

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
Kuru	ung 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
Low	er 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
Upp	er Subansiri District		1		
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	t 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

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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
Upp	er 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
Sian	g District	1	r		
84	Yembung	4 x 500	2000	1500	1994-95
85	Subbung	2 x 1500	3000	3000	2018-19
East	Siang District	1	r		
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
Low	er Dibang Valley District	1	1		
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
-	ng Valley District	1	ſ		
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

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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
Lohi	t District				
101	Doorah Nallah	5 x 100	500	300	1976-77 2013-14
102	Tafragram	250	250	250	1984-85
Chai	nglang 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
Tira	p 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
Anja	w 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.

SL. No.	Name of the Stations	Units	Installed Capacity	Actual Net Generation
	Western Zone (W	(Z)	(KW)	(KWH)
Taw	ang District	r		
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	t 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

2. Performance during 2018-19



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
Kur	ung Kumey District		•	
37	Коуе	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
Low	er 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
Upp	er 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	t 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
Upp	er 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
Sian	g 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
Low	er 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
Diba	ng 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
Lohi	t District			
101	Doorah Nallah	5 x 100	500	209418
102	Tafragram	250	250	161589
Chai	nglang District	1	'	
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
Tira	p District		-1	
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	
	w 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. <u>DETERMINATION OF TARIFF FOR THE HEPS</u>

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	V	alue	
1	Auxiliary Consumption	%		1	
2	O&M Expenses		elow 5MW – 38.06 Lakh/MW MW-25MW- 28.54 Lakh/MW		
	Escalation	%	5.72% per annu	ım	
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
0	Loan	%	70	Net Project Cost
			SBI MCLR	
7	Interest	%	(One Year	
/	Interest	70	Tenor) + 200	
			basis point	
8	Moratorium		No moratorium	
o			after COD	

#### a) <u>Capital Cost</u>

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 & 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 & 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 Canacity				
1	79 HEPs	42.77	43032.62		
2	37 HEPs	20.70	15439.63		
	Total ====>	63.47	58472.25		



T	Table No- 4.1. Capital Cost : Projects Commissioned in FY2018-19				
Sl. No.	Name of Station	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		

T	Table No- 4.2. Capital Cost : Projects Commissioned in FY2019-20				
Sl. No.	Name of Station	Installed Capacity (MW)	Capital Cost IN (Lakhs)		
1	Nuranang Ph- II	1.00	1200.00		

### b) <u>Design Energy</u>

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.

	<u>5. Design Energy</u>				
SL. No.	Name of the Stations	Installed Capacity	Design Energy (Annual)		
	Western Zone (WZ)	(KW)	(MU)		
Taw	ang 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	t 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
Kur	ung Kumey District		
37	Коуе	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
Low	er 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
Upp	er 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	t 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
Upp	er 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
Sian	g 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
Low	er Dibang Valley District		
89	Deopani Ph-I	750	6.24
90	Deopani Ph-II	750	6.24
91	Abhapani	450	3.74
Diba	ng 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
Lohi	it District	•	
101	Doorah Nallah	500	4.16
102	Tafragram	250	2.08
Cha	nglang 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)
Tira	p 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
Anja	w 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	d upto -31.03	8.2017	
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   Cost			
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) <u>Return on Equity (ROE)</u>

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  $1^{st}$  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.

Т	Table No- 7. Return on Equity (ROE) for the FY 2020-21			
	Projects Commissioned upto -31.03.2017			
SI. 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	

Та	Table No- 7.1. Return on Equity (ROE) for the FY 2020-21			
	Projects Commissioned in FY 2018-19			
SI. 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	



Та	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)	0 & 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			
SI. No.	Particular		0 & 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)	0 & 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.

Ta	Table No- 9. Interest on Working Capital for the FY2020-21		
	Projects Commissioned upto -31.03	3.2017	
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	



Та	Table No- 9.1. Interest on Working Capital for theFY 2020-21 - Mukto MHS		
	Projects Commissioned in FY 2018-19		
S. No.	Particulars		
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	

Τa	Table No- 9.2. Interest on Working Capital for theFY 2020-21 - Payu MHS at Kolariang		
	Projects Commissioned in FY 2018	8-19	
S. No.	Particulars I		
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	



Та	Table No- 9.3. Interest on Working Capital for theFY 2020-21 - Subbang		
	Projects Commissioned in FY 2018	8-19	
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	

Та	Table No- 9.4. Interest on Working Capital for the FY 2020-21 - Nuranang Ph - II		
	Projects Commissioned in FY 201	9-20	
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	
1			



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

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

Table No- 10. Annual Fixed Charge (AFC) for theFY 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	<b>Total Annual Fixed Cost</b>	7202.14	

Table No- 10.1. Annual Fixed Charge (AFC) for theFY 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	<b>Total Annual Fixed Cost</b>	1004.95	



Table No- 10.2. Annual Fixed Charge (AFC) for the FY 2020-21 - Payu MHS at Kolariang			
Pro	ojects 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	<b>Total Annual Fixed Cost</b>	121.57	

Table No- 10.3. Annual Fixed Charge (AFC) for the FY 2020-21 - Subbang			
Pro	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	<b>Total Annual Fixed Cost</b>	364.72	

Table No- 10.4. Annual Fixed Charge (AFC) for theFY 2020-21 - Nuranang Ph - II			
Pro	ojects 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	<b>Total Annual Fixed Cost</b>	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: -

Tal	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	

Та	Table No- 11.1. Tariff for the FY 2020-21 - Mukto MHSProject Commissioned in FY 2018-19		
P			
	(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	Table No- 11.2. Tariff for the FY 2020-21 - PayuMHS at Kolariang		
Р	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	

Tal	Table No- 11.3. Tariff for the FY 2020-21 - Subbang		
Р	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	
	Auxiliary Power Consumption		
5	(1%)	0.09	
6	Saleable Energy (MU)	9.37	
7	Tariff (Rs./kWh)	3.89	



Ta	Table No- 11.4. Tariff for the FY 2020-21 - Nuranang Ph - II		
Р	roject Commissioned in FY 201	.9-20	
	(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 MHS4.1 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	Below 500kW	1400
Pradesh	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 No-12. Capital Cost : Project Commissioned in FY2019-20			
SI. No.	Name of Station	Installed Capacity (MW)	Capital Cost IN (Lakhs)
1	Namchik -II MHS	0.30	420.00

#### Table - Capital Cost of Namchik-II

#### 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 1<sup>st</sup> 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 1<sup>st</sup> 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:

- 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.
- 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	Below 5 MW	38.06
Pradesh	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.	Name of Station	Installed	Capital Cost		
No.	Name of Station	Capacity (MW)	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	Веуе	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.	Name of Station	Installed	Capital Cost		
No.	Nume of Station	Capacity (MW)	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	Коуе	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.	Name of Station	Installed	Capital Cost			
No.	Name of Station	Capacity (MW)	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													
	Deprec	lation for Plant C	ommissioned	before FY Z	012								
SI. 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							
	Seppa	Western Zone	01-04-1980	0.30	224.20	5.76							
	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							
	Mai Ph-I	Western Zone	01-04-1982	2.00	1494.64	38.41							
	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							
_	Maro	Western Zone	01-04-2002	0.03	22.42	0.58							
	Dulom (Daporijo)	Western Zone	01-04-1981	0.40	269.04	6.91							
	Pagi (Basar)	Eastern Zone	01-04-1972	0.10	74.73 224.20	1.92							
	Along Ess Eshi (Dali)	Eastern Zone Eastern Zone	01-04-1975 01-04-1987	0.30 0.40	224.20	5.76 7.68							
	Ego-Echi (Dali) Yomcha	Eastern Zone	01-04-1987	0.40	37.37	0.96							
	Beye	Eastern Zone	01-04-2001	0.03	22.42	0.98							
	Yingkiong Ph-I	Eastern Zone	01-04-2004	0.03	112.10	2.88							
	Yingkiong Ph-II	Eastern Zone	01-04-1980	0.13	149.46	3.84							
	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								
	Pasighat	Eastern Zone	01-04-1974	0.20	149.46	3.84							
_	Silli	Eastern Zone	01-04-2001	0.03	22.42	0.58							
	Yembung	Eastern Zone	01-04-1994	2.00	1494.64	38.41							
	Deopani Ph-I	Eastern Zone	01-04-1986	0.75	560.49	14.40							
-	Abhapani	Eastern Zone	01-04-1994	0.45	336.29	8.64							
	Anini/ Awapani Ph-I	Eastern Zone	01-04-1994	0.15	112.10	2.88							
-	Chini Afra	Eastern Zone	01-04-2001	0.25	186.83	4.80							
	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	22.42	0.58										
36													
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														
Projects considered by commission Depreciation for plant Commissioned before FY 2012														
Sl. No.	Name of Station	Division/Zone	Date of COD	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								
	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								
	Pakoti	Western Zone	01-04-2010	0.10	138.37	3.56								
_	Patta Nallah	Western Zone	01-04-2010	0.10	140.80	3.62								
	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	Коуе	Western Zone	01-04-2009	0.05	98.00	2.52								
	Chambang	Western Zone	01-04-2009	0.03	109.55	2.82								
	Paya MHS at Hiya	Western Zone	01-04-2011	0.10	237.93	6.11								
	Sippi	Western Zone		4.00	3832.92									
	Pinto Karo MHS	Western Zone	01-04-2011	0.03	83.11	2.14								
	Sikin Karo	Western Zone	01-04-2011	0.20	387.61	9.96								
	Sinyum Koro	Western Zone	01-04-2011	0.10	197.06	5.06								
	Kojin Nallah	Western Zone	01-04-2011	0.10	184.35	4.74								
_	Kambang	Eastern Zone	01-04-2008	6.00	3832.92	98.51								
	Liromoba	Eastern Zone	01-04-2008	2.00	3073.73	78.99								
	Yingko Sikong at Rapum	Eastern Zone	01-04-2009	0.05	40.14	1.03								
	Angu	Eastern Zone	01-04-2010	0.05	39.46	1.01								
	Solegomang MHS	Eastern Zone	01-04-2011	0.05	88.83	2.28								
	Sirnyuk	Eastern Zone	01-04-1996	2.00	2464.32	63.33								
_	Kopu at Tuting	Eastern Zone	01-04-2007	0.25	259.60	6.67								
	Silingri	Eastern Zone	01-04-2008	0.05	101.68	2.61								
	Singa	Eastern Zone	01-04-2008	0.03	122.98	3.16								
	Ngaming	Eastern Zone	01-04-2008	0.05	103.04	2.65								
-	Sika	Eastern Zone	01-04-2008	0.02	50.00	1.29								
_	Mayung	Eastern Zone	01-04-2009	0.01	22.22	0.57								
	Gosang Koto MUS	Eastern Zone	01-04-2011 01-04-2011	0.50	826.00 96.70	21.23								
	Kote MHS	Eastern Zone		0.05		2.49								
	Sijen MHS at Adi pasi	Eastern Zone Eastern Zone	01-04-2011 01-04-2011	0.05	91.41 74.13	2.35 1.91								
43	Pyabung MHS Total ====>	Easter'll Zolle	01-04-2011	32.64	74.13 29673.92									
L	1 Utal =====>			32.04	290/3.92	762.63								

						Annexure - 4.								
Projects considered by commission Depreciation for plant Commissioned before FY 2012														
SI. No.	Name of Station	Deprecia Installed Capital Amou												
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								
	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 consid												
	Depree	ciation for plant (	Commissioned	after FY 20	12									
SI. 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								
	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								
	Awapani at Gepuline	Eastern Zone	01-04-2018	0.50	714.46	33.95								
	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													
si Canital Cost RoE (Rs. In													
Sl. No.	Name of Station	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								
	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									
36	Thiratju	Eastern Zone	01-04-1978	747.32									
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													
	ROE for FY 2020-21													
SI. No.	Name of Station	Division/Zone	COD	Capital Cost (Rs. In Lakh)	KOE (KS. 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										
21	Kade Nallah	Western Zone	01-04-2010	95.09	5.01									
22	Коуе	Western Zone	01-04-2009	98.00	5.16									
23	Chambang	Western Zone	01-04-2009	109.55	5.77									
	Paya MHS at Hiya	Western Zone	01-04-2011	237.93	12.53									
	Sippi	Western Zone	01-04-2008	3832.92										
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									
	Angu	Eastern Zone	01-04-2010	39.46	2.08									
	Solegomang MHS	Eastern Zone	01-04-2011	88.83	4.68									
	Sirnyuk	Eastern Zone	01-04-1996	2464.32	129.82									
	Kopu at Tuting	Eastern Zone	01-04-2007	259.60	13.68									
	Silingri	Eastern Zone	01-04-2008	101.68	5.36									
	Singa	Eastern Zone	01-04-2008	122.98	6.48									
	Ngaming	Eastern Zone	01-04-2008	103.04										
	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									
		otal ====>		29411.68										

Annexure - 7. Projects considered by commission													
Projects considered by commission ROE for FY 2020-21													
SI Capital Cost RoE (Rs. In													
SI. No.	Name of Station												
	Kote MHS	Eastern Zone	01-04-2011	96.70	5.09								
	Sijen MHS at Adi pasi	Eastern Zone	01-04-2011	91.41	4.82								
	Pyabung MHS	Eastern Zone	01-04-2011	74.13	3.91								
	Rina	Eastern Zone	01-04-2008	3024.45	159.33								
	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								
	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									
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								
	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								
	Mechuka	Eastern Zone	01-04-2012	113.02	5.95								
74	Sirikorang MHS	Eastern Zone	01-04-2008	646.11	34.04								
	Awapani at Gepuline	Eastern Zone	01-04-2018	714.46	37.64								
	Dura Nallah	Western Zone	01-04-2009	404.87	21.33								
77	Kachopani MHS	Eastern Zone	02-04-2009	393.33									
	Jigaon	Eastern Zone	01-04-2011	71.85	3.79								
	Zhongdongrong	Western Zone	01-04-2011	1406.44	74.09								
		otal ====>	-	13620.94	717.56								
	То	otal		43032.62	2266.97								

				Annexure - 8.
		nsidered by commis		
	0&M	Cost for FY 2020-21	T	
SI. No.	Name of Station	Division/Zone	Installed Capacity (MW)	0 & 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.
		onsidered by commi		
	0&N	1 Cost for FY 2020-21		<b></b>
Sl. No.	Name of Station	Installed Capacity (MW)	0 & 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.
	· · · · · · · · · · · · · · · · · · ·	sidered by commi		
	0&M C	ost for FY 2020-21		
SI. No.	Name of Station	Installed Capacity (MW)	0 & 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
	Kaho	Easter Zone	0.01	0.42
	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

<u>Annexure - 9.</u> 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			0.00
			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	<b>₹</b> 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	% p.a.	
			grossed up by prevailing	•	
			Minimum Alternate Tax(MAT) as on 1st		15.60%
			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	<b>Operation &amp; Maintenance</b>	-			
		(2020-21)		₹ Lacs	12.76
			& M Expenses Escalation	%	5.72%
8	Generation and Sale of En	ergy Total No. of Hours		Hrs	

