

**Pro-forma for furnishing Actual annual performance/operational data for the Hydro
Electric generating stations for the period from 2022-23**

	Particulars	Units	2022-23
1	Name of Company		NHPC LTD.
2	Name of Station		Chamera-I Power Station
3	Installed Capacity and Configuration	(MW)	540
3.1	Date of Commercial Operation - Unit Wise		Unit-I 01.05.1994 Unit-II 01.05.1994 Unit-III 01.05.1994
3.2	Effective COD		01.05.1994
4	Station Location	Under ground or Surface	Under Ground
5	Type of Excitation System		
6	Live Storage Capacity	(Million Cubic)	88.80
7	Rated Head	Metres	185
8	Head at Full Reservoir Level (FRL)	Metres	207
9	Head at Minimum Draw down Level (MDDL)	Metres	197.65
10	MW Capability at FRL	MW	540
11	MW Capability at MDDL	MW	515.6
12	Cost of spares :		
12.1	Cost of spares capitalized in books of accounts	(Rs. Lakhs)	120.25
12.2	Cost of spares included in the capital cost for the purpose of tariff	(Rs. Lakhs)	
13	Generation :		
13.1	Actual Gross Generation at Generator Terminals	(MU)	1889.18
13.2	Actual Net Generation Ex-bus including free power	(MU)	1884.56
13.3	Scheduled generation Ex-bus including free power	(MU)	1842.66
14	Actual Auxiliary Energy Consumption excluding colony consumption	(MU)	13.94
15	Actual Energy supplied to Colony from the station	(MU)	NIL
16	Average Declared Capacity (DC) during the year		
16.1	Actual Declared Capacity (DC) during the year	(MW)	496.60
16.2	Deemed Declared Capacity	(MW)	0.00
16.3	Actual energy supplied to beneficiaries	(MU)	1842.66
16.4	Actual energy supplied in DSM	(MU)	41.90
16.5	Actual energy supplied in exchange	(MU)	0.00
17	Weighted Average duration of outages (Unit-wise details)		
17.1	Scheduled outages	(Days)	AS PER APPENDIX-A
17.2	Forced outages	(Days)	
17.2.a	Within the control of generator	MU	
17.2.b	Beyond the control of generator	MU	
17.2.c	Shortfall in energy claimed / allowed	MU	
18	Cost of spares actually consumed	(Rs. Lakhs)	13.39
19	Average stock of spares	(Rs. Lakhs)	1836.33

Month wise Design Energy

Month	Period	Design Energy as approved by CEA (MU)	Month	Period	Design Energy as approved by CEA (MU)
April	1-10	21.08	October	1-10	34.82
	11-20	25.57		11-20	30.05
	21-30	52.37		21-31	32.05
May	1-10	57.17	November	1-10	24.01
	11-20	54.85		11-20	20.96
	21-31	72.52		21-30	20.94
June	1-10	56.00	December	1-10	16.11
	11-20	65.20		11-20	20.89
	21-30	62.26		21-31	22.93
July	1-10	93.71	January	1-10	20.83
	11-20	80.81		11-20	20.78
	21-31	105.11		21-31	22.85
August	1-10	105.53	February	1-10	20.79
	11-20	116.20		11-20	20.72
	21-31	118.53		21-28	16.62
September	1-10	71.66	March	1-10	20.03
	11-20	54.33		11-20	20.89
	21-30	42.18		21-31	23.22
			Total		1664.56

Storage Hydro plants shall also furnish actual monthly average peaking generation in MW achieved during the period 2017-18 to 2022-23 against the monthly average peaking capability approved by CEAs 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 2022-23
April	533.52	547.70
May	533.52	547.06
June	533.52	546.36
July	533.52	539.10
August	533.52	543.41
September	533.52	520.22
October	533.52	537.33
November	533.52	545.67
December	533.52	391.61
January	533.52	429.58
February	533.52	473.31
March	533.52	494.73

- 1 List of beneficiaries/customers along with allocation by Gol including (allocation of unallocated share) / capacity as contracted should also be furnished separately for each generating station.

As per APPENDIX - B

- 2 Declared Capacity should be as per Regulation of CERC Tariff Regulations for the period 2014-19 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)
NA

PLANT AVAILABILITY/SCHEDULED PLANT LOAD FACTOR ACHIEVED

Generating company: NHPC LTD.

