

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				
2	Name of Station		Tuirial Hydro Power Station				
3	Installed Capacity and Configuration	(MW)	60 MW (2 X 30MW)				
3.1	Date of Commercial Operation - Unit Wise		Unit#I : 30.10.2017		Unit#II : 30.01.2018		
3.2	Effective COD		30.01.2018				
4	Station Location	Under ground or Surface	Semi Underground Power Station				
	Stage		Single Stage				
5	Type of Excitation System		Static Excitation System				
6	Live Storage Capacity	(Million Cubic)	750 Millon Cumic Meter	750 Millon Cumic Meter	750 Millon Cumic Meter	750 Millon Cumic Meter	750 Millon Cumic Meter
7	Rated Head	Metres	53 m	53m	53m	53m	53m
8	Head at Full Reservoir Level (FRL)	Metres	90.5 m	90.5 m	90.5 m	90.5m	90.5 m
9	Head at Minimum Draw down Level (MDDL)	Metres	68.0 m	68.0 m	68.0 m	68.0 m	68.0 m
10	MW Capability at FRL	MW	60 MW	60 MW	60 MW	60 MW	60 MW
11	MW Capability at MDDL	MW	36 MW	36 MW	36 MW	36 MW	36 MW
12	Cost of spares :						
12.1	Cost of spares capitalized in books of accounts	(Rs. Lakhs)	627.90	56.01	0.00	0.00	0.00
12.2	Cost of spares included in the capital cost for the purpose of tariff	(Rs. Lakhs)	627.90	56.01	0.00	0.00	0.00
	Period						
13	Generation :						
13.1	Actual Gross Generation at Generator Terminals	(MU)	79.1057	168.4356	177.0114	158.8340	137.4160
13.2	Actual Net Generation Ex-bus including free power	(MU)	76.8310	160.7812	169.6790	152.0580	131.5430
13.3	Scheduled generation Ex-bus including free power	(MU)	N/A	165.5650	171.3524	150.4760	130.0914
14	Actual Auxiliary Energy Consumption excluding colony consumption	(MU)	1.9837	7.5530	7.1563	6.8745	6.1974
15	Actual Energy supplied to Colony from the station	(MU)	0.3924	0.6039	0.8058	0.7978	0.8484
16	Average Declared Capacity (DC) during the year	(MW)	N/A	30.4165	44.4665	44.0206	43.2775
	Actual Declared Capacity	(MU)	N/A	183.7720	220.3015	215.7538	212.0985
	Deemed Declared Capacity		N/A	N/A	N/A	N/A	N/A
	Actual energy supplied to beneficiaries		76.831	160.7812	169.679	152.058	131.543
	Actual energy supplied in DSM		N/A	N/A	N/A	N/A	N/A
	Actual energy supplied in exchange		Nil	Nil	Nil	Nil	Nil
17	Weighted Average duration of outages (Unit-wise details)(Including Scheduled and Forced Outage)	U#1(Days)	N/A	75 days 15.18 hrs	21 days 1.53 hrs	4 days 0.22 hrs	18 days 2.73 hrs
		U#2(Days)	N/A	45 days 6.85 hrs	25 days 11.57 hrs	11 days 6.7 hrs	17 days 2.4 hrs
17.1	Scheduled outages	(Days)	N/A	1day 23 hrs	22days 2.25hrs	11days 7.61 hrs	34days 12.71hrs
17.2	Forced outages	(Days)	N/A	118days 23.03hrs	24days 10.85hrs	3days 23.3hrs	0day 16.41hrs
	Within the control of generator	(Days)	N/A	118days 23.03hrs	24days 10.85hrs	3days 23.3hrs	0day 16.41hrs
	Beyond the control of generator	(Days)	N/A	8 days 13.77 hrs	21 days 13.25 hrs	3 days 20.27 hrs	1 day 6.5 hrs
	Shortfall in energy claimed / allowed						
18	Cost of spares actually consumed	(Rs. Lakhs)	38.16	74.20	83.51	32.62	171.76
19	Average stock of spares	(Rs. Lakhs)	10.00	25.00	33.00	12.00	50.00

Month wise Design Energy (Existing)

