

Pro-forma for furnishing Actual annual performance/operational data for the Hydro Electric generating stations for the 5-year period from 2017-18 to 2021-22

	Particulars	Units	2017-18	2018-19	2019-20	2020-21	2021-22	
1	Name of Company		North Eastern Electric Power Corporation Limited (NEEPCO LTD.)					
2	Name of Station		Doyang Hydro Power Station (DHPS)					
3	Installed Capacity and Configuration	(MW)	75 MW (3 X 25 MW) Reservoir Based Hydro Power Station					
3.1	Date of Commercial Operation - Unit Wise	Unit # 1	29-Jun-2000					
		Unit # 2	05-Jul-2000					
		Unit # 3	08-Jul-2000					
3.2	Effective COD		08-Jul-2000 (75 MW)					
4	Station Location	Under ground or Surface	Surface					
	Stage							
5	Type of Excitation System		Static Excitation system					
6	Live Storage Capacity	(Million Cubic)	220 MCM at 324.0 M RWL, 400 MCM at 333.0 M RWL					
7	Rated Head	Metres	67					
8	Head at Full Reservoir Level (FRL)	Metres	83.5					
9	Head at Minimum Draw down Level (MDDL)	Metres	43.5					
10	MW Capability at FRL	MW	75					
11	MW Capability at MDDL	MW	45					
12	Cost of spares :							
12.1	Cost of spares capitalized in books of accounts	(Rs. Lakhs)	153.92	13.98	0.00	87.45	222.88	
12.2	Cost of spares included in the capital cost for the purpose of tariff	(Rs. Lakhs)	0	13.98	0	87.45	54.03	
	Period							
13	Generation :							
13.1	Actual Gross Generation at Generator Terminals	(MU)	274.3620	231.4246	180.9225	203.8712	100.5788	
13.2	Actual Net Generation Ex-bus including free power	(MU)	261.3995	221.6999	173.7458	198.1637	96.5160	
13.3	Scheduled generation Ex-bus including free power	(MU)	259.9973	220.6492	171.9323	196.8749	94.5842	
14	Actual Auxiliary Energy Consumption excluding colony consumption	(MU)	0.4941	0.4459	0.4073	0.3892	0.3828	
15	Actual Energy supplied to Colony from the station	(MU)	2.3063	2.1328	2.1550	2.0303	1.8730	
16	Average Declared Capacity (DC) during the year	(MW)	53.10548	44.35458	48.63470	44.69534	46.22871	
	Actual Declared Capacity	MU	260.15630	223.52753	172.21215	196.98306	94.58461	
	Deemed Declared Capacity		NA	NA	NA	NA	NA	
	Actual energy supplied to beneficiaries	MU	259.9973	219.1516	171.4777	196.8749	94.5842	
	Actual energy supplied in DSM	MU	1.40220	1.05068	1.81354	1.28884	1.93179	
	Actual energy supplied in exchange			1.497663	0.4545925			
17	Weighted Average duration of outages (Unit-wise details)							
17.1	Scheduled outages	Unit # 1	(Days)	0.0	37.8	13.7	0.0	28.8
		Unit # 2	(Days)	29.5	15.5	18.5	0.0	31.5
		Unit # 3	(Days)	17.7	49.2	19.6	0.0	29.5
17.2	Forced outages	Unit # 1	(Days)	2.0	9.9	3.4	2.9	0.9
		Unit # 2	(Days)	138.2	56.3	5.2	3.5	0.6
		Unit # 3	(Days)	2.7	37.7	27.1	324.1	3.3
	Within the control of generator							
	Beyond the control of generator							
	Shortfall in energy claimed / allowed	MU	NA	NA	46.318	23.369	126.661	
18	Cost of spares actually consumed	(Rs. Lakhs)	80.35	67.87	26.49	24.62	15.53	
19	Average stock of spares	(Rs. Lakhs)	460.27	413.89	432.39	470.01	684.37	

Month wise Design Energy (Existing)

Annexure-III contd. SH 2/3

Month	Period	Design Energy as approved by CEA (MU)	Month	Period	Design Energy as approved by CEA (MU)
April	1-10	3.84	October	1-10	6.45
	11-20	3.84		11-20	6.45
	21-30	3.84		21-31	7.10
May	1-10	4.13	November	1-10	3.84
	11-20	4.13		11-20	3.84
	21-31	4.54		21-30	3.84
June	1-10	7.63	December	1-10	3.84
	11-20	7.63		11-20	3.84
	21-30	7.63		21-31	4.22
July	1-10	4.61	January	1-10	3.84
	11-20	4.61		11-20	3.84
	21-31	5.07		21-31	4.22
August	1-10	18.00	February	1-10	3.84
	11-20	18.00		11-20	3.84
	21-31	19.80		21-28	3.07
September	1-10	10.66	March	1-10	3.84
	11-20	10.66		11-20	3.84
	21-30	10.66		21-31	4.22
			Total		227.24