Annexure - 9.
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Tariff Sheet for Namchik - II MHS

											RE T	ariff (	Small l	Hydro	Projec	t, Sola	r PV, W	ind P	ower)																		
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	1	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	1	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 Levellised Tariff	Rs/Unit		4.84 5.29	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



### Annexure-los 11

BE, 2019-20

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Actual 2018-19		SI.	Head of Development / Account	Budget	
2017-18	Budget	Revised	No.		Estimate 2019- 20
	Estimate			r	6
1	2	3	4	5	0
				DEVELOPMENT ACTIVITIES	
				On-going Schemes	
				Hydel Generation	000.04
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		Wari MHS at Khenewa Circle (2x 25 kW).	83.00
	30.00	30.00		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		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		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
304.00	1000.01		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)	
300.00	200.00	200.00	2	Special repair of 2 x 500 kW Domkhrong Hydro Power	87.00
000.00				Project at Kalaktang	
		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	17.0
	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	( 90.0) f
	55 00	55.00	6	Governor panel R & M of Pacha SHP (2 x 1500 kW) (SH : Civil Works 8	50.0
50.00	50.00	50 00	7	EM works) Special Repair of Tago MHS (3 x 1500 kW) (SH Replacement of penstock pipe) i/c EM works - 3 Units	103 0
	30.00	30.00	8	Special repair and maintenance of Sippi SHP (2 x 2000 kW) (SH Raising height of Power channel, Spillway and	10.0
				cover slab on sliding zone)	1
	25.00	25.00	9	Restoration of flood damage works at Weir intake, feede channel, escape channel, desilting tank, silt flushing channel, power channel, forebay tank etc of Kamba SHEP (3 x 2 MW)	9
	20.00	20 00	10	Special repair & maintenance of Dali MHS (4x100 kW (SH: Civil works)	10.0
257.00	212.16	3 212.16	5 11	Protection of Forebay tank and Improvement in Powe Evacuation system of Rina SHP (2 x 1000 kW)	r 10.0
	30.00	30.00	12	C/o New Desilting Tank & Feeder Channel and EM wor for Pasighat MHS (2 x 100 kW)	
31.00	44.49	44.49	13	Special repair of Doorah Nallah MHS (4 x 100 kW)	6.1
30.00			and the second division of the	Special repair of Krawti nallah MHS (SH: Intake Weir)	20.0
30.00	15.00	0 15.00	0 15	Special Repair of Charju MHS (3 x 200 kW)	15.0
				Total of Hydel Improv. (I	) 1008.
758.00	1063.6	1103.0			
87.75	5		1	) Buildings C/o HT/SPT Residential Building for staff of Lho Division (SH:- T-V/1 No., T-IV/2 Nos., T-III/3 Nos., T-II	45. 7
			1	Nos., T-I/3 Nos. & B/Barrack- 10 Units)	ir 30.
20.0	0 40.0	0 40.0	0 2	Approach road to DHPD Residential complex at Itanaga	u 30.0

D.

Minent

Actual	2018-	.19	(32)	Head of Development / Account	(Rs. in lakh Budget
2017-18	Budget Estimate	Revised	NO.	gar A. Head of Development / Account	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	4	Providing external electric service connection for Govt. accomodation of DHPD at Itanagar.	15.0
	15.00	15.00	5	C/c Boundary wall cum protection wall at Hydro Power Office Complex at Itanagar	10.0
25.00	25.00	25.00	6	C/o RCC Boundary wait around Civil & EM Division office/Residential Hydro Power Complex at Manpoliang	20.0
	20.00	20.00	7	C/o Security fencing around Power House of Sippi SHP	10.0
	10.00	10.00	8	C/o Office Building for AE (E&M), Daporijo EM Sub- Division, DHPD	10.0
15.00	30.00	30.00	9	C/o Newly created Office building for Koloriang Civil Division, DHPD at Koloriang	10.0
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	
5.00	20.00	20.00	11	C/o T-V residential building for EE(C), Koloriang	6.5
	20.00	20.00	12	C/o Security fencing around Power House of complex of Payu MHS at Koloriang	10.0
	31.16	21.16	and the state of t	C/o Boundary wall of Division office at Aalo	28.8
	10.00	10 00		C/o foot suspension bridge at Sirikorang MHS (2 x 250 kW)	
	35.30	35 30	15	Infrastructure development of newly created Electro- Mechanical Sub Division & Civil Sub Division at Tirbin	25.0
103.00	116.51	116.51	16	C/o SE Office Building cum Residental buildings for newly created Pasighat Circle / Lower Siang-Dibang Basin (SH: Office Bldg1 No. T-V/1 No., T-III/2 Nos., T- II/4 Nos. & Bachelor Barrack - 5 Units)	
	25.00	25.00	17	C/o Compound wall for newly created SE office for Lower Siang and Dibang Basin Circle	5.0
	34.00	34.00	18	C/o Security fencing wall around DHPD complex Rock land, Tezu with M S Gate area 850R/Mts	51.0
			19	C/o Office building Changlang Sub-Division	10.0
	5.00			C/o 1 (one ) unit B/Barrack 4 unit for operational staff for Yapak Nallah MHS (2 X 100 KW )	
	10.96	10.96		C/o Security fencing / compound wall for Division office at Hawai Hydro power Division at Hawai	
	8.00			C/o 2 Unit Bachelor Barrack for Operational staff of Kachopani MHS (2 x 100 kW)	
271.75	8.18	534.11	23	C/o R C.C office building at Khonsa EM Sub-Division	41.1
211.13	544.11	554.11	d	Total of Buildings (c) Survey & Investigation	430.
	2.00	2.00		Survey & Investigation Survey & Investigation of MHP at Sakio Nallah (Amen Nallah) near Veo Village	2.0
	3.00		2	Survey & Investigation of MHP at Passa river (Ph-II) at Passa Valley Circle	3.0
	1.00			Survey & Investigation over Takesidang River at Ruhi Village under Tali ADC Hq.	
0.00	6.00	6.00		Total of Survey & Invest (d)	
1993.83	2949.67	3039.67		Sub-Total (I)	3332.9
				New Schemes	
			a)	Hydel Improvement	
			1	Repairing of Damaged generator (2500 KVA) of Unit No. II of Nuranang Ph-I (3 x 2 MW)	50.0



Actual 2018-19		SI.	SI. Head of Development / Account		
Actual 2017-18	Budget	Revised	No.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Estimate 2019-
	Estimate				<u>20</u> 6
1	2	3	4	5	20.00
			2	Reconstruction of Spillway and Power Channel of Mago	20.00
				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	20.00
			-	Shakti Hydel Station (2 x 50 kW)	20.00
		1	4	Reconstruction of Power Channel, Spillway and Sluice	20.00
				Valve of Tsechu MHS (2 x 50 kW) at Tsechu Reconstruction of Spillway Channel , Scour Pipe and	20.00
			5	Forebay Tank of Thingbu MHS (2 x 50 kW)	
			0	C/o Desilting Tank of Chellengkang Ph-I & Ph-II (1 x 30	20.00
			6	kW)	
			7	Reconstruction of rain damages of Power Channel of	35.00
			1 '	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.)	
			8	Complete replacement of old turbine and generator set	95.00
			0	of Unit-III of Rahung Hydel Station (3x250 kW) and	
				improvement of switchyard and external protection	
				system.	
			1	system.	
			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	f 150.00
			1.00	Pacha SHP (2 x 1500 kW) (SH Length of Power	r i
				Channel = 47.0 mtr. Aquaduct = 1 No. of span 15.0 mtr	
				with abutment & length Retaining wall = 85.0 Mtr. with	n
				A E mtc donth)	
			12	Augmentation of Pakke Kessang MHS (30 KW) to 100	50.00
				INV (procurement of new TG 2x50 KVV) sits with its	5
				control panel and protection panel, board and Gr	2
		1		0 415/1 1 ky step up sub-station	
			13	Reconstruction of rain damages of Spillway Channel of	
1				Sippi SHP (2 x 2000 kW) (SH: Length of Spinwa	Y
				Channel = 35.20 mtr. & Retaining wall 35.20 mtr.)	d 20.0
			14	Special repair of Penstock pipes, expansion joints an	en anter a service a servi
				other hydromechanical equipments of Dulom MHS (2	× o
			1	200 kW) including extension of Spillway Channel	CX In
				Protection work (SH: Expansion Joints = 5 Nos. & lengt	1)
				of Spillway Channel = 118.00 mtr.)	0 15.0
			15	Special repairs & maintenance of Sikin Koro MHS (2x10	1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -
				kW) at Bui (SH : Re-construction of rain damaged Powe	
				Channel & EM works).	
				Re-construction of rain damaged water conducted	or 75.0
			16	structures of Payu MHS (2 x 250 kW) at Pinchi (SI	H:
				Length Weir = 12.0 mtr., Feeder Channel = 35.0 mt	r.,
1 -				Power Channel = 50.0 mtr & Retaining Wall = 105	.0
				mtr.)	
			17	Z Special repair of Chate MHS (1 x 30 kW)	7.
			18	in the products of culuart) at Har	gu 75.
			10	Mue /2 v 1000 kM/ at Choba	in the second
		_	19	Dependent in temperature at dependent	M 200.
			13	Locuinments of Angong Nallah MHS	
				0 Rectification works of spillway of Angong Nallah SHP	(3 90.
			2	x 1500 kW)	
			2	<ol> <li>Special repair of Singha MHS (1 x 30 kW)</li> </ol>	10
				2 Special repair of Sirnyuk SHP (2 x 1000 kVV) (S	SH: 30.
			2	Supply, erection, testing and commissioning of electro	nic
		1		governor & SEU panel)	1

3



Actual	2018	-19	SI.	Head of Development / Account	Budget Estimate 2019
2017-18	Budget	Revised	No.		20 20
	Estimate	2	4	5	6
1	2	3	23 5	pecial repair of Kopu MHS (1 x 250 kW) (SH: Supply.	25.00
			e	rection, testing and commissioning of TG control panel	
			Î/	c OPU) Repair and maintenance of Gossang MHS ( 2x 250 kW)	10.00
			24 5	SH. Repairing of Electronic governor and synchronizing	
			F	panel)	15.00
			25 \$	Special repair of Yingkiong Ph-II MHS (2 x 100 kW) (SH: supply, erection, testing & commissioning of ELC panel	
				with dummy load tank)	
			26	Special repair of Sille MHS (2 x 250 kW) at Geku	15.0
			20	Special repair of E&M equipments of Pasighat MHS (2 x	30.0
				100 kW)	
_			28	Upgradation of existing switchyard for Pasighat MHS (2 x	15.0
				100 kW) Special repair of Electro-Mechanical equipments of	24.0
			29	Special repair of Electro-Mechanical equipments of Kamba SHEP (3 x 2 MW) including replacement of all	1
				worn out equipments like CT, PT, LA and insulators etc.	
				and Installation of New Electronic Governor for Unit-I.	
	-			A MAN AND A MAN AND A MAN AND A MAN AND AND AND AND AND AND AND AND AND A	40.0
			30	Special repair of Liromoba SHP (2 x 1000 kW) (SH:-	1
				Repairing of AVR panel and CT/PT) i/c EM works	10.0
			31	Special repair of Aalo MHS (4 x 100 kW)	
			32	Special repair of Dali MHS ( 4 x 100 kW) (SH:- Civil and E&M Works)	
			33	Special repair of Pagi SHP (2 x 50 kW) (SH:- E & N Works)	1 25.
			34	Special repair of Sirikorong MHS (2 x 250 kW) (SH: Wei Intake)	r 10.1
			35	Modification of Spillway of Subbung SHP (2x1500Kw)	50.
				Special repair of Yembung SHP (4 x 500 kW) (SH	1 50
			36	Restoration of weir & intake, protection structures t	
				power channel and including repair & replacement of Et	N
1	1			Equipment).	30
			37	Spl. Repair of Awapani MHS (2 x 250 KW) at Gepuline	
			38	Special repair of damaged weir intake at Chini Afra MH (1 x 250 kW)	S 15
			39	Restoration works of Chu Nallah MHS (2 x 15 kW)	8
			40	Modification of Turbine Governoring system of Tafraga	m 15
	_		41	MHS (1x250Kw) Repairing of Penstock pipe and Governing syste	m 25
			42	maintenance of Tafragam MHS (1 x 250Kw) Special repair of Mati Nallah MHS (2 x 250 KW) (E	
			43	Works) Special repair ing of Teepani MHS (2 x 250 kW) (S	
				F&M works)	
			44	Renovation of control panel of Charju MHS (3 x 250 kV	
			45	improvement of govering system of Unit-I of Tirath	nju
			46	THE MUS IS A DO WAN IS	
			47	Special repair of Tissue MHS Ph-I (4 x 100 kW)	11
			- · · · · · · · · · · · · · · · · · · ·	Total of Hydel Improv.	(a) 177
				b) Buildings	1
			1	C/o Office Building of Jang Civil Sub-Division at Jang	1



(Rs. in lak	Head of Dauglasmant (A.P.)	Actual 2018-19 SI, Head of Development / Actual				
Budget Estimate 201	Head of Development / Account	No.	Revised	Budget Estimate	2017-18	
20	5	4	3	2	1	
6 12.7	C/o residential building for staff quarter under Lumba	2				
	Civil Sub-Division (T-III/1 No. & T-II/1 No.) CC Flooring to DHPD Residential complex at Itanagar	3				
20.0						
25.0	Slab cover on Nallah of DHPD Residential Complex	4				
25.0	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)	5				
12.7	C/o SE's Office Building Cum Residental buildings for	6				
	newly shifted Subansiri Basin to Ziro (SH: Office Bidg1 No. T-V/1 No., T-III/2 Nos., T-II/4 Nos. & Bachelor Barrack - 5 Units)					
10.00	C/o Staff Quarter for JE at Tali (SH: T-III/1 No.)	7				
12.00	C/o staff quarter at intake & forebay tank of Angong nallah (SH: 4 men B/barracck)	8		1.124		
10.00	Infrastructure development of Division office complex at Geku.	9				
100.00	Security Fencing around Hydro Power Complex at Namsai	10				
242.51	Total of Buildings (b)					
	Survey & Investigation	(c)				
2.00	S&I of Pemashulfu MHS (3 x 250 kW) near Mechuka	2				
2.00	S&I Pibung MHS (2 x 250 kW) over Pibung river at Tumbin					
4.00	Total of Survey & Invest (c)		0.00	0.00	0.00	
2017.01	Sub-Total (II)		0.00	0.00	0.00	
	Maintenance of Assets		800.00	800.00	700.00	
800.00	Hydel Station, Building, Petty Works etc.	2	000.00	000.00	100.00	
200.00	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.)	1	800.00	800.00	700.00	
1000.00	Sub-Total (III)		800.00	000.00	100.00	
	T-t-1 (A)		3839.67	3749.67	2693.83	
6350.00	Total : (A) Budget Announcement	BE				
	lew	1				
500.00	Capacity Building, Public Sensitization / awareness / Confidence Building, Development of Software for Aonitoring System and Legal / Consultancy Services for Hydro Power Development in Arunachai Pradesh	N				
500.00	Total : (B)		0.00	0.00	0.00	
	CDAND TOTAL		3839.67	3749.67	693.83	
6850.00	GRAND TOTAL : (A) + (B) + (C)		0000.01			

