

F. No. 10-25/2017-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 17th August, 2017

To,

M/s Himachal Pradesh Power Corporation Limited,
Himfed Bhawan, Panjari, Below Old MLA Quarters,
Bypass Raod, Shimla - 1763125,
Himachal Pradesh
E-mail: dgmrcp@gmail.com

Subject: Installation of Material Ropeways 6 nos. for the construction of Chanju-III 48 MW HEP in Chaurah Tehsil of District Chamba, Himachal Pradesh by M/s Himachal Pradesh Power Corporation Limited - Terms of Reference - reg.

Sir,

This has reference to your proposal No. IA/HP/MIS/62364/2017 dated 10th April 2017, submitted to this Ministry for seeking Terms of Reference (ToR) in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of Terms of Reference (ToR) to the project 'Installation of Material Ropeways 6 nos for the construction of Chanju-III 48MW HEP in Chaurah Tehsil of District Chamba, Himachal Pradesh promoted by M/s Himachal Pradesh Power Corporation Limited was considered by the Expert Appraisal Committee (Infra-2) in its 20th meeting held on 26-28 July, 2017.

3. The details of the project, as per the documents submitted by the project proponent, and also as informed during the above said meeting, are under:-

- (i) Himachal Pradesh Power Corporation Limited (HPPCL), a State Government Undertaking has been entrusted with the construction of Chanju-III (48 MW) HEP in Chaurah Tehsil of District Chamba.
- (ii) Terms of Reference (ToR) for the construction of the said projects has already been approved and obtained from State Level EIA Authority vide MOM No. SEIAA/17th Meeting/2013-2855 dated 28.11.2016 which has been again extended up to Nov. 27th, 2017. The Techno economic Clearance of the said projects has also been accorded by Himachal Pradesh Govt. vide letter No DoE/CE/TEC- Chanju-III/2015-3443-51 dated 14.07.2015.
- (iii) The Chanju-III HEP (48 MW) envisaged as a run-of-river scheme on Chanju nallah, a tributary of Baira River which in turn drains into the river Ravi, in Chamba Distt. of H.P. The project is located in Chamba-Nakror-Kathwar-Dantoi road. For diversion of Chanju Nallah flows, a drop type trench weir is proposed at EL \pm 2100m to draw a design discharge of 10.32 cumecs. For diversion of Mahed nallah flows, a drop type trench weir is proposed at EL \pm 2100m to draw a design discharge of 3.15 cumecs. The water conductor system comprises an underground Desilting Basin to exclude all silt particles down to 0.20 mm size, a 4900 m long 2.7m concrete lined D-shaped head

race tunnel will carry design discharge of 10.32 cumecs at 2.60 m/sec., a underground forebay will be provided by enlarging the section of the tunnel at its end. Also from Mahed Nallah water shall be diverted through HRT 993 m long to the main HRT, just upstream of the forebay. A 660 m long main pressure shaft trifurcating near the power house to feed three generating units of 16 MW each. An underground power house located on the left bank of Chanju nallah at an EL ± 1616.00 m will have an installed capacity of 48MW.

- (iv) This project has been contemplated as run-of river development of Chanju Nallah. The proposal has been made in such a way to minimize the use of land. Before taking up the execution work of Chanju-III HEP (48 MW) by Himachal Pradesh Power Corporation Ltd. the forest/govt. land involving the area of 25.98 Hectare and private land involving the area of 1.42 Hectare respectively is likely to be acquired. Two Panchayats named as Chanju and Dehra are involving in this proposed project.
- (v) The proposed Hydro Electric Project is a run of river scheme on Chanju nallah, a left bank tributary of Baira Nallah which in turn is a left bank tributary of Siul river in Ravi basin. The project proposal envisages utilization of the combined waters of Chanju nallah and Mahed nallah for power generation. The paths in project area encountered most hostile terrain with steep gradient with deep and wide gorges and valleys much more inaccessible. The HPPWD road exists on the right bank of Chanju Nallah only. But due to dense forest on the left bank hills, the possibility of construction of any project road has been ruled out. Due to high altitude and difficult location aerial/material ropeway systems are needed to be installed.
- (vi) The objective of HPPCL is to use the ropeways for transportation of construction materials from road side to the work sites on the left bank of the Nallah. Therefore, for the construction of Chanju-III (48 MW) HEP, 6 no. of material ropeways across the Nallah are proposed to be installed. The altitude/elevation of the proposed Material Ropeways to be installed is more than 1000 m from MSL, therefore, the case for the installation of Material Ropeways for the construction of said projects is being submitted to MoEF&CC, Gol for making separate EIA/EMP reports. However; the EIA/EMP reports for whole of the project has been prepared by WAPCOS and further submitted to HP State Pollution Control Board for conducting Public Hearing.
- (vii) Cost of the project is Rs. 23.40 Crore.
- (viii) Proposed Material Ropeways would help in saving many trees which would be felled in case of road construction. As the area is hilly and the construction of the road is not feasible, there is a last option to provide ropeways. This would have positive impact on Environment.

