Compliance Report

on

Stage 2 Forest Clearance for the Lower Kopili Hydro Electric Project, 120 MW

(File No 8-53/2018FC dated 4th December 2020)

To

MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE

SUBMITTED BY



Assam Power Generation Corporation Limited (APGCL)

March 2024

Compliance Report on Stage 2 Forest Clearance for the Lower Kopili Hydro Electric Project, 120 MW. File No 8-53/2018FC dated 4th December 2020

Diversion of 523.046 ha of forest land for construction of Lower Kopili Hydro Electric Project by Assam Power Generation Corporation Limited under Dima Hasao West Division, Halflong and Hamren Division, Assam.

A. Conditions which need to be complied prior to handing over of forest land:

01		0	
SI	Conditions	Status of Compliance as on 31 st	
No.		March, 2024	
i	The Government of Assam,	Complied.	
	Environment and Forest	Government of Assam, Environment	
	Department shall issue final	and Forest Department notified the 8	
	notification for the proposed	patches of the Proposed Reserved	
	Compensatory Afforestation (CA)	Forest covering 525.27 ha of the	
	area as Reserved Forest /	Compensatory Afforestation area to	
	Protected Forest prior to handing	Reserved Forest vide notification	
	over the land to the User agency.	nos. FRS.152/2018/361 for	
	The State Government shall ensure	Wayungdisa Reserved Forest;	
	that the CA area in the final	FRS.152/2018/367 for Bagh Dima	
	notification shall not be changed	one Reserved Forest;	
	without prior approval of the	FRS.152/2018/364 for Bagh Dima	
	Government of India and shall not	Reserved Forest; FRS.152/2018/366	
	be less than 525.27 ha as proposed	for Choto Longku Reserved Forest;	
	in the notification nos.	FRS.152/2018/365 for Kapurcherra	
	FRS152/2018/354,	Reserved Forest; FRS.152/2018/363	
	FRS152/2018/353,	for Nabdi Dalugupu Reserved	
	FRS152/2018/352,	Forest; FRS.152/2018/362 for	
	FRS152/2018/351,	Tortelangso Reserved Forest and	
	FRS152/2018/350,	FRS.152/2018/360 for Langchithing	
	FRS152/2018/349,	Reserved Forest dated 25th May,	
	FRS152/2018/348 and	2021.	
	FRS152/2018/347 dated	(Reserved Forest Notifications	
	11.09.2020 of the Government of	already submitted in the 2022	
	Assam.	report).	
ii	The State Government shall ensure	Approved CRTDP is under	
	that the User Agency will implement	implementation.	
	the R&R Plan as per the R&R Policy	The state government appointed an	
	of the State Government in	officer of the rank of commissioner or	

SI	Conditions	Status of Compliance as on 31 st
SI No.	accordance with the National R&R Policy, Government of India before the commencement of the project work. The said R&R Plan will be monitored by the State Government/ concern Regional Office of MoEF&CC along with indicators for monitoring and expected observable milestones.	Status of Compliance as on 31st March, 2024 secretary of that government for resettlement and rehabilitation of affected households under the Act of 2013 for both the districts Dima Hasao on 18.8.2017 and Karbi Anglong on 1.9.2017. The 'Administrator' for rehabilitation and resettlement is responsible for supervising the formulation of rehabilitation and resettlement schemes or plans and proper implementation of each schemes or plans. The Administrator is also responsible for the post implementation social audit in consultation with the Gram Sabha in rural areas and municipality in the urban areas. Copies of the notification for appointment of Administrator already submitted in the last report of 2022. As per LA&RR Act 2013 clause no 48 (I), the Central Government may, whenever necessary for national or inter-State projects, constitute a National Monitoring Committee for reviewing and monitoring the implementation of rehabilitation and resettlement schemes or plans. The Act of 2013 provides an elaborate monitoring procedure. The appointment of a commissioner for R&R and R&R committee at the project level to meet the ADB's requirements additionally other than participatory monitoring. Land and Zirat compensation already been fully paid for Dima Hasao and Karbi Anglong. R&R assistance started from 31st March, 2022. Till now 99.58% in Dima
		Hasao and 100 % in Karbi Anglong R&R assistance completed.
iii	The State Govt. shall ensure the complete compliance of FRA, 2006.	Complied.

