No. J-12011/25/2009-IA.I

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

> Indira Paryavaran Bhavan 3rd Floor, Vayu Wing Jor Bagh Road, New Delhi -3

> > Date: 19th May, 2015

То

The Executive Director (D&E and Environment)
NHPC Ltd.,
NHPC Office Complex,
Sector -33,
Faridabad -121003 (Haryana)

Subject: Dibang Multipurpose Project (2880 MW) in Lower Dibang Valley District of Arunachal Pradesh by M/s NHPC Ltd - for Environmental Clearance - regarding.

Sir,

This has reference to your letter no. NH/PD/Env.115/1361 dated 27.5.2013 and subsequent letters dated 6.3.2014, 23.4.2014 and 6.8.2014 on the above mentioned subject.

- 2. The above referred proposal was appraised by the Expert Appraisal Committee (EAC) for River Valley and Hydro Electric Power Projects (RV&HEP) in its meeting held on 23rd-24th September 2013, 26th-27th March 2014, 5th-6th May 2014 and 16th-17th September 2014. The comments and observations of EAC of this project may be seen in the Minutes of the meetings which are available on the web-site of this Ministry.
- 3. The Public Hearings were conducted on 11.3.2013 at Roing for Lower Dibang Valley District and on 13.3.2013 at New Anaya for Dibang Valley District of Arunachal Pradesh.
- 4. The project is proposed on the Dibang River near Munli village in Lower Dibang Valley District of Arunachal Pradesh. The project envisages construction of 278 m high concrete gravity dam across Dibang River about 1.4 km upstream of confluence of Ashu Pani river with Dibang river for the generation of 2880 MW hydropower. This is a storage scheme project with dual purposes i.e. flood moderation and power generation. The total land requirement is about 5349.14 ha. Out of which 4577.84 ha is Un-classified State Forest, 701.30 ha is community land without forest cover and 70 ha is land under wet rice cultivation. Total submergence area is 3564 ha (out of which 1176 ha is river bed). The total catchment area of the project is 11276 Sq km. An underground powerhouse is proposed on right bank of river with 12 units of 240 MW capacity each. 115 families of 5 villages are likely to be displaced and 744 families of 39 villages are likely to be affected due to acquisition of land. The total estimated cost of the project is about Rs. 25347 Crores. The project is likely to be completed in 9 years.

SKI

5. The Expert Appraisal Committee (EAC), after due consideration of the relevant documents submitted by the project proponent and clarifications furnished in response to its observations, 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 its amendment in 2009, subject to compliance of the following conditions:

Part A: Specific Conditions

(i) The Catchment Area Treatment (CAT) plan, as proposed in EIA/EMP Report shall be undertaken in consultation with State Forest Department and major works shall be completed before impounding of reservoir. The year-wise details of CAT plan is as follows:

Treatment Measures	l Year	ll Year	III Year	IV Year	V Year	Total
Biological Measures						
Plantation (ha)	121	151	236	168	94	770
Engineering Measures						
Brushwood Check Dams (Nos.)	250	350	380	200	96	1276
Contour Bunding (Nos.)	8	20	30	14	10	82
Gabion Structures (Nos.)	40	67	62	50	40	259
Loose Boulder Check Dams (Nos.)	126	174	190	166	112	768
Silt Retention Dams (Nos.)	16	46	34	20	8	124

- (ii) The details of land holding of the project affected persons whose land is being acquired shall be submitted to this Ministry including Regional Office. The R&R benefits for the land losing households will be as per the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement Act, 2013. Additional provisions shall be given as per the State Rehabilitation and Resettlement Policy, 2008.
- (iii) A Monitoring Committee for R&R shall be constituted which must include representatives of project affected persons including from SC/ST category and a woman beneficiary.
- (iv) All the commitment made during the public hearings shall be fulfilled completely by the developer.
- (v) Dumping and consolidation/compilation of the muck shall be carried out only in the designated muck dumping sites as submitted in the EIA/EMP report. As per the proposed muck disposal plan given in your EIA/EMP, out of the 233 lakh m³ of muck to be generated (with 25-60% swelling factor) 35 lakh m³ will be utilized for construction purpose and remaining 198 lakh m³ will be dumped at 3 designated disposal sites in an allocated area of 112.62 ha. The dumping site shall be more than 30 m away from the HFL of the river and the Toe walls for Muck disposal sites shall be constructed at least 30 m away from the HFL of River Allocated grant of Rs. 648.40 lakhs shall be fully utilized and not to be diverted for any other purpose.



