

No.J-12011/86/2007-IA.I  
Government of India  
Ministry of Environment and Forests

Paryavaran Bhawan,  
CGO Complex,  
Lodhi Road  
New Delhi -110 003

Date; 24<sup>th</sup> January, 2011

President (Hydro)  
GMR Bajoli Holi Hydropower Private Limited,  
Old udaan Bhawan  
2<sup>nd</sup> Floor, Terminal 1  
I G I airport, palam  
New delhi-110037

Subject –Bajoli Holi Hydroelectric Project (180 MW) in Himachal Pradesh –  
Environment clearance reg.

Sir,

This has reference to your letter No. GMR / Hydro / 501/1248 /10 dated 22-11-2010 and subsequent letters dated 21.12.2010, 05.01.2011, and 12.1.11 on the above mentioned subject.

2. The project envisages construction of a concrete gravity dam of 66.0 m height from foundation level across Ravi river near village Bajoli and surface power house near village Holi in Chamba district for generation of 180 MW electricity. This is run off the river scheme. The length of the HRT is 15.56 km. The length of reservoir is 2.42 km. FRL is 2018.25 m and MDDL is 2012.00 m. Live storage is 0.92 MCM. The total land requirement for the project is 85.70 ha. Out of which 75.23 ha is forest land, 0.90 ha horticultural land and 9.57 ha is private land. In all there are 288 project affected families (PAFs) whose land is likely to be acquired permanently and 2 PAFs who will lose land as well as house. The rehabilitation & resettlement of project affected persons will be implemented as per NRRP, 2007.

3. The above referred proposal was considered by the Expert Appraisal Committee for River Valley & Hydroelectric Projects at its meeting held on 20<sup>th</sup> & 21st December 2010.

4. The Ministry of Environment and Forests hereby accords environmental clearance as per the provisions of Environmental Impact Assessment Notification, 2006 subject to strict compliance of the terms and conditions as follows:

## Part A: Specific Conditions

- (i) Catchment Area Treatment Plan as has been proposed should be completed in 5 years. The plan is given below:

### Year wise target (physical) for Catchment Area Treatment Plan

Measures	Year I	Year II	Year III	Year IV	Year V	Total
	Physical	Physical	Physical	Physical	Physical	Physical
<b>Biological measures</b>						
Enrichment Plantations	200 ha	200 ha	200 ha	200 ha	67 ha	867 ha
Afforestation	200 ha	200 ha	200 ha	200 ha	49 ha	849 ha
Maintenance of afforestation	400 ha	400 ha	400 ha	400 ha	116 ha	1715 ha
Pasture Development	300 ha	300 ha	300 ha	300 ha	249 ha	1449 ha
Nursery development	10 no.	10 no.	-	-	-	20 no.
Maintenance of Nursery	-	-	-	-	-	-
Vegetative fencing	5 km	5 km	5 km	5 km	5 km	25.0 km
Watch and ward	-	-	-	-	-	-
<b>Engineering Measures</b>						
Contour Bunding	140 ha	125 ha	125 ha	125 ha	125	640.0 ha
Check Dams	20 no.	20 no.	20 no.	20 no.	20 no.	100 no.

- (ii) Prior approval under Forest (Conservation) Act, 1980 for diversion of forest land should be taken. No physical work will be initiated without forest clearance for this project.
- (iii) In all there are 288 project affected families (PAFs) whose land is likely to be acquired permanently and 2 PAFs who will lose land as well as house. The rehabilitation & resettlement of project affected persons should be completed before commissioning of the project.
- (iv) The following commitments made during the public hearing should be fulfilled:-
- a) Appointment of two numbers of MD doctors and one of them shall be lady doctor. Both these doctors are to be on the pay rolls of the company.

- b) Training to the 120 Nos of the local youths for the ITI course.
  - c) Strengthening of the existing Holi-Nayaram road, once the same is handed over to GMR after necessary clearance.
- (v) Environmental flow should be 20% of the average lean season flow of 90% dependable year for four consecutive leanest months.
  - (vi) Biodiversity conservation & management plan as proposed in the EMP should be implemented in totality. From the study area 272 flowering plant species were recorded which include 28 trees, 48 shrubs, 10 climbers and 186 herbs. However listing of bryophytes / teridophytes has not been done. This may be done and submitted within three months.
  - (vii) Fishery conservation & Management plan as proposed in the EMP should be undertaken in consultation with the Fisheries department, Government of Himachal Pradesh. The up gradation of existing facilities of fish farm at Holi in Chamba district should also be done to meet the demand of fish seeds.
  - (viii) All the equipments which are likely to generate high noise levels are to be fully mollified (noise reduction measures).
  - (ix) Consolidation and compilation of the muck should be carried-out in the muck dumping sites and the dumping sites should be above high flood level. The proposed plan envisages generation of total volume of Muck as 21.64 lakh cum(including 40 % swell factor). Out of which about 9.32 lacs cum of muck will be utilised as construction material for various project components and 12.32 lacs cum of muck will be disposed off at pre designated seven number of disposal sites.
  - (x) Green belt development is proposed around project areas, reservoir periphery (12.00 ha) road side (13.8 nkm ) and other components. The average width of the green belt around reservoir rim will be around 40 m varying from about 15 m at places to 120 m or as physiographic and land features allow. The allocated amount of R.s. 9.28 lakhs for green belt development should strictly be used for the purpose.
  - (xi) The environment clearance does not necessarily imply that forestry clearance shall be granted to the project and that the proposals for the forestry clearances shall be considered by respective authorities on their merit. The investment made in the project, if any, based on environmental clearance so granted, shall be entirely at the cost and risk of the project proponent

**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 prevented.

- (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.
- (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.
- (iv) 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.
- (v) Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.
- (vi) Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Chandigarh for review.
- (vii) Officials from Regional Office MOEF, Chandigarh who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection.

5. The responsibility of implementation of environmental safeguards rests fully with the M/s GMR Bajoli Holi Hydro Power Pvt. Ltd. & Government of Himachal Pradesh.

6. The total amount of Rs. 15603.28 Lakhs kept in the budgetary provisions for implementation of environmental management plan should be strictly adhered and not to be diverted for any other purpose.

7. In case of change in the scope of the project, project would require a fresh appraisal.

8. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time-bound and satisfactory manner.


9. This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.

11. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad/ Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

12. The proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>.

13. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional office of MoEF, the respective Office of CPCB and the SPCB.

Yours faithfully,



(Dr. S. Bhowmik)  
Additional Director &  
Member Secretary, EAC

Copy to:-

1. Secretary, Ministry of Power, Shram Shakti, Bhawan, Rafi Marg, New Delhi-1.
2. The Adviser (Power), Planning Commission, Yojna Bhawan, New Delhi-1.
3. Principal Secretary (MPP & Power), Government of Himachal Pradesh, Shimla
4. The Secretary, Department of Environment, Government of Himachal Pradesh, Shimla.
5. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
6. The Regional Office, Ministry of Environment & Forests, Chandigarh
7. Member Secretary, Himachal Pradesh State Pollution Control Board, Phase-III, Him Parivesh, New Shimla – 171 009
8. DG (FC), MoEF, New Delhi
9. ADG (WL), MoEF, New Delhi
10. EI- Division, Ministry of Environment & Forests, New Delhi-110003.
11. Guard file.

(Dr. S. Bhowmik)  
Additional Director &  
Member Secretary of EAC