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# APPLICATION

## FOR

## ANNUAL REVENUE REQUIREMENT (ARR)

&

# TARIFF PETITION FOR

# FY 2020-21

# PART – B

Submitted by: Department of Hydro Power Development - 2020

## Index

Check list of	Check list of forms and other documents for Annual Revenue Requirement filing by Generation Licencee						
Format No.	Format No. Title of Format						
Format - HG1	Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)	page i (1) - i (124)					
Format - HG2	Design Energy and MW Continuous (month-wise) Run of River Type Stations	page ii (1) - ii (124)					
Format - HG3	Annual Revenue Requirement	page iii					
Format - 2	Total Number of Employee	page iv					
Format - 3	Employees Productive Parameters	page v					
Format - 13	Investment Plan (Scheme - Wise)	page vi					
Format - 14	Investment Plan (Year - Wise)	page vii					

Name of the Hydro Generating Station : Chellengkang Ph-I State/ Distt. Arunachal Pradesh/ Tawang District

	ils of Cod, Type of Hydro Stations,		Annual Dlant A	voilability
	or (NAPAF)	normative	z Allilual Flain, A	vallaoliity
гаси	& other normative para	meters cor	sidered for Tarif	f
Sl.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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	· ·			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	period (MW)			
-	Type of Turbine			
10.4	Type of Turonie			
10.5	Rated Head (M) Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Chellengkang Ph-II State/ Distt. Arunachal Pradesh/ Tawang District

	/ Distt. Arunachal Pradesh/ Tawang		1 1 1 1 1	
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability
Facto	or (NAPAF)			-
	& other normative para	meters cor	sidered for Tarif	
Sl.	Description	Unit	2019-20	2020-21
No.	-		(Estimated)	(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	%	1.009/	1.00%
/	Transformation losses	70	1.00%	1.00%
0	Normative Plant Availability	0./		
8	Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs.		
9.1	Maintenance Spares for WC	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	1			
	Installed Consoity (Do of Units y	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			

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

Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)           &         Other normative parameters considered for Tariff           Sl.         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             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              6         Design Energy (Annual)         Mus         0.83         0.83           7         Auxiliary Consumption including Transformation losses         %         1.00%         1.00%           8         Normative Plant Availability %         14         14         4 <th></th> <th>/ Distt. Arunachal Pradesh/ Tawang</th> <th><i>,</i></th> <th>A 1.D1 / A</th> <th>1 1 114</th>		/ Distt. Arunachal Pradesh/ Tawang	<i>,</i>	A 1.D1 / A	1 1 114
& other normative parameters considered for TariffSl. No.DescriptionUnit2019-20 (Estimated)2020-21 (Projected)1Installed CapacityKW1001002Free Power to home state%NILNIL3Date of commercial operationImage: Commercial operationImage: Commercial operationImage: Commercial operation4Type of StationImage: Commercial operationImage: Commercial operationImage: Commercial operationa)Surface/ undergroundImage: Commercial operationImage: Commercial operationa)Surface/ undergroundImage: Commercial operationImage: Commercial operationb)Purely ROR/ Pondage/ StorageImage: Commercial operationImage: Commercial operationc)Peaking/ non-peakingImage: Commercial operationImage: Commercial operationd)No of hours of peakingImage: Commercial operationImage: Commercial operationb)Static excitationImage: Commercial operationImage: Commercial operation6Design Energy (Annual)Mus0.830.837Auxiliary Consumption including Transformation losses $\%$ 1.00%8Normative Plant Availability Factor (NAPAF) $\%$ 1.00%9.1Maintenance Spares for WCRs. LakhImage: Commercial operation9.2Receivable for WCR. LakhImage: Commercial operation9.3Base Rate of return on equity Mill $\%$ Not Applicable9.4 <td></td> <td></td> <td>Normative</td> <td>e Annual Plant, A</td> <td>vailability</td>			Normative	e Annual Plant, A	vailability
Sl. No.DescriptionUnit $2019-20$ (Estimated) $2020-21$ (Projected)1Installed CapacityKW1001002Free Power to home state%NILNIL3Date of commercial operation4Type of commercial operationa)Surface/ undergroundb)Purely ROR/ Pondage/ Storagec)Peaking/ non-peakingd)No of hours of peakinge)Overload capacity (MW) & period5Type of excitation6Design Energy (Annual)Mus0.837Auxiliary Consumption including Transformation losses%8Normative Plant Availability Factor (NAPAF)%9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity Mil 2017%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10.3Peaking capacity during lean period (MW)10010.4Type of Turbine10.5Rated Head (M)	Facto				0
No.DescriptionUnit(Estimated)(Projected)1Installed CapacityKW1001002Free Power to home state%NILNIL3Date of commercial operation4Type of Stationa) Surface/ undergroundb) Purely ROR/ Pondage/ Storagec) Peaking/ non-peakingd) No of hours of peakinge) Overload capacity (MW) &geriod5Type of excitationa) Rotating exciters on generatorb) Static excitation6Design Energy (Annual)Mus7Auxiliary Consumption including Factor (NAPAF)%9.1Maintenance Spares for WCRs. Lakh9.3Base Rate of return on equity%9.4Tax Rate%9.5Prime lending Rate of SBI as on April' 2017%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010.3Rated Head (M)KW100		& other normative para	meters cor		
No.       Image: Constraint of the second seco		Description	Unit		
2       Free Power to home state       %       NIL       NIL         3       Date of commercial operation       Unit - 1         Unit - 2       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           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       R.s. Lakh           9.2       Receivable for WC       R. Lakh         12.90%         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 <td< td=""><td>No.</td><td>-</td><td>Oint</td><td>(Estimated)</td><td>(Projected)</td></td<>	No.	-	Oint	(Estimated)	(Projected)
3       Date of commercial operation       Unit - 1         Unit - 1       Unit - 2         4       Type of Station       a) Surface/ underground         a) Surface/ underground       b) Purely ROR/ Pondage/ Storage         c) Peaking/ non-peaking       c) Peaking/ non-peaking         d) No of hours of peaking       c) Peaking/ non-peaking         e) Overload capacity (MW) & period       c) Peaking context of peaking         f) No of hours of peaking       c) Peaking context of peaking         e) Overload capacity (MW) & period       c) Peaking context of peaking         f) No of hours of peaking       c) Peaking context of peaking         e) Overload capacity (MW) & period       c) Peaking context of peaking         f) Auxiliary Consumption including Transformation losses       mommative Plant Availability         f) Auxiliary Consumption including Transformation losses       %       1.00%         8       Normative Plant Availability       %       1.00%         8       Normative Plant Availability       %       14         9.1       Maintenance Spares for WC       R. Lakh       9.3         9.2       Receivable for WC       R. Lakh       9.4         9.5       Prime lending Rate of SBI as on April' 2017       %       13.80%       12.90%					
Unit - 1       Unit - 2         4       Type of Station       Image: Station of the state			%	NIL	NIL
Unit - 24Type of Stationa) Surface/ undergroundb) Purely ROR/ Pondage/ Storagec) Peaking/ non-peakingd) No of hours of peakinge) Overload capacity (MW) & periodf5Type of excitationa) Rotating exciters on generatorb) Static excitation6Design Energy (Annual)Mus0.837Auxiliary Consumption including Transformation losses8Normative Plant Availability Factor (NAPAF)9.1Maintenance Spares for WC9.3Base Rate of return on equity 9%9.4Tax Rate9.5Prime lending Rate of SBI as on April' 20179.6Prime lending Rate of SBI as on April' 201710.1Type10.2Installed Capacity (Bo of Units x MW)10.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	3				
4       Type of Station       Image: Storage of the state of		Unit – 1			
a) Surface/ underground		Unit – 2			
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)         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.2       Receivable for WC         9.3       Base Rate of return on equity         9.4       Tax Rate         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)	4	Type of Station			
c) Peaking/ non-peaking		a) Surface/ underground			
d) No of hours of peaking		b) Purely ROR/ Pondage/ Storage			
d) No of hours of peaking		c) Peaking/ non-peaking			
period					
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)       %       1.00%       1.00%         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         100       100         10.3       Peaking capacity during lean period (MW)       KW       100       100         10.4       Type of Turbine             10.5       Rated Head (M)	5	1			
b) Static excitationMus0.830.836Design Energy (Annual)Mus0.830.837Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh		**			
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)       %       1.00%       1.00%         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         100       100         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)					
7Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh	6	/	Mus	0.83	0.83
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         100       100         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)	7	Auxiliary Consumption including	%	1.00%	1.00%
9.1       Maintenance Spares for WC       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         100       100         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)	8	Normative Plant Availability	%		
9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10010.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.1	Maintenance Spares for WC			
9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M) </td <td>9.2</td> <td>Receivable for WC</td> <td></td> <td></td> <td></td>	9.2	Receivable for WC			
9.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.3			14	14
9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.4		%	Not Applicable	Not Applicable
10.1       Type       Installed Capacity (Bo of Units x MW)       KW       100       100         10.2       Installed Capacity (Bo of Units x MW)       KW       100       100         10.3       Peaking capacity during lean period (MW)       Image: Capacity during lean period (MW)       Image: Capacity during lean period (MW)         10.4       Type of Turbine       Image: Capacity during lean period (MW)       Image: Capacity during lean period (MW)         10.5       Rated Head (M)       Image: Capacity during lean period (MW)       Image: Capacity during lean period (MW)	9.5		%		**
10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10010010.4Type of Turbine10010.5Rated Head (M)100	10.1	*			
10.3     period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)		Installed Capacity (Bo of Units x	KW	100	100
10.4 Type of Turbine       10.5 Rated Head (M)	10.3				
10.5 Rated Head (M)	10.4	▲			

Name of the Hydro Generating Station : Thimbu

State/ Distt. Arunachal Pradesh/ Tawang District

Deta	ils of Cod, Type of Hydro Stations,		e Annual Plant, A	vailability Factor
(NAI	PAF)			
	& other normative para	meters cor		
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	,,,	1.12	1.12
5	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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Khet

State/ Distt. Arunachal Pradesh/ Tawang District

Detai	ils of Cod, Type of Hydro Stations,		e Annual Plant, A	vailability Factor
(NAI			· 1 10 T ·	c.
~1	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	Installed Capacity	KW	(Estimated) 100	(Projected) 100
2	Free Power to home state	<u>K</u> w	NIL	NIL
		70	INIL	INIL
3	Date of commercial operation Unit – 1			
	Unit - 2			
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	0.83	0.83
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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)			
	Rated Discharge (Cumes)			

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

Deta	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	PAF)			-
	& other normative para	meters cor		
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	Maintananaa Sparaa far WC	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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### Name of the Hydro Generating Station : Mago MHS State/ Distt. Arunachal Pradesh/ West Kameng

Detai (NAI	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Factor
(1121	& other normative para	meters cor	sidered for Tarif	f
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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

## Name of the Hydro Generating Station : Nuranang

State/ Distt. Arunachal Pradesh/ Ta	wang District
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Details	of Cod, Type of Hydro Stations, Normati		lant. Availability F	actor (NAPAF)
2	& other normative param			
Sl.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(Projected)
1	Installed Capacity	KW	6000	<u>6000</u>
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation	70	1,112	1,112
	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	%	1.00%	1.00%
/	Transformation losses			1.00%
0	Normative Plant Availability Factor	%		
8	(NAPAF)	%0		
9.1	Maintananaa Snaraa far WC	Rs.		
9.1	Maintenance Spares for WC	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	%	13.80%	12.90%
9.5	April' 2017	/0	13.8070	12.9070
10.1				
10.1	Туре			
	Type Installed Capacity (Bo of Units x	VW	6000	6000
10.1		KW	6000	6000
10.2	Installed Capacity (Bo of Units x	KW	6000	6000
	Installed Capacity (Bo of Units x MW) Peaking capacity during lean period (MW)	KW	6000	6000
10.2	Installed Capacity (Bo of Units x MW) Peaking capacity during lean period	KW	6000	6000
10.2 10.3	Installed Capacity (Bo of Units x MW) Peaking capacity during lean period (MW)	KW	6000	6000

Name of the Hydro Generating Station : Kitpi Ph-I

State/ Distt.: Arunachal Pradesh/ Tawang District

	ils of Cod, Type of Hydro Stations,	0		ability Factor
(NAI	PAF)		· · · · · · · · · · · · · · · · · · ·	
~1	& other normative pa	rameters	I	0000.01
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	Туре			
10.2	Installed Capacity (No. of Units x KW)	KW	1500	1500
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Kitpi MHS Ph-II State/ Distt. Arunachal Pradesh/ Tawang District

	/ Distt. Arunachal Pradesh/ Tawang			
	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability
Facto	or (NAPAF)			
	& other normative para	meters con	sidered for Tarif	f
Sl.	Description	Unit	2019-20	2020-21
No.	Description	Ullit	(Estimated)	(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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
10.1	Installed Capacity (Bo of Units x	KW	3000	3000
	MW) Peaking capacity during lean			
10.3	period (MW)			
	Type of Turbine			
10.5	Rated Head (M)			
	Rated Discharge (Cumes)			

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

Detai	ls of Cod, Type of Hydro Stations, N		Annual Plant, Ava	ilability Factor
(NAF	AF) & other normative para	meters cor	sidered for Tarif	f
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	0/	1.000/	1.000/
7	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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

	ils of Cod, Type of Hydro Stations,		e Annual Plant, A	vailability Factor
(NAI	PAF) & other normative para	matars cor	sidered for Tarif	f
01	& other normative para			
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)	%		
0.1	Maintanana Suama fan WC	Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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

	/ Distt. Arunachal Pradesh/ Tawang			
Detai	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability
Facto	or (NAPAF)			
	& other normative para	meters cor	sidered for Tarif	f
S1.	Description	Unit	2019-20	2020-21
No.	Description	Ullit	(Estimated)	(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	0/	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0/		
8	Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	%	13.80%	12.90%
7.5	April' 2017	70	15.0070	12.9070
10.1	Туре			
10.2	Installed Capacity (Bo of Units x	KW	100	100
	MW)			
10.3	Peaking capacity during lean			
	Peaking capacity during lean period (MW)			
10.4	Peaking capacity during lean			

Name of the Hydro Generating Station : Bramdhongchung Ph-II State/ Distt. Arunachal Pradesh/ Tawang District