SI	Conditions	Status of Compliance as on 31 st
No.		March, 2024
		The Forest Settlement Officer, Dima Hasao has communicated that all the rights over the said Compensatory Afforestation land has been already settled and requested to notify CA area as Reserved Forest vide letter no. REV/S/34/2020-21/9214-21 dated 30/01/2021 and the Forest Settlement Officer, West Karbi Anglong district vide letter no. KAAC/110/Cess of KLHEP/2017-18/28 dated 17.02.2021 has communicated the same and
		accordingly notification for Reserved
		Forest of all the 8 patched done.
iv	The State Govt. ensure that the User Agency shall obtain the Environment Clearance as per the provisions of the Environmental (Protection) Act, 1986, if required.	Complied. MoEF&CC vide No.J- 12011/26/2012-IA-I dated 4th December, 2019 had accorded Environment Clearance (EC) to Assam Power Generation Corporation Limited (APGCL) for the Lower Kopili Hydro Electric Project, 120 MW. Copy of the EC is given in the annexure-1. During the detail engineering design (during implementation) few components were changed, which were approved by CEA through MOC on 09.11.2022. Amendment of the EC as per MOC was accorded by the Ministry on 3.1.2024. (Annexure 2)

B. Conditions which need to be complied after handing over of forest land to the user agency :

SI No.	Conditions	Status of Compliance (As on 31 st March, 2024)	
i	Legal status of the diverted forest land shall remain unchanged;	Legal status of the diverted forest land is not changed by the User Agency.	
ii	the State Forest Department will	Assam vide Letter No.	

SI No.	Conditions	Status of Compliance (As on 31 st March, 2024)
	issue of approval and maintained thereafter, from funds deposited by User Agency. At least 1000 saplings per hectares shall be planted as per approved plan / scheme and maintained thereafter subsequently for ten years. The approved soil and Moisture conservation (SMC) activities on the CA land shall be carried out by the State Forest Department;	8th March, 2022, Compensatory Afforestation Plantation drive for Lower Kopili Hydro Electric Project (120 MW) was supposed to be included in the APO of 2022-23. Reminder letter to Forest Department from Project Director was given on 21.09.2023 vide letter no APGCL/CGM(H)/W/2007/140/Pt-VI/77. (Annexure 3). Letter received from CEO, State CAMPA dated 11th Oct, 2023 stating that the nursery being raised in 8 reserved forests under CA Plan and CAT plan will be included in the AOP 2024-2025. (Annexure 4)
iii	The State Govt. ensure that 198.746 ha out of proposed diversion of 523.046 ha of forest land shall be maintained as Green Belt at the cost of User Agency under the supervision of State Forest Department;	198.746 ha out of proposed diversion of 523.046 ha of forest land is maintained as Green Belt.
iv	The User Agency shall pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India;	Agreed.
V	The State Govt. shall ensure that	Conservator of Forests and Nodal Officer (FC Act), Assam on implementation of CAT Plan etc vide APGCL Letter No. APGCL/CGM(H)/W/2007/140/Pt-VI/42 dated 10 th Jan, 2022.
		In response to the above letter, the Additional Principal Chief Conservator of Forests & Chief Executive Officer, State CAMPA, Assam vide Letter No. FG.27/CAMPA/CA/2021-22 dated 8th March, 2022, Compensatory Afforestation Plantation drive for Lower Kopili Hydro Electric Project (120 MW) is likely to be included in the APO of 2022-23 for which SLEC meeting will be held shortly.

SI No.	Conditions	Status of Compliance (As on 31 st March, 2024)
		Again on 29.03.2023 vide letter no. FRS/G/CAMPA/CAT Plan/2023-24/3480-85 Division Forest Officer, Dima Hasao west division asking for the catchment area maps and APGCL provided the available maps to the Forest Department, Dima Hasao, West. APGCL shared the CAT Plan map and shape files to the Forest Department on 20.01.2024.
vi	The State Govt. and User Agency shall ensure that no residential or labour colony / camp shall be constructed over forest land. The User Agency shall provide fuels preferably alternate fuels to the labourers and the staff working at the site so as to avoid any damage and pressure on the nearby forest areas;	Complied. All the residential and labour colony / camp are constructed outside the forest land in the areas under revenue department. Contractor engaged for the project for the construction works under APGCL (User Agency) are providing LPG gas for all staff and labourers engaged under Lower Kopili Hydro Electric Project.
vii	The State Govt. ensure that the User Agency shall carry out muck disposal at predesignated sites in such a manner so as to avoid its rolling down and the dumping area for muck disposal shall be stabilized and reclaimed by planting suitable species by the user agency at the cost of project under the supervision of State Forest Department. Retaining walls terracing shall be carried out to hold the dumping material in place. Stabilization and reclamation of such dumping sites shall be completed before handing over the same to the State Forest Department in a time bound manner as per Plan.	Under Compliance. The muck disposal site is located in Revenue land outside the diverted Forest Land of 523.046 ha. Stabilization and reclamation of such dumping sites is under progress as per Muck Management Plan.
viii	The State Government and the user agency shall ensure that the tress available between full reservoir level (FRL) and FRL-4 meters are not felled.	Agreed.
ix	The Forest clearance will be for a period of diversion of the said forest	Agreed.