- (vi) A minimum environmental flow of 20 cumec shall be maintained throughout the year through an un-gated opening. Moreover, at least one turbine out of 12 turbines shall be operated 24 hours in full /part load throughout the year, which will provide the sufficient discharge downstream of TRT outlet with adequate depth and velocity of water for sustenance of the aquatic life in the downstream. Continuous monitoring system for the flow measurement shall be installed and data be displayed at appropriate site for civil society and stake holders. Six monthly results shall be submitted to the Regional Office of the Ministry and SPCB.
- (vii) Proposed compensatory afforestation programme in 9155.68 ha of land at in Dibang Forest Division, Lower Dibang Valley District; Anini Forest Division, Dibang Valley District & Namsai Forest Division, Lohit District in consultation with Forest Department. A budget of Rs.15585.21 has been allocated for this purpose shall be fully utilized and not to be diverted for any other purpose.
- (viii) To enhance the environment of project site, greenbelt, as proposed in the EIA/EMP Report, shall be developed. The proposed greenbelt along the periphery of reservoir and project appurtenances shall be undertaken on approximately 200 ha of area @ 1600 plants/ hectare using 27 different plant species should be undertaken in consultation with State Forest Department State Forest Department. The allocated budget of Rs.200 lakhs shall be fully utilized for this purpose and not to be diverted to any other purpose.
 - (ix) The Biodiversity Conservation and Wildlife Management Plan shall be taken-up as outlined in the EMP and as submitted vide letter no. NH/PD/Env.115/521 dated 6.3.2014 and implemented in consultation with the State Forest Department without any diversion of funds. The allocated budget of Rs. 1785.10 lakhs for this purpose shall be fully utilized and not to be diverted for any other purpose. A report of implementation shall be included in the six monthly progress and compliance report to be submitted to the Ministry including its Regional Office.
 - (x) Equipment likely to generate high noise levels shall 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. For this necessary insulation arrangements etc. to be ensured.
 - (xi) The fishery conservation and management plan as proposed in the EMP shall be implemented completely with the Fisheries Department, Government of Arunachal Pradesh. The development fish hatchery for warm water fish at Ashupani & cold water fish at Etalin shall be taken-up with the help of State Fishery Department. A budget of Rs. 648.24 lakhs provided for fishery conservation and management plan should be fully utilized for this purpose and not be diverted for any other purpose.
 - (xii) The environmental clearance is subject to obtaining prior clearance from forest angle and wildlife angle, including clearance from the Standing Committee of the NBWL, if required.
 - (xiii) Grant of environmental clearance does not necessarily imply that forest clearance shall be automatically granted to the project as forest clearance shall be considered by the respective authorities on their merits and decision taken accordingly.
 - (xiv) If any investment is made in the project, based on environmental clearance so granted, in anticipation of the clearance from forest and wildlife angle, shall entirely be at the cost and risk of the project proponent for which Ministry of Environment, Forests & Climate, Change shall not be responsible in this regard in any manner.

3

(xv) Any other clearance required from any other organization/department should be obtained before commencement of works and commissioning of the project, as applicable.