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor				
(NAI	1	matana aan	aidanad fan Tanif	c				
Sl.	& other normative parameters considered for Tariff       S1.     2019-20     2020-21							
No.	Description	Unit	(Estimated)	(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)	%						
0.1	Maintanana Suama fan WC	Rs.						
9.1	Maintenance Spares for WC	Lakh						
9.2	Receivable for WC	R. Lakh						
	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	Туре							
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100				
10.3	Peaking capacity during lean period (MW)							
	Type of Turbine							
	Rated Head (M)							
10.6	Rated Discharge (Cumes)							

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#### Name of the Hydro Generating Station : Mukto State/ Distt. Arunachal Pradesh/ Dibang Valley District

State/	/ Distt. Arunachal Pradesh/ Dibang	Valley Dis	strict	
Detai	ls of Cod, Type of Hydro Stations,	Normative	Annual Plant, A	vailability Factor
(NAP	PAF)			
	& other normative para	meters con	sidered for Tarif	f
Sl.		TT '4	2019-20	2020-21
No.	Description	Unit	(Estimated)	(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	0/	1.000/	1.000/
/	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0/		
8	Factor (NAPAF)	%		
9.1	Maintonanaa Sparas for WC	Rs.		
9.1	Maintenance Spares for WC	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	%	13.80%	12.90%
9.3	April' 2017	/0	13.0070	12.9070
10.1	Туре			
10.2	Installed Capacity (Bo of Units x	KW	6000	6000
10.2	MW)	K W	0000	0000
10.3	Peaking capacity during lean			
10.3	period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
10 (	Rated Discharge (Cumes)			

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### Name of the Hydro Generating Station : Nuranag Ph-II

Detai	Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor					
(NAI	(NAPAF)					
	& other normative para	meters con	sidered for Tarif	f		
Sl.	Description	Unit	2019-20	2020-21		
No.	-		(Estimated)	(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)	%				
0.1	Maintenance Success for WC	Rs.				
9.1	Maintenance Spares for WC	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						
10.2	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)					

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Name of the Hydro Generating Station : Rahung

State/ Distt. Arunachal Pradesh/	West Kameng District
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	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF				2
	& other normative para	meters cor		
Sl.	. Description	Unit	2019-20	2020-21
No.			(Estimated)	(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	0/	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0/		
8	Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			

Name of the Hydro Generating Station : Dirang

State/ Distt. Arunachal Pradesh/ West Kameng District

-	/ Distt. Arunachal Pradesh/ West K.	6		
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vallability Factor
(NAI	& other normative para	meters cor	sidered for Tarif	f
Sl.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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)	%		
		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
-	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	Туре			
10.2	Installed Canacity (Bo of Units y	KW	2000	2000
10.3	Peaking capacity during lean			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			
10.0	Rated Discharge (Culles)			

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

	ls of Cod, Type of Hydro Stations,			vailability Factor		
(NAF		Normative	Annual I Iani, A	valiability Pactor		
		meters cor	sidered for Tarif	f		
S1.	& other normative parameters considered for Tariff 2019-20 2020-21					
No.	Description	Unit	(Estimated)	(Projected)		
1	Installed Capacity	KW	300	300		
2	Free Power to home state	<u>%</u>	NIL	NIL		
3	Date of commercial operation	/0	INIL	INIL		
3	Unit – 1					
	Unit - 2					
	Unit – 3					
4						
4	Type of Station a) Surface/ underground					
	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		
-	Auxiliary Consumption including	0.(	1.000/	1.000/		
7	Transformation losses	%	1.00%	1.00%		
0	Normative Plant Availability	0.(				
8	Factor (NAPAF)	%				
0.1	, , , , , , , , , , , , , , , , , , ,	Rs.				
9.1	Maintenance Spares for WC	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	Туре					
	Installed Capacity (Bo of Units x		_			
10.2	MW)	KW	300	300		
10.3	Peaking capacity during lean period (MW)					
10.4	Type of Turbine					
10.5	Rated Head (M)					
	Rated Discharge (Cumes)					

## 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         SI.       Description       Unit       2019-20       2020-21         No.       Description       Unit       2019-20       (Projected)         1       Installed Capacity       KW       1000       1000         2       Free Power to home state       %       NIL       NIL         3       Date of commercial operation	-	Distt. Arunachal Pradesh/ West K	Ű		
& other normative parameters considered for TariffSl. No.DescriptionUnit2019-20 (Estimated)2020-21 (Projected)1Installed CapacityKW100010002Free Power to home state%NILNIL3Date of commercial operationunit - 14Type of Stationa)Surface/ undergroundb)Purely ROR/ Pondage/ Storagec)Peaking/ non-peakingd)No of hours of peakinge)Overload capacity (MW) & period5Type of excitationa)Rotating exciters on generatorb)Static excitation6Design Energy (Annual)Mus8.328.327Auxiliary Consumption including Transformation losses%1.00%8Normative Plant Availability Factor (NAPAF)%14149.1Maintenance Spares for WCR. Lakh9.2Receivable for WCR. Lakh13.80%12.90%9.1Installed Capacity (Bo of Units x MW)KW1000100010.3Peaking capacity during lean period (MW)10.00%100010.4Type of Turbine10.00%			Normative	Annual Plant, A	vailability Factor
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         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         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)     %     14     14       9.1     Maintenance Spares for WC     R. Lakh        9.2     Receivable for WC     R. Lakh      10.00%       9.3     Base Rate of return on equity     %     14     14       9.4     Tax Rate     %     Not Applicable     Not Applicable       9.5 <td< td=""><td>(NAF</td><td></td><td></td><td></td><td></td></td<>	(NAF				
No.DescriptionUnit (Estimated)(Projected)1Installed CapacityKW100010002Free Power to home state%NILNIL3Date of commercial operation4Type of Stationa)Surface/ undergroundb)Purely ROR/ Pondage/ Storagec)Peaking/ non-peakingd)No of hours of peakinge)Overload capacity (MW) & period5Type of excitation6Design Energy (Annual)Mus8.328.327Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%14149.1Maintenance Spares for WCR. Lakh9.2Receivable for WCR. Lakh13.80%12.90%9.4Tax Rate%Not ApplicableNot Applicable9.5April' 2017%13.80%12.90%10.1Type </td <td></td> <td>&amp; other normative para</td> <td>meters cor</td> <td></td> <td></td>		& other normative para	meters cor		
No.       Installed Capacity       KW       1000       1000         1       Installed Capacity       KW       1000       1000         2       Free Power to home state       %       NIL       NIL         3       Date of commercial operation            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             6       Design Energy (Annual)       Mus       8.32       8.32         7       Auxiliary Consumption including Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability %       Kach            9.1       Maintenance Spares for WC       Rs. Lakh <tr< td=""><td>Sl.</td><td rowspan="2">. Description</td><td>Unit</td><td>2019-20</td><td>2020-21</td></tr<>	Sl.	. Description	Unit	2019-20	2020-21
2       Free Power to home state       %       NIL       NIL       NIL         3       Date of commercial operation       Unit - 1         4       Type of Station       1         a) Surface/ underground       1       1         b) Purely ROR/ Pondage/ Storage       1       1         c) Peaking/ non-peaking       1       1         d) No of hours of peaking       1       1         e) Overload capacity (MW) & period       1       1         5       Type of excitation       1       1         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)       %       14       14         9.1       Maintenance Spares for WC       Rs. Lakh       13.80%       12.90%         9.1       Maintenance Spares for WC       R Lakh       13.80%       12.90%         9.1       Maintenance Spares for SBI as on April '2017       %       Not Applicable       Not Applicable         9.5       Prime lending Rate of SBI as on April '2017       %       13.80%       12.90%         10.1       T	No.		Olin	(Estimated)	(Projected)
3       Date of commercial operation       Unit - 1         Unit - 1       Unit - 2         4       Type of Station       a) Surface/ underground         a) Surface/ underground       a) Surface/ underground       a) Surface/ underground         b) Purely ROR/ Pondage/ Storage       c) Peaking/ non-peaking       c) Overload capacity (MW) & period         c) Overload capacity (MW) & period       c) Overload capacity (MW) & period       c) Overload capacity (MW) & period         5       Type of excitation       c) Overload capacity (MW) & period       c) Overload capacity (MW) & period         6       Design Energy (Annual)       Mus       8.32       8.32         7       Auxiliary Consumption including Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability %       %       14       14         9.1       Maintenance Spares for WC       Rs. 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       1       1       1000       1000         10.2       Installed Capacity du	1	Installed Capacity	KW	1000	1000
Unit - 1Unit - 1Unit - 24Type of Stationa) Surface/ undergroundb) Purely ROR/ Pondage/ Storagec) Peaking non-peakingd) No of hours of peakinge) Overload capacity (MW) & period5Type of excitationa) Rotating exciters on generatorb) Static excitation6Design Energy (Annual)Mus8.327Auxiliary Consumption including Transformation losses9.1Maintenance Spares for WC8Rs. Lakh9.2Receivable for WC9.3Base Rate of return on equity April' 20179.4Tax Rate9.5Prime lending Rate of SBI as on April' 201710.1Type10.2Installed Capacity (Bo of Units x MW)10.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	2		%	NIL	NIL
Unit - 24Type of Stationa) Surface/ undergroundb) Purely ROR/ Pondage/ Storagec) Peaking / non-peakingd) No of hours of peakinge) Overload capacity (MW) & period5Type of excitationa) Rotating exciters on generatorb) Static excitation6Design Energy (Annual)Mus $8.32$ 7Auxiliary Consumption including Transformation losses8Normative Plant Availability Factor (NAPAF)9.1Maintenance Spares for WC8.3Res. Lakh9.2Receivable for WC9.3Base Rate of return on equity April' 20179.4Tax Rate9.5Prime lending Rate of SBI as on April' 201710.1Type10.2Installed Capacity (Bo of Units x MW)10.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	3				
4       Type of Station		Unit – 1			
a) Surface/ underground		Unit – 2			
b) Purely ROR/ Pondage/ Storage	4	Type of Station			
c) Peaking/ non-peaking		a) Surface/ underground			
d) No of hours of peaking		b) Purely ROR/ Pondage/ Storage			
e) Overload capacity (MW) & period		c) Peaking/ non-peaking			
period $\sim$ 5Type of excitation $\sim$ a) Rotating exciters on generator $\sim$ b) Static excitation $\sim$ 6Design Energy (Annual)Mus $8.32$ $8.32$ 7Auxiliary Consumption including Transformation losses $\%$ $1.00\%$ $1.00\%$ 8Normative Plant Availability Factor (NAPAF) $\%$ $1.00\%$ $1.00\%$ 9.1Maintenance Spares for WCRs. Lakh $Lakh$ 9.2Receivable for WCR. Lakh9.3Base Rate of return on equity $\%$ $\%$ $14$ $14$ 9.4Tax Rate $\%$ Not Applicable9.5Prime lending Rate of SBI as on April' 2017 $\%$ $13.80\%$ $12.90\%$ 10.1Type $\sim$ $\sim$ 10.2Installed Capacity (Bo of Units x MW)KW $1000$ $1000$ 10.3Peaking capacity during lean period (MW) $\sim$ $\sim$ $\sim$ 10.4Type of Turbine $\sim$ $\sim$ $\sim$ 10.5Rated Head (M) $\sim$ $\sim$ $\sim$					
5       Type of excitation		e) Overload capacity (MW) &			
a) Rotating exciters on generator         b) Static excitation         6       Design Energy (Annual)         Mus       8.32         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.2       Receivable for WC         9.3       Base Rate of return on equity         9.4       Tax Rate         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)		period			
b) Static excitationMus8.328.326Design Energy (Annual)Mus8.328.327Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh	5	Type of excitation			
6Design Energy (Annual)Mus8.328.327Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh		a) Rotating exciters on generator			
7Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh		b) Static excitation			
7       Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability Factor (NAPAF)       %       1.00%       1.00%         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          1000         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)	6	Design Energy (Annual)	Mus	8.32	8.32
Iransformation losses       Image: Constraint of the system	7	Auxiliary Consumption including	0/	1.000/	1.000/
8       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         1000       1000         10.2       Installed Capacity (Bo of Units x MW)       KW       1000       1000         10.3       Peaking capacity during lean period (MW)	/	Transformation losses	%0	1.00%	1.00%
Factor (NAPAF)Rs. Lakh9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%149.4Tax Rate%Not Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%10.1Type100010.2Installed Capacity (Bo of Units x MW)KW100010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	0	Normative Plant Availability	0/		
9.1Maintenance Spares for WCLakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%149.4Tax Rate%Not Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%10.1Type110.2Installed Capacity (Bo of Units x MW)KW100010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	8	Factor (NAPAF)	%0		
Image: Prime lending Rate of SBI as on April' 2017R. Lakh9.5Prime lending Rate of SBI as on April' 2017%1410.1Type%13.80%12.90%10.2Installed Capacity (Bo of Units x MW)KW1000100010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	0.1	Mit S C WC	Rs.		
9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW1000100010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.1	Maintenance Spares for WC	Lakh		
9.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW1000100010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.2	Receivable for WC	R. Lakh		
9.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW1000100010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.3	Base Rate of return on equity	%	14	14
9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type $   -$ 10.2Installed Capacity (Bo of Units x MW)KW1000100010.3Peaking capacity during lean period (MW) $  -$ 10.4Type of Turbine $  -$ 10.5Rated Head (M) $  -$		· ·	%	Not Applicable	Not Applicable
10.1       Type       Installed Capacity (Bo of Units x MW)       KW       1000       1000         10.3       Peaking capacity during lean period (MW)       Image: Comparison of Comparison o	9.5		%		
10.2     Installed Capacity (Bo of Units x MW)     KW     1000     1000       10.3     Peaking capacity during lean period (MW)      1000     1000       10.4     Type of Turbine         10.5     Rated Head (M)	10.1	-			
10.3     period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)		Installed Capacity (Bo of Units x	KW	1000	1000
10.5 Rated Head (M)	10.3				
10.5 Rated Head (M)	10.4	Type of Turbine			
10.6 Rated Discharge (Cumes)					
	10.6	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Sessa

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI			· 1 10 T .0	
C1	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	-	17337	(Estimated)	(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
_	Auxiliary Consumption including		1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
	Normative Plant Availability			
8	Factor (NAPAF)	%		
		Rs.		
9.1	Maintenance Spares for WC	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
	Prime lending Rate of SBI as on		• •	
9.5	April' 2017	%	13.80%	12.90%
10.1	<u> </u>			
	Installed Canacity (Bo of Units y			
10.2	MW)	KW	1500	1500
10.3	Peaking capacity during lean			
	period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Rupa

State/ Distt. Arunachal Pradesh/ West Kameng District

	Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor				
(NAI	AF) & other normative para	matars aar	reidonad for Tarif	£	
Sl.	& other normative para		2019-20	2020-21	
SI. No.	Description	Unit	(Estimated)	(Projected)	
1	Installed Capacity	KW	(Estimated) 200	200	
2	Free Power to home state	%	NIL	NIL	
3	Date of commercial operation	/0	INIL	INL	
5	Unit – 1				
	Unit - 2				
4	Type of Station				
<u> </u>	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.			
9.1	Maintenance Spares for wC	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	Туре				
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				
	Rated Head (M)				
10.6	Rated Discharge (Cumes)				

