

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
3rd 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.

2. 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 2 units 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:

1. The Secretary, Ministry of Power, Sharm Shakti Bhawan, Rafi Marg, New Delhi-110001
2. The Advisor (Power), Planning Commission, Yojana Bhawan, New Delhi-110001.
3. The Principal Secretary (Power), Govt. of Assam, Secretariat, P.O Assam, Sachivalaya, Block-C, Ground Floor, Dispur, Guwahati-781 006, Assam.
4. The Principal Secretary, Department of Environment & Forest, Govt. Of Assam, Secretariat, Dispur, Guwahati-781 006, Assam.
5. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan R.K. Puram, New Delhi-110066.
6. The Dy. Director General Forest, Regional Office, Ministry of Environment, Forest & Climate Change Upland Road, Laitumkhrah, Shilong, Meghalaya-793 003.
7. 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:

- i. 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.
- ii. 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 six-monthly 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.
- v. NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
- vi. 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.
- ii. 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

- i. 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.
- ii. 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.
- ii. 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

- i. 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.
- ii. 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.
- iv. Compensatory afforestation programme shall be implemented as per the plan approved.
- v. 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

- i. Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt, if any.
- ii. Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.
- iii. Preventive measures viz. fuming 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.
- v. 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.
- vi. Early Warning Telemetric system shall be installed in the upper catchment area of the project for advance intimation of flood forecast.
- vii. 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

- i. 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.

- ii. 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.
- vii. 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.
- ix. 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).
- x. 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.
- xi. 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.

- xv. 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.

SM