SI No.	Conditions	Status of Compliance (As on 31 st March, 2024)
	land shall be for a period co terminus with the period of mining granted under the Mines and Minerals (Development and Regulation) Act, 1957, as amended and framed there-under;	
x	The State Govt. shall ensure that the forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department or person without prior approval of the Central Government and the layout plan of the proposal shall not be changed without the prior approval of the Central Government;	Agreed. The layout plan is annexed in annexure 5.
xi	The State Govt. shall ensure that no damage to the flora and fauna of the adjoining area shall be caused;	Agreed.
xii	The State Govt. shall ensure that User Agency shall explore the possibility of translocation of maximum number of trees identified to be felled and any tree felling shall be done only when it is unavoidable and that too under strict supervision of the State Forest Department;	Agreed and under compliance.
xiii	The State Govt. shall ensure that the User agency shall provide free water for the forestry related projects;	Agreed.
xiv	It may please note that violation of any of the conditions will amount to violation of Forest (Conservation) Act, 1980 and action would be taken as prescribed in para 1.21 of Chapter 1 of the Handbook of comprehensive guidelines of Forest (Conservation) Act, 1980 as issued by this Ministry's letter No. 5-2/2017-FC dated 28.02.2019.	Agreed.
XV	The State Govt. shall ensure that the User Agency shall submit the annual self-compliance report in respect of the above stated conditions to the State	Agreed. The annual self-compliance report in respect of the above stated conditions in the FC Stage 2 accorded for Lower Kopili Hydro

SI	Conditions	Status of Compliance (As on 31st			
No.		March, 2024)			
	Government, concerned Regional Office and to this Ministry by the end of March every year regularly; and	Electric Project will be submitted to the State Government, concerned Regional Office and to the MoEF&CC.			
xvi	The State Govt. shall ensure that the User Agency shall comply all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order(s) and NGT Order(s) pertaining to this project, if any, for the time being in force, as applicable to the project.	Agreed.			

Annexure 1: Copy of EC

No. J-12011/26/2012-IA-I

Government of India
Ministry of Environment, Forest & Climate Change
(IA.I Division)

Indira Paryavaran Bhawan 3rd Floor, Vayu Wing Jor Bagh Road New Delhi-110 003

Dated: 04th September, 2019

To

The Chief General Manager (Hydro) M/s Assam Power Generation Corporation Ltd 3nd Floor, Bijulee Bhavan Paltan Bazar Guwahati-781001 Assam

Sub: Lower Kopili HEP (120 MW) in Karbi Anglong & Dima Hasao, Assam by M/s Assam Power Generation Corporation Ltd.- reg. Environmental Clearance

Sir.

This has reference to your letter No. APGCL/CGM (H)/W/2007/140/Pt-VII/01 dated 27.03.19 on the above-mentioned subject.

- The above referred proposal was considered by the Expert Appraisal Committee (EAC) for River Valley & Hydroelectric projects in its meeting held on 24.08.2017 & 05.12.2017. The comments and observations of EAC on the project may be seen in the Minutes of the meeting which are available on the web-site of this Ministry.
- 3. The proposed Lower Kopili HEP (120 MW) is downstream development of existing Kopili HEP stage I and is located in east of Karbi Anglong and west of Dima Hasao districts of Assam. The dam structure is located on Kopili River (a major tributary of the Brahmaputra River) and the powerhouse structure is located on right bank of Kopili River. The project diversion site is located at village Longku. The project envisages utilization of the regulated discharge from Kopili HEP, spills of Khandong and Umrong Dam and the discharge from the intermediate catchment by creation of a reservoir and utilizing a gross head of about 114 m. This is a run-of-the-river scheme. The scheme has been conceived to run at full potential in monsoon season and operate as a peaking station in non-monsoon season. The total cost of the project is Rs. 1,031.58 Cr excluding the R&R land cost (Rs. 84.33 Cr).
- 4. The Lower Kopili HE Project envisages construction of a 70.13 m high concrete gravity dam across the river Kopili at Longku, about 20 km downstream of Kopili HEP stage I Power House with an installed capacity of (110 + 10) MW. A water conductor system comprising of an Intake Structure, Head Race Tunnel along with Surge Shaft & penstock and a surface power house with installed capacity of 110 MW, comprising of 2units of 55MW each. An Auxiliary Power House of installed capacity of 10 MW (2x2.5 MW + 1x5 MW) is also proposed at the dam toe for generation of Power.

