

**JOINT INSPECTION of the project sites by Forest Dept, Power Dept, Energy Management Centre & Kerala State Electricity Board Officials on 17.11.18**

1. While reviewing the Forest clearance (2.87 ha) proposal, the High Power Committee (Meeting held on 8.5.18) directed that the project sites may be jointly inspected by the officials of Forest Dept, Power Dept, EMC, KSEB & the project proponent.
2. Based on the above, the Principal Chief Conservator of Forests & Nodal officer vide his Lr. dt. 16.08.18 instructed the Chief Conservator of Forests/ High Range Circle/ Kottayam to carry out the Joint inspection.
3. Accordingly, the Joint inspection was held on 17.11.2018 and the following Officials / Members were present

***Forest Department***

1. Mr. Deepak Misra, I.F.S  
Chief Conservator of Forests, Kottayam.
2. Mr. Unnikrishnan, I.F.S  
Divisional Forest Officer, Kothamangalam.

***Power Department***

3. Mr. Gopakumaran Nair,  
Joint Secretary to Government

***Energy Management Centre***

4. Mr. M.K. Parameswaran Nair  
Technical Committee Member of Kerala Govt. for SHP
5. Mr. G. Anil  
Joint Director
6. Mr. Dineshkumar  
Energy Technologist

***Kerala State Electricity Board***

7. Mr. Ajith  
Executive Engineer

***Keezharkuthu Power Private Limited***

8. Mr. Onkar Singh  
Managing director
9. Mr. Jasbir Singh

Joint Managing director

10. Dr. Shaji

Environmental Specialist,

Agriculture & Eco systems Management Centre, Trivandrum.

#### **4. Comments of the Chief Conservator of Forests, Kottayam**

During the site study, the Chief Conservator of Forests, High Range Circle, Kottayam agreed that the diversion weir inside the forest is small. However, the CCF expressed apprehensions about the proposed approach road to the weir site for a length of 1000 m through the RF area.

#### **5. Acceptance by the company**

In view of the apprehensions of the Forest Department, the company informed that the approach road to the weir site can be deleted by substituting a temporary **Ropeway** with steel towers at required interval which will not require any diversion of RF Land but will require only permission for “right of way” from the Forest Dept.

#### **6. Consensus**

- (i) The Company has agreed NOT to carry out any major repair work to the existing Kottakavala – Kaithapara mud road.
- (ii) The proposed approach road to weir site will be scrapped and substituted by a “rope way” temporarily during the construction period.
- (iii) The CCF informed that the proposal may be recast by deleting the approach road and incorporating the rope way.
- (iv) The CCF agreed to examine the proposal if it is revised on the above lines.

#### **7. Joint Inspection Report of Forest, KSEB & EMC**

The Joint Inspection Reports of Forest Dept, KSEB & EMC are attached here with.

#### **8. Revised Proposal**

Closely following the views of the CCF / High Range Circle, Kottayam, the proposal has now been revised as below:

- (i) The entire approach road to the weir site is scrapped
- (ii) In order to approach the weir site for construction of weir / removal of muck from power tunnel, a temporary “ropeway” with steel towers at required intervals (which will not require any diversion of forest land but will require only permission for ‘Right of way’, as is being granted for erection of power transmission lines) has been proposed now.  
The steel towers which will be erected with bolts & nuts, will be removed once the construction works are over.
- (iii) As per the revised proposal, initial requirements of forest land will be 2.42 ha and 1.44

ha of Forest land will be handed over back to Forest Department for afforestation. As such the requirements after construction of the project will only be 0.98 ha.

- (iv) 2.42 ha of non-forest land near Kaithapara Village will also be handed over for compensatory afforestation.

In sum, submergence of 0.5 ha for 5m high diversion weir and the surge tank of 5m dia alone will remain within the R.F. area, after the implementation of the project.

## **9. Merits of the revised Keezharkuthu Project (19.8 MW)**

- (i) Only 2.42 ha of forest land is required for implementing this 19.8 MW project.
- (ii) Out of this, 1.44 ha i.e, 66% of the forest land will be handed over back to the Forest Dept. immediately once the construction is over and net requirement will be only 0.98ha.
- (iii) Equal area of 2.42 ha. of private lands adjoining the forest boundary is to be handed over by the Company for compensatory afforestation.
- (iv) As such, there will be a net increase of 1.44 ha of Forest cover.
- (v) Requirement of forest land per MW of installed capacity will be only be 0.12 ha initially and finally 0.05ha only.
- (vi) All the comments/issues raised by Forest Dept. have been fully addressed, in the revised forest clearance proposal.
- (vii) The PH & a portion of a penstock are located in private land.
- (viii) The project already has roads up to the power house area.
- (ix) People are residing near the project area and the company has obtained almost all other major clearances. They have also done the Environmental Impact Assessment (EIA) Study, even though it is not mandatory for small hydro projects, as required by the Forest Dept. It is very clear from the Report that the environmental damages in the forest area are very less when compared to benefits. They have also proposed a complete Environmental Management Plan (EMP) to build this small hydro project. Project proponent will not have any permanent human presence in the forest area once the construction is over. Only the submergence of weir (0.5 Ha) and the shaft (5m dia) will be left behind within the forest area.
- (x) Demand for power keeps on increasing in Kerala and the State do not have much scope for additional thermal power generation.
- (xi) In such a situation, the best option will be to go in for cheap, renewable & eco-friendly hydro power projects, where the requirement of forest land will be minimum.