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh

Name of the Hydro Generating Station : Dokumpani

State/ Distt. Arunachal Pradesh/ West Kameng District

	ils of Cod, Type of Hydro Stations,			vailability Facto
NAF	PAF)		· 1 . 1 C . T . ' C	
	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	-		(Estimated)	(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
	Auxiliary Consumption including			
7	Transformation losses	%	1.00%	1.00%
	Normative Plant Availability			
8	Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
-		K. Lakn	1.4	1.4
	Base Rate of return on equity	% %	14	14 Not Annlisch1
9.4	Tax Rate	70	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			

 The Department of Hydro Power Generation, Govt. of Arunachal Pradesh
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Name of the Hydro Generating Station : Domkhrong

State/ Distt. Arunachal Pradesh	/ West Kameng District
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Detai (NAF	lls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor	
(INAI	& other normative para	meters con	sidered for Tarif	f	
Sl.	2019-20 2020-21				
No.	Description	Unit	(Estimated)	(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	Maintananaa Snanaa fan WC	Rs.			
9.1	Maintenance Spares for WC	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	Туре				
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				
	Rated Head (M)				
10.6	Rated Discharge (Cumes)				

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Name of the Hydro Generating Station : Sinchung

State/ Distt. Arunachal Pradesh/	West Kameng District
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Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(INAI	& other normative para	meters con	sidered for Tarif	f
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
	Auxiliary Consumption including			
7	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	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	50	50
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Ankaling

State/ Distt. Arunachal Pradesh/	West Kameng District
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Detai (NAI	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Factor
(1 11 11	& other normative para	meters con	sidered for Tarif	f
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		1	
6	Design Energy (Annual)	Mus	0.25	0.25
7	Auxiliary Consumption including	%	1.00%	1.00%
/	Transformation losses	/0	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
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
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh

Name of the Hydro Generating Station : Dikshi

State/ Distt. Arunachal Pradesh/ V	West Kameng District
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Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(1121	& other normative para	meters con	sidered for Tarif	f
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	%	1.00%	1.00%
,	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintenance Spares for WC	Rs.		
0.2		Lakh		
9.2	Receivable for WC	R. Lakh %	1.4	1.4
	Base Rate of return on equity		14 Nat Applicable	14 Not Applicable
9.4	Tax Rate Prime lending Rate of SBI as on	%	Not Applicable	Not Applicable
9.5	April' 2017	%	13.80%	12.90%
10.1	51			
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)			
	Rated Discharge (Cumes)			

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

	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF				
	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	Description	OIIIt	(Estimated)	(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	-	1	
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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	^			
10.2	Installed Capacity (Bo of Units x MW)	KW	200	200
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/ i(28)

Name of the Hydro Generating Station : Jigaon

State/ Distt. Arunachal Pradesh/ V	West Kameng District
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	Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor					
(INAI	(NAPAF) & other normative parameters considered for Tariff					
Sl.	-		2019-20	2020-21		
No.	Description	Unit	(Estimated)	(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.				
9.1	Maintenance Spares for WC	Lakh				
	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	Туре					
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100		
10.3	Peaking capacity during lean period (MW)					
	Type of Turbine					
	Rated Head (M)					
10.6	Rated Discharge (Cumes)					

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh

Name of the Hydro Generating Station : Seppa

Deta	Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor					
(NAI	(NAPAF)					
	& other normative parameters considered for Tariff					
S1.	Description	Unit	2019-20	2020-21		
No.	Description	Olin	(Estimated)	(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	0/	1.000/	1.000/		
7	Transformation losses	%	1.00%	1.00%		
0	Normative Plant Availability	0/				
8	Factor (NAPAF)	%				
0.1	, , , , , , , , , , , , , , , , , , ,	Rs.				
9.1	Maintenance Spares for WC	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	0/	12 200/			
9.5	April' 2017	%	13.80%	12.90%		
10.1	Туре					
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					
	Rated Head (M)					
	Rated Head (M) Rated Discharge (Cumes)					
10.0	Kated Discharge (Cumes)					

Name of the Hydro Generating Station : Pakke Kessang

	Distt. Arunachal Pradesh/ East Ka	-		9.1.99. 55.
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	/		· · · · · · · · · · · · · · · · · · ·	2
	& other normative para	meters cor		
Sl.	. Description	Unit	2019-20	2020-21
No.			(Estimated)	(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
_	Auxiliary Consumption including	0 /	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
	Normative Plant Availability	<b>0</b> (		
8	Factor (NAPAF)	%		
	, , , , , , , , , , , , , , , , , , ,	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
	Prime lending Rate of SBI as on		••	
9.5	April' 2017	%	13.80%	12.90%
10.1	Туре			
	Installed Capacity (Bo of Units x			
10.2	MW)	KW	30	30
	Peaking capacity during lean			
10.3	period (MW)			
104	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			
10.0	Rated Discharge (Culles)			

Name of the Hydro Generating Station : Pacha MHS

	Dist. Arunachai Pradesh/ East Ka	0		11114 5		
	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor		
(NAF	,		· · · · · · · · · · · · · · · · · · ·	2		
	& other normative parameters considered for Tariff					
Sl.	Description	Unit	2019-20	2020-21		
No.	Decemption	onit	(Estimated)	(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	%	1.00%	1.00%		
	Transformation losses					
8	Normative Plant Availability Factor (NAPAF)	%				
	· · · · · · · · · · · · · · · · · · ·	Rs.				
9.1	Maintenance Spares for WC	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						
10.1	Type Installed Canacity (Ro of Units y					
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					
	Rated Head (M)					
	Rated Discharge (Cumes)					
2						

Name of the Hydro Generating Station : Pakoti

Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(INAI	& other normative para	meters cor	sidered for Tarif	f
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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Patta Nallah

State/ Distt. Arunachal Pradesh/ East Kame	ng District
$\mathbf{D}$ (1) $\mathbf{C}$ (1) $\mathbf{T}$ (1) $\mathbf{C}$ (1) $\mathbf{U}$ (1) $\mathbf{U}$ (1) $\mathbf{U}$	

Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(1111	& other normative para	meters cor	sidered for Tarif	f
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	Maintananaa Suanaa far WC	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh

Name of the Hydro Generating Station : Watte Mame

	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor			
(NAF			· 1 10 T	rc.			
C1	& other normative parameters considered for Tariff						
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)			
NO.	Installed Capacity	KW	(Estimated)	(Projected) 50			
2	Free Power to home state	%	NIL	NIL			
3	Date of commercial operation	/0	INIL	INIL			
5	Unit – 1						
4	Type of Station						
4	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	%	1.00%	1.00%			
/	Transformation losses	70	1.0070	1.0070			
8	Normative Plant Availability	%					
0	Factor (NAPAF)	70					
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	Туре						
10.2	Installed Conseity (De of Unite y	KW	50	50			
10.2	MW)	ΚW	50	50			
10.3	Peaking capacity during lean						
10.3	period (MW)						
10.4	Type of Turbine						
	Rated Head (M)						
	Rated Discharge (Cumes)						

Name of the Hydro Generating Station : Kade Nallah

State/ Distt. Arunachal Pradesh/	East Kameng District
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Detai NAF	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Facto
	& other normative para	meters cor	sidered for Tarif	f
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
-	Auxiliary Consumption including		1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
	Normative Plant Availability			
8	Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicabl
	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
	Installed Capacity (Bo of Units x MW)	KW	50	50
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/i(36)

Name of the Hydro Generating Station : Koye

State/ Distt. Arunachal Pradesh/ Kurung Kumey District

Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor			
(INAI		meters con	sidered for Tarif	f			
Sl.	& other normative parameters considered for Tariff      SI.    2019-20    2020-21						
No.	Description	Unit	(Estimated)	(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	%	1.00%	1.00%			
'	Transformation losses	70	1.0070	1.0070			
8	Normative Plant Availability	%					
0	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	21						
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						
-	Rated Head (M)						
10.6	Rated Discharge (Cumes)						

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/i(37)

Name of the Hydro Generating Station : Paya MHS at Hiya State/ Distt. Arunachal Pradesh/ Kurung Kumey District

Detai	ils of Cod, Type of Hydro Stations,	5		vailability Factor
(NAF				-
	& other normative para	meters cor		
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	Maintonanaa Sparag for WC	Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/i(38)

Page/ i(39)

Name of the Hydro Generating Station : Kidding MHS

State/ Distt. Arunachal Pradesh/ Kurung Kumey District

Detai (NAF	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor			
(INAI		meters cor	sidered for Tarif	f			
Sl.	& other normative parameters considered for TariffSI.2019-202020-21						
No.	Description	Unit	(Estimated)	(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	Maintananaa Suanaa fan WC	Rs.					
9.1	Maintenance Spares for WC	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	Туре						
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						
	Rated Head (M)						
10.6	Rated Discharge (Cumes)						

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh

Name of the Hydro Generating Station : Dumi Dutte

Detai (NAF	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(ITAI	& other normative para	meters cor	sidered for Tarif	f
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	<u>30</u>	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	%	1.00%	1.00%
'	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
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	Туре			
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)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/i(40)

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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

Detai (NAF	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Factor
(	& other normative para	meters cor	sidered for Tarif	f
Sl. No.	Description	Unit	2019-20 (Estimated)	2020-21 (Projected)
1	Installed Capacity	KW	1000	1000
2	Free Power to home state	<u>%</u>	NIL	NIL
3	Date of commercial operation	/0	INIL	INIL
3	Unit – 1			
	Unit - 2			
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	8.32	8.32
7	Auxiliary Consumption including Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	*			
10.2	Installed Conseity (De of Unite y	KW	1000	1000
10.3	Dealying consoity during loon			
10.4	Type of Turbine			
	Rated Head (M)			

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

Detai (NAF	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor			
(INAI		meters con	sidered for Tarif	f			
Sl.	& other normative parameters considered for Tariff       Sl.     2019-20     2020-21						
No.	Description	Unit	(Estimated)	(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	%	1.00%	1.00%			
'	Transformation losses	70	1.0070	1.0070			
8	Normative Plant Availability	%					
0	Factor (NAPAF)						
9.1	Maintenance Spares for WC	Rs.					
	-	Lakh					
9.2	Receivable for WC	R. Lakh					
	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	Туре						
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30			
10.3	Peaking capacity during lean period (MW)						
10.4	Type of Turbine						
10.5	Rated Head (M)						
10.6	Rated Discharge (Cumes)						

Name of the Hydro Generating Station : Chambang

State/ Distt. Arunachal Pradesh/ Kurung Kumey District

	ils of Cod, Type of Hydro Stations,	Normative		vailability Factor
(NAI			· 1 10 T :0	0
- 4	& other normative para	meters cor		
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	%	1.00%	1.00%
/	Transformation losses	70	1.0070	1.0070
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	Туре			
10.2	MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/i(43)

Name of the Hydro Generating Station : Mai PH-I

Detai (NAF	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(INAI	& other normative para	meters cor	sidered for Tarif	f
Sl.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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	%	1.00%	1.00%
/	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintanance Spores for WC	Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Mai PH-II

State/ Distt. Arunachal Pradesh/ Lower Subansiri District

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	& other normative para	meters con	sidered for Tarif	f
S1.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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.		
9.1	Maintenance Spares for wC	Lakh		
	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
10.2	MW)	KW	1000	1000
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Tago

State/ Distt. Arunachal Pradesh/ Lower Subansiri District Details of Cod. Type of Hydro Stations Normative Annua

	/ Distt. Arunachal Pradesh/ Lower S			
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF				-
	& other normative para	meters cor		
S1.	Description	Unit	2019-20	2020-21
No.	Description	Oint	(Estimated)	(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
	Auxiliary Consumption including			
7	Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	<u> </u>			
10.2	Installed Capacity (Bo of Units x	KW	4500	4500
	MW)			
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
10.5	Rated Head (M)			
	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Maro

State/ Distt. Arunachal Pradesh/ Upper Subansiri District

	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF	& other normative para	matars cor	sidered for Tarif	f
Sl.	& other normative para		2019-20	2020-21
51. No.	Description	Unit	(Estimated)	
<u>No.</u>	Installed Capacity	KW	(Estimated) 30	(Projected) 30
2	Free Power to home state	<u>K</u> w	NIL	NIL
3		70	INIL	INIL
3	Date of commercial operation Unit – 1			
4				
4	Type of Station a) Surface/ underground			
	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	%	1.00%	1.00%
/	Transformation losses	/0	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
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	Туре			
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			
	Rated Head (M)			
10.6				

Name of the Hydro Generating Station : Sippi

State/ Distt. Arunachal Pradesh/ Upper Subansiri District

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI			-: 1 1 f T: f	c
<u></u>	& other normative para	meters con		
Sl.	Description	Unit	2019-20	2020-21
No.	-	17117	(Estimated)	(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		1	
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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	*			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh Page/i(48)

Name of the Hydro Generating Station : Pinto Karo MHS

	Distt. Arunachal Pradesh/ Upper S			
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI			· 1 · 1 0 · T · 0	2
	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	Description	Oint	(Estimated)	(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
0	Auxiliary Consumption including	11145	0.21	0.21
7	Transformation losses	%	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintananaa Snanaa fan WC	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1				
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			
	0 ()			

State/ Distt. Arunachal Pradesh/ Upper Subansiri District Details of Cod. Type of Hydro Stations. Normative Annue

Name of the Hydro Generating Station : Sikin Koro

State/ Distt. Arunachal Pradesh/ Upper Subansiri District

	ils of Cod, Type of Hydro Stations,		e Annual Plant, A	vailability Factor
(NAF		matana aan	aidanad fan Tanif	c
<u>01</u>	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	-		(Estimated)	(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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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)			
	Rated Discharge (Cumes)			