- 5. The total land requirement of the project is 1577 ha. The forest land to be acquired for the project is 523 ha. The private land to be acquired for the project is 1054 ha. In principle approval of Stage 1 Forest Clearance for the diversion of 523.046 ha of forest land was accorded on 27.03.2019.
- 6. Scoping clearance for pre-construction activities was approved on 30.01.2014. Application for the extension of ToR was considered by the EAC during the meeting held on 30.01.2017 and validity of ToR was extended till 29.01.2018 vide MoEF&CC letter No. J-12011/26/2012-IA-I dated 30.03.2017. The Public Hearing was held on 10.01.2017 at Longku, APGCL Project Site, district Dima-Hasao, Assam for the proposed Lower Kopili HEP (120 MW). The Public Hearing was conducted under the Chairmanship of the ADM, Dima Hasao.
- 7. The Expert Appraisal Committee (EAC) in its 10th meeting held on 05.12.2017, after due consideration of the relevant documents submitted by the project proponent and clarifications furnished, have recommended for grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry of Environment, Forest and Climate Change hereby accords necessary Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification, 2006 and as amended thereof, subject to compliance of the following conditions and as given in Annexure I (i.e. Standard EC conditions for River Valley and Hydroelectric projects):
 - I. The Environmental Management Plan (EMP) shall be strictly adhered to and a sum of Rs. 26147.5077 lakhs (Capital cost: 15427.689 lakhs & Recurring cost: Rs. 10717.817 lakhs), the budgetary provisions for implementation of EMP, shall be fully utilized and not to be diverted to any other purpose. In case of revision of the project cost or due to price level change, the cost of EMP shall also updated proportionately.
- II. The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018 regarding Corporate Environment Responsibility. Project proponent shall require to invest Rs 5.81 crore for CER activities as submitted to the Ministry. A total budget of Rs. 5.81 crore shall be spent for upgradation of education facilities in existing schools (Rs. 66.0 lakhs), construction of community toilets (Rs. 380.0 lakhs), upgradation of Health care facilities (Rs. 115.0 lakhs) and awareness generation (Rs 20.0 lakhs). The entire activities under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report and to a District Collector.
- III. The environmental clearance is valid for period of 10 years from the date of issue of this letter for commissioning of the project.
- IV. After 5 years of the commissioning of the project, a study shall be undertaken regarding impact of the project on the environment and downstream ecology. The study shall be undertaken by an independent agency, decided in consultation with the Ministry.
- V. Any other clearances/permissions/approvals from any other organization/department, as applicable to the project shall be taken.

- VI. PP shall procure construction material only from those Govt./Pvt. Agencies/Corporations/etc. that are having all applicable legal/statutory clearances/permissions or necessary permission to be obtained for quarrying construction materials for the project as per the EIA Notification, 2006 and subsequent amendments thereof.
- VII. Based on the recommendation of Cumulative Impact Assessment and Carrying capacity study of river basin or as per the ToR conditions or minimum 15% of the average flow of four consecutive leanest months or as submitted in the EIA/EMP report, whichever value is higher, shall be released as environmental flow.
- 8. This issues with approval of the Competent Authority.

Yours faithfully

(Dr. S. Kerketta) Director

Copy to:

- The Secretary, Ministry of Power, Sharm Shakti Bhawan, Rafi Marg, New Delhi-110001
- 2. The Advisor (Power), Planning Commission, Yojana Bhawan, New Delhi-110001.
- The Principal Secretary (Power), Govt. of Assam, Secretariat, P.O Assam, Sachivalaya, Block-C, Ground Floor, Dispur, Guwahati-781 006, Assam.
- The Principal Secretary, Department of Environment & Forest, Govt. Of Assam, Secretariat, Dispur, Guwahati-781 006, Assam.
- The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan R.K. Puram, New Delhi-110066.
- The Dy. Director General Forest, Regional Office, Ministry of Environment, Forest & Climate Change Upland Road, Laitumkhrah, Shilong, Meghalaya-793 003.
- The Member Secretary, Assam Pollution Control Board, Bamunimaidam, Guwahati-781 021.
- 8. NIC Cell- request to upload on the MoEF website.
- 9. Sr. PSS to JS(GM)
- 10. Guard File

(Director)

Standard EC Conditions for River Valley and Hydroelectric projects

I. Statutory compliance:

- The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden, if applicable. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the sixmonthly compliance report. (in case of the presence of Schedule-I species in the study area).
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
- Necessary approval of CEA shall be obtained for those projects having the project cost more than Rs. 1,000 crore.

