

TEESTA-VI HE PROJECT (500 MW)
SIX MONTHLY PROGRESS REPORT ON ENVIRONMENTAL ASPECTS

PROGRESS FOR THE PERIOD: ENDING MARCH' 2024

1.	Name of the Project	Teesta-VI Hydro-Electric Project (500 MW)															
2.	Type of the Project	Hydro-Electric Project (Run-of-the-river scheme)															
3.	Clearance Letter(s) OM No. & Date a) Environment Clearance b) Forest Clearance	a) No. J-12011/55/2006-IA.I Dated 21.09.2006 and No. J-12011/55/2006-IA.I (R) Dated 14.08.2020 b) <table border="1"> <thead> <tr> <th>Letter Nos.</th><th>Date</th><th>Forest Land (ha)</th></tr> </thead> <tbody> <tr> <td>F. No. 8-140/2006-FC</td><td>23.05.2008 & 12.03.2021</td><td>89.4266</td></tr> <tr> <td>No. 5-WBB009 / 2007-BHU</td><td>11.09.2007</td><td>0.6935</td></tr> <tr> <td>No. 3-SK B 062/ 2008-SHI/2274-75</td><td>27.10.2008</td><td>0.096</td></tr> <tr> <td colspan="2">Total Forest Land (ha)</td><td>90.2161</td></tr> </tbody> </table>	Letter Nos.	Date	Forest Land (ha)	F. No. 8-140/2006-FC	23.05.2008 & 12.03.2021	89.4266	No. 5-WBB009 / 2007-BHU	11.09.2007	0.6935	No. 3-SK B 062/ 2008-SHI/2274-75	27.10.2008	0.096	Total Forest Land (ha)		90.2161
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Total Forest Land (ha)		90.2161															
4.	Locations a) District(s) b) State(s) c) Latitude d) Longitude	Gangtok and Namchi Sikkim 27°14'29.98" N (Barrage); 27°10'42" N (Power House) 88°28'35.39" E (Barrage); 88°30'40" E (Power House)															
5.	Address for Correspondence a) Address of concerned Project Head (with pin code, telephone/fax nos.) b) Address of concerned HOD in Corporate Office (with pin code & telephone/fax no.)	Chief Executive Officer Lanco Teesta Hydro Power Limited Teesta-VI HE Project Balutar, P. O. Singtam, District Gangtok- 737134 Phone: 03592 - 247221 (O) Executive Director Environment & Diversity Management Division NHPC Limited, NHPC Office Complex, Sector - 33, Faridabad, Haryana- 121 003 Phone: 0129-2254674															
6.	Details of environmental Management Plans	As per <i>Annexure-I</i>															
7.	Break-up of the Project area (land details) a) Submergence area																

