

Projects considered by commission

Depreciation for plant Commissioned after FY 2012

Sl. No.	Name of Station	Division/Zone	Date of COD	Installed Capacity (MW)	Capital Cost (Rs. In Lakh)	Depreciation Amount @5.28% P.A. (Rs. In Lakh) for FY 2020-21
1	Mago MHS	Western Zone	01-04-2014	0.10	140.44	6.67
2	Ayingmuri MHS	Western Zone	01-04-2011	0.25	175.00	8.32
3	Limeking MHS	Western Zone	01-04-2011	0.03	21.00	1.00
4	Mechuka	Eastern Zone	01-04-2012	0.15	113.02	5.37
5	Sirikorang MHS	Eastern Zone	01-04-2008	0.50	646.11	30.70
6	Awapani at Gepuline	Eastern Zone	01-04-2018	0.50	714.46	33.95
7	Dura Nallah	Western Zone	01-04-2009	0.50	404.87	19.24
8	Kachopani MHS	Eastern Zone	02-04-2009	0.20	393.33	18.69
9	Jigaon	Eastern Zone	01-04-2011	0.10	71.85	3.41
10	Zhongdongrong	Western Zone	01-04-2011	1.00	1406.44	66.83
Total				**3.33**	**4086.52**	**194.19**

Annexure - 6.

Projects not considered by commission

Calculation of ROE the FY 2020-21

Sl. No.	Name of Station	Division/Zone	Date of COD	Capital Cost IN (Lakhs)	RoE (Rs. In Lakh) for FY 2020-21
1	Kitpi Ph-I	Western Zone	01-04-1977	1120.98	59.05
2	T. Gompa	Western Zone	01-04-2001	37.37	1.97
3	Chellengkang Ph-I	Western Zone	01-04-2004	22.42	1.18
4	Rahung	Western Zone	01-04-1972	560.49	29.53
5	Dirang	Western Zone	01-04-1977	1494.64	78.74
6	Saktangrong	Western Zone	01-04-2011	224.20	11.81
7	Rupa	Western Zone	01-04-1997	149.46	7.87
8	Dokumpani	Western Zone	01-04-2000	22.42	1.18
9	Seppa	Western Zone	01-04-1980	224.20	11.81
10	Pakke Kessang	Western Zone	01-04-2001	22.42	1.18
11	Patte MHS at Tali	Western Zone	01-04-2004	22.42	1.18
12	Mai Ph-I	Western Zone	01-04-1982	1494.64	78.74
13	Mai Ph-II	Western Zone	01-04-1982	747.32	39.37
14	Tago	Western Zone	01-04-1992	3362.94	177.16
15	Maro	Western Zone	01-04-2002	22.42	1.18
16	Dulom (Daporijo)	Western Zone	01-04-1981	269.04	14.17
17	Pagi (Basar)	Eastern Zone	01-04-1972	74.73	3.94
18	Along	Eastern Zone	01-04-1975	224.20	11.81
19	Ego-Echi (Dali)	Eastern Zone	01-04-1987	298.93	15.75
20	Yomcha	Eastern Zone	01-04-2001	37.37	1.97
21	Beye	Eastern Zone	01-04-2004	22.42	1.18
22	Yingkiong Ph-I	Eastern Zone	01-04-1980	112.10	5.91
23	Yingkiong Ph-II	Eastern Zone	01-04-1992	149.46	7.87
24	Sikut/ Tuting	Eastern Zone	01-04-1984	74.73	3.94
25	Selli at Geku	Eastern Zone	01-04-1994	373.66	19.68
26	Pasighat	Eastern Zone	01-04-1974	149.46	7.87
27	Silli	Eastern Zone	01-04-2001	22.42	1.18
28	Yembung	Eastern Zone	01-04-1994	1494.64	78.74
29	Deopani Ph-I	Eastern Zone	01-04-1986	560.49	29.53
30	Abhapani	Eastern Zone	01-04-1994	336.29	17.72
31	Anini/ Awapani Ph-I	Eastern Zone	01-04-1994	112.10	5.91
32	Chini Afra	Eastern Zone	01-04-2001	186.83	9.84
33	Tafragram	Eastern Zone	01-04-1984	186.83	9.84
34	Kaho	Eastern Zone	01-04-2004	7.47	0.39
35	Kebitho	Eastern Zone	02-04-2004	22.42	1.18
36	Thiratju	Eastern Zone	01-04-1978	747.32	39.37
37	Charju	Eastern Zone	01-04-1984	448.39	23.62
Total ========>				**15439.63**	**813.36**

