

ANNEXURE-1 TO COMMERCIAL TENDER

LIST OF MINIMUM EQUIPMENT TO BE DEPLOYED BY THE BIDDER

| Sl. No. | Equipment Description | QTY (Nos.) |
|---------|--|------------|
| 1. | Thermit weld kit | 1 |
| 2. | Pin Brazing Machine | 1 |
| 3. | Cable crimping tool | 1 |
| 4. | CIPL Survey –Instrument (Required during post commissioning surveys) | 1 |
| 5. | CAT Survey Instrument (Required during post commissioning surveys) | 1 |
| 6. | DCVG /CAT Frame “A” Survey instrument (Required during post commissioning surveys) | 1 |
| 7. | Data loggers (Required during post commissioning surveys) | 5 |
| 8. | Soil resistivity instrument | 1 |
| 9. | Insulation tester | 1 |
| 10. | Continuity tester | 1 |

Notes:

- A. Bidder is required to mobilize the above minimum critical equipment in good working condition and suitable for installation of PCP system & associated work. Bidder is required to augment the above equipment with additional numbers / categories of equipment as per actual requirement and instruction of Engineer-In-Charge without any additional financial implication to client.
- B. Bidder shall replace any defective / damaged equipment promptly to complete the work without any time & cost implication to the client / owner.
- C. After completion of certain activities, in case equipment are not required the same can be demobilised with prior approval of Engineer-In-Charge.

ANNEXURE-2 TO COMMERCIAL TENDER

MINIMUM NUMBER OF SKILLED MANPOWER TO BE DEPLOYED

| SI. No. | DESCRIPTION | TOTAL REQUIREMENT |
|---------|---------------------------|-------------------|
| 1. | Overall Project In-charge | 1 |
| 2. | Discipline Engineer | 1 |
| 3. | Safety officer | 1 |
| 4. | Skilled/Unskilled workers | AS REQD |

NOTES:-

- A. The details of minimum manpower required to be mobilized by the execution contractor to complete the work within schedule for each part is given above and it is not exhaustive. Contractor is required to augment the above list with additional numbers/categories of workmen as required and directed by Engineer-In charge to complete the work within the completion time schedule and quoted price.
- B. The Manpower as identified above, should have required qualification and adequate relevant experience.

ANNEXURE-3 TO COMMERCIAL TENDER

EXPERIENCE CRITERIA FOR KEY PERSONNEL TO BE DEPLOYED DURING EXECUTION OF WORK

The Bidder must provide a detailed organizational chart indicating the organization or personnel and equipment for each phase of the Works. CVs of main key persons shall be submitted by the Contractor along with bid and replacement of any of these key persons after LOA issuance shall be approved by Owner / Owner's representative. Key persons shall be deployed during the entire duration of the work till completion of all works. Non deployment of key persons will be subject to recovery as defined elsewhere in the bid.

Following key persons to be deployed during construction:

| Sl. No. | Position | Qualification & Knowledge | Experience | No. of Key Personnel (minimum) |
|---------|--|---|---|--------------------------------|
| 1. | Construction Manager / Construction In-Charge/RCM/ Overall Project In-charge | Degree in Electrical/ Chemical or Metallurgical Engineering | B.E. in (Electrical, Chemical or Metallurgical Engineering) & at least 10 year Experience in the Cathodic Protection and shall be NACE certified level-II/III personnel & shall be available for entire time schedule of the project. | 1 No. |
| 2. | Discipline Engineer/ Spread Incharge | Degree / Diploma in Electrical/ Chemical or Metallurgical Engineering | B.E. or Diploma in (Electrical, Chemical or Metallurgical Engineering) & at least 5 year Experience in the Cathodic protection and shall be available for entire time schedule of the project. | 1 No. |
| 3. | Safety Officer | Degree / Diploma in Engineering/ Safety | At least 3 years of experience for Degree holder and 5 years for Diploma holder in Safety Management in construction of cross country pipeline (Hydro-carbonpipeline), hydrocarbon processing plant. | 1 No. |