	Forest Non-forest b) Others	36.00 ha forest land 0.448 ha non-forest land Total: 36.448 ha 1. 54.2161 ha forest land including 21.9971 ha of underground forest land. 2. Private Land (about 34 ha) acquired by Sikkim Power Development Corporation (SPDC) and further leased to LTHPL for 35 years’ lease period from Commercial Operate Date (COD) for Permanent Works, Muck Dumping, Road, Construction Facility, and 3. Private Land (about 11.3657 ha) taken on short term lease with periods of 3.5/4/4.5/5/6/7 years directly by LTHPL.														
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 landless labourers/artisans. (a) SC/ST/Adivasis (b) Others	Teesta-VI HE Project is located in an area of low population density. Population of about 400 to 500 belonging to 111 families has been affected due to acquisition of some portion of land. As mentioned in EIA Report of the Project the caste details of PAFs are as under: <table><tr><th>Caste Category</th><th>Number</th></tr><tr><td>(a) Scheduled Tribes (STs)</td><td>41</td></tr><tr><td>(b) Scheduled Castes (SCs)</td><td>6</td></tr><tr><td>(c) Most Backward Classes (MBCs)</td><td>8</td></tr><tr><td>(d) Other Backward Classes (OBCs)</td><td>55</td></tr><tr><td>(e) Others</td><td>1</td></tr><tr><td>Total</td><td>111</td></tr></table> <ul style="list-style-type: none">Only part of their private land has come under acquisition, no family has become land less. No structure is involved in the land acquisition hence no Rehabilitation and resettlement plan has been proposed.	Caste Category	Number	(a) Scheduled Tribes (STs)	41	(b) Scheduled Castes (SCs)	6	(c) Most Backward Classes (MBCs)	8	(d) Other Backward Classes (OBCs)	55	(e) Others	1	Total	111
Caste Category	Number															
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(e) Others	1															
Total	111															
9.	Financial details a) Project cost as originally planned and subsequent revised estimates and the years of price reference. b) Actual expenditure incurred on the Project so far. c) Allocations made for the Environmental Management Plan (₹ Lakhs) d) Actual expenditure incurred on the Environmental Management so far.	₹ 5,748.04 crore at July 2018 PL including IDC & FC of ₹ 977.09 crore and the bid amount of ₹ 907 crores (As per Investment Approval). ₹ 3300.27 crore approx. (as on 31.03.2024). ₹ 3547.44 lakh (As per EMP & subsequent revision) ₹ 3079.23 lakh (Annexure-I for details)														

10.	Forest Land requirements Status of approval for diversion of forest land for non-forestry use.	i. MoEF&CC accorded diversion of 89.4266 ha of forest land (67.4295 ha surface land and 21.9971 ha underground land) on 23.05.2008. After acquisition of LTHPL by NHPC Ltd. w.e.f. 09.10.2019, the Forest Clearance was transferred in favour of LTHPL (A wholly owned subsidiary of NHPC Ltd.) vide MoEF&CC's letter dated 12.03.2021. ii. MoEF&CC, Eastern Regional Office, Bhubaneswar vide letter dated 11.09.2007 approved diversion of 0.6935 ha of forest land for link road and bridge at Tarkhola. Transfer of Forest Clearance for 0.6935 ha of Forest Land in favour of LTHPL (A wholly owned subsidiary of NHPC Ltd.) is under consideration of Integrated Regional Office, MoEF&CC, Kolkata. iii. MoEF&CC, RO, Shillong vide letter dated 27.10.2008 approved diversion of 0.096 ha of forest land for laying of water supply pipe line to the colony and other locations of Teesta-VI HE Project. Transfer of Forest Clearance for 0.096 ha of Forest Land in favour of LTHPL (A wholly owned subsidiary of NHPC Ltd.) is under consideration of Integrated Regional Office, MoEF&CC, Kolkata.
11.	Status of construction a) Date of commencement (Actual and / or planned) b) Date of completion (actual and / or planned)	a) March 2007 by Lanco Energy Pvt. Ltd. and Date of Re-start: 08.03.2019 by Lanco Teesta Hydro Power Ltd. (A wholly owned subsidiary of NHPC Ltd.) i.e. date of Investment Approval by Govt. of India. b) Planned: Unit-I & II October 2027 Unit-III & IV December 2027
12.	Reasons for the delay, if the project is yet to be started	<ul style="list-style-type: none"> Project was started by LTHPL in March 2007. However, the construction of the Project was stuck up since 2012 and subsequent to approval of Resolution Plan by Hon'ble National Company Law Tribunal (NCLT), NHPC Ltd. has acquired the LTHPL as a going concern w.e.f. 09.10.2019 and balance construction works are going on.
13.	Details of site visit a) By Monitoring Committee	

	b) By Regional Office	<ul style="list-style-type: none"> The re-constituted Multi-Disciplinary Monitoring Committee visited the Project site on 27.02.2023 and first meeting of re-constituted Monitoring Committee was held at the Forest and Environment Department, Government of Sikkim, Gangtok on 04.03.2023.
14.	Brief Note on the Status of compliance of the conditions stipulated by MOEF&CC	Enclosed as <i>Annexure-II</i>