Storage Hydro plants shall also furnish actual monthly average peaking generation in MW achieved during the period 2017-18 to 2021-22 against the monthly average peaking capability approved by CEA as per following format:

Month	Expected Avg. of daily 3-hour peaking capacity as approved by CEA	Actual monthly average of daily 3-hour peaking (MW) for the period 2017-18 to 2021-22
April	NA	28.31
May	NA	31.69
June	NA	42.73
July	NA	54.58
August	NA	61.61
September	NA	63.84
October	NA	61.55
November	NA	58.20
December	NA	53.26
January	NA	45.34
February	NA	42.78
March	NA	38.30

- 1 List of beneficiaries/customers along with allocation by GoI including (allocation of unallocated share) / capacity as contracted should also be furnished separately for each generating station.
- 2 Declared Capacity should be as per Regulation CERC Tariff Regulations including month wise information may be furnished.
- 3 Any relevant point or a specific fact having bearing on performance or operating parameters may also be highlighted or brought to the notice of the Commission.

Month wise Design Energy (Post R&M)

Month	Period	Design Energy as approved by CEA (MU)	Month	Period	Design Energy as approved by CEA (MU)
April	1-10	NA	October	1-10	NA
	11-20	NA		11-20	NA
	21-30	NA		21-31	NA
May	1-10	NA	November	1-10	NA
	11-20	NA		11-20	NA
	21-31	NA		21-30	NA
June	1-10	NA	December	1-10	NA
	11-20	NA		11-20	NA
	21-30	NA		21-31	NA
July	1-10	NA	January	1-10	NA
	11-20	NA		11-20	NA
	21-31	NA		21-31	NA
August	1-10	NA	February	1-10	NA
	11-20	NA		11-20	NA
	21-31	NA		21-28	NA
September	1-10	NA	March	1-10	NA
	11-20	NA		11-20	NA
	21-30	NA		21-31	NA
			Total		

Annexure –IV

PLANT AVAILABILITY/SCHEDULED PLANT LOAD FACTOR ACHIEVED

Generating company: North Eastern Electric Power Corporation Limited (NEEPCO LTD.)

Name of Generating station: Doyang Hydro Power Station (DHPS)

Installed Capacity (MW) : 75

Normative Annual Plant Availability Factor (%) approved by Commission : 73% up-to 2018-19 and 70% from 2019-20

Plant Availability Factor Achieved (%)

Month	2017-18	2018-19	2019-20	2020-21	2021-22	Reasons for shortfall in PAF achieved vis-a-vis NAPAF
April	49.16	31.89	22.99	30.44	49.66	Generator Transformer Winding failure of U2 from 20/11/2017 to 23/05/2018. U-III governor problem, rotor earth fault and APM works of U3 from 24/10/2018 to 16/12/2018. Rectification of GT problem of U3 from 08/03/2020 to 17/02/2021 and Very less Water Availability.
May	52.46	38.73	41.60	36.13	36.89	
June	65.36	61.45	59.59	47.08	45.55	
July	86.58	86.58	62.81	60.26	63.46	
August	95.66	97.03	78.79	66.00	68.95	
September	96.84	90.82	85.00	62.21	86.58	
October	92.85	73.14	90.19	62.94	88.19	
November	81.58	54.24	92.65	67.31	87.64	
December	60.35	62.97	86.70	67.48	74.78	
January	60.62	54.65	64.04	66.82	52.97	
February	59.24	35.78	57.35	75.93	52.46	
March	56.61	27.22	45.29	81.64	41.19	
Annual	71.52	59.74	65.63	60.32	62.39	

Plant Load Factor Achieved (%)

Month	2017-18	2018-19	2019-20	2020-21	2021-22	Reasons for shortfall in PLF achieved vis-a-vis Target PLF
April						
May						
June						

July					
August					
September					
October					
November					
December					
January					
February					
March					
Annual					

Details of operation & Maintenance expenses (to be filled by each Hydro generating station)