Annexure-III contd. SH 2/3

Month	Period	Design Energy as approved	Month	Period	Design Energy as approved by
April	1-10	14.37	October	1-10	26.08
	11-20			11-20	
	21-30			21-31	
May	1-10	17.37	November	1-10	17.77
	11-20			11-20	
	21-31			21-30	
June	1-10	20.79	December	1-10	14.61
	11-20			11-20	
	21-30			21-31	
July	1-10	27.24	January	1-10	13.73
	11-20			11-20	
	21-31			21-31	
August	1-10	35.17	February	1-10	13.60
	11-20			11-20	
	21-31			21-28	
September	1-10	36.23	March	1-10	13.67
	11-20			11-20	
	21-30			21-31	
			Total		250.63

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	Data not available at site	29.58
May		27.52
June		35.80
July		39.41
August		41.51
September		45.43
October		49.40
November		48.75
December		47.63
January		44.40
February		41.58
March		35.54

- 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	Month	Period	Design Energy as approved by
April	1-10	N/A	October	1-10	N/A
	11-20	N/A		11-20	N/A
	21-30	N/A		21-31	N/A
May	1-10	N/A	November	1-10	N/A
	11-20	N/A		11-20	N/A
	21-31	N/A		21-30	N/A
June	1-10	N/A	December	1-10	N/A
	11-20	N/A		11-20	N/A
	21-30	N/A		21-31	N/A
July	1-10	N/A	January	1-10	N/A
	11-20	N/A		11-20	N/A
	21-31	N/A		21-31	N/A
August	1-10	N/A	February	1-10	N/A
	11-20	N/A		11-20	N/A
	21-31	N/A		21-28	N/A
September	1-10	N/A	March	1-10	N/A
	11-20	N/A		11-20	N/A
	21-30	N/A		21-31	N/A
			Total		

Annexure –IV

PLANT AVAILABILITY/SCHEDULED PLANT LOAD FACTOR ACHIEVED

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

Name of Generating station: Tuirial Hydro Power Station (THPS)

Installed Capacity (MW) : 60

Normative Annual Plant Availability Factor (%) approved by Commission : 85%

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		27.83	64.33	61.52	43.86	Less Water availability. OPU and B us duct problem of U1 from 08/03/2018 to 19/05/2018. Rectification of Leakage of TGB oil and increasing trend of vibration at bearings of U2 from 08/10/2018 to 15/11/2018.
May		37.47	59.75	60.73	28.68	
June		63.24	67.93	62.08	47.51	
July		72.66	72.16	53.65	63.78	
August		30.30	91.53	74.06	84.13	
September		30.30	96.83	83.45	95.93	
October		50.72	89.98	95.01	97.51	
November		61.17	76.39	96.04	97.84	
December	37.20	53.44	84.35	89.79	93.81	
January	58.11	54.31	79.34	82.82	84.13	
February	71.85	63.91	71.32	71.45	73.74	
March	37.47	67.34	46.58	60.62	65.14	
Annual	51.24	51.01	75.04	74.27	73.02	

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	NA	NA	NA	NA	NA	
May	NA	NA	NA	NA	NA	
June	NA	NA	NA	NA	NA	

July	NA	NA	NA	NA	NA
August	NA	NA	NA	NA	NA
September	NA	NA	NA	NA	NA
October	NA	NA	NA	NA	NA
November	NA	NA	NA	NA	NA
December	NA	NA	NA	NA	NA
January	NA	NA	NA	NA	NA
February	NA	NA	NA	NA	NA
March	NA	NA	NA	NA	NA
Annual	NA	NA	NA	NA	NA

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

Name of Generation Company: NEEPCO
Name of the hydro-electric station: Tuirial HPS

