

**F. No. J-12011/14/2019-IA-I (R)**  
Government of India  
Ministry of Environment, Forest & Climate Change  
(IA.I Division)

Received on  
08/02/2021  
Main

Indira Paryavaran Bhawan  
2<sup>nd</sup> Floor, Vayu Wing  
Aliganj, Jor Bagh Road  
New Delhi-110 003

Dated: 02<sup>nd</sup> February, 2021

To,

The Director  
**M/s Madhya Bharat Power Corporation Limited**  
DD Sharma Building (2<sup>nd</sup> floor)  
Near State Bank of India, Duragaon  
East Sikkim, Gangtok - 73 7102

**Sub: Rongnichu HEP (115 MW) by Madhya Bharat Power Corporation Limited -  
Consideration of Environment Clearance - reg.**

Sir,

This has reference to your online Proposal No. IA/SK/RIV/159493/2019 and letter no. MBPCL/MoEF&CC/2020-21/122 dated 21.06.2020 submitted to the Ministry for Environmental Clearance (EC) to the project cited in the subject.

2. The above referred proposal was considered by the Expert Appraisal Committee (EAC) for River Valley & Hydroelectric projects in its 1<sup>st</sup> and 5<sup>th</sup> meeting held on 29.07.2020 & 30.12.2020, respectively. 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. Rongnichu Hydroelectric Project (115 MW) on Rongnichu stream in East Sikkim district of Sikkim, is being developed by M/s Madhya Bharat Power Corporation Ltd. (MBPCL). The Barrage complex is located about 2km downstream of Namli village and 16km south of Gangtok city along NH-31A. Rongnichu Hydroelectric Project is a run-of-river hydro development project with installed capacity of 115 MW.

4. Project Proponent submitted that the EC was accorded on 04.04.2007 to Rongnichu HEP (96MW) for a period of 10 years as per the provisions of EIA Notification, 2006. After obtaining the EC in April 2007, there has been an initial delay of more than 3 years to start the actual construction. The geological difficulties of lower Himalayan region resulted in slower pace of excavation of underground works. Viewing the delays being encountered, extension of validity of EC for 3 years was applied. The Ministry vide letter dated 16.6.2017 and 9.11.2017 accorded extension of validity up to 3.4.2020.

5. M/s Madhya Bharat Power Corporation Ltd. intends to enhance the installed capacity of power house from 96 MW to 115MW owing to higher inflows available during 5 10-daily blocks in monsoon period and in the light of enabling provision of running machines at 20% overload as stipulated in power potential studies carried earlier. Application for ToR was submitted to the Ministry for Rongnichu

G. J. P.



Hydroelectric Project (115 MW) on 19.08.2019. Proposal was considered by the EAC and ToR was granted vide Ministry's letter dated 16.01.2020 for 115 MW installed capacity with exemption on the requirement fresh Public hearing. However, while recommending ToR, EAC recommended that EIA report shall be uploaded in the Public domain for one month at SPCB. In compliance with ToR, the draft report was uploaded by SPCB, Sikkim, on website on 11.2.2020 for inviting opinion/suggestion from stakeholders. The SPCB, Sikkim intimated that 14 written suggestions/objections were received. Compliance of these suggestions have been incorporated in the report. Final EIA/EMP report was submitted to the Ministry on 23.06.2020 for Environmental Clearance.

6. Project Proponent submitted that the project envisages construction of a 14 m high barrage with 3 bays fitted with gates (12.2m x 6.5m); surface desilting basin; one gated power intake, 12.581 km long D-shape lined HRT, vertical surge shaft; underground steel lined pressure shaft and surface powerhouse for housing 2 vertical shaft Pelton turbine of capacity 57.5 MW each. The barrage is located (27°16'6.859"N/88° 35'20.058"E) about 2 Km downstream of Namli village and 16 Km south of Gangtok along NH31A. The powerhouse is located (27°10'42.339" N/88° 32'21.577"E) on the right bank of Rangpo River 2.5 km from Rangpo Town on Rangpo-Rongli SH.