Name of Generation Company: NEEPCO LTD

Name of the hydro-electric station: Doyang Hydro Electric Plant

Rs. In Lakh

(A)	Break up of O&M expenses	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Consumption of stores & spares	80.35	67.87	26.49	24.62	15.53
2.	Repair and Maintenance					
2.1	For Dam , Intake, WCS, De- silting chamber	2.64	11.14	11.14	0.10	6.37
2.2	For Power House and all other works	141.37	236.83	218.06	183.54	181.15
	Sub-Total (Repair and Maintenance)	144.02	247.97	229.20	183.64	187.52
3.	Insurance	85.13	83.00	103.64	185.77	179.29
4.	Security	1316.35	1419.89	1545.96	1770.08	1453.23
5.	Administrative expenses					
5.1	Rent	2.88	3.24	2.38	3.18	4.37
5.2	Electricity charges					
5.3	Traveling & conveyance	2.88	3.24	2.38	3.18	4.37
5.4	Telephone, Postage etc., Communication	1.29	2.36	0.77	1.15	0.76
5.5	Advertisement	8.59	7.69	8.62	1.54	
5.6	Donations					
5.7	Entertainment					
	Sub-total (Admn expenses)					
6	Employee cost					
6.1	Salaries,wages & allowances	2839.05	3436.83	3113.42	3181.50	3346.97
6.2	Staff welfare expenses	16.30	6.84	3.63	6.14	8.13
6.3	Productivity linked incentive	136.61	12.02	0.00	13.04	70.14
6.4	Expenditure on VRS					
6.5	Ex-gratia	12.88	8.00	13.00		
6.6	Performance related pay (PRP)					
6.7	VII Pay Arrears Paid Pertaining to period prior to 2017-18					
	Sub-total (Employee cost)					
7.	Loss of stores	0.35			0.04	1.30
8.	Provisions					
9.	Allocation of Corporate office expenses					
10	Other expenses (Specify items)					
10.1	Bank charges	0.02	0.03	0.01	0.01	0.01
10.2	Books & Periodicals	0.20	0.05	0.13	0.17	0.25
10.3	Professional Charges	0.26	0.21	7.41	0.73	1.21
10.4	Rates & Taxes	1.18	2.05	4.55	6.10	5.30
10.5	Uniform/Livries & safety equipment	1.66	0.39	0.86	0.35	
10.6	Other Vehicles	2.56	6.67	1.25	3.10	
10.7	Printing & Stationery	2.73	2.47	2.59	1.51	1.24
10.8	Filing fee	3.30	3.30	3.30	17.82	3.30
10.9	Misc. Expenses	4.35	3.65	3.53	2.54	1.96
10.1	Training & recruitment expenses	4.63	0.45	0.03		0.77
10.11	Other staff welfare expenses	5.21	6.60	8.35	24.00	7.74
10.12	CSR activities	8.94	41.97	65.14	31.78	40.58
10.13	Guest house expenses	9.26	9.59	10.10	11.12	12.38
10.14	Legal expenses	27.31	14.28	15.37	8.39	
10.15	Transport- Vehicle Running exp.	35.91	33.56	33.65	29.80	30.18
10.16	EDP Hire & other charges	42.73	20.16	16.38	14.54	12.36
10.17	RLDC Fee & Charges	45.49	37.70	55.27	29.84	33.68
10.18	Hiring of vehicle	65.42	68.08	70.46	68.15	73.94
10.19	Medical expenses on regular employees & others	83.00	66.20	91.11	57.21	63.50
10.2	Education expenses	132.21	161.34	146.19	135.00	140.25
10.21	Pension	192.20	195.09	200.53	208.47	316.05
10.22	Provident Fund	260.38	272.20	280.13	289.77	204.46
10.23	Leave Encashment	439.25	286.27	354.00	158.22	350.81
10.24	Gratuity	909.62	153.59	115.52	129.59	129.77
10.25	Furnishing Expenses			0.13	0.03	
11	Total (1 to 10)					
12	Revenue/Recoveries, if any	93.60	9.51	354.85	5.29	41.56
13	Net expenses					
14	Capital spares consumed not included in (A) (1) above and not claimed /allowed by Commission for capitalisation					
15	Number of employees:	260.00	247.00	242.00	235.00	224.00
15.1	Executives	46.00	42.00	39.00	41.00	39.00

15.2	Non- Executives	214.00	205.00	203.00	194.00	185.00
15.3	Corporate Office					
16	Man-MW ratio (Man/MW)	3.46	3.29	3.22	3.13	2.98
16.1	Number of employees deployed in O&M	260.00	247.00	242.00	235.00	224.00
16.2	Executives	46.00	42.00	39.00	41.00	39.00
16.3	Non Executives	214.00	205.00	203.00	194.00	185.00