Rs. Lakh

(A)	Break up of O&M expenses	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Consumption of stores & spares	38.16	74.20	83.51	32.63	171.77
2.	Repair and Maintenance					
2.1	For Dam , Intake, WCS, De- silting chamber	0.00	7.91	48.16	31.18	26.94
2.2	For Power House and all other works	171.44	574.87	492.72	521.79	754.00
	Sub-Total (Repair and Maintenance)	171.44	582.78	540.88	552.96	780.93
3.	Insurance	58.83	156.98	191.75	288.27	175.00
4.	Security	55.73	94.10	83.57	88.91	110.14
5.	Administrative expenses					
5.1	Rent	0.00	0.00	0.00	0.00	0.00
5.2	Electricity charges	39.46	4.26	213.94	81.98	95.40
5.3	Traveling & conveyance	27.05	41.69	19.42	4.06	7.29
5.4	Telephone, Postage etc., Communication	35.18	23.30	31.72	5.60	7.70
5.5	Advertisement	0.26	0.38	1.66	0.00	0.00
5.6	Donations	0.00	0.00	0.00	0.00	0.00
5.7	Entertainment	0.00	0.00	0.00	0.00	0.00
	Sub-total (Admn expenses)	101.94	69.62	266.74	91.64	110.38
6	Employee cost					
6.1	Salaries,wages & allowances	1686.52	2895.56	1686.08	1517.35	1419.59
6.2	Staff welfare expenses	80.94	115.52	72.05	53.20	41.07
6.3	Productivity linked incentive	77.06	34.94	8.34	3.57	33.71
6.4	Expenditure on VRS	0.00	0.00	0.00	0.00	0.00
6.5	Ex-gratia	3.90	1.14	0.00	0.00	0.00
6.6	Performance related pay (PRP)	0.00	0.00	0.00	0.00	0.00
6.7	VII Pay Arrears Paid Pertaining to period prior to 2017-18	0.00	0.00	0.00	0.00	0.00
	Sub-total (Employee cost) :-	1848.42	3047.16	1766.46	1574.11	1494.37
7.	Loss of stores	0.7992772	1.1957772	3.048778	0.2383223	0.3356533
8.	Provisions	153.34	0.00	0.00	0.00	115.21
9.	Allocation of Corporate office expenses	9.56	2.80	0.00	0.00	0.00
10	Other expenses (Specify items)	3880.60	14891.90	12295.90	11727.46	11493.03
11	Total (1 to 10)	6318.82	18920.74	15231.87	14356.21	14451.18
12	Revenue/Recoveries, if any	220.86	85.77	171.89	10.45	108.93
13	Net expenses :-	6097.97	18834.97	15059.98	14345.77	14342.25
14	Capital spares consumed not included in (A) (1) above and not claimed /allowed by Commission for capitalisation		107.08	1.01	40.35	
15	Number of employees:	113	100	88	82	74
15.1	Executives	56	50	45	40	37
15.2	Non- Executives	57	50	43	40	37
15.3	Corporate Office					
16	Man-MW ratio (Man/MW)	1.88	1.67	1.47	1.37	1.23
16.1	Number of employees deployed in O&M	20	20	19	18	16
16.2	Executives	14	14	14	13	13
16.3	Non Executives	6	6	5	5	3

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 (±) 10% in any head of O&M expenses				
	(ii) Details of expenditure under the head "Others" :- Total of Point 12 of Annexure - VIII.				
	(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)