Annexure - 7.

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	Domkhrong	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**

Annexure - 7.

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**

Annexure - 8.

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**

Annexure - 8.

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**

Annexure - 8.

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	52.39	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	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	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
Levellised Tariff	**Rs/Unit**		**5.29**																																		

Planning Department Itanagar (A.P.)

Annexure-10 & 11

BE, 2019-20

Name of Department: Hydropower

(Rs. in lakh)

Actual 2017-18	2018-19 Budget Estimate	2018-19 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 Domkhrong 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 Budget Estimate	2018-19 Revised	No.	Head of Development / Account	Budget Estimate 2019-20
1	2	3	4	5	6
	35.00	35.00	3	C/o Second Floor on Govt. Accomodation 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. accomodation 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 Residental buidlings 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 Hawai Hydro power Division at Hawai	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 Budget Estimate	2018-19 Revised	Sl. No.	Head of Development / Account	Budget Estimate 2019-20
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	Reconstrution of flood damage of Power Channel of Pacha SHP (2 x 1500 kW) (SH: Length of Power Channel = 47.0 mtr., Aquaduct = 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 (2x 250 kW) (SH: Repairing of Electronic governor and synchronizing panel)	10.00
			25	Special repair of Yingkiong 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 Governoring 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 govering 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**

(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	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 Residental buidlings 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/barracck)	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**

Department of Hydro Power Development
Government of Arunachal Pradesh

APPLICATION

FOR

ANNUAL REVENUE REQUIREMENT (ARR)

&

TARIFF PETITION FOR

FY 2020-21

PART – B

Submitted by:
Department of Hydro Power Development - 2020

Index

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

Name of the Hydro Generating Station : Kitpi 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	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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

Name of the Hydro Generating Station : Domkhrong
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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

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)			

Format - HG 1.

Name of the Hydro Generating Station : Koye

State/ Distt. Arunachal Pradesh/ Kurung Kumey 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)			

Format - HG 1.

Name of the Hydro Generating Station : Paya MHS at Hiya
State/ Distt. Arunachal Pradesh/ Kurung Kumey 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 : Kidding MHS
State/ Distt. Arunachal Pradesh/ Kurung Kumey 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	500	500
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	4.16	4.16
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	500	500
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 : Dumi Dutte

State/ Distt. Arunachal Pradesh/ Kurung Kumey 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)			

Format - HG 1.

Name of the Hydro Generating Station : Payu MHS at Koloriang
State/ Distt. Arunachal Pradesh/ Kurung Kumey 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)			

Format - HG 1.

Name of the Hydro Generating Station : Patte MHS at Tali
State/ Distt. Arunachal Pradesh/ Kurung Kumey 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)			

Format - HG 1.

Name of the Hydro Generating Station : Chambang
State/ Distt. Arunachal Pradesh/ Kurung Kumey 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)			

Format - HG 1.

Name of the Hydro Generating Station : Mai PH-I

State/ Distt. Arunachal Pradesh/ Lower Subansiri 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 : Mai PH-II

State/ Distt. Arunachal Pradesh/ Lower Subansiri 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)			

Format - HG 1.

Name of the Hydro Generating Station : Tago

State/ Distt. Arunachal Pradesh/ Lower Subansiri 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	4500	4500
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	37.45	37.45
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	4500	4500
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 : Maro

State/ Distt. Arunachal Pradesh/ Upper Subansiri 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)			

Format - HG 1.