Note:					
	Year-wise audited actual O&M expenses submitted for the period 2017-18 to 2021-22 should be clearly indicating the following				
	(i) Explanation / Justification for year to year variation of more than (\pm) 10% in any head of O&M expenses				
	(ii) Details of expenditure under the head "Others".				
	(iii) Details of the amount indicated under the head "Revenues/Recoveries"				
	(iv) Details of arrears and prior period adjustments included in the data for the period 2017-18 to 2021-22, if any, pertaining to period prior to the year 2017-18 should be mentioned separately in the following format:				
Sl. No.	Year during the period 2017-22 in which arrear/ prior period adjustments have been made	Year to which this arrear and prior period adjustment pertains	Amount of arrear/ prior period adjustment (Rs. in lakh)		
	(v) Separately furnish the details of abnormal expenses, if any.				
	(vi) Future provisions pertaining to period beyond 2021-22 made in the employee cost or any other head during 2017-18 to 2021-22 towards wage revision/arrears or for any other reason shall be provided separately.				

Details of actual O&M expenses (Common for Hydro /Thermal Generating Station)

DOYANG HYDRO POWER STATION, DOYANG NAGALAND

Sl. No.	Item	Unit	2017-18	2018-19	2019-20	2020-21	2021-22
1	Consumption of stores & spares		80.35	67.87	26.49	24.62	15.53
2	Repair & Maintenance		144.02	247.97	229.20	183.64	187.52
3	Insurance		85.13	83.00	103.64	185.77	179.29
4	Security						
4.1	CISF		1070.43	1170.95	1253.48	1522.65	1409.86
4.2	Other than CISF		245.93	248.94	292.48	247.43	43.37
5	Water Charges						
6	Administrative Expenses						
6.1	Rent		2.88	3.24	2.38	3.18	4.37
6.2	Electricity charges						
6.3	Travelling & Conveyance		34.31	26.52	22.71	5.40	9.42
6.4	Communication Expenses		1.29	2.36	0.77	1.15	0.76
6.5	Advertising		8.59	7.69	8.62	1.54	0.00
6.6	Foundation Laying & Inauguration						
6.7	Donation						
6.8	Entertainment						0.34
6.9	Filing fee		3.30	3.30	3.30	17.82	3.30
	Subtotal (Administrative Expenses)						
7	Employee Cost						
7.1.1	Salaries, Wages & Allowances						
7.1.1.1	Salaries, Wages & Allowances (including loco pilots and man power associated with stone and metal picking charges and						
7.1.1.2	Salaries, Wages & Allowances (Excluding loco pilots and man power associated with stone and metal picking charges and water pumping)		2839.05	3436.83	3113.42	3181.50	3346.97
7.1.1.3	Loco pilots						
7.1.1.4	Stone and metal picking						
7.1.1.5	Water pumping						
7.1.2	Pension		192.20	195.09	200.53	208.47	316.05
7.1.3	Gratuity		909.62	153.59	115.52	129.59	129.77
7.1.4	Provident Fund		260.38	272.20	280.13	289.77	204.46
7.1.5	Leave Encashment		439.25	286.27	354.00	158.22	350.81
7.2	Staff welfare expenses		16.30	6.84	3.63	6.14	8.13
7.2.1	Medical expenses on superannuated employees						
7.2.2	Medical expenses on regular employees & others		83.00	66.20	91.11	57.21	63.50
7.2.3	Uniform/Livries & safety equipment		1.66	0.39	0.86	0.35	0.00
7.2.4	Canteen expenses						
7.2.5	Other staff welfare expenses		5.21	6.60	8.35	24.00	7.74
	Subtotal (Staff welfare Expenses)						
7.3	Productivity linked Incentive		136.61	12.02	0.00	13.04	70.14
7.4	Expenditure on VRS						
7.5	Ex-gratia		12.88	8.00	13.00		
7.6	Performance Related Pay (PRP)						
	Sub Total (Employee Cost)						
8	Loss of Store		0.35			0.04	1.30
9	Provisions						
10	Prior Period Expenses						
11	Corporate Office expenses allocation						
12	Others						
12.1	Rates & Taxes		1.18	2.05	4.55	6.10	5.30
12.2	Water cess						
12.3	Training & recruitment expenses		4.63	0.45	0.03	0.00	0.77
12.4	Tender Expenses						
12.5	Guest house expenses		9.26	9.59	10.10	11.12	12.38
12.6	Education expenses		132.21	161.34	146.19	135.00	140.25
12.7	Community Development Expenses						
12.7.1	CSR activities		8.94	41.97	65.14	31.78	40.58
12.8	Ash utilisation expenses						
12.9	Books & Periodicals		0.20	0.05	0.13	0.17	0.25
12.1	Professional Charges		0.26	0.21	7.41	0.73	1.21
12.11	Legal expenses		27.31	14.28	15.37	8.39	0.00
12.12	EDP Hire & other charges		42.73	20.16	16.38	14.54	12.36
12.13	Printing & Stationery		2.73	2.47	2.59	1.51	1.24
12.14	RLDC Fee & Charges		45.49	37.70	55.27	29.84	33.68
12.15	Brokerage & Commission						
12.16	Bank charges		0.02	0.03	0.01	0.01	0.01
12.17	Claims/advances written off						