Part B: General Conditions

- (i) Adequate arrangements for providing free fuel like kerosene/wood/LPG shall be made at the project cost for the consumption of laborers to be engaged in the construction work so that indiscriminate felling of trees is prevented.
- (ii) Medical facilities as well as recreational facilities shall also be provided to the labourers.
- (iii) The labourers to be engaged for construction works shall be thoroughly examined by health personnel and adequately treated before issuing them work permit. Periodic health check-up during construction period may also be taken up.
- (iv) Water sprinkling arrangements shall be made to suppress the fugitive emissions/dust.
- (v) Potable drinking water and proper sanitary facilities shall be provided for the labour force. Also proper disposal facilities for solid waste is to be ensured.
- (vi) Restoration of construction area including dumping sites of excavated materials shall be ensured by leveling, filing up of borrow pits, landscaping etc. The area should be properly treated with suitable plantation.
- (vii) Environmental parameters shall be monitored and "six monthly monitoring reports" shall be submitted to the Ministry of Environment, Forests & Climate Change, New Delhi including its Regional Office for their review.
- (viii) Solid waste management & sanitation facility will have to be provided for the labour.
- (ix) Disaster Management Plan shall be prepared in consultation with the District Authorities and early warning telemetric system shall be installed.
- (x) As proposed in the EMP, an Environment Management Cell (EMC) shall be established at the project level with sufficient manpower. The head of the EMC shall report directly to the head of the Project for speedy implementation of EMP & related issues.
- 6. The Project Proponent shall provide full cooperation and provide all required documents /data to the Officials from concerned Regional Office of the Ministry who would be monitoring the implementation of environmental safeguards and undertake inspection.
- 7. The responsibility of implementation of environmental safeguards rests fully with the M/s. NHPC Ltd and Government of Arunachal Pradesh. Therefore, these may be critically reviewed jointly & periodically.
- 8. Besides the above stated conditions, the Project Proponent shall also implement all other environmental safeguards, as proposed in the EIA/EMP report and other reports from time to time. The Government of Arunachal Pradesh may also like to monitor implementation of EMP at regular intervals.
- 9. The Environmental Management Plan (EMP) shall be strictly adhered to and a sum of Rs.760.08 Crores the budgetary provisions for implementation of EMP shall be fully utilized and not to be diverted for any other purpose.

SH

- 10. In case of change in the scope of the project, the same shall be intimated to the Ministry and fresh approval, if required, shall be taken from the Ministry.
- 11. 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.
- 12. This clearance letter is valid for a period of 10 years from the date of issue of this letter for commissioning and generation of electricity.
- 13. A copy of the clearance letter shall be marked to concerned Panchayat/Zilla Parishad/Municipal Corporation, Urban local body and local NGO, if any, from whom any suggestion/representations were received while processing the proposal. The clearance letter shall also be put on website by the project proponent.
- 14. State Pollution Control Board / Committee shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's /Tehsildar's Office for 30 days.
- 15. 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 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, Forest & Climate Change at http://www.moef.nic.in.
- 16. The project proponent shall also submit six monthly reports on the status of compliance of stipulated EC conditions including the results of monitored data (both in hard copies as well as by email) including the respective Regional Office of MOEF & CC.
- 17. 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 to be decided in consultation with the Ministry.
- 18. A multi-disciplinary Committee (MDC) for monitoring the implementation of environmental safe guards during construction shall be constituted by the project proponent (PP) in consultation with the Ministry as early as possible. A panel may be proposed by the PP and submitted to Ministry and the Government of Arunachal Pradesh. The project proponent shall organize six monthly meetings of the Committee and submit the monitoring report to the Ministry.

The MDC will monitor specifically the stability and effectiveness of muck dumping site during all visits and monitor it & suggest remedial measures, if so required.

- 19. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days from the date of issue, as prescribed under Section-10 of the National Green Tribunal Act, 2010.
- 20. The Regional Office will monitor all environmental parameters encompassed in the EMP, specially effectiveness and stability of muck disposal sites and ensure release of environmental flow etc. These will be separately reported by Regional Office in their six monthly reports to be submitted to MoEF & CC, New Delhi.

21. Government of Arunachal Pradesh shall also ensure compliance and any violation of EC conditions during construction & commissioning shall be brought to the notice of MoEF & CC by Government of Arunachal Pradesh immediately for necessary action.

Yours faithfully,

(S. K. Srivastava) Scientist-E

Copy to:

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi -1
- 2. The Secretary, Ministry of Water Resources, RD & GR, Shram Shakti Bhawan, Rafi Marg, New Delhi -1
- 3. The Secretary, Department of Power, Government of Arunachal Pradesh, Itanagar-791111. (AP)
- 4. The Secretary, Department of Forest, Environment & Wildlife Management, Government of Arunachal Pradesh, Forest Secretariat, Itanagar-791111 (AP)
- 5. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delh-110066
- 6. The CCF, Regional Office, Ministry of Environment & Forests, Upland Road, Laitumkhrah, Shillong-793003 (Meghalaya)
- 7. Member Secretary, Arunachal Pradesh State Pollution Control Board, Environment & Forest Office Complex, Sector-P, Itanagar-791111, (AP)
- 8. El-Division, Ministry of Environment, Forest & Climate Change, New Delhi-110003.
- 9. PS to JS (BS)
- 10. NIC Cell for uploading in MOEF's website.
- 11. Guard File/Notice Board.

(S. K. Srivastava) Scientist-E