Name of the Hydro Generating Station : Sippi

State/ Distt. Arunachal Pradesh/ Upper Subansiri 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	4000	4000
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	33.29	33.29
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	4000	4000
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 : Pinto Karo MHS
State/ Distt. Arunachal Pradesh/ Upper Subansiri 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	25	25
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	0.21	0.21
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	25	25
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 : Sikin Koro

State/ Distt. Arunachal Pradesh/ Upper Subansiri 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)			

Format - HG 1.

Name of the Hydro Generating Station : Sinyum Koro
State/ Distt. Arunachal Pradesh/ Upper Subansiri 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 : Dulom (Daporijo)
State/ Distt. Arunachal Pradesh/ Upper Subansiri 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	400	400
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	3.33	3.33
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	400	400
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 : Ayingmuri MHS
State/ Distt. Arunachal Pradesh/ Upper Subansiri 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	250	250
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	2.08	2.08
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	250	250
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 : limeking MHS
State/ Distt. Arunachal Pradesh/ Upper Subansiri 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)			

Format - HG 1.

Name of the Hydro Generating Station : Kojin Nallah
State/ Distt. Arunachal Pradesh/ Upper Subansiri 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 : Pagi (Basar)
State/ Distt. Arunachal Pradesh/ West Siang 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 : Along

State/ Distt. Arunachal Pradesh/ West Siang 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	400	400
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	3.33	3.33
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	400	400
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 : Ego-Echi (Dali)
State/ Distt. Arunachal Pradesh/ West Siang 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	400	400
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	3.33	3.33
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	400	400
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 : Mechuka

State/ Distt. Arunachal Pradesh/ West Siang 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	150	150
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
	Unit – 3			
	Unit – 4			
	Unit – 5			
	Unit – 6			
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	1.25	1.25
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	150	150
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 : Yomcha
State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Beye

State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Kambang
State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Liromoba
State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Yingko Sikong at Rapum
State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Angu

State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Solegomang MHS
State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Borung MHS
State/ Distt. Arunachal Pradesh/ West Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Sirikorang MHS
State/ Distt. Arunachal Pradesh/ West Siang 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	500	500
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	4.16	4.16
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	500	500
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 : Yingkiong Ph-I
State/ Distt. Arunachal Pradesh/ Upper Siang 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	150	150
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	1.25	1.25
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	150	150
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 : Yingkiong Ph-II
State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Sikut/ Tuting
State/ Distt. Arunachal Pradesh/ Upper Siang 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 : Selli at Geku
State/ Distt. Arunachal Pradesh/ Upper Siang 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	500	500
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	4.16	4.16
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	500	500
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 : Sirnyuk

State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Kopu at Tuting
State/ Distt. Arunachal Pradesh/ Upper Siang 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	250	250
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	2.08	2.08
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	250	250
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 : Silingri

State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Singa

State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Ngaming
State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Sika

State/ Distt. Arunachal Pradesh/ Upper Siang 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	15	15
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	0.12	0.12
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	15	15
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 : Mayung
State/ Distt. Arunachal Pradesh/ Upper Siang 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	5	5
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	0.04	0.04
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	5	5
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 : Gosang
State/ Distt. Arunachal Pradesh/ Upper Siang 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	500	500
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	4.16	4.16
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	500	500
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 : Kote MHS

State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Sijen MHS at Adi pasi
State/ Distt. Arunachal Pradesh/ Upper Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Pyabung MHS
State/ Distt. Arunachal Pradesh/ Upper Siang 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	25	25
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	0.21	0.21
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	25	25
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 : Yembung
State/ Distt. Arunachal Pradesh/ East Siang 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 : Subbung
State/ Distt. Arunachal Pradesh/ Siang 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)			

Format - HG 1.

Name of the Hydro Generating Station : Pasighat
State/ Distt. Arunachal Pradesh/ East Siang 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)			