

**Six-monthly Progress Report on Compliance of conditions stipulated in Environment Clearance letter
of Teesta Low Dam Stage-IV (160MW) Power Station**

(for the period April-2022 to Sep-2022)

1.	Project Type	Hydroelectric Project									
2.	Name of the project	Teesta Low Dam Stage-IV (160 MW) Power Station									
3.	Clearance letter (s). OM No. & Dates a) Environment clearance b) Forest clearance	<p>a) Letter No. J-12011/46/2004-IA-I dated: 31.03.2005. b) Forest Clearance:</p> <table border="1"> <thead> <tr> <th>MoEF's letter nos.</th><th>Date</th><th>Forest land (ha)</th></tr> </thead> <tbody> <tr> <td>F.No.-8-61/2004-FC</td><td>30.03.2006</td><td>338.05</td></tr> <tr> <td>F.No. 8-61/2004-FC</td><td>13.11.2007</td><td>4.9</td></tr> </tbody> </table>	MoEF's letter nos.	Date	Forest land (ha)	F.No.-8-61/2004-FC	30.03.2006	338.05	F.No. 8-61/2004-FC	13.11.2007	4.9
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4.	Location a) District(s) b) State (s) c) Latitude d) Longitude	<p>Teesta Low Dam –IV Power Station Dam site: 18.3 km d/s of Teesta bridge near NH31A. Darjeeling West Bengal 26°55' 32"N to 28°07' N 88°0' E to 88°53'E</p>									
5.	Address of 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.	<p>Group General Manager (In-charge), TLD-III & IV Power Station, NHPC Ltd. Rambi Bazar, P.O. – Reang, Distt. Darjeeling, West Bengal – 734 321 Telephone No. 03552-261018</p> <p>Executive Director, Environment & Diversity Management Division, Corporate Office, NHPC Ltd., Sector - 33, Faridabad, Haryana - 121 003. Telephone No. 0129- 2278014</p>									
6.	Details of environmental management plan:	Environmental Management Plans (EMP) are listed at Annex-I.									
7.	Break-up of the Project area: a) Submergence area: Forest area Non-forest b) Others	<p>a) Submergence area : 264.90 ha i. Forest land : 264.90 ha. ii. Non-forest land : nil b) Others: 88.95 ha i) Forest land : 78.05 ha. ii) Govt. land : 10.90 ha (TLD-IIIPS colony) Total area: 342.95 ha</p>									

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 /Tribals b) Others	No families are affected due to submergence. However, 11 families residing in 8 hutments downstream of the dam axis were identified for resettlement, as these houses were falling under High Flood Level (HFL) as per EIA&EMP. <ul style="list-style-type: none"> • Losing houses / private land - Nil. • SC : 11(families living d/s of the dam axis) • Others: Nil
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 environmental management plans. d) Actual expenditure incurred on the environmental management plans so far:	a) As per DPR, total cost: Rs 998.36 crore (PL August-2003) and as per CCEA Rs.1061.37 crore (PL March-2005). b) Rs. 1782.52 crores at sunset date 31.03.2019 (revised completion cost as recommended by MoP). c) Rs.1689.21 lakh as per EMP at 2003 PL and increased to Rs. 3804.18 lakh during CCEA clearance at 2005 PL. d) Rs. 4873.55 lakh (as per Annex-I).
10.	Forest Land requirements: a) Status of approval for diversion of forest land for non-forestry use. b) The status of clear felling in forest land	a) A total of 342.95 ha of forest land was diverted for construction of Project. b) Felling of trees on forest land was undertaken and completed by the West Bengal Forest Development Corporation (WBFDC) Ltd. before reservoir filling.
11.	Status of construction a) Date of commencement (actual and / or planned) b) Date of completion (actual and/or planned).	a) 05.06.2006 (Actual) b) August 2016(Actual)
12.	Reasons for the delay. If the project is yet to start:	Not Applicable. Project has been commissioned.
13.	Details of site visit a) By monitoring committee b) By regional Office	a) The 6 th and 7 th Environment Monitoring Committee meetings and site visit were held on 15.01.2018 and on 25.11.2019, respectively, at Kalijhora. The 8 th EMC meeting was held on 18.06.2021 by video conferencing. b) Dy. Director (S) from Eastern Regional Office of MoEF&CC visited the project site on 15-16 Jan.' 2018 along with EMC members. Scientist-B from Regional Office-Bhubaneswar, MoEF&CC visited the project site as part of EMC meeting on 25.11.2019. As per discussion held in EMC meeting on 18.06.2021, DFOs of Kalimpong and CCF Hill Circle jointly visited the left bank area under the Kalingpong Forest Division on 24.7.2021.