Sl. No.	Item	Unit	2017-18	2018-19	2019-20	2020-21	2021-22
1	Consumption of stores & spares		38.16	74.20	83.51	32.63	171.77
2	Repair & Maintenance		171.44	582.78	540.88	552.96	780.93
3	Insurance		58.83	156.98	191.75	288.27	175.00
4	Security						
4.1	CISF		14.90	36.34	45.23	49.22	64.10
4.2	Other than CISF		40.84	57.76	38.34	39.69	46.05
5	Water Charges		0.00	0.00	0.00	0.00	0.00
6	Administrative Expenses						
6.1	Rent		0.00	0.00	0.00	0.00	0.00
6.2	Electricity charges		39.46	4.26	213.94	81.98	95.40
6.3	Travelling & Conveyance		27.05	41.69	19.42	4.06	7.29
6.4	Communication Expenses		35.18	23.30	31.72	5.60	7.70
6.5	Advertising		0.26	0.38	1.66	0.00	0.00
6.6	Foundation Laying & Inauguration		0.00	0.00	0.00	0.00	0.00
6.7	Donation		0.00	0.00	0.00	0.00	0.00
6.8	Entertainment		0.00	0.00	0.00	0.00	0.00
6.9	Filing fee		1.88	5.37	2.64	5.94	5.64
	Subtotal (Administrative Expenses)		103.83	74.99	269.38	97.58	116.02
7	Employee Cost						
7.1	Salaries, Wages & Allowances						
7.1.1	Salaries, Wages & Allowances (including loco pilots and man power associated with stone and metal picking charges and water pumping)		0.00	0.00	0.00	0.00	0.00
7.1.1.2	Salaries, Wages & Allowances (Excluding loco pilots and man power associated with stone and metal picking charges and water pumping)		1686.52	2895.56	1686.08	1517.35	1419.59
7.1.1.3	Loco pilots		0.00	0.00	0.00	0.00	0.00
7.1.1.4	Stone and metal picking		0.00	0.00	0.00	0.00	0.00
7.1.1.5	Water pumping		0.00	0.00	0.00	0.00	0.00
7.1.2	Pension		105.28	135.00	101.54	92.18	88.16
7.1.3	Gratuity		472.46	206.22	42.40	42.10	38.81
7.1.4	Provident Fund		145.66	188.85	144.02	131.55	127.68
7.1.5	Leave Encashment		284.49	243.48	258.11	66.08	89.61
7.2	Staff welfare expenses						
7.2.1	Medical expenses on superannuated employees		0.00	0.00	0.00	0.00	0.00
7.2.2	Medical expenses on regular employees & others		43.42	69.23	49.29	42.11	36.05
7.2.3	Uniform/Livries & safety equipment		0.16	0.51	1.11	0.29	0.32
7.2.4	Canteen expenses		0.00	0.00	0.00	0.00	0.00
7.2.5	Other staff welfare expenses		37.37	45.78	21.64	10.80	4.70
	Subtotal (Staff welfare Expenses)		80.94	115.52	72.05	53.20	41.07
7.3	Productivity linked Incentive		0.00	0.00	0.00	0.00	0.00
7.4	Expenditure on VRS		0.00	0.00	0.00	0.00	0.00
7.5	Ex-gratia		3.90	1.14	0.00	0.00	0.00
7.6	Performance Related Pay (PRP)		77.06	34.94	8.34	3.57	33.71
	Sub Total (Employee Cost)		2856.31	3820.71	2312.54	1906.02	1838.63
8	Loss of Store		0.80	1.20	3.05	0.24	0.34
9	Provisions		153.34	0.00	0.00	0.00	115.21
10	Prior Period Expenses		0.00	0.00	0.00	0.00	0.00
11	Corporate Office expenses allocation		9.56	2.80	0.00	0.00	0.00
12	Others						
12.1	Rates & Taxes		0.00	1.21	22.26	16.39	10.92
12.2	Water cess		0.00	0.00	0.00	0.00	0.00
12.3	Training & recruitment expenses		1.85	2.34	0.50	0.00	0.33
12.4	Tender Expenses		0.40	11.36	6.66	3.04	0.09
12.5	Guest house expenses		31.35	42.84	47.66	49.51	55.14
12.6	Education expenses		0.00	0.00	0.00	0.00	0.00
12.7	Community Development Expenses		0.00	0.00	0.00	0.00	0.00
12.7.1	CSR activities		6.17	45.55	16.11	51.60	23.82
12.8	Ash utilisation expenses		0.00	0.00	0.00	0.00	0.00
12.9	Books & Periodicals		0.00	0.00	0.00	0.00	0.00
12.1	Professional Charges		0.10	1.21	15.34	4.49	1.21
12.11	Legal expenses		15.69	31.90	224.96	8.88	1.85
12.12	EDP Hire & other charges		18.31	7.87	2.89	1.34	2.94
12.13	Printing & Stationery		1.76	2.88	3.33	1.76	2.06
12.14	RLDC Fee & Charges		0.00	0.00	0.00	0.00	0.00
12.15	Brokerage & Commission		0.00	0.00	0.00	0.00	0.00
12.16	Bank charges		0.41	0.15	0.42	0.01	0.01
12.17	Claims/advances written off		0.00	0.00	0.00	0.00	0.00
12.18	Hiring of vehicle		0.00	0.00	0.00	0.00	0.00
12.19	Payment to auditors		0.00	0.35	0.13	0.00	0.07
12.20	Misc. Expenses						
	(Break-up Of Misc.)						
12.20.1	Horticulture		0.00	0.00	0.00	0.00	0.00
12.20.2	Transport- Vehicle Running exp.		121.97	178.42	147.25	135.72	140.95
12.20.3	Hire charges & Operating Exp -Construction equipment		0.00	0.00	0.00	0.00	0.00
12.20.4	Tree Plantation exp.		0.00	1.22	4.88	3.22	8.06

