

No. J-12011/81/2007-IA.I
Government of India
Ministry of Environment & Forests
(IA.I - Division)

Paryavaran Bhawan,
CGO Complex,
Lodhi Road,
New Delhi - 110003

Dated : 16.4.2010

To

The General Manager
Integrated Hydro-Electric Project
Himachal Pradesh Power Corporation Ltd
Kinfed Building, Reckong Peo - 172 107
District Kinnaur (Himachal Pradesh)

Sub: Integrated Kashang Hydroelectric Power Project - 243 MW in the District of Kinnaur of Himachal Pradesh by M/s. Himachal Pradesh Power Corporation Ltd. - Environmental Clearance - regarding.

Sir,

This has reference to your letter No.HPPCL/KHEP/ME-R&R-4/2009/5801-03 dated 20.8.2009 and subsequent letters dated 28.8.2009 and 2.12.2009 on the above mentioned subject.

2. The proposed project envisages construction of trench weir located near Dollo Dogri village in Kinnaur District of Himachal Pradesh. The proposed project is an integration of earlier Kashang HEP (66 MW). The integrated project has 4 stages with erstwhile Kashang (66 MW) HEP as 1st stage with 65 MW capacity. The Ministry accorded Environmental Clearance for Stage-I project on 15.11.2002. The project envisages construction of trench weir and intends to use waters from Kashang and Kerang Khads, both tributaries of river Sutlej for generation of 243 MW hydropower. The stage-I of the project involves a run-of-the river scheme with diversion of major part of Kashang stream (near Dollo Dogri village) to an underground power house located on the right bank of the river near village Powari. The Stage-II comprising diversion of the Kerang stream into an underground water conductor system. The Stage-III is consisting of augmenting the generating capacity of stage-I powerhouse using Kareng water over the 820 m head available in Kasang stage-I powerhouse. Stage-IV is comprising a more or less independent scheme harnessing the power potential of Kerang stream, up-stream of the diversion site of stage-II. The diversion Structure to be located near village Tokytu with an underground powerhouse near village Lippa. The total land requirement is 85.73 ha., out of which forestland is 61.89 ha. and private land is 23.83 ha. Total of 223 persons (all loose land) are likely to be affected due to this project. The total project cost is about Rs.1828.58 Crores and will be completed in 54 months.

3. The above proposal was considered by the Expert Appraisal Committee for River Valley & Hydroelectric projects at its meetings held on 14.9.2009 and 15.12.2009.

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 4 years.
The plan is given below:

| Treatment Measures | 0 Year | I Year | II Year | III Year | IV Year | Total |
|-----------------------------------|--------|--------|---------|----------|---------|-------|
| A) Biological Measures | | | | | | |
| Afforestation (ha.) | 50 | 75 | 90 | 90 | 70 | 375 |
| Timber Plantation (ha.) | 10 | 15 | 20 | 20 | 10 | 75 |
| Fodder Plantation (ha.) | 10 | 14 | 22 | 22 | 7 | 75 |
| NTFP Cultivation (ha.) | - | 5 | 10 | 5 | - | 20 |
| Pasture Development (ha.) | 20 | 50 | 75 | 75 | 55 | 275 |
| Nursery Development (nos.) | 6 | - | - | - | - | 6 |
| B) Engineering Measures | | | | | | |
| DRSM Check Dams (nos.) | - | 200 | 200 | 300 | 196 | 896 |
| Wire Crate Check Dams (nos.) | - | 100 | 150 | 150 | 48 | 448 |
| Wire-Crate Boulder Spurs (nos.) | - | 70 | 70 | 70 | 30 | 240 |
| Bench Terracing (ha.) | - | 15 | 15 | 15 | 5 | 50 |
| Contour Staggered Trenches (nos.) | - | 15 | 20 | 20 | 7 | 62 |
| Catch Water Drain (mt.) | - | 300 | 300 | 300 | 100 | 1000 |