II. Air quality monitoring and preservation

- i. Regular monitoring of various environmental parameters viz., Water Quality, Ambient Air Quality and Noise levels as per the CPCB guidelines at designated locations shall be carried out on monthly basis and a detailed database of the same shall be prepared and recorded. This shall be used as a baseline data for post construction EIA / Monitoring purposes.
- Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Necessary control measures such as water sprinkling arrangements, etc. bet taken up to arrest fugitive dust at all the construction sites.

III. Water quality monitoring and preservation

- i. Before impounding of the water, Cofferdams for both at the upstream and downstream are to be decommissioned as per EIA/EMP report so that once the project is commissioned; cofferdam should not create any adverse impact on water environment including the rock mass and muck used for the Cofferdam.
- ii. Water depth sensors shall be installed at suitable locations to monitor e-flow. Hourly data to be collected and converted to discharge data. The Gauge and Discharge data in the form of Excel Sheet be submitted to the Regional Office, MoEF & CC and to the CWC on weekly basis.

IV. Noise monitoring and prevention

- All the equipment likely to generate high noise shall be appropriately enclosed or inbuilt noise enclosures be provided so as to meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986.
- The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Catchment Area Treatment Plan

Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report shall be implemented in consultation with the State Forest Department and shall be implemented in synchronization with the construction of the project.

VI. Waste management

- i. Muck disposal be carried out only in the approved and earmarked sites. The dumping sites shall be located sufficiently away from the HFL of the river. Efforts be made to reuse the muck for construction and other filling purposes and balanced be disposed of at the designated disposal sites. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures be carried out so that sites are stabilized quickly.
- Solid waste management should be planned in details. Land filling of plastic waste shall be avoided and instead be used for various purposes as envisaged in the EIA/EMP reports. Efforts be made to avoid one time use of plastics.

VII. Green Belt, EMP Cost, Fisheries and Wildlife Management

 Detailed information on species composition particular to fish species from previous study/literature be inventoried and proper management plan shall be prepared for insitu conservation in the streams, tributaries of river and the main river itself for which adequate budget provision be made and followed strictly.



Wildlife Conservation Plan prepared for both core and buffer zones shall be implemented in consultation with the local State Forest Department, if applicable.

- iii. To enrich the habitat of the project site, plantation shall be raised as envisaged in the EIA/EMP report. Plantation to be developed along the periphery of the reservoir in multi-layers with local indigenous species in consultation with the local State Forest Department.
- Compensatory afforestation programme shall be implemented as per the plan approved.
- Fish ladder/pass as envisaged in the EIA/EMP report shall be maintained for migration of fishes. Regular monitoring of this facility be carried out to ensure its effectiveness.

VIII. Public hearing and Human health issues

- Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt, if any.
- Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.
- iii. Preventive measures viz. furning and spraying of mosquito control shall be done in and around the labour colonies, affected villages, stagnated pools, etc. Provisions be made to not to create any stagnated pools to avoid creation of breeding grounds of the vector borne diseases.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- Labour force to be engaged for construction works shall be examined thoroughly and adequately treated before issuing them work permit. Medical facilities shall be provided at the construction sites.
- Early Warning Telemetric system shall be installed in the upper catchment area of the project for advance intimation of flood forecast.
- Emergency preparedness plan be made for any eventuality of the dam failure and shall be implemented as per the Dam Break Analysis

IX. Corporate Environment Responsibility

 The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.

- Skill mapping be undertaken for the youths of the affected project area and based on the skill mapping, necessary trainings to the youths be provided for their long time livelihood generation
- iii. The PP shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iv. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- v. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- vi. Post EIA and SIA be prepared for the project through a third party and evaluation report be submitted to the Ministry after five years of commissioning of the project.
- vii. Multi-Disciplinary Committee (MDC) be constituted with experts from Ecology, Forestry, Wildlife, Sociology, Soil Conservation, Fisheries, NGO, etc. to oversee implementation of various environmental safeguards proposed in EIA/EMP report during construction of the project. The monitoring report of the Committee shall be uploaded in the website of the Company.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by 5 prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public

Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

9

Annexure 2: Amendment of EC



File No.: J-12011/26/2012-IA.I Government of India Ministry of Environment, Forest and Climate Change IA Division ***



Dated 03/01/2024



To,

The Chief General Manager (Hydro)

M/s Assam Power Generation Corporation Ltd

2nd Floor, Bijulee Bhawan, Paltanbazar, Guwahati, Guwahati, KAMRUP METRO, ASSAM,

Paltanbazar, 781001 cgmh2010@yahoo.in

(vii) Name of Project

Subject:

Lower Kopili HEP (120 MW) in Karbi Anglong & Dima Hasao, Assam by M/s Assam Power Generation Corporation Ltd- Amendment in Environmental Clearance- reg

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/AS/RIV/441844/2023 dated 23/10/2023 for grant of an amendment in prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC23A0505AS5877865A
(ii) File No. J-12011/26/2012-IA.I
(iii) Clearance Type Amendment in EC

(iv) Category A

(v) Schedule No./ Project Activity 1(c) River Valley/Irrigation projects
(vi) Sector River Valley and Hydroelectric Projects

Lower Kopili HEP (120MW) in Karbi Anglong & Dima Hasao, Assam, by M/s Assam Power

Generation Corporation Ltd.

(viii) Location of Project (District, State) DIMA HASAO, ASSAM

(ix) Issuing AuthorityMoEF&CC(x) EC Date04/09/2019(xi) Applicability of General ConditionsNO

(xiii) Status of implementation of the project

- In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A, B and C)
 were submitted to the MoEF&CC for an appraisal by the Expert Appraisal Committee EAC under the provision of EIA
 notification 2006 and its subsequent amendments.
- 2. The above-mentioned proposal has been considered by Expert Appraisal Committee (EAC) in the meeting held on 26/10/2023. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above.
- The brief about the reasons for an amendment requested along with comparison table illustrating the details of amendments are annexed to this letter as Annexure (2).
- 4. The EAC, in its meeting held on 26.10.2023, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of amendment in Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof.
- 5. The MoEF&CC has examined the proposal in accordance with the extant provisions of the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and based on the recommendations of the Expert Appraisal Committee hereby accords amendment in Environment Clearance dated 4.09.2019 for the instant proposal to M/s Assam Power Generation Corporation Ltd under the provisions of EIA Notification, 2006 and as amended thereof subject to compliance of EC conditions, general instructions issued vide EC letter dated and EC identification number IA/AS/RIV/441844/2023 and following certain additional specific conditions.
- 6. The details of amendment sought is at Annexure (2).
- 7. This issues with the approval of the Competent Authority

Copy To

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110 001.
- 2. The Chairman, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delhi 110 066.
- Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office Law-U-Sib, Lumbatngen, Near MTC Workshop, Shillong
- The Principal Chief Conservator of Forests, Head of Forest Force, Aranya Bhawan, Panjabari, Guwahati, 781037, Assam.
- 5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi 110 032.
- 6. The Member Secretary, Assam Pollution Control Board, Bamunimaidam, Guwahati 21
- 7. Guard file/Monitoring file
- 8. Website of MoEF&CC.

e-Payments

Annexure 1

Specific EC Conditions for (River Valley/irrigation Projects)

1. Additional Condition

S. No	EC Conditions			
1.1	Aquatic study specially, migratory aquatic species concerning occurrence of fishes /habitat impact studies shall be carried out from recognised govt. Institutes and prepared mitigation measures, with provision of financial budget revised in the EMP. The outcome of the said study shall be			

IA/AS/RIV/441844/2023

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S. No	EC Conditions		
	implemented.		
1.2	Submit undertaking that R&R scenario /habitat of flora and fauna of project are not change due to modification of the project components.		
1.3 All the conditions mentioned in the EC dated 4.09.2019 shall remain unchanged.			



The details of amendment sought

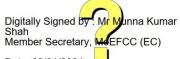
The Project Proponent and the accredited Consultant made a detailed presentation on the salient features of the project and informed that:

- The Lower Kopili HEP (120 MW) is downstream development of existing Kopili HEP stage I and is located in east of Karbi Anglong and west of Dima Hasao districts of Assam.
- ii. The project is situated in the West Karbi Anglong and Dima Hasao (also known as North Cachar Hills) Autonomous District Council (ADC) areas of Central Assam. The Project location (dam site) is defined by 25°39'57.39"N latitude and 92°46'53.62"E longitude
- iii. The dam structure is located on Kopili River (a major tributary of the Brahmaputra River) and the main powerhouse and auxiliary power house structures are located on right bank of Kopili River.
- iv. The project envisages utilization of the regulated discharge from Kopili HEP, spills of Khandong and Umrong Dam and the discharge from the intermediate catchment by creation of a reservoir and utilizing a gross head of about 114m.
- v. This is a run-of-the-river scheme.
- vi. The scheme has been conceived to run at full potential in monsoon season and operate as a peaking station in non-monsoon season.
- vii. Land requirement: The total land requirement of the project is 1577 ha.