The Department of Hydro Power Generation, Govt. of Arunachal Pradesh

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)		/ Distt. Arunachal Pradesh/ Upper S			11111 E
& 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       NIL         3       Date of commercial operation             4       Type of Station              a) Surface/ underground  <			Normative	e Annual Plant, A	vailability Factor
Sl. No.DescriptionUnit2019-20 (Estimated)2020-21 (Projected)1Installed CapacityKW1001002Free Power to home state%NILNIL3Date of commercial operation4Type of commercial operationa)Surface/ undergroundb)Purely ROR/ Pondage/ Storagec)Peaking/ non-peakingd)No of hours of peakinge)Overload capacity (MW) & period5Type of excitation6Design Energy (Annual)Mus0.830.837Auxiliary Consumption including Transformation losses%1.00%8Normative Plant Availability Factor (NAPAF)%14149.3Base Rate of return on equity 9%%13.80%12.90%9.4Installed Capacity (Bo of Units x MW)%13.80%12.90%9.5Prime lending Rate of SBI as on April 2017%13.80%12.90%10.1Type10010010.2Installed Capacity (Bo of Units x MW)KW10010010.4Type of Turbine10010.5Rate Head (M)100100	(NAł				
No.DescriptionUnit (Estimated)(Projected)1Installed CapacityKW1001002Free Power to home state%NILNIL3Date of commercial operationImage: Commercial operationImage: Commercial operation3Date of commercial operationImage: Commercial operationImage: Commercial operation4Type of StationImage: Commercial operationImage: Commercial operationa) Surface/ undergroundImage: Commercial operatingImage: Commercial operatingb) Purely ROR/ Pondage/ StorageImage: Commercial operatingImage: Commercial operatingc) Peaking/ non-peakingImage: Commercial operatingImage: Commercial operatingd) No of hours of peakingImage: Commercial operatingImage: Commercial operatinge) Overload capacity (MW) & periodImage: Commercial operatingImage: Commercial operatingfType of excitationImage: Commercial operatingImage: Commercial operating6Design Energy (Annual)Mus0.830.837Auxiliary Consumption including Transformation lossesImage: Commercial operatingImage: Commercial operating8Normative Plant Availability Factor (NAPAF)Image: Commercial operatingImage: Commercial operating9.1Maintenance Spares for WCRs. LakhImage: Commercial operatingImage: Commercial operating9.3Base Rate of return on equity April' 2017Image: Commercial operatingImage: Commercial operating9.4 <t< td=""><td></td><td>&amp; other normative para</td><td>meters cor</td><td></td><td></td></t<>		& other normative para	meters cor		
No.       (Estimated)       (Projected)         1       Installed Capacity       KW       100       100         2       Free Power to home state       %       NIL       NIL         3       Date of commercial operation            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             6       Design Energy (Annual)       Mus       0.83       0.83          7       Auxiliary Consumption including Transformation losses       %       1.00%       1.00%         8       Receivable for WC       R. Lakh            9.1       Maintenance Spares for WC       R. Lakh             9.2       Receivable for WC </td <td></td> <td>Description</td> <td>Unit</td> <td></td> <td></td>		Description	Unit		
2       Free Power to home state       %       NIL       NIL       NIL         3       Date of commercial operation       Unit - 1         Unit - 2       Unit - 2         4       Type of Station       Image: Storage         a) Surface/ underground       Image: Storage       Image: Storage         b) Purely ROR/ Pondage/ Storage       Image: Storage       Image: Storage         c) Peaking/ non-peaking       Image: Storage       Image: Storage         d) No of hours of peaking       Image: Storage       Image: Storage         c) Peaking/ non-peaking       Image: Storage       Image: Storage         d) No of hours of peaking       Image: Storage       Image: Storage         c) Overload capacity (MW) &       Image: Storage       Image: Storage         d) No of hours of peaking       Image: Storage       Image: Storage         f       Jype of excitation       Image: Storage       Image: Storage         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)       %       14       14         9.1       Maintenance Spares for WC	No.	-	Oint	(Estimated)	
3       Date of commercial operation       Unit - 1         Unit - 1       Unit - 2         4       Type of Station       a) Surface/ underground         a) Surface/ underground       b) Purely ROR/ Pondage/ Storage         c) Peaking/ non-peaking       c) Peaking/ non-peaking         d) No of hours of peaking       c) Overload capacity (MW) & period         s       Type of excitation         a) Rotating exciters on generator       b) Static excitation         b) Static excitation       must on the state excitation         6       Design Energy (Annual)       Mus       0.83         7       Auxiliary Consumption including Transformation losses       %       1.00%         8       Normative Plant Availability %       Factor (NAPAF)       %         9.1       Maintenance Spares for WC       Rs. 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       must on the state ext of MW       100       100         10.3       Peaking capacity during lean period (MW)       must on the stat	1		KW	100	100
Unit - 1       Unit - 2         4       Type of Station       Image: Station of the state	2	Free Power to home state	%	NIL	NIL
Unit - 24Type of Stationa) Surface/ undergroundb) Purely ROR/ Pondage/ Storagec) Peaking/ non-peakingd) No of hours of peakinge) Overload capacity (MW) & period5Type of excitationa) Rotating exciters on generatorb) Static excitation6Design Energy (Annual)Mus0.830.837Auxiliary Consumption including Transformation losses8Normative Plant Availability Factor (NAPAF)9.19.1Maintenance Spares for WC1.3Base Rate of return on equity April' 20179.410.1Type10.2Installed Capacity (Bo of Units x MW)MW)10.3Peaking capacity during lean period (MW)10.410.410.5Rated Head (M)	3	Date of commercial operation			
4       Type of Station       Image: Storage         a) Surface/ underground       Image: Storage         b) Purely ROR/ Pondage/ Storage       Image: Storage         c) Peaking/ non-peaking       Image: Storage         d) No of hours of peaking       Image: Storage         e) Overload capacity (MW) & period       Image: Storage         f) No of hours of peaking       Image: Storage         e) Overload capacity (MW) & period       Image: Storage         f) Type of excitation       Image: Storage         6       Design Energy (Annual)       Mus         7       Auxiliary Consumption including Transformation losses       %         7       Auxiliary Consumption including Transformation losses       %         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 of Turbine       Image: Storage: Storage       Image: Storag		Unit – 1			
a) Surface/ underground		Unit – 2			
b) Purely ROR/ Pondage/ Storage	4	Type of Station			
c) Peaking/ non-peaking		a) Surface/ underground			
d) No of hours of peakingImage: constraint of the second sec		b) Purely ROR/ Pondage/ Storage			
d) No of hours of peakingImage: constraint of the second sec		c) Peaking/ non-peaking			
periodImage: constraint of the second se		d) No of hours of peaking			
5       Type of excitation		e) Overload capacity (MW) &			
a) Rotating exciters on generator         b) Static excitation         6       Design Energy (Annual)         Mus       0.83         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         8.       Lakh         9.2       Receivable for WC         8.       Lakh         9.3       Base Rate of return on equity         %       14         9.4       Tax Rate         %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)		period			
a) Rotating exciters on generator         b) Static excitation         6       Design Energy (Annual)         Mus       0.83         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         8.       Lakh         9.2       Receivable for WC         8.       Lakh         9.3       Base Rate of return on equity         %       14         9.4       Tax Rate         %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)	5	Type of excitation			
b) Static excitationMus0.830.836Design Energy (Annual)Mus0.830.837Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)		V1			
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)       %       1.00%       1.00%         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         100       100         10.2       Installed Capacity (Bo of Units x MW)       KW       100       100         10.3       Peaking capacity during lean period (MW)         100         10.4       Type of Turbine            10.5       Rated Head (M)					
7Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%1.00%9.1Maintenance Spares for WCRs. Lakh	6		Mus	0.83	0.83
7       Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability Factor (NAPAF)       %       1.00%       1.00%         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         100       100         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)	-		0 (	1.000/	1.000/
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         100       100         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)	1		%	1.00%	1.00%
8Factor (NAPAF)%9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%9.4Tax Rate%9.5Prime lending Rate of SBI as on April' 2017%10.1Type-10.2Installed Capacity (Bo of Units x MW)KW10.3Peaking capacity during lean period (MW)-10.4Type of Turbine-10.5Rated Head (M)-	0		<b>0</b> (		
9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%149.4Tax Rate%Not Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	8	-	%		
9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	~ .		Rs.		
9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.1	Maintenance Spares for WC	Lakh		
9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M) </td <td>9.2</td> <td>Receivable for WC</td> <td></td> <td></td> <td></td>	9.2	Receivable for WC			
9.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)				14	14
9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)			%	Not Applicable	Not Applicable
9.5       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)	0.7	Prime lending Rate of SBI as on	0.4		
10.1     Type       10.2     Installed Capacity (Bo of Units x MW)     KW       10.3     Peaking capacity during lean period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)	9.5	-	%	13.80%	12.90%
10.2Installed Capacity (Bo of Units x MW)KW10010010.3Peaking capacity during lean period (MW)10010010.4Type of Turbine10010.5Rated Head (M)100	10.1	<b>*</b>			
10.3     Peaking capacity during lean period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)			<b></b>	100	1.0.0
10.3     Peaking capacity during lean period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)	10.2	MW)	KW	100	100
10.3     period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)		Peaking conscity during lean			-
10.4 Type of Turbine       10.5 Rated Head (M)	10.3				
10.5 Rated Head (M)	10.4				
		· · 1			

Name of the Hydro Generating Station : Dulom (Daporijo)

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI			· 1 . 1 C . T . 'C	с С
<u>C1</u>	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	_		(Estimated)	(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
-	Auxiliary Consumption including	0./	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0/		
8	Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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			
	Installed Canacity (Bo of Units y			
10.2	MW)	KW	400	400
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
10.0				

State/ Distt. Arunachal Pradesh/ Upper Subansiri District Details of Cod, Type of Hydro Stations, Normative Annual Plant, Availability Factor (NAPAF)

Name of the Hydro Generating Station : Ayingmuri MHS

Detai	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI				-
	& other normative para	meters con	sidered for Tarif	f
Sl.	Description	Unit	2019-20	2020-21
No.	Description	Ullit	(Estimated)	(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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
10.2	Installed Capacity (Bo of Units x	KW	250	250
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

State/ Distt. Arunachal Pradesh/ Upper Subansiri District

Name of the Hydro Generating Station : limeking MHS

	Distt. Arunachal Pradesh/ Upper S			11114 5
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF	· · · · · · · · · · · · · · · · · · ·		· 1 1 C T · C	c
~1	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	-		(Estimated)	(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
	Auxiliary Consumption including			
7	Transformation losses	%	1.00%	1.00%
	Normative Plant Availability			
8	Factor (NAPAF)	%		
<u> </u>		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
-	Base Rate of return on equity	<u>к. Laкп</u>	14	14
9.4	Tax Rate	/0 %	Not Applicable	Not Applicable
	Prime lending Rate of SBI as on	/0		
9.5	•	%	13.80%	12.90%
10.1	April' 2017			
10.1				
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			
	Rated Head (M)			
10.5	Kaleu fieau (IVI)			

State/ Distt. Arunachal Pradesh/ Upper Subansiri District

Page/ i(55)

Name of the Hydro Generating Station : Kojin Nallah

State/ Distt. Arunachal Pradesh/ Upper Subansiri District

	ils of Cod, Type of Hydro Stations,			vailability Factor
(NA	PAF) & other normative para	matars aar	nidered for Tarif	e
S1.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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	Maintanance Spares for WC	Rs.		
9.1	Maintenance Spares for WC	Lakh		
	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Pagi (Basar) State/ Distt. Arunachal Pradesh/ West Siang District

	ils of Cod, Type of Hydro Stations,	-		vailability Factor
(NAI			,	5
	& other normative para	meters cor	sidered for Tarif	f
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)	%		
0.1	Maintanana Suama fan WC	Rs.		
9.1	Maintenance Spares for WC	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	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	100	100
10.3	period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Along