12.20.5	R&D expenses		0.00	0.00	0.00	0.00	0.00
12.20.6	Other Vehicles		0.00	0.00	0.00	0.00	0.00
12.20.7	Consumption-HSD/LDO-(Ind/Imp)-DG Set		34.09	20.05	44.75	23.15	27.80
12.20.8	Exp/ Inc from Inv Diff		0.00	0.00	0.00	0.00	0.00
12.20.9	Loss on sale of Investments		0.00	0.00	0.00	0.00	0.00
12.20.10	Operating exp of diesel generating sets		0.50	13.99	45.96	20.29	25.02
12.20.11	Furnishing Expenses		0.00	0.00	0.00	0.00	0.00
12.20.12	Subscription to Trade and Other Association		0.00	0.00	0.00	0.00	0.00
12.20.13	Hire Charges - Helicopter/Aircraft		0.00	0.00	0.00	0.00	0.00
12.20.14	Visa & Entry Permit Charges - Overseas		0.00	0.00	0.00	0.00	0.00
12.20.15	FX Monitoring Terminal Expenses		0.00	0.00	0.00	0.00	0.00
12.20.16	Works/Conf.(Excl train R&D CENPEEP)Earlier Non FBT		0.00	0.00	0.00	0.00	0.00
12.20.17	Workshop/Conf. Exp (train R&D CENPEEP) Earlier FBT		0.00	0.00	0.00	0.00	0.00
12.20.18	Hire charges - Office equipment		0.00	0.00	0.00	0.00	0.00
12.20.19	Payment for health club etc		0.00	0.00	0.00	0.00	0.00
12.20.20	Gifts liable for Fringe Benefit Tax		0.00	0.00	0.00	0.00	0.00
12.20.21	Festival expenses liable Earlier (FBT)		0.00	0.00	0.00	0.00	0.00
12.20.22	Miscellaneous Expenses		473.44	48.44	8.77	1.84	4.75
12.20.23	Rounding Off Difference		0.00	0.00	0.00	0.00	0.00
12.20.24	Regional Power Committee Expenses		0.00	0.00	0.00	0.00	0.00
12.20.25	Misc Exp. trf to CSR and IEDC		0.00	0.00	0.00	0.00	0.00
12.20.26	Specify other sub head, if any.						
	Interest on Loan & Bonds		3056.55	4700.19	4615.76	4426.43	4077.97
	Depreciation		118.01	9781.92	7088.29	6979.78	7110.02
	Sub Total (Others)		3880.60	14891.90	12295.90	11727.46	11493.03
13	(Total 1 to 12)		7290.44	19625.45	15697.08	14661.44	14629.31
14	Revenue / Recoveries		220.86	85.77	171.89	10.45	108.93
15	Net Expenses		7069.58	19539.68	15525.19	14650.99	14520.38
	Total O&M Cost						

	h) Supplementary Tariff - Emission																	
	Absolute value	(Rs. Crore)																
	Rate	(%)																
	i) Ash Utilisation Expenses	(Rs. Crore)																
25	AFC	(Rs./ kWh)												29.24652	7.158215	6.596071	7.52758	8.609661
26	Energy Charge	(Rs./kWh)													1.209	2.962	3.725	4.165
26.1	Supplemental Energy Charges - Emission Control	(Rs./kWh)																
27	Total tariff	(Rs. kWh)													5.294	5.536	6.366	6.74
28	Revenue realisation before tax	(Rs. Crore)																
29	Revenue realisation after tax	(Rs. Crore)																
30	Profit/ loss	(Rs. Crore)																
31	DSM Generation	(MU)																
32	DSM Rate	(Rs/kWh)																
33	Revenue from DSM	(Rs. Crore)																
34	Compensation received for operation below NAPAF																	
35	Part load Compensation received from beneficiariaes																	
36	Amount received from SCED	(Rs Crore)																

Note: 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