

# Expression of Interest for Empanelment of Survey agencies /firms to work in UJVN Limited

## Prequalification Criteria

- 1 Firm should have its registered office in India.
- 2 Firm should have registration in E.P.F.
- 3 Firm should have registration in service tax.
- 4 Firm should have Income Tax PAN No.
  
- 5 **Technical Criteria (Work Experience):** As per OM no.17/UJVNL/MD/C-18 dated 02.01.2012

Experience of having successfully completed Survey work (By Total Station) of Major hydroelectric projects ( more than 25MW) during last 7 years ending last day of month previous to the one in which this bid is invited should be either of the following:-

**Tentative amount of bid is 5.0 Lacs**

- (i) Three similar completed works each costing not less than the amount equal to 40% of the invited bid value.  

**OR**
- (ii) Two similar completed works each costing not less than amount equal to 50% of the invited bid value.  

**OR**
- (iii) One similar completed work costing not less than amount equal to 80% of the invited bid value.

- 6 **Financial Criteria:** As per OM no.17/UJVNL/MD/C-18 dated 02.01.2012

Average Annual Financial turnover during the last 3 financial years ending 31<sup>st</sup> March of the previous financial year, should be at least 30 % of the invited bid value. The firm shall submit Balance sheet and Profit & Loss account of last 3 years in support of this established through latest ITCC or Income tax return certificate/acknowledge of respective financial.

6. Firm should have latest modern Survey equipments in its name viz.(Documentary proof required)
  - a. DGPS dual frequency minimum one set.
  - b. Total station of least count 2 seconds with two nos. tripod
  - c. Digital levels
  - d. Auto levels
  - e. Auto plotter/ Scanner (AO size)/ Software/ Computers
  
7. Firm should have minimum 5 experts/ trained-man power who are associated with the firm from past 2 years, in Topographical surveying/Data processing and providing maps in Auto Cad format.(CV with qualifications and relevant experience to be attached).
  
8. UJVN Limited may inspect the office for assessment of the criteria.
  
9. Firm should have completion certificates from Engineer in charge for successfully carrying out works of major hydroelectric project( more than 25MW) under Government organization/PSUs/Private developer.

10. Empanelment fee of Rs 1135.00(Rs. 1000+13.5% VAT=1135) in the form of demand draft issued from any Nationalized / Scheduled Bank in India drawn in favour of ***“DGM (Civil), Vyasi Project, UJVN Limited, Dakpathar (Dehradun) payable at Dakpathar”***. This fee is non-refundable. The fee valid for three years. The fee exempted for the firms those who have submitted document against Expression of Interest Notice No.:01/UJVNL/DGM/LMPP/Survey/2014-15 Dated:17/03/2015.

Qualifying updated credentials shall have to submit by firms every year of before empanelment.

## Tentative details of survey work to be carried out in Lakhwar Vyasi Project

Topographical Surveys for run of river scheme/Dam based project

Sl.No.	Features	Survey requirements	Standards of survey accuracy
	Planimetric & height control.	<p>Precise planimetric and height control in the project area and connecting the same with national control net work by Survey of India as specified under:-</p> <ol style="list-style-type: none"> <li>a) Precise Planimetric control net work by DGPS Trilateration from 5Km. upstream of dam axis to 2Km. downstream of the dam axis</li> <li>b) Densification of control net work with closed traverse with total station in the project area based on the main control net work the project.</li> <li>c) Transferring of bench mark from existing Survey of India bench mark to the project area by precise order height control net work of closed leveling by auto level/Sprit level or digital auto level.</li> <li>d) Construction of Survey pillars and bench marks at different structures of the project.</li> </ol>	<p><b>Second order class-II</b> of Trilateration with:-  <b>positional accuracy</b> : 1:20,000  <b>Tri angle closure</b> : 2 (Average)                      And 5 seldom to exceed  <b>Geometric configuration</b> : Minimum angle contained within, not less than 20°  <b>Astro azimuth</b> closer not to exceed 12  <b>Side length of triangles</b> 4Km.-10Km.                      Check between forward and backward running between fixed elevation or loop closer not to exceed 8mmç Km.                       C:C 1:2:4 ( size 1m. x 1m. x1m)With center punch mark on mettle plate grouted and providing co-ordinates to all such pillars with connections to main survey control net work.</p>
2.	Planimetric Survey	Topographical survey of the main stream showing all the features and sub features of the river bed and covering 50m above FRL i.e.796 both side of river bank or as directed by Engineer-in-Incharge.	Contour interval 5m or as directed by Engineer-in-Incharge.
3.	L-section and X-section	Longitudinal section and X-section of the stream/structure/proposed alignment/proposed structure along the center line as directed by Engineer-in-Incharge.	
4.	General layout survey	Topographical survey of the project with contour interval 1m. covering all the components of the project extending from 500m upstream and 500m downstream of proposed dam axis on both of banks of river upto 50m above the proposed FRL.	
5.	Reservoir Area.	Topographical survey of Reservoir area with contour interval 5m covering an area on both banks of river up to 50 m above the proposed FRL up to the tip of reservoir or as directed by Engineer-in-Incharge.	

6.	X-Sections	X-sections of the reservoir area from river bed level to 50m above the proposed FRL covering both banks of the river on spacing 100m ( or as directed by Engineer-In-Charge) from the centerline of the proposed dam axis up to the tip of the reservoir.	
7.	Dam	Topographical survey of Diversion structure from 500 upstream to 500m Downstream with contour interval 1m covering from river bed level to 50m above the proposed top level of the diversion structure or as directed by Engineer-in-Incharge.	
8.	X-Sections.	X-sections on spacing 10m interval from proposed center line of the diversion structure up to 500m Upstream and 500m Downstream covering both banks of the river from river bed level to 50m above from proposed top level of the diversion structure.	
9.	Access Adits and Tunnel portals	Topographical survey of Access Adits and Tunnel portals (100m surrounding from proposed location in all side) with contour interval 1m.	
10.	Setting out. surveys	Survey and setting out works of different structures of Project components as per details of design on ground /Underground(Tunnels and Cavern). Plotting of L-sections, X sections precisely and calculations of quantities.	
11.	Underground Survey	Marking of existing structures on drawing by carrying out survey of existing underground structures like Adit to power house (186 m long & 5.7 m D-shaped), Adit to erection bay (213 m long & 7.0 m D-shaped), Power house cavern (130 m x 20 m x 27.59 m D-shaped), upper drainage gallery (166 m long & 2.5 x 3.0 m D-shaped), Cable tunnel (3.5 m dia D-shaped & length 105 m), collection chamber ( D-shaped, 80m x 10 m x 10.80 m), Diversion tunnels (02 nos horse shoe shaped, 5 m dia, 567.67 m & 596.05 m long) and tail race tunnel (4.25 m semi circle & 96 m length) and also preparation of cross sections at an interval of 10 m and also at change of structure point. (If TRT is not accessible, outlet side co-ordinates of TRT should be marked) or as directed by Engineer-in-Incharge.	

All above work also includes preparation of maps and layout plan in requisite scale to supply them in both soft and hard formats with 3 sets including cost of man power, labour, surveying instruments, camp equipage etc. as per direction of Engineer-in-charge

**Note: The survey work (may vary from above mentioned tentative work) to be executed (Quantity and Item) shall be informed vide enquiry separately after completion of empanelment.**