14.	Brief note on the status of compliance of the conditions stipulated by MOEF.	As per Annex-II.
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Annex-I

Expenditure incurred on Environmental Management Plans in respect of Teesta Low Dam-IV Power Station (till Sept,2022)

Sl No.	EMP	Allocation as per EMP 2003PL	CCEA approved cost (Mar'05 PL)	Expenditure (Rs. In lakh)
1	Compensatory afforestation	505.00	547.82	505.00
2	CAT Plan	491	532.63	491.00
3	Biodiversity Conservation plan including Fish Management Plan	50.00	54.24	49.95
4	Reservoir Rim Treatment	132.60	143.87	1026.92
5	Green Belt Development	50.00	54.24	30.66
6	Restoration of borrow areas, quarry and construction sites	5.00	5.42	--
7	Muck Disposal plan	25.00	27.12	208.52
8	*Solid waste Management (contractor clause)	40.00	43.39	38.00
9	*Fuel arrangements (contractor clause)	16.00	19.53	202.18
10	Health Management	37.80	43.39	9.65 & by contractor
11	Landscaping & Beautification plan	20.00	21.7	--
12	Eco-tourism development plan	99.00	114.99	91.22
13	Disaster Management Plan	75.81	82.24	16.57
14	Env. Monitoring Programme	90.00	97.63	92.85
15	NPV for 338.05ha forest land.	--	1960.69	1960.69
	B- land			
16	R&R Plan	52.00	55.28	78.25
	Sub-total:	1689.21	3804.18	4801.46
	Others			
1	Additional NPV & CA for 4.9ha forest land (2007 PL).	--	49.59	72.09
2	To protect 4.9ha forest land from encroachment, as suggested in the forest proposal.	--	22.50	
	Grand Total		3876.27	4873.55

*Contractor clause: *Cost of solid waste management & fuel management borne by contractor.*

S.No.	Conditions stipulated in EC	Compliances of conditions by TLDP-IV Power Station
	<u>Sl.No 3 Part A: Specific Conditions:</u>	
i	Catchment Area Treatment Plan as proposed, should be completed in four years:	Rs.491 lakh was deposited to PCCF, West Bengal on 27.02.2007 for implementation of CAT as envisaged in EMP. The progress of CAT works and fund utilization was also discussed during the 8 th Environmental Monitoring Committee (EMC) meeting held on 18.06.2021 via video conferencing. The State Forest Deptt. has submitted the total utilization of Rs.179.93 lakh upto 2020-21. The State Forest Deptts. are being regularly pursued to complete the balance works as well as for submission of utilization reports for the entire fund released towards CAT Plan, through various correspondences and meetings with the concerned State Forest Divisions.
ii	For the socio-economic upliftment and safety of total 41 persons from 11 families living downstream of the dam axis should be rehabilitated as per R&R plan proposed in EMP report:	<p>No habitation was getting affected due to submergence by Project. However, a total of 11 families were identified for relocation as per approved R&R Plan since they were residing in the high flood zone of project. After deliberations in several R&R committee meetings, the PAFs agreed to receive a lump sum of Rs.8.5 lakh per family in the 11th R&R meeting held on 12.07.2014 under the chairmanship of ADM, Siliguri. It was also agreed that PAFs shall relocate themselves of their choice and no other benefits shall be claimed.</p> <p>After completion of all codal formalities, the compensation was made to nine PAFs whereas one of the PAF's deceased long back and no legal heir exists and the other one is yet to claim. The area got vacated by PAFs, was cordoned-off by fencing by the project and the site has been taken over by forest department.</p>

