



NORTH EASTERN ELECTRIC POWER CORPORATION LIMITED

(A Govt. Of India Enterprises)

EXECUTIVE DIRECTOR(TECH)/ HEAD OF PLANT

DOYANG HYDRO POWER STATION

DOYANG, NAGALAND

E-mail: dhep_doyang@rediffmail.com

No. NEEPCO/DHPS/HoP/2025-26/T-02/

38

Dtd. 30.04.2025

To,

✓ The Advisor(s),
Ministry of Environment, Forest & Climate Change,
North Eastern Regional Office,
Law-U-Sib, Lumbatngen,
Shillong-793021.

Sub: Six Monthly Environmental Compliance Report of Doyang Hydro Power Station, NEEPCO Ltd., for the period ending March'2025.

Dear Sir,

Enclosed please find herewith the Six Monthly Environmental Compliance Report with regard to Doyang Hydro Power Station, NEEPCO Ltd., Doyang for the period ending March'2025 which is self-explanatory for your further kind needful please.

Thanking you.

Yours faithfully,

Executive Director(Tech)/ Head of Plant
DHPS, NEEPCO Ltd.

Dated: 30.04.2025

Memo No. NEEPCO/DHPS/HoP/2025-26/T-02/

Copy to:

1. The Chief General Manager (Tech), Env. & RR Wing, NEEPCO Ltd., Shillong for favour of kind information please.
2. The Dy. General Manager (Tech), Dam & Spillway Division, DHPS, Doyang, NEEPCO Ltd., for information.

Executive Director(Tech)/ Head of Plant
DHPS, NEEPCO Ltd.

Registered office

Brookland Compound, Lower New Colony, Shillong-793003, Meghalaya, India

Website: www.neepco.com

SALIENT FEATURES OF DOYANG HYDRO POWER STATION, NEEPCO LTD.
NAGALAND

1. **Location-**
 - a. District: Wokha
 - b. State: Nagaland
 - c. Longitude: 94°15'58"
 - d. Latitude: 26°13'47"

2. **Source of Supply-**
 - a. Name of tributary: Chubi
 - b. Name of main river: Doyang


3. **Hydrology-**
 - a. Catchment area: 2606 sq.km
 - b. Design flood: 5977 cumecs.
 - c. Maximum probable flood: 5977 cumecs.
 - d. Routed discharge: 4283 cumecs.

4. **Doyang reservoir-**
 - a. Maximum annual runoff: 3095.2 M.cum
 - b. Minimum annual runoff: 1265.3 M.cum
 - c. Full reservoir level(FRL) EL-333.00 M
 - d. Maximum water level (MWL) EL. -336.00 M
 - e. Minimum draw down level: EL-306.00 M
 - f. Gross storage at FRL: 535.00 Mcum.
 - g. Dead storage at MDDL: 165.00 Mcum.
 - h. Effective storage: 370.00 Mcum.

5. **Dam-**
 - a. Type of Dam: Rockfill with impervious core
 - b. Length of dam: 525.00 M
 - c. Height of Dam above deepest bed: 92.00 M
 - d. Width of Dam at base 445.00 M

6. **Spillway**
 - a. Length of spillway: 71.0 M
 - b. Gates: Radial gates: 4 nos. of 12m x 12m dimension
 - c. Design flood: 5977.00 cumecs
 - d. Crest elevation: EL. 321.00 M

7. **Water conductor system-**
 - a. Number: 1 with trifurcation
 - b. Diameter: 6.00 M
 - c. Length: 427.26 M


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8. DIVERSION TUNNEL-

- a. Length of Diversion Tunnel: 633 M
- b. Dia. of Diversion Tunnel: 12 M

9. Power House-

- a. Maximum T.W.L: EL-261.20 M
- b. Minimum T.W.L: EL-252.50 M
- c. Maximum head: 83.50 M
- d. Minimum head: 43.50 M
- e. Design head: 67.00 M
- f. Installed capacity: 3 x 25 MW
- g. Firm power potential: 23.0 MW (Each unit)
- h. Type: Surface
- i. Length: 69.50 M
- j. Breadth: 28.25 M
- k. Height: 17.5 M above service bay level
- l. Runner removal gallery: EL 245.65 M
- m. Turbine Floor: EL 252.10 M
- n. Generator Floor: EL 255.30 M
- o. Control Room Floor: EL 259.30 M
- p. Service Bay floor: EL 264.50 M
- q. Capacity of EOT Crane: 100 MT/25 MT