9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW40040010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)		Distt. Arunachal Pradesh/ West Si	-				
& other normative parameters considered for TariffSI.DescriptionUnit2019-20 (Estimated)2020-21 (Projected)1Installed CapacityKW4004002Free Power to home state $\%$ NILNIL3Date of commercial operationImit - 1Imit - 2Imit - 2Imit - 2Imit - 4Imit - 4Imit - 44Type of StationImit - 4Imit - 2Imit - 4Imit - 4Imit - 4Imit - 44Type of StationImit - 4b) Purely ROR/ Pondage/ StorageImit - 3c) Peaking/ non-peakingImit - 3d) No of hours of peakingImit - 3e) Overload capacity (MW) & periodImit - 35Type of excitationImit - 3a) Rotating exciters on generatorImit - 3b) Static excitationImit - 36Design Energy (Annual)Imit - 37Auxiliary Consumption including Transformation losses $\%$ 8Normative Plant Availability Factor (NAPAF) $\%$ 9.1Maintenance Spares for WCRs. Lakh9.3Base Rate of return on equity 9% $\%$ 9.4Tax Rate $\%$ 9.5Prime lending Rate of SBI as on April' 2017 $\%$ 10.2Installed Capacity during lean period (MW)Imit - 1410.3Peaking capacity during lean period (MW)Imit - 1410.4Type of TurbineImit - 1410.5Rate Head (M)Imit -			Normative	e Annual Plant, A	vailability Factor		
Sl. No.       Description       Unit       2019-20 (Estimated)       2020-21 (Projected)         1       Installed Capacity       KW       400       400         2       Free Power to home state       %       NIL       NIL       NIL         3       Date of commercial operation          NIL       NIL       NIL         3       Date of commercial operation            NIL       NIL       NIL         4       Type of Station	(NAF	,	matana aan	aidanad fan Tarif	r		
No.DescriptionUnit(Estimated)(Projected)1Installed CapacityKW4004002Free Power to home state%NILNIL3Date of commercial operation4Unit - 14Unit - 24Type of Stationa) Surface/ undergroundb) Purely ROR/ Pondage/ Storagec) Peaking/ non-peakingd) No of hours of peakinge) Overload capacity (MW) & period5Type of excitationa) Rotating exciters on generatorb) Static excitation6Design Energy (Annual)7Auxiliary Consumption including $\%$ 7Transformation losses8Normative Plant Availability $Factor (NAPAF)$ 9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity $\%$ %10.1Type10.2Installed Capacity (Bo of Units x MW)KW40040010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)							
1       Installed Capacity       KW       400       400         2       Free Power to home state       %       NIL       NIL         3       Date of commercial operation       Unit - 1         Unit - 2       Unit - 2         Unit - 4       4         4       Type of Station       Image: Station         a)       Surface/ underground       Image: Station         b)       Purely ROR/ Pondage/ Storage       Image: Storage         c)       Peaking/ non-peaking       Image: Storage         c)       Overload capacity (MW) & period       Image: Storage         5       Type of excitation       Image: Storage         6       Design Energy (Annual)       Mus       3.33         7       Auxiliary Consumption including mage: Storage       Image: Storage       Image: Storage         6       Design Energy (Annual)       Mus       3.33       3.33         7       Auxiliary Consumption including mage: Storage       Image: Storage       Image: Storage         9.1       Maintenance Spares for WC       Rs. Lakh       Image: Storage       Image: Storage         9.2       Receivable for WC       R. Lakh       Image: Storage       Image: Storage       Image: Storage		Description	Unit				
2       Free Power to home state       %       NIL       NIL         3       Date of commercial operation       Unit - 1         4       Unit - 2       Unit - 2         6       Unit - 3       Unit - 4         4       Type of Station       1         a) Surface/ underground       1       1         b) Purely ROR/ Pondage/ Storage       1       1         c) Peaking/non-peaking       1       1         e) Overload capacity (MW) & period       1       1         5       Type of excitation       1       1         6       Design Energy (Annual)       Mus       3.33       3.33         7       Auxiliary Consumption including 7       %       1.00%       1.00%         8       Normative Plant Availability 8       %       1.00%       1.00%         9.1       Maintenance Spares for WC       Rs. Lakh       1.4       14         9.2       Receivable for WC       R. Lakh       13.80%       12.90%         9.5       April' 2017       13.80%       12.90%       10.1         9.6       Prime lending Rate of SBI as on April' 2017       %       400       400         9.7       Prime lending Rate of SBI as on April' 201			VW		· · · · · · · · · · · · · · · · · · ·		
3       Date of commercial operation       Unit - 1         Unit - 1       Unit - 2         Unit - 3       Unit - 4         4       Type of Station       1         a) Surface/ underground       1       1         b) Purely ROR/ Pondage/ Storage       1       1         c) Peaking/non-peaking       1       1         d) No of hours of peaking       1       1         e) Overload capacity (MW) & period       1       1         5       Type of excitation       1       1         a) Rotating exciters on generator       1       1       1         b) Static excitation       1       1       1       1         6       Design Energy (Annual)       Mus       3.33       3.33         7       Auxiliary Consumption including Transformation losses       %       1.00%       1.00%         8       Ractor (NAPAF)       %       1.00%       1.00%       1.00%         9.1       Maintenance Spares for WC       Rs. Lakh       1.00%       1.00%       12.90%         9.2       Receivable for WC       R. Lakh       13.80%       12.90%       12.90%         9.5       Prime lending Rate of SBI as on April' 2017       %       13							
Unit - 1       Unit - 1         Unit - 2       Unit - 3         Unit - 3       Unit - 4         4       Type of Station         a) Surface/ underground       interval         b) Purely ROR/ Pondage/ Storage       interval         c) Peaking/ non-peaking       interval         d) No of hours of peaking       interval         c) Peaking/ non-peaking       interval         d) No of hours of peaking       interval         e) Overload capacity (MW) & period       interval         5       Type of excitation       interval         6       Design Energy (Annual)       Mus       3.33         7       Auxiliary Consumption including Transformation losses       %       1.00%         8       Normative Plant Availability %       interval       interval         9.1       Maintenance Spares for WC       Rs. Lakh       interval         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 of Turbine       interval       interval       interval	-		70	INIL	INIL		
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)         7       Auxiliary Consumption including %         7       Transformation losses         8       Normative Plant Availability %         Factor (NAPAF)       %         9.1       Maintenance Spares for WC         8.1       Rs. Lakh         9.2       Receivable for WC         9.4       Tax Rate         %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x KW         400       400         401       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)	3	<u>^</u>					
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         7       Auxiliary Consumption including Y%         1.00%       1.00%         8       Normative Plant Availability Y%         9.1       Maintenance Spares for WC         Rakh       9.2         Receivable for WC       R. Lakh         9.3       Base Rate of return on equity %         9.4       Tax Rate         %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x KW         MW)       400         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)							
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)         7       Transformation losses         8       Normative Plant Availability         9.1       Maintenance Spares for WC         8       Receivable for WC       R. 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       1       1       14       14         9.4       MW)       KW       400       400         10.2       Installed Capacity (Bo of Units x KW       400       400         10.3       Peaking capacity during lean period (MW)       10.5       400							
4       Type of Station         a) Surface/ underground       a) Surface/ underground         b) Purely ROR/ Pondage/ Storage       c) Peaking/ non-peaking         d) No of hours of peaking       c) Overload capacity (MW) & period         c) Overload capacity (MW) & period       c) Type of excitation         a) Rotating exciters on generator       c) Design Energy (Annual)         b) Static excitation       d) Lo0%         c) Design Energy (Annual)       Mus         d) Normative Plant Availability       %         factor (NAPAF)       %         9.1       Maintenance Spares for WC         Receivable for WC       R. Lakh         9.2       Receivable for WC         9.3       Base Rate of return on equity       %         9.4       Tax Rate       %         9.5       Prime lending Rate of SBI as on April' 2017       %         10.1       Type       1         10.2       Installed Capacity (Bo of Units x KW       400         MW)       Peaking capacity during lean period (MW)       10.4         10.4       Type of Turbine       1         10.5       Rated Head (M)       1							
a) Surface/ underground	1						
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         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         8.       Lakh         9.2       Receivable for WC         8.       Lakh         9.3       Base Rate of return on equity         %       14         9.4       Tax Rate         %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)							
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         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.2       Receivable for WC         R. Lakh       9.2         9.3       Base Rate of return on equity         %       14         9.4       IA         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)							
d) No of hours of peaking		b) Purely ROR/ Pondage/ Storage					
e) Overload capacity (MW) & period         5       Type of excitation         a) Rotating exciters on generator         b) Static excitation         6       Design Energy (Annual)         7       Auxiliary Consumption including Transformation losses         7       Normative Plant Availability %         8       Normative Plant Availability %         9.1       Maintenance Spares for WC         9.2       Receivable for WC         8       Rate of return on equity %         9.3       Base Rate of return on equity %         9.4       Tax Rate         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)		c) Peaking/ non-peaking					
period       5       Type of excitation         a) Rotating exciters on generator		d) No of hours of peaking					
5       Type of excitation         a) Rotating exciters on generator         b) Static excitation         6       Design Energy (Annual)         Mus       3.33         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.2       Receivable for WC         R. Lakh         9.3       Base Rate of return on equity         %       14         14       14         9.4       Tax Rate         %       13.80%         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)		e) Overload capacity (MW) &					
a) Rotating exciters on generator         b) Static excitation         6       Design Energy (Annual)         Mus       3.33         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.1       Maintenance Spares for WC         9.2       Receivable for WC         8       Rate         9.3       Base Rate of return on equity         9.4       Tax Rate         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)		period					
b) Static excitation         6       Design Energy (Annual)         7       Auxiliary Consumption including Transformation losses         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.2       Receivable for WC         9.3       Base Rate of return on equity         9.4       Tax Rate         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)	5	Type of 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)       %       1.00%       1.00%         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         400       400         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)           400		a) Rotating exciters on generator					
7       Auxiliary Consumption including Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability Factor (NAPAF)       %       1.00%       1.00%         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          400         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)		b) Static excitation					
7       Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability Factor (NAPAF)       %       1.00%       1.00%         9.1       Maintenance Spares for WC       Rs. Lakh       %       14       14         9.2       Receivable for WC       R. Lakh       %       14       14         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	6	Design Energy (Annual)	Mus	3.33	3.33		
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         400       400         10.3       Peaking capacity during lean period (MW)            10.4       Type of Turbine             10.5       Rated Head (M)	7	•	%	1.00%	1.00%		
9.1       Maintenance Spares for WC       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)	8	Normative Plant Availability	%				
Image: Problem of the second	0.1		Rs.				
9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW40040010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M) </td <td>9.1</td> <td>Maintenance Spares for WC</td> <td>Lakh</td> <td></td> <td></td>	9.1	Maintenance Spares for WC	Lakh				
9.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW40040010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.2	Receivable for WC	R. Lakh				
9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.110	9.3	Base Rate of return on equity	%	14	14		
9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW40040010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.4	Tax Rate	%	Not Applicable	Not Applicable		
10.1       Type       10.1         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         10.5       Rated Head (M)       10.5       10.5       10.5       10.5	9.5	-	%				
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       10.5     Rated Head (M)     10.5     10.5     10.5	10.1						
10.3     Peaking capacity during lean period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)		Installed Capacity (Bo of Units x	KW	400	400		
10.4 Type of Turbine       10.5 Rated Head (M)	10.3	Peaking capacity during lean					
10.5 Rated Head (M)	104	· · · · · · · · · · · · · · · · · · ·					
110.61Rated Discharge (Cumes)		Rated Discharge (Cumes)					

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Name of the Hydro Generating Station : Ego-Echi (Dali) State/ Distt. Arunachal Pradesh/ West Siang District

Detail	ls of Cod, Type of Hydro Stations,	-		vailability Factor
(NAP				-
	& other normative para	meters cor	sidered for Tarif	f
Sl.	Description	Unit	2019-20	2020-21
No.	Description	Ullit	(Estimated)	(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
/	Auxiliary Consumption including	%	1.00%	1.00%
	Transformation losses			
	Normative Plant Availability Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs.		
	_	Lakh		
	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
9 7	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	400	400
	Peaking capacity during lean period (MW)			
1 I				
	<b>^</b>			
10.4	Type of Turbine Rated Head (M)			

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)

(NAF				
	& other normative para	meters cor	sidered for Tarif	f
Sl.	Description	Unit	2019-20	2020-21
No.	Description	Ullit	(Estimated)	(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	%	1.000/	1.00%
/	Transformation losses	%0	1.00%	1.00%
8	Normative Plant Availability Factor (NAPAF)	%		
		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Yomcha

State/ Distt. Arunachal Pradesh/ West Siang District

Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(INAI	& other normative para	meters con	sidered for Tarif	f
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	%	1.00%	1.00%
/	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0/		
8	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		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
10.2	MW)	KW	50	50
10.3	period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Beye

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	& other normative para	meters con	sidered for Tarif	f
Sl.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(Projected)
1	Installed Capacity	KW	30	30
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation	70	TUL	THE
5	Unit – 1			
4	Type of Station			
<u> </u>	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	%	1.00%	1.00%
/	Transformation losses	/0	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
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	Туре			
10.2	MW)	KW	30	30
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Kambang

	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF	/			c
C1	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.		17117	(Estimated)	(Projected)
1	Installed Capacity	KW	6000	6000
2	Free Power to home state	%	NIL	NIL
3	Date of commercial operation			
	Unit – 1			
	Unit – 2			
4	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	0/	1.000/	1.000/
/	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0/		
8	Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
	Installed Capacity (Bo of Units x			
10.2	MW)	KW	6000	6000
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Liromoba

Deta	ils of Cod, Type of Hydro Stations,	U		vailability Factor
(NAI	PAF)			•
	& other normative para	meters cor		
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	,,,		1,112
	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	Maintananaa Sparaa far WC	Rs.		
9.1	Maintenance Spares for WC	Lakh		
	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
9.4		%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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

	lls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF	AF) & other normative para	matars cor	ridered for Tarif	f
S1.	& other normative para		2019-20	2020-21
No.	Description	Unit	(Estimated)	(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	%	1.00%	1.00%
/	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Angu

Detai (NAF	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(INAI	& other normative para	meters cor	sidered for Tarif	f
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		1	
6	Design Energy (Annual)	Mus	0.42	0.42
7	Auxiliary Consumption including	%	1.00%	1.00%
/	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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

	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF	1		: 1 1 f T: f	c
01	& other normative para	meters cor	2019-20	
Sl. No.	Description	Unit	(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	%	1.00%	1.00%
/	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintenance Spares for WC	Rs.		
<i>.</i>	_	Lakh		
9.2	Receivable for WC	R. Lakh		
	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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

	ils of Cod, Type of Hydro Stations,	0		vailability Factor
(NAI			-	•
	& other normative para	meters cor		f
Sl.	Description	Unit	2019-20	2020-21
No.	Description		(Estimated)	(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	%	1.00%	1.00%
/	Transformation losses	70	1.00%	1.00%
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintananca Sparas for WC	Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			

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

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	AF) & other normative para	meters cor	sidered for Tarif	f
S1.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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		
	Receivable for WC	R. Lakh		
	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				
10.2	Installed Capacity (Bo of Units x MW)	KW	500	500
10.3	Peaking capacity during lean period (MW)			
	Type of Turbine			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Yingkiong Ph-I State/ Distt. Arunachal Pradesh/ Upper Siang District

	ils of Cod, Type of Hydro Stations,	-		vailability Factor
(NAI	& other normative para	meters cor	sidered for Tarif	f
Sl.	Description	Unit	2019-20	2020-21
No.	Description	Oint	(Estimated)	(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
-	Auxiliary Consumption including	0 /	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0 (		
8	Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	<b>^</b>			
10.2	Installed Canacity (Bo of Units y	KW	150	150
10.3	Peaking canacity during lean			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Yingkiong Ph-II State/ Distt. Arunachal Pradesh/ Upper Siang District

	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF	& other normative para	meters con	sidered for Tarif	f
S1.	& other normative para		2019-20	2020-21
No.	Description	Unit	(Estimated)	(Projected)
1	Installed Capacity	KW	200	200
2	Free Power to home state	<u>%</u>	NIL	NIL
3	Date of commercial operation	70	TUL	THE
	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)	%		
0.1	· · · · · ·	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	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	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	200	200
10.3	Peaking capacity during lean period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Sikut/ Tuting State/ Distt. Arunachal Pradesh/ Upper Siang District

Detai	ils of Cod, Type of Hydro Stations,			vailability Factor
(NAI	& other normative para	meters cor	sidered for Tarif	f
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)	%		
0.1	Maintananaa Suanaa fan WC	Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Selli at Geku State/ Distt. Arunachal Pradesh/ Upper Siang District

Detai	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	· · · · · · · · · · · · · · · · · · ·			
	& other normative para	meters cor		
S1.	Description	Unit	2019-20	2020-21
No.	Description		(Estimated)	(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)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	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	Туре			
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)			

Name of the Hydro Generating Station : Sirnyuk

State/ Distt. Arunachal Pradesh/ Upper Siang District

	/ Distt. Arunachal Pradesh/ Upper S	-		11114 F
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI				2
	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	-	Oint	(Estimated)	(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	0/	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0 /		
8	Factor (NAPAF)	%		
		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
9.4	Tax Rate	%	Not Applicable	Not Applicable
0.7	Prime lending Rate of SBI as on	0 /		
9.5	April' 2017	%	13.80%	12.90%
10.1	Туре			
			2000	2000
10.2	Installed Capacity (Bo of Units x MW)	KW	2000	2000
	Dealying consoity during loon			-
10.3	period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			
10.0	Tured Disenarge (Curres)			

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

	ls of Cod, Type of Hydro Stations,	Normative	Annual Plant, A	vailability Factor
(NAP	AF) & other normative para	matana a an	aidanad fan Tanif	6
Sl.	& other normative para	meters con	2019-20	2020-21
	Description	Unit		
No.		<b>WW</b>	(Estimated) 250	(Projected) 250
	Installed Capacity Free Power to home state	KW		
		%	NIL	NIL
3	Date of commercial operation			
4	Unit – 1			
	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	%	1.00%	1.00%
/	Transformation losses	/0	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintenance Spares for WC	Rs. Lakh		
0.2	Descional la fam W/C	R. Lakh		
	Receivable for WC		1.4	14
	Base Rate of return on equity Tax Rate	% %	14 Not Applicable	14 Nat Applicable
		70	Not Applicable	Not Applicable
	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
	Туре			
1 1 1 1 / 1	Installed Capacity (Bo of Units x MW)	KW	250	250
1 1 1 1 1	Peaking capacity during lean period (MW)			
	Type of Turbine			
10.5	Rated Head (M)			

Name of the Hydro Generating Station : Silingri

Detai (NAF	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Facto
`	& other normative para	meters cor	sidered for Tarif	f
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	0/	1.000/	1.000/
/	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0 /		
8	Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Singa