 The forest land to be acquired for the project is 523 ha. The private land to be acquired for the project is 1054 ha.
- viii. **Forest Clearance**: In principle approval of Stage 1 Forest Clearance for the diversion of 523.046 ha of forest land was accorded on 27 .03.2019.
- ix. Environment clearance for the project was accorded on 04.09.2019
- x. **E flow** will be maintained as per stipulation of EC.
- xi. Salient features of the project:
- a. Land Area: 1577 Ha (Forest land 523.0 Ha, Revenue land 1054.0 Ha)
- b. Power generation capacity: 120 MW (MPH 2 X 55 MW; APH 2 X 2.5 + 1 X 5 MW)
- c. Location of Dam Axis: 25°39'57.39"N; 92°46'53.62"E
- d. Location of MPH: 25°41'5 4.02"N; 92°48'15.98"E
- e. Concrete Gravity Dam: Across the river Kopili at Longku
- f. Dam Height 66.5 m
- g. water conductor system comprising of an intake structure, head race tunnel along with surge shaft and pen stock.
- h. Project cost: 1031.58 Cr excluding the R&R land cost 84.33 Cr.
- i. EMP cost: 26147.5077 lakh
- i. CER cost: 5.81 Cr
- xii. The details of amendment sought is as under: -

S.	Para/ details of	Details as	To be	Justification/
No.	EC issued by	per EC	revised/	reasons
	MoEF&CC	0	read as	

-	T.	Constant and a second	1	The second secon
1	Dam Height (m)	70.13	66.5	El. 228.00 m - El. 162.50 m = 66.50m. Change in dam design alters consumption of construction materials (e.g., concrete) and the volume of muck generated for disposal on-site.
2	Length of the Dam (m) Total width of dam structure including overflow & non overflow blocks		335.0	As per revised arrangement of NOF and OF section.
3	No of Spillways	R I	6 E	10 m x 12.50 m. The discharging capacity of proposed spillway arrangement is verified on the physical hydraulic model study carried out in IRI, Roorkee and gate opening was found adequate to pass the PMF at N-1 condition. Same is approved by CEA
4	HRT Diameter (m)	6.65	7.0	Diameter of HRT is increased to ensure CEA approved head losses of 6m.
5	HRT length (m)	3619.62	3641.22	As per revised arrangement.
6	Tail Race Channel width (m)		26.0	Arrangement is revised to provide better hydraulic condition at the outlet of tail race.
7	Tail Race Channel length (m)	52.0	40.0	& Control of the Cont
8	Submergence area with the Reservoir spread (Ha)	552 submergence area	area with reservoir	Submergence area remains same i.e. 552 Ha within the reservoir spread of 620 Ha to accommodate plantation area as per EC and FC stipulation, Reservoir rim treatment, safety area for human and wildlife, within the existing land area of 1577 ha.



Date: 03/01/2024

Annexure 3: Letter to CCF & Nodal Officer (FC Act)

ASSAM POWER GENERATION CORPORATION LIMITED

Registered Office: Bijulee Bhawan, 3rd floor, Paltanbazar, Guwahati-781001, Assam

Mridul saikia

Dated:21.09.2023

Project Director (PMU) Email: mridul.saikia@apgcl.org

To, The Chief Conservator of Forests & Nodal Officer (FC Act), O/o PCCF & HoFF, Assam Aranya Bhawan, Punjabari, Guwahati, Kamrup (Metro)

No: APGCL/CGM(H)/W/2007/140/Pt-VI/77

Sub: Implementation of (Catchment Area Treatment) CAT Plan and Compensatory Afforestation (CA) Programme for 120 MW Lower Kopili Hydro Electric Project.