DETAILS OF ENVIRONMENTAL MANAGEMENT PLANS OF TEESTA-VI HE PROJECT (500 MW)

S. No.	Plans	Cost of EMP# (₹ lakhs)	Expenditure Incurred (₹ lakhs)	Utilization Received (₹ lakhs)
1.	Public Health and Solid Waste Management Plan	179.00	0.00	0.00
2.	Catchment Area Treatment Plan (Revised)	2410.18*	2410.18	1091.27
3.	Compensatory Afforestation Plan	114.65	114.65	114.65
4.	Biodiversity Conservation	119.12*	119.12	95.34
5.	Fish Management Plan	170.00*	170.00	0.00
6.	Soil Conservation & Forest Protection Plan	183.53*	183.53	0.00
7.	Free Fuel Provision	98.85	0.00	0.00
8.	Restoration plan for spoil tips	81.61	0.00	0.00
9.	Restoration Plan for Quarry Sites	35.97	0.00	0.00
10.	Landscape Plan	48.91	0.00	0.00
11.	Green Belt around the Project Area	13.58	0.00	0.00
12.	Environmental Monitoring Programme	13.25	2.96	2.96
13.	Crop Compensation	78.79	78.79	78.79
Total		3547.44	3079.23	1383.01
<i>The cost does not include NPV (₹ 568 lakhs) & cost of land taken on lease.</i>				

#As per Environment Management Plan Report approved by MoEF&CC and subsequent revision by State Government.

**Funds have been deposited by LTHPL in Sikkim CAMPA; Forest & Environment Deptt., Govt. of Sikkim; and Directorate of Fisheries, Govt. of Sikkim*

Brief Note on the Status of Compliance of the Conditions stipulated by MoEF & CC

S. No.	PART - A: Specific Conditions	Compliance Status
i.	Biodiversity Conservation Plan as proposed in the EMP should be implemented in toto in the identified locations.	<ul style="list-style-type: none"> State Forest Department vide letter dated 22.03.2021 submitted the Utilization Certificate of ₹ 95.34 lakh towards Biodiversity Conservation Plan till 31.03.2020 out of total fund of ₹ 119.12 lakh. A check post at Thalthaley Village (Pamphok Block) has been installed by the Forest Department, Govt. of Sikkim to check trespassers. Demarcation and fencing of diverted forest land were done to avoid damage to nearby area. However, the Soil Conservation & Forest Protection Plan has not yet incorporated in APO by State Forest Department.
ii.	For propagation of migratory fishes, a fish farm/hatchery shall be developed as proposed vide letter dated 18th August 2006. As breeding of Mahseer fish is difficult in captivity, procedure to be adopted for propagation of Mahseer in hatchery should be submitted within six months from the date of issue of this letter.	<ul style="list-style-type: none"> After Acquisition of LTHPL by NHPC Limited, Project vide letter dated 11.01.2020 requested the State Forest Department, Govt. of Sikkim for submission of present status of Fish Management Plan. Construction work of Fish Farm-cum-Hatchery Unit at Chittrey Village, District Namchi, Sikkim is under progress. Photographs of construction work are enclosed as Annexure IV.
iii.	The Catchment Area Treatment Plan as has been proposed should be completed in four years. The plan is attached as Annexure III.	<ul style="list-style-type: none"> State Forest Department vide letter dated 22.03.2021 submitted the Utilization Certificate of fund utilized of ₹ 1091.27 lakh for different Management Plans in implementation of CAT Plan till 31.03.2020 out of ₹ 1122.73 lakh deposited by erstwhile LTHPL. State Forest Department revised the cost of CAT Plan to ₹ 2410.18 lakh and raised demand of balance ₹ 12,87,44,747/- vide letter dated 11.03.2022. This balance amount was paid in Sikkim CAMPA on 26.04.2022. Thus, Total amount of ₹ 2410.18 lakh deposited towards CAT plan of Teesta-VI HEP out of which utilization of ₹ 1091.27 lakh has been submitted by Forest Department, Govt. of Sikkim.
iv.	Considering the landslide prone areas, the tunnelling should be done, with great care under close supervision.	<ul style="list-style-type: none"> For landslide prone area, tunnelling is being carried out with proper controlled blasting or by mechanical means and by providing adequate support system.