	Distt. Arunachal Pradesh/ Upper S			11114 5 4
	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF				2
	& other normative para	meters cor		
Sl.	Description	Unit	2019-20	2020-21
No.	_		(Estimated)	(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	0/	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	<u> </u>		
8	Factor (NAPAF)	%		
0.1		Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
9.3	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
0.5	Prime lending Rate of SBI as on	07		
9.5	April' 2017	%	13.80%	12.90%
10.1	* 1			
10.2	Installed Capacity (Bo of Units x MW)	KW	30	30
10.2	Peaking capacity during lean			
10.3	period (MW)			
10.4	Type of Turbine			
	Type of Turbine Rated Head (M)			

Name of the Hydro Generating Station : Ngaming

Detai (NAF	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Facto
`	& other normative para	meters cor	sidered for Tarif	f
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	0/	1.000/	1.000/
/	Transformation losses	%	1.00%	1.00%
0	Normative Plant Availability	0 /		
8	Factor (NAPAF)	%		
9.1	Maintenance Spares for WC	Rs. Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Sika

	ils of Cod, Type of Hydro Stations,	-		vailability Factor
(NAF	••••••	nomative	Allinual Flain, A	
(INAI	& other normative para	meters con	sidered for Tarif	f
Sl.			2019-20	2020-21
	Description	Unit		
No.		<b>U</b> W	(Estimated)	(Projected)
	Installed Capacity	KW	15 NH	15 NH
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
_	Auxiliary Consumption including	0.(	1.000/	1.000/
7	Transformation losses	%	1.00%	1.00%
	Normative Plant Availability			
8	Factor (NAPAF)	%		
	, , , , , , , , , , , , , , , , , , ,	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
	Prime lending Rate of SBI as on			
9.5	April' 2017	%	13.80%	12.90%
10.1				
	Installed Capacity (Bo of Units x			
10.2	MW)	KW	15	15
10.2	Dealying consoity during loon			
10.3	period (MW)			
10.4	Type of Turbine			
	Rated Head (M)			
	Rated Discharge (Cumes)			
		1		

Name of the Hydro Generating Station : Mayung

State	e/ Di	istt. 4	Arur	nacha	l Pra	desł	1/ U	Jpper	Sian	g District	
											_

Detai	ls of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAF			· 1 10 T :0	<u></u>
	& other normative para	meters con		
Sl.	Description	Unit	2019-20	2020-21
No.	-		(Estimated)	(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	%	1.00%	1.00%
/	Transformation losses	70	1.00%	1.00%
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
9.1	Maintenance Spares for WC	Rs.		
		Lakh		
	Receivable for WC	R. Lakh		
	Base Rate of return on equity	%	14	14
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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Name of the Hydro Generating Station : Gosang

State/ Distt. Arunachal Pradesh/ Up	pper Siang District
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Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(NAI	& other normative para	meters cor	sidered for Tarif	f
Sl.	· · · · · · · · · · · · · · · · · · ·		2019-20	2020-21
No.	Description	Unit	(Estimated)	(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)	%		
0.1	Maintanana Suama fan WC	Rs.		
9.1	Maintenance Spares for WC	Lakh		
9.2	Receivable for WC	R. Lakh		
	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Kote MHS

Detai (NAI	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Factor
(1111	& other normative para	meters cor	sidered for Tarif	f
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	%	1.00%	1.00%
/	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	70		
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
	Tax Rate	%	Not Applicable	Not Applicable
9.5	Prime lending Rate of SBI as on April' 2017	%	13.80%	12.90%
10.1	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

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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 Ar

Detai (NAF	ils of Cod, Type of Hydro Stations, PAF)	Normative	e Annual Plant, A	vailability Factor
	& other normative para	meters cor	sidered for Tarif	f
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	%	1.00%	1.00%
/	Transformation losses	/0	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)	/0		
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	Туре			
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)			

l Plant Availability Factor

Name of the Hydro Generating Station : Pyabung MHS State/ Distt. Arunachal Pradesh/ Upper Siang District

Detai (NAI	ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
(INAI	& other normative para	meters con	sidered for Tarif	f
Sl.			2019-20	2020-21
No.	Description	Unit	(Estimated)	(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	%	1.00%	1.00%
,	Transformation losses	70	1.0070	1.0070
8	Normative Plant Availability	%		
0	Factor (NAPAF)			
9.1	Maintenance Spares for WC	Rs.		
_	-	Lakh		
9.2	Receivable for WC	R. Lakh		
	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	Туре			
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			
	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Yembung

(NAPAF)         & other normative parameters considered for Tariff         SI.       Description       Unit       2019-20 (Estimated)       2020-21 (Projected)         1       Installed Capacity       KW       2000       2000         2       Free Power to home state       %       NIL       NIL       NIL         3       Date of commercial operation             4       Type of Station              4       Type of Station <th></th> <th>ils of Cod, Type of Hydro Stations,</th> <th>Normative</th> <th>e Annual Plant, A</th> <th>vailability Factor</th>		ils of Cod, Type of Hydro Stations,	Normative	e Annual Plant, A	vailability Factor
Sl. No.DescriptionUnit2019-20 (Estimated)2020-21 (Projected)1Installed CapacityKW200020002Free Power to home state%NILNIL3Date of commercial operationImit - 1Imit - 2Unit - 2Unit - 2Imit - 3Imit - 44Type of StationImit - 4Imit - 44Type of StationImit - 4Imit - 44Type of StationImit - 4Imit - 44Overload capacity (MW) & periodImit - 4Imit - 45Type of excitationImit - 4Imit - 46Overload capacity (MW) & periodImit - 4Imit - 47Auxiliary Consumption including Transformation lossesImit - 68Normative Plant Availability 	(NAI			· 1 10 T :0	
No.DescriptionUnit(Estimated)(Projected)1Installed CapacityKW200020002Free Power to home state%NILNIL3Date of commercial operation4Unit - 15Unit - 26Unit - 37Unit - 44Type of Stationa) Surface/ underground </td <td>~1</td> <td>&amp; other normative para</td> <td>meters con</td> <td></td> <td></td>	~1	& other normative para	meters con		
No.(Estimated)(Projected)1Installed CapacityKW200020002Free Power to home state%NILNIL3Date of commercial operation $Unit - 1$ Unit - 1Unit - 2 </td <td></td> <td>Description</td> <td>Unit</td> <td></td> <td></td>		Description	Unit		
2       Free Power to home state       %       NIL       NIL       NIL         3       Date of commercial operation       Unit - 1         Unit - 2       Unit - 2         Unit - 3       Unit - 4         4       Type of Station       1         a)       Surface/ underground       1         b)       Purely ROR/ Pondage/ Storage       1         c)       Peaking/ non-peaking       1         d)       No of hours of peaking       1         e)       Overload capacity (MW) & period       1         5       Type of excitation       1         6       Design Energy (Annual)       Mus       16.64         7       Auxiliary Consumption including %       1.00%       1.00%         8       Normative Plant Availability %       1       1.00%         9.1       Maintenance Spares for WC       Rs. Lakh       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       1       14       14         9.4       Tax Rate       13.80%       12.90% <t< td=""><td></td><td>_</td><td></td><td>· · · /</td><td></td></t<>		_		· · · /	
3       Date of commercial operation       Unit - 1         Unit - 1       Unit - 2         Unit - 3       Unit - 4         4       Type of Station       1         a) Surface/ underground       1       1         b) Purely ROR/ Pondage/ Storage       1       1         c) Peaking/non-peaking       1       1         d) No of hours of peaking       1       1         e) Overload capacity (MW) & period       1       1         5       Type of excitation       1       1         a) Rotating exciters on generator       1       1       1         b) Static excitation       1       1       1       1         6       Design Energy (Annual)       Mus       16.64       16.64         7       Auxiliary Consumption including Transformation losses       1       100%       1.00%         8       Ractor (NAPAF)       %       1       14       14         9.1       Maintenance Spares for WC       Rs. Lakh       12.90%       12.90%         9.2       Receivable for WC       R. Lakh       12.90%       12.90%       12.90%       13.80%       12.90%       12.90%       10.2       13.80%       12.90%       10.2		* *			
$\begin{tabular}{ c c c c c c c } \hline Unit - 1 & & & & & & & & & & & & & & & & & &$			%	NIL	NIL
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         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability %         Factor (NAPAF)       %         9.1       Maintenance Spares for WC         R. Lakh       9.2         Paceivable for WC       R. Lakh         9.3       Base Rate of return on equity       %         9.4       Tax Rate       %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017       %       13.80%       12.90%         10.1       Type       1       1       1.90%       10.1       10.2         Installed Capacity (Bo of Units x MW)       KW       2000       2000       2000         10.3       Peaking capacity during	3				
Unit - 3       Unit - 4         4       Type of Station         a) Surface/ underground       a) Surface/ underground         b) Purely ROR/ Pondage/ Storage       c) Peaking/ non-peaking         c) Peaking/ non-peaking       c) Overload capacity (MW) & period         5       Type of excitation         a) Rotating exciters on generator       b) Static excitation         6       Design Energy (Annual)       Mus         7       Auxiliary Consumption including Transformation losses       %         8       Normative Plant Availability       %         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       1       1       1.90%       1         10.2       MW)       Peaking capacity during lean period (MW)       10       10.3       Peaking capacity during lean period (MW)       10.4       14       14					
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         7       Auxiliary Consumption including Transformation losses         %       1.00%         8       Normative Plant Availability %         9.1       Maintenance Spares for WC         8       Race of return on equity %         9.1       Maintenance Spares for WC         9.3       Base Rate of return on equity %         9.4       Tax Rate         %       Not Applicable         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x KW         MW)       2000       2000         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine       10.5         10.5       Rated Head (M)       10 <td></td> <td></td> <td></td> <td></td> <td></td>					
4       Type of Station         a) Surface/ underground       a) Surface/ underground         b) Purely ROR/ Pondage/ Storage       c) Peaking/ non-peaking         d) No of hours of peaking       c) Overload capacity (MW) & period         e) Overload capacity (MW) & period       c) Positive Plant Availability         f       Transformation losses         g       Normative Plant Availability         f       Factor (NAPAF)         g.1       Maintenance Spares for WC         g.2       Receivable for WC         g.3       Base Rate of return on equity         g.4       Tax Rate         g.5       Prime lending Rate of SBI as on April' 2017         g.6       Installed Capacity (Bo of Units x KW         g.7       Installed Capacity during lean period (MW)         g.10.3       Peaking capacity during lean period (MW)					
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         7       Auxiliary Consumption including Transformation losses         %       1.00%         8       Normative Plant Availability %         Factor (NAPAF)       %         9.1       Maintenance Spares for WC         Rs.       Lakh         9.2       Receivable for WC         Rs.       Lakh         9.3       Base Rate of return on equity         %       13.80%       12.90%         10.1       Type       113.80%       12.90%         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         10.4       Type of Turbine       10.5       Kated Head (M)       10.5	4				
c) Peaking/ non-peaking		a) Surface/ underground			
d) No of hours of peaking		b) Purely ROR/ Pondage/ Storage			
d) No of hours of peaking		c) Peaking/ non-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         7       Auxiliary Consumption including Transformation losses         8       Normative Plant Availability Factor (NAPAF)         9.1       Maintenance Spares for WC         9.2       Receivable for WC         R. Lakh         9.3       Base Rate of return on equity         9.4       Tax Rate         9.5       Prime lending Rate of SBI as on April' 2017         10.1       Type         10.2       Installed Capacity (Bo of Units x MW)         10.3       Peaking capacity during lean period (MW)         10.4       Type of Turbine         10.5       Rated Head (M)					
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)       %       1.00%       1.00%         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		period			
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)       %       1.00%       1.00%         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	5	Type of 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)       %       1.00%       1.00%         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          2000       2000         10.3       Peaking 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)					
7       Auxiliary Consumption including Transformation losses       %       1.00%       1.00%         8       Normative Plant Availability Factor (NAPAF)       %       1.00%       1.00%         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          2000       2000         10.3       Peaking capacity (Bo of Units x MW)       KW       2000       2000       2000         10.3       Peaking capacity during lean period (MW)              10.4       Type of Turbine               10.5       Rated Head (M)		b) Static excitation		1	
7Auxiliary Consumption including Transformation losses%1.00%1.00%8Normative Plant Availability Factor (NAPAF)%1.00%9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity 9.4%149.4Tax Rate%Not Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW2000200010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M) </td <td>6</td> <td>Design Energy (Annual)</td> <td>Mus</td> <td>16.64</td> <td>16.64</td>	6	Design Energy (Annual)	Mus	16.64	16.64
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)	7	Auxiliary Consumption including	%	1.00%	1.00%
9.1Maintenance Spares for WCRs. Lakh9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%149.4Tax Rate%Not Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%10.1Type10.2Installed Capacity (Bo of Units x MW)KW200010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	8	Normative Plant Availability	%		
9.1       Maintenance Spares for WC       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)		, , , , , , , , , , , , , , , , , , ,	Rs		
9.2Receivable for WCR. Lakh9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW2000200010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.1	Maintenance Spares for WC			
9.3Base Rate of return on equity%14149.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW2000200010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)	9.2	Receivable for WC			
9.4Tax Rate%Not ApplicableNot Applicable9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type10.2Installed Capacity (Bo of Units x MW)KW2000200010.3Peaking capacity during lean period (MW)10.4Type of Turbine10.5Rated Head (M)				14	14
9.5Prime lending Rate of SBI as on April' 2017%13.80%12.90%10.1Type		<u> </u>		1.	
10.1       Type       10.2         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         10.5       Rated Head (M)       10.5       10.5       10.5       10.5	_	Prime lending Rate of SBI as on			
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       10.5     Rated Head (M)     10.5     10.5     10.5	10.1	<u>^</u>			
10.3     Peaking capacity during lean period (MW)       10.4     Type of Turbine       10.5     Rated Head (M)		Installed Capacity (Bo of Units x	KW	2000	2000
10.4 Type of Turbine       10.5 Rated Head (M)	10.3	Peaking capacity during lean			
10.5 Rated Head (M)	10.4	<b>•</b> • • • •			
		Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Subbung State/ Distt. Arunachal Pradesh/ Siang District

	ils of Cod, Type of Hydro Stations,		e Annual Plant, A	vailability Factor
	PAF)			2
	& other normative para	meters cor	sidered for Tarif	f
Sl.	Description	Unit	2019-20	2020-21
<u>No.</u>	1	KW	(Estimated) 3000	(Projected) 3000
2	Installed Capacity Free Power to home state	<u>K</u> w	NIL	NIL
3	Date of commercial operation	70	INIL	INIL
5	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.		
7.1		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	Туре			
10.2	Installed Capacity (Bo of Units x MW)	KW	3000	3000
10.3	period (MW)			
10.4	Type of Turbine			
10.5	Rated Head (M)			
10.6	Rated Discharge (Cumes)			

Name of the Hydro Generating Station : Pasighat

Detai	ils of Cod, Type of Hydro Stations,			vailability Factor
(NAI				
	& other normative para	meters cor		f
Sl.	Description	Unit	2019-20	2020-21
No.			(Estimated)	(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		Rs.		
	Maintenance Spares for WC	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	Туре			
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			
	Rated Head (M)			
	Rated Discharge (Cumes)			