10. Turbine-

- a. Type: Vertical Francis
- b. Maximum head: 80.50 M
- c. Minimum head: 49.00 M
- d. Rated/Designed Head: 67.00 M
- e. Normal speed: 250 rpm
- f. Runaway Speed: 510 rpm
- g. Diameter of runner: 2.35 M
- h. Efficiency at 100% Rated load: 91.40%
- i. Max output at designed Head: 26 MW
- j. Discharge at designed head, rated output: 37.67 Cumec

11. Penstock valve-

- a. Type: Lattice type butterfly valve
- b. Diameter: 2.90 M
- c. Number: 3 (Three)

12. Main Inlet valve-

- a. Type: Butterfly
- b. Diameter: 2900 mm
- c. Opening time: 60 sec + 15
- d. Closing time: 60 sec + 15
- e. Allowable leakage: 5 lit/min



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13. Generators-

- | | |
|-----------------------------|------------------------------------|
| a. Type: | Salient pole, 3 phase, synchronous |
| b. Rated Power: | 25 MW |
| c. Current: | 1458 A |
| d. Power Factor: | 0.9 |
| e. Speed: | 250 rpm |
| f. Efficiency at 100% Load: | 96.71% |

14. Step-up Transformer-

- | | |
|----------------------------|---------------------|
| a. Nos. and voltage ratio: | 3 Nos, 11 KV/132 KV |
| b. Capacity: | 28.5 MVA |


15. Evacuation System-

- | | |
|-----------------------|------------------|
| a. Number of feeders: | 4(four) – 132 KV |
| | i. Dimapur I |
| | ii. Dimapur II |
| | iii. Mokukchung |
| | iv. Kohima |


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REPORT ON MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFE GUARD OF
DOYANG HYDRO POWER STATION (75 MW), NAGALAND
For the Period of 1st October'2024 to 31st March'2025
Monitoring Report (Part-I)
(Data sheet)

1	Project Type: River-Valley/Mining/ Industry/Thermal/Nuclear/Other (Specify)	River Valley
2	Name of the Project	Doyang H.E. Project
3	Clearance letter (s) OM No. and Date	i). Letter No. 14/68/80-ENV Dated 28.06.1982 Government of India Department of Environment. ii). No. 14-68/80-IA.I Dtd. 14.09.2000 Govt. of India, Ministry of Environment and Forest.
4	Locations:	
	a) District	Wokha
	b) State	Nagaland
	c) Latitudes/Longitudes	26°13'47"/94°15'58"
5	Address of Correspondence:	
	a) Address of Concerned Project Chief Engineer. (With Pin Code & Telephone/Telex/Fax Nos.)	Head of Plant, Doyang Hydro Power Station, NEEPCO Ltd., Doyang, Wokha, Nagaland, Pin code: 797100, E-mail: dhep_doyang@rediffmail.com
	b) Address of Executive Project Engineer/Manager (With pin Code & Telephone/Telex/Fax Nos.)	do
6	Salient Features:	
	a) Of the Project	As enclosed in Annexure-I
	b) Of the Environmental Management Plans	
7	Break-up of the Project Area (Forest & Non- Forest):	
	a) Submergence area (Forest & Non-Forest)	5424 acres
	b) Others	2981 acres


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8	Break-up of the Project affected population with enumeration of those losing houses/dwelling units only, agricultural land only, both dwelling units and agricultural land and land less labours/artisans:	
	Both land and house	Nil
	Only Home	Nil
	Only Land	3401.70 Ha. for Project Construction, 149.70 Ha. for Quarry (After commissioning of the Project, the land has been handed over to the Govt. of Nagaland)
	Other immovable Properties	NIL
	Total	
	a) SC, ST/Adivasis	NIL
	b) Others	NIL
9	Financial Details	
	a) Project cost as originally planned and subsequent revised estimates and the years of price reference.	Originally Rs. 128.61 Cr. at 1982 PL, Further revised to Rs. 758.70 Cr. as on Feb'2000 PL.
	b) Allocation made for Environmental Management Plans with item wise and years wise break up.	Allocation of Rs. 3.25 Cr. for CAT Plan
	c) Benefit cost ratio/internal rate of return and the year of assessment	
	d) Whether (c) includes the cost of Environmental Management as shown in (b) above.	Yes
	e) Actual Expenditure incurred on the Project so far.	Rs. 758.70 Cr.
	f) Actual expenditure incurred on the Environmental Management plans so far.	Rs. 3.25 Cr. for CAT Plan

10	Forest land Requirement:	
	a) The status approval for a diversion of forest land for non forestry use	
	b) The status of compensatory afforestation, if any	NIL
	c) The status of clear felling	NIL
	d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far.	Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland, Kohima is responsible for implementation of the Scheme.