v.	A monitoring committee should be constituted which must include representatives of project affected persons from SC/ST Category and a women beneficiary.	<ul style="list-style-type: none"> MoEF&CC vide letter dated 25.05.2022 re-constituted the Multidisciplinary Monitoring Committee. The re-constituted Multi-Disciplinary Monitoring Committee visited the Project site on 27.02.2023 and first meeting of re-constituted Monitoring Committee was held at the Forest and Environment Department, Government of Sikkim, Gangtok on 04.03.2023.
vi.	All the assurances/ commitments given by the project authority in the public hearing must be honoured in letter and spirit.	<ul style="list-style-type: none"> The same is being complied.
vii.	Forest Clearance should be obtained for acquiring 67.43 Hectare forest land & submitted.	<ul style="list-style-type: none"> Forest Clearance (Stage-II) was accorded by MoEF&CC vide letter dated 23.05.2008 for 89.4266 ha forest land (67.4295 ha surface land and 21.9971 ha underground land). The change of name of User Agency to LTHPL (A wholly owned subsidiary of NHPC Limited) has been accepted by MoEF&CC, New Delhi vide letter dated 12.03.2021.
viii.	During the lean season 10% of available water (82.5 cumecs) should be released downstream of the dam for sustenance of aquatic life.	<ul style="list-style-type: none"> State Pollution Control Board - Sikkim vide letter dated 01.10.2022 finalized the quantity of 15 % minimum environmental flow (e-flow) of 16.60 cumecs during lean season (December-March) for Teesta-VI HEP. Suitable provision has been kept in the design of barrage so that minimum e-flow of 16.60 cumecs could be released downstream after commissioning of the project for sustenance of aquatic life.
ix.	Any other clearance from any other organization if required should be obtained.	<ul style="list-style-type: none"> All required clearances are obtained as per requirement.
PART - B: General Conditions		
i.	Adequate free fuel arrangement should be made for the labour force engaged in the construction work at project cost so that indiscriminate felling of tress is prevented.	Presently, mess facility is being provided by the Contractors to the engaged manpower.
ii.	Fuel depot may be opened at the site to provide the fuel (kerosene/wood). Medical facilities as well as recreational facilities	<ul style="list-style-type: none"> Fuel (LPG & Kerosene) is being procured by the Contractors from the local market as and when required. Contractors' camps are being equipped with recreation facilities etc.