Ref: 1. MoEF&CC Forest Clearance Stage 2 vide No. 8-53/2018FC Dated 4th December, 2020

- Environment Clearance MoEF&CC vide No. J-12011/26/2012-IA-I Dated 4th September, 2019
- APGCL Letter No. APGCL/CGM(H)/W/2007/140/Pt-VI/42 Dated: 10.01.2022
- 4. Your Office Letter No. FG.27/Nodal/Lower Kopili HE Project/Part III Dated 29.03.2022
- APGCL Letter No. APGCL/CGM(H)/W/2007/140/Pt-VI/52 Dated: 16.11.2022
- 6. Letter from CEO, State CAMPA No. FG.27/CAMPA/CA Pltn/2022-23 dated: 28.11.2022
- 7. APGCL Letter No. APGCL/CGM(H)/W/2007/140/Pt-VII/84 Dated 30.01.2023
- 8. APGCL Letter No: APGCL/CGM(H)/W/2007/140/Pt-VI/75 Dated 07.06.2023

Sir,

With reference to the subject cited above, it is for your kind information that the construction work of the 120 MW Lower Kopili Hydro Electric Project has been already initiated. As such the implementation of Catchment Area Treatment Plan, Soil & Moisture Conservation Plan and Compensatory Afforestation programme in 8 patches of Reserved Forests declared by Govt of Assam in Dima Hasao and Karbi Anglong districts shall be implemented in synchronized with the construction of the project as per requirement of MoEF&CC, Govt. of India, New Delhi. As per your earlier communication it was mentioned that the implementation of the above plan was included in the APO of 2022-23 in SLEC meeting.

Therefore, you are requested kindly to apprise the status of implementation of the above-mentioned plans covering the land bank map, an action plan to APGCL with a brief report so that APGCL can include it in the compliance report of EC and FC to MoEF&CC.

H

Project Oirector, (PMU) APGCL, Bijulee Bhawan, Ghy-1

Page 1 of 2

Memo No: APGCL/CGM(H)/W/2007/140/Pt-VI/77(a)

Copy to:

- 1. The Addl. Principal Chief Conservator of Forest & Chief Executive Officer, State CAMPA, for favour of kind information
- 2. The Principal Secretary, Power (Electricity) Department, GoA for favour of kind information
- 3. The Principal Secretary, Department of Environment and Forest, GoA for favour of kind information
- 4. The Chairman, APGCL for kind information.
- 5. The Managing Director, APGCL for kind information.

Project Director, (PMU) APGCL, Bijulee Bhawan, Ghy-1

Dated: 21.09.2023

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Annexure – 4: Letter from Forest Department to PD, LKHEP on CAT Plan, SMC Plan, CA Plan.





By e-mail

GOVERNMENT OF ASSAM OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS & HEAD OF FOREST FORCE, ASSAM

ARANYA BHAWAN, PANJABARI :: GUWAHATI-781037

No.FG.27/CAMPA/CA Pltn/2022-23

E-mail statecampaassam@gmail.com Dated Guwahati, 11th Oct, 2023

To,

The Project Director (PMU),

Assam Power Generation Corporation Limited,

Bijulee Bhawan, 3rd Floor, Paltanbazar, Guwahati-781001

Sub:

Implementation of CAT Plan, SMC Plan and CA Plantation programme for 120

MW Lower Kopili Hydro Electric Project, - reg.

Ref:

Your letter no.APGCL/CGM(H)/W/2007/140/Pt-VI/77 dated 21.09.2023.

Sir,

With reference to the above, I am to inform you that the activities of Catchment Area Treatment Plan & Soil & Moisture Conservation Plan drive for Lower Kopili Hydro Electric Project (120 MW) have not been implemented till now as the same are likely to be included in the APO of 2024-25. However, the programme for the Compensatory Afforestation (CA) plantation activities are started by raising of site nurseries near by the approved 8 (eight) CA sites and plantation activities are going on under APO 2023-24 in Hamren & Dima Hasao (West) Forest Division.

Yours faithfully,

(Dr. Satyendra Singh, IFS)

Addl. Principal Chief Conservator of Forests & Chief Executive Officer, State CAMPA, Assam Aranya Bhawan, Panjabari, Guwahati – 37

Copy to:

- The Principal Secretary, Department of Power, Govt. of Assam, Block-C, Ground Floor, Janata Bhwan, Guwahati-6.
- The Principal Secretary, Department of Environment & Forest, Govt. of Assam, Janata Bhwan, Guwahati-6.
- 3. The Chief Conservator of Forests & Nodal Officer (F.C Act), Aranya Bhawan, Panabari
- 4. The Chairman, APGCL
- 5. The Managing Director, APGCL.

Addl. Principal Chief Conservator of Forests & Chief Executive Officer, State CAMPA, Assam Aranya Bhawan, Panjabari, Guwahati – 37

Annexure 5: Project Layout out

