

**DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL
HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)**

FILE NO. : **FP/HP/HYD/41472/2019**

DATE OF PROPOSAL :

**ALTERNATE SITES CONSIDERED TO MINIMISE THE USE OF
FOREST LAND FOR CONSTRUCTION OF
LOWER IKU SMALL HYDRO ELECTRIC PROJECT (1 MW)**

ALTERNATIVE-I

The proposed project is situated on the left bank of the Iku Khad. The alternative involves construction of diversion structure at EL \pm 1225 m on Iku Khad. The water conductor shall consist of surface De-Silting Tank, Water Conducting System, Forebay Tank and surface Power House on the left bank of Iku Khad. The gross head available for power generation shall be around 115 m. Surface powerhouse shall be located on the left bank of the Iku Khad.

Feature considered:

- Forest land involved to the tune of 0.6806 hectares.
- Entire alignment of the Project falls on the left bank of the Iku Khad.
- Gross head is fully utilized, resulting in more power generation.
- Less felling of trees i.e. 24 number of trees is involved in the proposal.

ALTERNATIVE- II

This alternative involves construction of diversion structure on Iku Khad at EL \pm 1225 m and the Water Conductor System involving of about 630 m length passing through a loose rock on the right bank of the khad. Geologically, this alternative is not appropriate for the safety of the Project components.

Feature Considered:

- Forest land involved to the tune of 0-76-00 hectares.
- It is difficult for construction of water conductor system on the right bank as it passes through loose rock.
- Gross head available also decreases, resulting in less power generation.
- The Project cost increases in this alternative.
- Felling of 62 number of trees is involved in the proposal.

ALTERNATIVE- III

This is mainly right bank alternative and involves construction of diversion structure at EL \pm 1225 m on the Iku Khad. Water of Iku Khad shall be diverted through 1110 m long Pressurised Power Pipe from De-Silting cum Forebay Tank. The Power House shall be constructed on the right bank of Iku Khad near to the Iku Khad and thus it would not be safe. The net head available shall also be less. In this alternative the Power Channel shall be pressurized and the area in question is vulnerable to land slides.


Features Considered:

- Entire alignment falls on right bank of Iku Khad.
- Forest land involved to the tune of 0-72-25 hectares.
- The Power House and Power Channel shall not be safe
- More felling of trees i.e. 105 is involved in the proposal.

Keeping in view all the above three alternative, the **alternative- I**, which is more suitable and environmental friendly, has been finally adopted.

For M/s Sanjeev Hydro Projects (P) Ltd.

Sanjeev Hydro Projects Pvt. Ltd.


Authorised Signatory

Authorised Signatory

Place : Dharamshala

Dated :