4. The EAC, in its meeting held on 26-28 July, 2017, after detailed deliberations, recommended the project for grant of ToR. As per the recommendation of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords ToR to the project 'Installation of Material Ropeways 6 nos for the construction of Chanju-III 48 MW HEP in Chaurah Tehsil of District Chamba, Himachal Pradesh promoted by M/s Himachal Pradesh Power Corporation Limited for preparation of the Environment Impact Assessment (EIA) Report and Environment Management Plan (EMP) with the following specific and general conditions in addition to Standard ToR provided at Annexure -1:



- (i) Importance and benefits of the project.
- (ii) A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places).
- (iii) Stage – I forest clearance to be submitted.
- (iv) Status of application for NBWL clearance if required for the project.
- (v) Toposheet map of 10 km distance indicating eco-sensitive areas duly authenticated by the Wildlife warden.
- (vi) Route map of proposed ropeway project.
- (vii) Layout maps of proposed project indicating location of upper station and lower station, building, food court, parking, greenbelt area, utilities etc.
- (viii) Numbers of persons/projections of tourist.
- (ix) Cost of project and time of completion.
- (x) A note on appropriate process and materials to be used to encourage reduction in carbon foot print. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy conservation building code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy system includes air conditioning systems, indoor lighting systems, water heaters, air heaters and air circulation devices. Use
- (xi) Details of air emission, effluents, solid waste and hazardous waste generation and their management.
- (xii) Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- (xiii) The E.I.A. should specifically address to vehicular traffic management and parking facilities.
- (xiv) Examine the ground water / water body contamination from septic tank/Soak pit.
- (xv) The impact of odors from the bio-toilets and its management.
- (xvi) The increment in foot falls as a result of implementation of the project along with a justification on the adequacy of the existing and proposed infrastructure including toilets.
- (xvii) An assessment of the impact of all activities being carried out or proposed to be carried out by the project shall be made for traffic densities and parking capabilities in a 2 kms radius from the site. A detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA.
- (xviii) At LTP, one monitoring station should be set up in North and South direction of the project. The meteorological data should be compared with IMD.
- (xix) An onsite disaster management plan shall be drawn up to account for risks and accidents. This onsite plan shall be dovetailed with the onsite management plan for the district.

- (xx) Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made.
- (xxi) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included.
- (xxii) Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
- (xxiii) A tabular chart with index for point wise compliance of above ToR.

General Guidelines

- (i) The EIA document shall be printed on both sides, as far as possible.
- (ii) All documents should be properly indexed, page numbered.
- (iii) Period/date of data collection should be clearly indicated.
- (iv) Authenticated English translation of all material provided in Regional languages.
- (v) The letter/application for EC should quote the MoEF&CC File No. and also attach a copy of the letter prescribing the ToR.
- (vi) The copy of the letter received from the Ministry on the ToR prescribed for the project should be attached as an annexure to the final EIA-EMP Report.
- (vii) The final EIA-EMP report submitted to the Ministry must incorporate the issues mentioned in ToR and that raised in Public Hearing. The index of the final EIA-EMP report, must indicate the specific chapter and page no. of the EIA-EMP Report where the specific ToR prescribed by the Ministry and the issue raised in the Public Hearing have been incorporated. Questionnaire related to the project (posted on MoEF&CC website) with all sections duly filled in shall also be submitted at the time of applying for EC.
- (i) Grant of ToR does not mean grant of EC.
- (ii) The status of accreditation of the EIA consultant with NABET/QCI shall be specifically mentioned. The consultant shall certify that his accreditation is for the sector for which this EIA is prepared.
- (iii) On the front page of EIA/EMP reports, the name of the consultant/consultancy firm along with their complete details including their accreditation, if any shall be indicated. The consultant while submitting the EIA/EMP report shall give an undertaking to the effect that the prescribed ToRs (ToR proposed by the project proponent and additional ToR given by the MoEF&CC) have been complied with and the data submitted is factually correct (Refer MoEF&CC Office memorandum dated 4th August, 2009).
- (iv) While submitting the EIA/EMP reports, the name of the experts associated with/involved in the preparation of these reports and the laboratories through which the samples have been got analysed should be stated in the report. It shall clearly be indicated whether these laboratories are approved under the

Environment (Protection) Act, 1986 and the rules made there under (Please refer MoEF&CC Office Memorandum dated 4th August, 2009). The project leader of the EIA study shall also be mentioned.