iii	Though flow of Teesta River is very fast, but due to unforeseen situation the flow of river may slow down at certain points due to construction activities. This may give rise to breeding of mosquitoes. There are some malaria vectors which can breed in slow moving streams. This part of the river should be properly channelized so that no small pools and puddles are allowed to be formed.	TLD-IV Project is commissioned and is fully operational since Aug.'2016. The project is run-of-the-river scheme as such there is no stagnation of water.
iv	Tributaries of the Teesta River near Reang, form the preferred breeding sites for Mahaseer fish. To permit upstream mitigation of the fish for breeding a fish ladder has been proposed in the design of dam. For conservation of the migratory fishes Central Institute of Fisheries Education, Kolkata has suggested some measures in their report. These measures should be followed.	Fish ladder provided across right non-over flow section of dam body for movement of fishes is under operation and the designated amount of water is being released through it, to facilitate fish migration. Further, project has conducted the fish ladder efficacy study through CIFRI, Barrackpore. The measures suggested by CIFRI are being implemented.
v	The Mahananda Wildlife sanctuary is approximately 0.35 km downstream from the project. For minimizing disturbance to animals in Mahananda Sanctuary, only controlled blasting should be undertaken. The biodiversity Conservation plan for protection of flora and fauna proposed in the EMP, should be followed in toto.	Measures as suggested for minimizing disturbance to animals in Mahananda Sanctuary were duly implemented through State Wildlife Division during construction stage. Presently project is under operation and hence there are no blasting activities in Power Station. Further, Biodiversity Conservation plan proposed in EMP has been successfully implemented through Darjeeling Forest Division and North Bengal University.
vi	Downstream of the dam, flood –zoning approach should be done. No settlement should be allowed within flood zone.	An inundation plan was incorporated in Emergency Action Plan (EAP) for monitoring and mitigating of any eventualities in case of high flood. EAP stands submitted to concerned authorities. Further, PAFs residing at high flood level zone have been suitably compensated and shifted. There is no habitation in the downstream flood zone of project.
vii	For the restoration of dumping area, a proper care should be taken to avoid any spillover of muck into the riverbed and its flow into the river during the high discharge or flood or monsoon period. The area should be properly afforested with suitable plantation.	Dumping of muck during the construction phase was carried out at designated/ identified sites only. The same were protected suitably by providing retaining walls, crate work, etc. and the same are stabilized and restored through afforestation.

	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 trees is avoided.	The project has already been commissioned in August, 2016 and labourers engaged during construction works were demobilized. However, the same was duly complied during the construction stage.
(ii)	Fuel depot may be opened at the site to provide the fuel (kerosene/ wood/ LPG). Medical facilities as well as recreational facilities should also be provided to the labourers.	The project is in operation since,2016 as such, no labour population is residing at the project. However, free medical facilities are being extended to local villagers / labourers through the project dispensary.
(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.	The condition was complied with during the construction stage. The project is in operation since August,2016, as such, no major labour population is engaged at site now.
(iv)	A monitoring committee for R&R should be constituted which must include representatives of project affected persons from ST category and a woman beneficiary.	R&R Monitoring Committee was constituted by the District Magistrate, Darjeeling under the Chairmanship of Additional District Magistrate, Siliguri on 29.4.2008.
(v)	Restoration of construction area including dumping site of excavated materials should be ensured by leveling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.	Dumping of muck during the construction phase were carried out at designated/ identified sites only. The sites were duly protected by providing suitable retaining walls, crate work, etc. and further stabilized and restored through voluntary afforestation.
(vi)	Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.	As per the EIA/EMP or other studies, necessary budget / contractor clause was kept in the total budget/ contract document of the project for successful implementation of suggested measures.
(vii)	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.	The multidisciplinary Environmental Monitoring Committee was constituted and the Committee has so far conducted eight meetings on dated 17.01.2008, 10.12.2008, 20-22.04.2010, 22.09.2011, 11.09.2015, 15.01.2018, 25.11.2019 and 18.06.2021 respectively.

(viii)	Six-monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.	Six-monthly monitoring reports are being submitted regularly to MoEF&CC, New Delhi and its Regional Office. The last progress report was submitted to RO Kolkata, MoEF&CC vide letter no. NH/Env.96/67 dated 31.05.2022 as an attachment with email ID: iro.kolkata-mefcc@gov.in (IRO,Kolkata) and yogendra78@nic.in . (MOEF&CC,New Delhi)
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