Name of Generating station: Chamera-I Power Station

Installed Capacity (MW) : 540 MW

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

1. 2014-19: 90%

2. 2019-24: 90%

Plant Availability Factor Achieved (%)

Month	2022-23	Reasons for shortfall in PAF achieved vis-a-vis NAPAF
April	103.09	
May	103.09	
June	103.09	
July	102.50	
August	102.30	
September	102.93	
October	103.08	
November	103.09	
December	81.32	
January	70.33	
February	69.35	
March	71.76	
Annual	93.08	

Plant Load Factor Achieved (%)

Month	2022-23	Reasons for shortfall in PLF achieved vis-a-vis Target PLF
April	NOT APPLICABLE	
May		
June		
July		
August		
September		
October		
November		
December		
January		
February		
March		
Annual		

Name of the Utility		NHPC LTD
Name of the Generating Station		Chamera-I Power Station
Station/ Stage/ Unit		3 x 180 MW
Fuel Type (Coal/ Lignite/ Gas/ Liquid Fuel/ Nuclear/ Hydro)		
Capacity of Plant (MW)		540 MW
COD		May-1994
		2022-23
1	Plant Availability Factor (PAF) (%)	93.08
2	Plant Load Factors (PLF) (%)	
3	Scheduled Energy (MU)	1842.66
4	Scheduled Generation (MU)	
5	Actual Generation (MU)	1889.18
	Actual Generation Ex-bus (MU)	1884.56
	Actual energy supplied to beneficiaries	1842.66
6	Quantum of coal consumption (MT)	
7	Value of coal (Rs. Lakh)	
8	Specific Coal Consumption (kg/kwh)	
9	Gross Calorific Value of Coal (Kcal/ Kg)	
10	Heat Contribution of Coal (Kcal/ kwh)	
11	Cost Of Specific Coal Consumption (Rs./Kwh) – Finally admitted by CERC	
12	Quantum of Oil Consumption (Lit.)	
13	Value of Oil (Rs. lakh)	
14	Gross calorific value of oil (kcal/lit)	
15	Specific Oil Consumption (ml/ kwh)	
16	Cost Of Specific Oil Consumption (Rs./Kwh) – Finally admitted by CERC	
17	Heat Contribution of Oil (Kcal/ kwh)	
18	Station Heat Rate (kcal/kwh)	
19	Auxiliary Energy Consumption (%)	0.74
20	Debt at the end of the year (Rs. Crore)	0.00
21	Equity - Average (Rs. Crore)	652.15
22	Working Capital (Rs. Crore) – finally admitted by CERC	75.09
23	Capital cost (Rs. Crore) – finally admitted by CERC	2107.30
24	Capacity Charges/ Annual Fixed Cost (AFC)	321.97
	(a) Return on equity – post tax (admitted by CERC up to 2009) and Pre Tax post 2009	
	Absolute value	130.31
	Rate (%)	19.99%
	(b) interest on Loan	
	Absolute value	0
	Rate (%) – Weighted Average Rate	
	(c) Depreciation (finally allowed by CERC)	
	Absolute value	32.10
	AAD	
	Rate (%)	As the power Station has
	(d) Interest on working Capital	
	Absolute value	7.88
	Rate (%)	10.50%
	(e) Operation and maintenance cost (finally admitted by CERC)	
	Absolute value	136.38
	Rate (%)	
	(f) Compensation Allowances	
	(g) Special Allowance	NA
25	AFC (Rs. Kwh)	321.97
26	Energy Charge (Rs./Kwh)	1.11
27	Total tariff (Rs. Kwh)	2.22
28	Revenue realisation before tax (Rs. Crore)	386.55
29	Revenue realisation after tax (Rs. Crore)	
30	Profit/ loss (Rs. Crore)	214.97
31	DSM Generation (MU)	41.90
32	DSM Rate (Ps/Kwh)	
33	Revenue from DSM (Rs. Crore)	10.31

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.

- Note:
- Rs. 3.0190 Cr Additional one time O&M expenses allowed on account of Interest on arbitration award for period 2014-19.
 - Security services allowed Rs. 13.3006 Cr, Rs. 13.935 Cr & Rs. 14.5997 Cr for year 2019-20, 2020-21 & 2021-22 respectively.
 - Rs. 8.9091 Cr Additional one time O&M expenses allowed on account of Interest on arbitration award for period 2019-24.