- (v) All the ToR points as presented before the Expert Appraisal Committee (EAC) shall be covered.

5. The above ToR should be considered for the project 'Installation of Material Ropeways 6 nos for the construction of Chanju-III 48MW HEP in Chaurah Tehsil of District Chamba, Himachal Pradesh promoted by M/s Himachal Pradesh Power Corporation Limited, in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006.

6. A detailed draft EIA/EMP report should be prepared in terms of the above additional ToR and should be submitted to the State Pollution Control Board for conducting Public Hearing. Public Hearing to be conducted for the project in accordance with the provisions of the EIA Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

7. The project proponent shall submit the detailed final EIA/EMP prepared as per ToR to the Ministry for considering the proposal for environmental clearance within 3 years as per the MoEF&CC O.M. No.J-11013/41/2006-IA-II(I) (P) dated 08.10.2014.

8. The consultants involved in preparation of EIA/EMP report after accreditation with Quality Council of India/National Accreditation Board of Education and Training (QCI/NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other Organization(s)/ Laboratories including their status of approvals etc. vide Notification of the MoEF&CC dated 19.07.2013.

9. The prescribed ToR would be valid for a period of three years for submission of the EIA/EMP Reports.


(Kushal Vashist)
Director

Copy to:

The Member Secretary, Himachal Pradesh Pollution Control Board, Him Parivesh, Phase-III, New Shimla-171009, Himachal Pradesh (INDIA).

Annexure - I

7(g): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR AERIAL ROPEWAYS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

- (i) Examine and submit a brief description of the project-name, project site, geology, topography, nature, size, location of the project, project coverage, master plan, length of the proposed aerial rope way, details of ROW, height from MSL and its importance to the region/ State.
- (ii) Any adverse impact of the works already carried out.
- (iii) Submit the details of facilities viz. administration building, restaurant, toilets, waste collection and disposal etc at Lower terminal and upper terminal including parking area.
- (iv) Submit the details of trees required to be cut for the project, including the type, girth size etc. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation shall be carried out and cost provision should be made for regular maintenance. Details to be submitted.
- (v) Examine and submit the likely impact due to influx of people and associated developments
- (vi) Submit maps of the project area and 10 km surrounding area from boundary of the proposed/existing project area, thereby delineating project areas wild life sanctuaries notified under the Wild Life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/inter state boundaries and international boundaries. Any bio- diversity park or any protected site.
- (vii) Submit baseline data and description of existing situation of the land at the proposed project site including description of terrain, hill slopes, inland topography, slope and elevation, rock types, regional tectonic setting (reported fractures/faulting/folding, warping), and history of any volcanic activity, seismicity and associated hazards.
- (viii) Submit details of power requirement and source. Energy efficiency measures in the activity should be drawn up. PP should also submit details of D.G. Sets along with noise control measures.



- (ix) Details of anticipated impact during construction stage and operation stage w.r.t. landslides, surface drainage etc., should be predicted. The existing surrounding features up to 1 km and impact on them should be addressed separately.
- (x) PP should examine and submit activities associated with aerial ropeway construction and operations and likely associated hazards and accidents. It is therefore desirable that based on the categories of hazards prevailing at the project site, risk assessment may be carried out by specialists in the field and recommendations may be implemented. Risk assessment should be carried out for seismicity, slope stability, soil erosion, and flood hazard.
- (xi) Any litigation pending against the proposed project and/or any direction/order passed by any court of law against the project, if so, details thereof should be provided.
- (xii) Submit Certificate from the competent authorities for safety of ropeway and its monitoring.
- (xiii) Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- (xiv) A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
- (xv) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- (xvi) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- (xvii) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "[http://moef.nic.in/Manual/Aerial Ropeway](http://moef.nic.in/Manual/AerialRopeway)".