7. Project Proponent submitted that total land requirement for the project has been assessed as 59.872 ha of which diverted forest land is 48.4825 ha and private land permanently acquired is 11.3895 ha which has been totally acquired. Besides this 11.3116 ha was taken on short term lease basis from land owners for the construction of temporary structures of which 10.792 ha has been returned to the lessor (land owners) and their lease has been terminated. Balance 0.5196 ha will be returned before commissioning of the project.

8. Project Proponent submitted that the submergence area at FRL is 10.70 ha. Fambonglho Wildlife Sanctuary (WLS) exists within 3.79 km from the project area but no part of the project falls within the ESZ of WLS. There were 62 affected families of which none was displaced. Techno-Economic Clearance for the revised capacity of 115 MW at an estimated cost of Rs. 1453.34 Crores has been accorded by the Energy and Power Department, Government of Sikkim vide letter No. 91/GoS/E&P/2004-05/PART-IV/20, dated 15.6.2020. The cost of implementing Environment Management Plan worked out to Rs. 2902.00 lakh and capital cost is Rs. 2348.50 to ameliorate the negative effects of project construction and overall improvement of the Environment.

9. Proposal for EC was earlier considered in the 1<sup>st</sup> EAC meeting held on 29<sup>th</sup> July 2020. EAC deliberated on the project and after considering of all the facts, sought additional information. Information sought in the 1<sup>st</sup> EAC meeting were submitted to the Ministry on 22<sup>nd</sup> December 2020 through Parivesh Portal and accordingly proposal was reconsidered for an Environment Clearance in the 5<sup>th</sup> EAC meeting held on 30.12.2020.

10. Project Proponent made the detailed presentation on the additional information sought by the EAC in the earlier meeting held in July 2020. After detailed presentation by the PP, EAC observed that Project Proponent has now submitted the E-flow assessment as per the TOR condition i.e 30% (Monsoon season), 20% (Lean season) and 20% (Non-monsoon and Non-lean season) of 90% dependable year. Further, during other than monsoon season the e-flow shall be



released through 1400mm diameter sluice pipe fitted with Clamp-on Ultrasonic meter at its end with its sensors connected to control room. During monsoon season, e-flow shall be released through under sluice bay and flow shall be measured by calibrated open channel flow meter already fitted at the end of d/s pier. EAC observed that total land requirement for the project has been assessed as 59.872ha of which diverted forest land is 48.4825 ha [Diversion of Forest Land (26.2313 ha); Diversion of additional Forest Land (2.5325 ha) Surrender of already diverted forest land (3.6250 ha) Forest Land for construction of 220Kv transmission line (Right of Way) - 23.3437ha] and private land permanently acquired is 11.3895 ha.

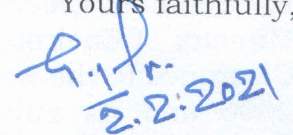
11. EAC in its 5<sup>th</sup> Meeting, also deliberated on the submission made by the Project Proponent regarding monitoring of ambient air quality, noise, water monitoring and meteorological data. Further, EAC also took note on the Regional Office, MoEF&CC monitoring report of the existing EC and submission made regarding approval of pre-DPR chapters. EAC after detailed deliberation on the additional information and other information submitted (Form 2, EIA/EMP report, Public Hearing issues, kml file) and as presented by the Project Proponent, recommended the proposal for grant of Environmental Clearance subject to compliance of applicable Standard Environment Clearance conditions with some additional conditions. Accordingly, the Ministry of Environment, Forests and Climate Change hereby accords Environmental Clearance to the Rongnichu HEP (115 MW) as per the Provisions of EIA- Notification, 2006 and its subsequent amendments, subject to compliance of the standard Environmental Conditions as enumerated in the Annexure-I and following conditions:

- i. The Environmental Management Plan (EMP) including activities proposed under Local Area Development Plan shall be strictly adhered to as submitted in the EIA/EMP reports. The budgetary provisions (Rs 2902.00lakhs) 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 be updated proportionately.
- ii. After 5 years of the commissioning of the project, a study shall be undertaken regarding impact of the project on the environment. The study shall be undertaken by an independent agency.
- iii. Conservation plan prepared for Schedule I species shall be implemented as approved by the concerned Competent Authority.
- iv. Commitments made to address the concern raised during public consultation including establishing PHC at Namliand Namcheybong village, as submitted in the EMP shall be strictly adhered.
- v. Solid waste generated, especially plastic waste, etc. should not be disposed of as landfill material. It should be treated with scientific approach and recycled. Use of single-use plastics may be discouraged.
- vi. Land acquired for the project shall be suitably compensated in accordance with the law of the land with the prevailing guidelines. Private land shall be acquired as per provisions of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
- vii. Necessary permission to be obtained for quarrying construction materials, if any required, for the project as per the EIA Notification, 2006 and as amended thereof.
- viii. Necessary control measures such as water sprinkling arrangements, etc. and construction of paved roads leading to muck disposal sites shall be taken up on priority to arrest fugitive dust at all the construction sites.



- ix. Stabilization of muck disposal sites using biological and engineering measures shall be taken up immediately to ensure that muck does not roll down the slopes and shall be disposed safely and that it does not pollute the natural streams and water bodies in surrounding area. Report of the same to be submitted to Ministry and its Regional office, Shillong.
- x. Real time monitoring of e-flow to be done in consultation with State PCB or any other institution.
- xi. The clearance is valid for period of 10 years from the date of issue of this letter for commissioning of the project.
- xii. The EC granted is strictly under the provisions of EIA Notification, 2006 and amendments thereof. It does not amount to be approval under any other acts or rules applicable for the project. The requisite approvals/clearances from any other organization/department as applicable to the proposed project shall be ensured by the Project Proponent.
12. This has approval of the Competent Authority.

Yours faithfully,

  
(Yogendra Pal Singh)  
Scientist 'E'

**Copy to:**

1. The Secretary, Ministry of Power, Sharm Shakti Bhawan, Rafi Marg, New Delhi - 110 001.
2. The Secretary, Ministry of Water Resources, RD & GR, Sharm Shakti Bhawan, Rafi Marg, New Delhi-3.
3. The Secretary (Power), Department of Power, Govt. of Sikkim, Secretariat, Gangtok - 737 102.
4. The Secretary, Department of Forest, Environment & Wildlife Management, Govt. Of Sikkim, Gangtok - 737 102.
5. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan R. K. Puram, New Delhi - 110 066.
6. The Deputy Director General of Forests (C), Ministry of Environment, Forest & Climate Change North Eastern Regional Office (NEZ), Law-U-SIB, Lumbatngen, Shilong - 793 021.
7. The Member Secretary, State Pollution Control Board, Department of Forest, Environment & Wildlife, Deorall, Govt. of Sikkim, Gangtok - 737 101.
8. Guard File

  
(Yogendra Pal Singh)  
Scientist 'E'



**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. 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 crores.

**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. As the reservoir will be acting as balancing reservoir and there would be fluctuation of water level during peaking period, efforts be made to reduce impact on aquatic life including impacts during spawning period both at the upstream and downstream of the project.
- iii. 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**

- i. 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 and Wildlife Management**

- i. 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, whichever value is higher, shall be released as environmental flow.



- ii. 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.
- iii. Wildlife Conservation Plan approved by the Chief Wildlife Warden shall be implemented in consultation with the local State Forest Department.
- iv. 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.
- v. Compensatory afforestation programme shall be implemented as per the plan approved.

#### **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.
- 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 Disaster Management Plan.

#### **IX. Miscellaneous**

- i. 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.



- ii. The Company 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.
- iii. 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.
- iv. 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.
- v. 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.
- vi. 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.
- vii. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by 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.
- viii. 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.
- ix. 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.
- x. 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.



- xi. 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.
- xii. 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.
- xiii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xiv. 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.
- xv. 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).
- xvi. 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.
- xvii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xviii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xix. 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.
- xx. 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 Trans-boundary 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.
- xxi. 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.

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