- (ii) The land holding of project affected persons whose land is being acquired to be submitted to this Ministry. The benefits for the land losing households will be as per the Rehabilitation & Resettlement Policy, 2006, Government of Himachal Pradesh. Adequate publicity of the compensation package should be circulated in the affected villages.
- (iii) The commitment made during the public hearing should be fulfilled.
- (iv) A scientific study from a reputed institute for deciding the minimum flow to be released during the lean season should be undertaken. Till the study is completed 15 % of the average flow of four consecutive leanest months should be maintained for environmental flow. After the study is completed release of minimum flow should be study based or 15% whichever is higher.
- (v) As committed during Environment Public hearing, the project proponent should clear the shoal formed by silt brought by Garang (also known as Pizzar) a left bank tributary of Kerang khad near village Lipa well downstream of the project by either releasing enough downstream discharge during summer months or through other means.
- (vi) All the equipment which are likely to generate high noise levels are to be fully mollified (noise reduction measures).
- (vii) 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 for the generated muck of 1.17 Mm³, of which 0.3 Mm³ is proposed to be reutilized for construction material & other filling purposes and remaining 0.879 Mm³ of muck which goes-up 1.231 Mm³ (after

increased volume) should be disposed of at 13 designated disposal areas should be strictly implemented.

- (viii) Compensatory afforestation programme proposed in 86 ha should be implemented in to-to. The proposed greenbelt development in 6 ha. using 13 different plant species along the approach roads, residential areas, office complex, trench weir sites, powerhouse sites etc at a cost of Rs. 55 lakhs should be taken-up strictly.
- (ix) The fisheries management plan for stocking of fish in the streams, tributaries of Sutlej river and the main river itself @20,000 fry of about 30 mm size fingerlings/annum should be strictly adhered. A total budget of Rs. 105 lakhs is allocated for this purpose should not be diverted.
- (x) The proposed Wildlife Management, Development and Conservation of Biodiversity Plan of the Sanctuary at a cost of Rs. 100 lakhs spread over 10 years should be taken-up strictly in the area outlined in the plan (as mentioned in EMP-Chapter-5) without any diversion of funds.
- (xi) The Wildlife sanctuary exists at a distance of 1.5 km from stage-IV. The clearance from Steering Committee of NBWL under Wildlife (Protection) Act, 1972 should be obtained

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.
 - (vi) Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.
 - (vii) Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Chandigarh for review.
6. 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.
7. The responsibility of implementation of environmental safeguards rests fully with the Himachal Pradesh Power Corporation Ltd & Government of Himachal Pradesh.
8. The total amount of Rs. 51.50 Crores kept in the budgetary provisions for implementation of environmental management plan should be strictly adhered and not to be diverted for any other purpose.
9. In case of change in the scope of the project, project would require a fresh appraisal.
10. 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.

11. This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.
12. 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 any 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.
13. The project 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 letters 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](http://www.envfor.nic.in)
14. 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 by e-mail) to the respective Regional office of MoEF, the respective Office of CPCB and the SPCB.
15. Any appeal against the environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section-11 of the National Environment Appellate Authority Act, 1997.

Yours faithfully,



(Dr. S. Bhowmik)
Additional Director

Copy to:

1. The 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 (Power), Government of Himachal Pradesh, Shimla
4. The Secretary, Department of Environment, Government of Himachal Pradesh, Shimla.
5. The Secretary, Ministry of Water Resources, Shram Shakti Bhawan, Rafi Marg, New Delhi-1
6. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
7. The Northern Regional Office, Ministry of Environment & Forests, Bays No. 24-25, Sector-31 A, Dakshin Marg, Chandigarh-160 022 (UT)
8. Member Secretary, Himachal Pradesh State Pollution Control Board, Paryavaran Bhavan, Phase-III, New Shimla.- 171 009 (H.P.)
9. EI- Division, Ministry of Environment & Forests, New Delhi-110003.
10. Guard file.

(Dr. S. Bhowmik)
Additional Director