	should also be provided to the labourers.	<ul style="list-style-type: none"> Medical facilities are provided by the Contractors to the labourers.
iii.	All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.	<ul style="list-style-type: none"> Health screening and check-ups of labourers are carried out before engaging them in works. Medical facility is being provided to the labourers.
iv.	Restoration of construction area including dumping site of excavated materials should be ensured by levelling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.	<ul style="list-style-type: none"> Environment friendly measures are being undertaken for dumping of Muck at designated dump yards. Dumping areas are being provided with adequate retaining structures such as crate walls, RRM walls, etc. as per requirement. After dumping the areas are being levelled. The nallahs and river sections as per site requirement are being provided with adequate protection measures such as crate wall and concrete plugs. All precautionary measures are being taken as per the statutory requirements with progress of works.
v.	Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.	<ul style="list-style-type: none"> All suggestive safeguards measures are being taken care of their construction sites by contractors.
vi.	A Multidisciplinary committee should be constituted with representatives from various disciplines of forestry, ecology, wildlife, soil conservation, NGO etc. to oversee the effective implementation of the suggested safeguard measures.	<ul style="list-style-type: none"> MoEF&CC vide letter dated 25.05.2022 has re-constituted the Multidisciplinary Monitoring Committee. The re-constituted Multi-Disciplinary Monitoring Committee visited the Project site on 27.02.2023 and first meeting of re-constituted Monitoring Committee was held at the Forest and Environment Department, Government of Sikkim, Gangtok on 04.03.2023.
vii.	Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.	<ul style="list-style-type: none"> Six-monthly monitoring reports are periodically submitted to Integrated Regional Offices of MoEF&CC along with MoEF&CC, New Delhi. The latest progress report was submitted to Integrated Regional Offices of MoEF&CC vide letter dated 03.11.2023.
viii.	Officials from Regional Office MOEF, Shillong/Kolkata who would be monitoring the implementation of environmental safeguard should be given full facilities and documents / data by the project proponents during their inspection.	<ul style="list-style-type: none"> Noted and Complied by LTHPL (A wholly owned subsidiary of NHPC Ltd.).

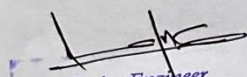
ix.	The responsibility of implementation of environmental safeguard rests fully with the M/s Lanco Energy Private Limited/Lanco Teesta Hydro Power Ltd. & Government of Sikkim.	<ul style="list-style-type: none"> Noted. LTHPL (A wholly owned subsidiary of NHPC Ltd.) will bear the responsibility of implementation of environmental safeguard.
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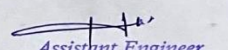
DETAILS OF CATCHMENT AREA TREATMENT PLAN

Five Year Catchment Area Treatment Action Plan for Teesta-VI HE Project								
S. No.	Items Of Works	Unit	1st Yr	2nd Yr	3rd Yr	4th Yr	5th Yr	Total
I	Forest Land							
A	Biological Measures							
1	Aided Natural Regeneration	Ha	20	30	30			80
2	Aided Natural Regeneration	Ha	150	350	350	350		1200
3	Medicinal Plantation	Ha	50	50				100
4	Medicinal Plantation	Ha	50	50				100
5	Sowing and dribbing in land Slide areas	Ha				10	10	20
6	Artificial regeneration	Ha		300	400	400	400	1500
7	Silviculture Development	Ha		30	30	40		100
8	Bamboo (Pareng Plantation)	Ha		30	30	40		100
9	Barbed wire fencing	km	5	5				10
10	Maintenance of aided natural regeneration and other plantations	Ha	270	810	810	800	410	3100
11	Vegetative fencing with Jatropha in rows	km	15	10				25
B	ENGINEERING WORKS							
1	Jhora Training with sausage wall with drops	m ³	1000	700	300			2000
2	Dry Stone Wall	m ³	1200	600	200			2000
3	Catch Water Drains	m	1400	400	200			2000
4	Bally fencing	Ha	40	10				50
II	Agriculture Land							
A	Biological Measures							
1	Fodder Development	Ha			200	400	400	1000
2	Agroforestry (200 plants per ha)	Ha			200	400	400	1000
3	Jatropha Plantation (Uncultivable lower area)	Ha	100					100
B	ENGINEERING WORKS							
1	Jhora Training with sausage wall with drops	m ³	1400	400	200			2000
2	Dry Stone Wall	m ³	1400	400	200			2000
3	Catch Water Drains	m	1400	400	200			2000
4	Bally fencing	Ha	40	10				50

**PHOTOGRAPHS: PROGRESS OF CONSTRUCTION WORK OF FISH FARM-CUM-HATCHERY
UNIT OF TEESTA-VI HE PROJECT AT CHITTREY VILLAGE, NAMCHI, SIKKIM**




Junior Engineer
Directorate of Fisheries
Govt. of Sikkim

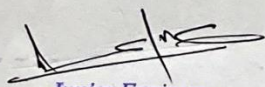

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