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11	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any, with quantitative information.	NIL
12	Status of Construction:	
	a) Date of commencement (actual and/or planned)	Project started in 1985 and commissioned on June'2000
	b) Date of completion (actual and/or planned)	
13	Reasons for the delay if the project is yet to start.	NA
14	Date of Site Visits:	
	a) The dates on which the project was monitored by the regional office on previous occasions, if any.	NA
	b) Date of site visit for this monitoring report	
15	Details of correspondence with Project authorities for obtaining action plans, information & status of compliance to safeguards.	


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PART-II
DOYANG HYDRO POWER STATION (75 MW), NAGALAND
ENVIRONMENTAL CLEARANCE LETTER NO. 14/68/80-ENV Dated 28.06.1982

Part -B: General conditions


Sl. No.	Stipulations	Status of compliance
i)	A land-use map of the catchment should be prepared to identify critically eroded areas so that extensive soil conservation measures can be launched in the catchment simultaneously with the construction of the hydel project;	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland(detailed at Annexure-II). Complied.
ii)	Submergence should be calculated upto 4.00 m below FRL and felling of trees restricted upto this level only;	Complied.
iii)	Adequate arrangement should be made to provide fuel to the labour force, free of cost, during the construction period so that indiscriminate destruction of forests in the neighbour can be prevented;	Complied. Project Completed.
iv)	Restoration of construction areas must be undertaken at project cost to prevent soil erosion.	Complied.


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COMPENSATORY AFFORESTATION TREATMENT (CAT) PLAN

Annexure-II

Sl. No.	ENVIRONMENTAL STIPULATIONS	ACTION PLAN	STATUS OF COMPLIANCE
1	Micro Plan preparation in 20 villages		Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
2	Works in agriculture (jhum) & community forest lands		
a	Biological/afforestation including raising of nurseries in 20 villages.	Nurseries in 20 villages for raising 30 lakhs seedlings @ 1 lakh seedling per year. Forestry activities only for 1st year creation of plantation including gap plantation. Aided natural regeneration.	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
b	Engineering measures (300 nos. of check dam and Gully Plugging)	Check dams/gully plugging (300 nos).	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
3	Tissue culture lab including running cost for 3 years	Upgradation of existing TCL of the forest deptt. Water supply facility. Lab Equipment. Shade/Green House. Glassware. Chemicals. Maintenance and running cost, including lab to land programmes.	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
4	Transportation		
a	1 Lorry for carrying seedlings		Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
b	3 Jeeps for extension works in 5 districts		
c	POL & Maintenance for 3 years for (a) & (b)		
5	Extension services		
a	Honorarium for 20 women extension workers	Contract wages for 20 women extension workers @ Rs. 2500/Month.	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.



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b	Multi-media tools and accessories	Multi media tools for awareness creation and extension through mass communication media.	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
6	Training		
a	Training 20 modules in 20 villages		Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
7	Development of Micro- Enterprises	Development of micro-enterprises for economic opportunities through a system of revolving fund in 20 villages @ Rs. 3.50.	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.
8	Project initiation, Monitoring & Evaluation, including cost of hiring of one vehicle, and computer & Accessories.	Hiring of one vehicle @ Rs. 15000 per month. Computer & Accessories, including minimum furniture. Wages for one contract technical staff @ Rs. 4000.00. Cost of a still camera. Contingency.	Fund released and executed through Department of Forest, Ecology, Environment & Wild life, Govt. of Nagaland.


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FINANCIAL OUTLAY AND PHASING

Sl. No.	ITEMS	OUTLAY(Rs. IN LAKHS)	TOTAL (Rs. in LAKHS)
1	Micro Plan preparation in 20 villages	3.00	3.00
2	Works in agriculture (Jhum) & community forest lands		157.00
	a Biological/afforestation including raising of nurseries in 20 villages.	127.00	
	b Engineering measures (300 nos. of check dam and Gully Plugging)	30.00	
3	Tissue culture lab including running cost for 3 years	23.00	23.00
4	Transportation		27.00
	a 1 Lorry for carrying seedlings	6.00	
	b 3 Jeeps for extension works in 5 districts	13.00	
	c POL & Maintenance for 3 years for (a) & (b)	8.00	
5	Extension services		24.00
	a Honorarium for 20 women extension workers	18.00	
	b Multi-media tools and accessories	6.00	
6	Training		12.00
	a Training 20 modules in 20 villages	12.00	
7	Development of Micro- Enterprises	70.00	70.00
8	Project Initiation, Monitoring & Evaluation, including cost of hiring of one vehicle, and computer & Accessories.	9.00	9.00
TOTAL =			325.00


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