12.18	Hiring of vehicle		65.42	68.08	70.46	68.15	73.94
12.19	Payment to auditors						
12.2	Misc. Expenses		4.35	3.65	3.53	2.54	1.96
	(Break-up Of Misc.)						
12.20.1	Horticulture						
12.20.2	Transport- Vehicle Running exp.		35.91	33.56	33.65	29.80	30.18
12.20.3	Hire charges & Operating Exp -Construction equipment						
2.20.4	- Tree Plantation exp.						
2.20.5	- R&D expenses						
12.20.6	Other Vehicles		2.56	6.67	1.25	3.10	
12.20.7	Consumption-HSD/LDO-(Ind/Imp)-DG Set						
12.20.8	Exp/ Inc from Inv Diff						
12.20.9	Loss on sale of Investments						
2.20.10	Operating exp of diesel generating sets						
2.20.11	Furnishing Expenses				0.13	0.03	
2.20.12	Subscription to Trade and Other Association						
2.20.13	Hire Charges - Helicopter/Aircraft						
2.20.14	Visa & Entry Permit Charges - Overseas						
2.20.15	FX Monitoring Terminal Expenses						
2.20.16	Works/Conf.(Excl train R&D CENPEEP)Earlier Non FBT						
2.20.17	Workshop/Conf. Exp (train R&D CENPEEP) Earlier FBT						
2.20.18	Hire charges - Office equipment						
2.20.19	Payment for health club etc						
2.20.20	Gifts liable for Fringe Benefit Tax						
2.20.21	Festival expenses liable Earlier (FBT)						
2.20.22	Miscellaneous Expenses						
2.20.23	Rounding Off Difference						
2.20.24	Regional Power Committee Expenses						
2.20.25	Misc Exp. trf to CSR and IEDC						
2.20.26	Specify other sub head, if any.						
	Sub Total (Others)						
13	(Total 1 to 12)		6955.91	6708.08	6555.80	6604.34	6706.76
14	Revenue / Recoveries		93.60	9.51	354.85	5.29	41.56
15	Net Expenses		6862.32	6698.57	6200.95	6599.05	6665.20
	Total O&M Cost		6862.32	6698.57	6200.95	6599.05	6665.20

Rate	(%)																		
i) Ash Utilisation Expenses	(Rs. Crore)																		
AFC	(Rs./ kWh)	3.3334439	3.1303316	3.822185	2.4498609	2.1504718	5.561619	4.2209935	5.0265548	5.8928818	3.9512741	6.911684	7.4129438	5.1469142	4.7461035	5.5769823	8.0348365	7.2256156	15.501916
Energy Charge	(Rs./kWh)						2.137	2.294	2.443	2.592	2.047	2.38	2.47	2.114	2.416	2.859	3.171	2.821	5.732
Supplemental Energy Charges - Emission Control	(Rs./kWh)																		
Total tariff	(Rs. kWh)						4.516	4.305	4.977	5.273	4.059	5.349	5.547	4.838	4.831	5.022	5.862	5.745	8.429
Revenue realisation before tax	(Rs. Crore)																		
Revenue realisation after tax	(Rs. Crore)																		
Profit/ loss	(Rs. Crore)																		
DSM Generation	(MU)							4.391	2.741	7.93	3.398	1.59	3.575	4.631	2.322	2.064	2.368	1.961	1.99
DSM Rate	(Rs/kWh)																		
Revenue from DSM	(Rs. Crore)							1.042	0.488	1.651	0.310	0.202	0.267	0.613	0.424	0.462	0.436	0.407	0.43
Compensation received for operation below NAPAF																			
Part load Compensation received from beneficiariaes																			
Amount received from SCED	(Rs Crore)																		

Generating Companies are required to submit data for all generating stations
This is a general format. Plants of different fuel users have to fill the cells as applicable to them.
Tariff for the Hydro may be understood as composite tariff.
The data provided for the corresponding years need to mention as Actual or provisional.
Data for each Unit and Stage is required to be submitted in additional sheets as per the format