

## EXPRESSION OF INTERSET

Himachal Pradesh Power Corporation Limited invites Expression of Interest (EOI) from interested and experienced companies/firms/joint ventures (limited to two firms) for the "Preparation of Detailed Project Report (DPR) for C/o Two Way Passenger Ropeway- (Bi-cable Jig back Cabin Ride system for six passengers) between Shunarang at Ralli village and Badodhar at Mebar village near Reckong-Peo in Distt. Kinnaur of Himachal Pradesh, India".

The scope of work includes, detailed survey and design required for preparation of DPR of the Double Reversible Bi-Cable Jig Back Passenger Ropeway System in single section, Horizontal length is  $\pm 1339$  m, level difference  $\pm 480$  m, having Capacity of 40 persons per hour (PPH). The proposed Ropeway starts from an area adjacent to Ralli School (Lower Terminal) and terminates near Mebar village (Upper Terminal) on an upward slope.

### A) DESIGN AND SPECIFICATION DATA FOR PREPARATION OF DPR AS PER PRELIMINARY FEASIBILITY REPORT :

#### **1. Technical Data:**

1.1 Based on the reconnaissance and system capacity, the broad specification of the Ropeway is as below:

Sr. No.	Item	Parameters
1.	System	Bi Cable Jig back Cabin Ride
2.	Direction of operation	Clockwise
3.	Capacity (Designed), PPH	40@ max speed
4.	Line speed, m/sec	0 to 3
5.	Horizontal distance between station rail back loop crs, m	1339
6.	Vertical rise, m	480
7.	Inclined length, m	1408
8.	Alignment	Straight
9.	Line gauge, m	5
10.	Capacity of cabin, persons (Aluminum)	6
11.	Total no. of clusters, no.	2
12.	Cabin at each cluster	1
13.	Total number of cabin, no.	2x1=2
14.	Travel time one way, min	8.53
15.	Type of cabin	Fully enclosed cabin with ventilation. Door operation-manual.

16.	Track Rope	34 mm dia, Full Locked Coil, Tensile grade 1570 N/Sq. mm quality, MBL-112.13 Mn, Un Galvanised
17.	Hauling Rope	14mm dia. 6x19s (9-9-1) Tensile grade 1570 N/Sq. mm
18.	Tension Rope for Hauling Rope	28 mm diameter, 6x25F, IWRC, Galvanized, Tensile Grade- 1570 N/ Sq. mm.
19.	Tension Rope for Track Rope	54 mm diameter, 6x36 SW, IWRC, Galvanized, Tensile Grade-1960 N/Sq.mm
20.	Location of Drive gears	LTP
21.	Location of Tension gears	LTP
22.	Main drive Motor, KW	15, 3 Phase, 415 Volts, 50 Hz, Sq. Cage Induction Motor, 1500 R.P.M.
23.	Engine drive for emergency	5 HP Air cool automotive engine with integral clutch.
24.	Line speed with emergency engine, m/sec	0.5 to 1
25.	Line rescue System	Independent Rescue System of 4 person capacity cabin, 3.7 KW Rescue Ropeway geared motor
26.	Rescue Rope	10 mm dia, 6x19S, Tensile grade 1770 N/Sq.mm quality
27.	D.G. Set @ LTP, KVA	25
28.	Stand by D.G. Set @ UTP	5
29.	Relevant standard	IS 5230

Operation & Maintenance of the Ropeway system shall be carried out in accordance with the recommendation of manufacturer of the equipment such as Gear Box, Motors, Coupling, Control Panels, Carriage, hangers, Cabin & haulage Ropes etc.

## 2. Design Parameters:

2.1 All the station structures and trestles should be designed keeping in view the effects of wind, earthquake, temperature variations, geo technical conditions etc. prevalent at the site. In this regard the Indian Codes would be considered as guidelines. Some of the main design parameters to be considered are given in paras 2.2 to 2.5.

### 2.2 Climate features:

For the design of structure, a temperature variation from (+) 25 deg. C to (-) 5 deg. C has been considered.

### 2.3 Humidity:

Variation in humidity level from 30% to 95% has been considered for the system design.

#### 2.4 Wind pressure:

Wind pressure shall be as per the relevant Indian Standard i.e. installation should not be in operation at 150 Km/hr-wind speed.

#### 2.5 Seismic factors:

The Ropeways system works are located in Zone IV as per IS 1893, 1984. Hence, all the structures shall be designed as per the provisions of the IS Codes as applicable for Zone IV taking in to account the seismic coefficient and importance factor.

### 3. Geology:

It would be necessary for specific geo-technical investigations to be carried out to ensure proper foundation design at the location of important locations, like stations, trestles etc.

### 4. Specifications for Civil works:

The design material and workmanship for civil, structural, electro-mechanical, water supply & sanitary fittings, works in all respect shall conform to latest Indian Standards, Central Public Works Department Specifications.


### B) Criteria For Short Listing of the Firms Shall be as Follow:

To qualify for the award of the contract, the bidder/the firm/company shall have past work experience of similar nature and should fulfill the following qualification/requirements given here under:

1. Proof of the past work done and execution of similar works along with quantum and value of work.
2. Proof of the technical, managerial and financial capabilities of the Firm/Company.
3. Information of the qualification of key staff along with an undertaking that the entire work including field data collection will be done by experienced professionals only.
4. Work Experience (Technology Partner):  
Must have prepared DPRs for similar type of Passenger Ropeways for at least 1000 m long horizontal span and above.
5. The bidder shall have surveyed, designed and prepared DPR of **minimum one, six passengers** ropeway during last 5 years. The bidder should submit the details of such completed works. In support of having completed the works, the bidder should submit the attested copies of the completion certificates from the clients indicating the name, description, value of the work, date of start, date of completion (Contractual and actual). The value of work executed should be inclusive of the value of free supply items.
6. Technical & Price bids shall be invited from shortlisted firms/companies separately.
7. Operation and maintenance cost of Ropeway should also be included in the DPR. Such cost shall include :
  - (i) Cost of hiring an agency of O&M of Passenger Ropeway of capacity of six passengers;
  - (ii) Cost of training to villagers/HPPCL staff for the period of one year after construction/operation of Ropeway; and
  - (iii) Quarterly visit of the technical staff of the equipment supplier for a period of one year after operation.

8. The bidders are advised to visit and examine the site of works and its surroundings and obtain himself on his own responsibility all information that may be necessary for preparing the bid and entering into the Contract. The costs of any such visits shall be entirely at the bidder's own expense.
9. Before submitting Expression of Interest (EOI), the bidder will be deemed to have satisfied himself by actual inspection of the site and locality of the works that all conditions liable to be encountered during the execution of the works are taken into account.
10. Queries, if any, can be made to the Manager (R&R), Shongtong - Karchham HEP, HPPCL, Reckong-Peo, and Distt. Kinnaur (H.P.), Phone No. (LL): 01786-222856, Mobile No.: 94186-65667, Fax: 01786-223174, Email: skhep.hppcl@gmail.com

Last date of submission of EOI: 30-11-2018 upto 5:00PM.

  
General Manager  
Shongtong Karchham HEP  
HPPCL, Reckong Peo  
Distt. Kinnaur (H.P.)