SECTION 1 NOTICE INVITING TENDER (NIT)

1.1 GENERAL

1.1.1 Name of Work:

Uttar Pradesh Metro Rail Corporation (UPMRC) invites Open Tender for the work "Outsourcing of manpower for O&M work for preventive and corrective maintenance of 25 KV OHE and power supply installations (ASSs & RSSs) (excluding SCADA) of Uttar Pradesh Metro Rail Corporation Ltd."

From eligible applicants who have valid electrical contractor license and have work experience for maintenance of Traction Installations (25 KV OHE & PSI)/EHV Transmission lines/Power Supply Installations (66 KV and above) in railways / metro rails or experience of Erection of Traction Installations (25 KV OHE & PSI)/EHV Transmission lines/Power Supply Installations (66 KV and above) in railways / metro rails.

The brief scope of the work and site information is provided in NIT Section 2.

1.1.2 Key details:

S.No	Description	Scope
1	Tender No	UPMRCTR-01
2	Scope	Outsourcing of manpower for O&M work for preventive and corrective maintenance of 25 KV OHE and power supply installations (ASSs & RSSs) (excluding SCADA) of Uttar Pradesh Metro Rail Corporation Ltd."
3	Approximate cost of works	Rs. 2,24,28000/- excluding taxes for 03 years
4	Tender Security amount	2,24,280/ -
5	Expected Duration of the work	36 months from date of LOA,
6	Cost of Tender Paper	23600.00 (inclusive of GST) (In form of demand draft in favour of "Uttar Pradesh Metro Rail Corporation Limited" payable at Lucknow)
7	Date & Time of sale of tender paper	From 21.02.2020 to 12.03.2020 (between 10:00 Hrs to 17:30 hrs) on working days
8	Last date of seeking clarification	13.03.2020
9	Pre bid meeting	13.03.2020 @ 11:00 Hrs
10	Last date of issuing reply to pre bid queries and issue of addendum (if any)	16.03.2020
11	Last date & Time of submission of tender	Up to 11:00 hrs on 23.03.2020
12	Date & Time of opening of tender	23.03.2020 (at 11:30 hrs)
13	Place of Availability of Tender Document, Seeking clarifications and Submission of Completed Tender Documents	Office of Chief Electrical Engineer/Traction Uttar Pradesh Metro Rail Corporation Ltd, Administrative Building, Vipin Khand, Gomati Nagar, Lucknow -226010 E mail: aksingh.ceetr.lmrc@gmail.com

1.1.3 QUALIFICATION CRITERIA:

1.1.3.1 Eligible Applicants:

- i. The tenders for this contract will be considered only from those tenderers (proprietorship firms, partnerships firms, companies, corporations) who meet requisite eligibility criteria prescribed in the sub-clauses of clause 1.1.3 of NIT. <u>Joint Ventures or Consortium are not allowed to participate in the tender.</u>
- ii. A tenderer shall submit only one bid in the same tendering process. A tenderer who submits or participates in, more than one bid will cause all of the proposals in which the tenderer has participated to be disqualified. No tenderer can be a subcontractor while submitting a bid in the same bidding process.
- iii. Tenderers shall not have a conflict of interest. All Tenderers found to have a conflict of interest shall be disqualified. Tenderers shall be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - a) tenderer has been engaged by the Employer to provide consulting services for the preparation related to procurement for on implementation of the project;
 - b) tenderer is any associates/affiliates (inclusive of parent firms) mentioned in subparagraph(a) above; or
 - c) tenderer lends, or temporarily seconds its personnel to firms or organisations which are engaged in consulting services for the preparation related to procurement for on implementation of the project, if the personnel would be involved in any capacity on the same project.
- iv. The Tenderer/applicant must not have been blacklisted or debarred as on the due date of submission of bid by Government of India/ State Government / Government undertaking from participating in the tenders. The tenderer should submit an undertaking to this effect in Form of Tender. The tenderer shall also submit a "Verification Statement" to this effect as per proforma placed at Annexure 1 of ITT.

1.1.3.2 Minimum Eligibility Criteria:

The tenderers will be qualified only if they satisfy the criteria as given below during last seven-year ending **31.01.2020**.

S no	Description		Requirement
1.	Financial	Turnover of last three years	>30% of annual estimated cost without GST
		Profitability	Profit making for 3 preceding financial years
2.	Technical	The contractor should have work experience for maintenance of Traction Installations (25 KV OHE & PSI)/EHV Transmission lines/Power Supply Installations (66 KV and above) in railways / metro rails. (With valid electrical contractor license) or Erection of Traction Installations (25 KV OHE & PSI)/EHV Transmission lines/Power Supply Installations (66 KV and above) in railways / metro rails. (With valid electrical contractor license) Similar works in last 07 years	3 nos of each not less than 40% of yearly estimate cost i.e. Three similar work of value of Rs. 30 lakhs or more Or 2 no of each not less than 50% of yearly estimate cost cost i.e. Two similar work of value of Rs. 37 lakhs or more Or 1 work not less than 80% of yearly estimate cost i.e. One similar work of value of Rs. 60 lakhs or more
3.	Specific Experience	FOCS ROCS	Installed or maintained at least 40TKM of FOCS and 5TKM of ROCS and PSI installations
4.	License	Electrical contractor license	The contractor must have valid Electrical contractor license

NOTE: -

- The tenderer shall submit details of work executed by them in the Performa of Appendices-12 of F.O.T. for the works to be considered for qualification of works experience criteria.
- For the above, documentary proof such as completion certificates from client clearly indicating the nature/scope of work, actual completion cost and actual date of completion for such work should be submitted.

1.1.3.3 Deleted

1.1.3.4 Deleted

1.1.4 TENDER DOCUMENTS

The Tender documents consist of:

Volume 1:

Notice Inviting Tender (NIT) (Section-1), Brief Scope of Work (Section-2) & Tender Prices and Schedule of Payment (Section-3). Instructions to Tenderers (ITT) - including Annexures Form of Tender (FOT) - including Appendices

Volume 2:

General Conditions of Contract (GCC)
Special Conditions of Contract (SCC) - including Schedules

Volume 3:

Specifications and Scope of work

Volume 4:

Bill of Quantities (BOQ)

- The tenderers may obtain further information/ clarification, if any, in respect of these tender documents from the office of **Chief Electrical Engineer/Traction**, Uttar Pradesh Metro Rail Corporation Ltd. (UPMRC) Administrative Building, Near Dr. Bhimrao Ambedkar Samajik Parivartan Sthal, Vipin Khand, Gomti Nagar, Lucknow-226010 [Email id:aksingh.ceetr.lmrc@gmail.com]
- **1.1.6** Late tenders (received after date and time of submission of bid) shall not be accepted under any circumstances.
- 1.1.7 Tenders shall be valid for a period of **180 days** from the date of submission of Tenders and shall be accompanied with a tender security of the requisite amount as per **Annexure-5 of ITT** in the form of a Bank Guarantee from Scheduled Commercial Bank in India.
- 1.1.8 UPMRC reserves the right to accept or reject any or all proposals without assigning any reasons. No tenderer shall have any cause of action or claim against the UPMRC for rejection of his proposal.

1.1.9	This Notice Inviting T	ender (NIT)	supersedes the	previous u	ploaded NIT of	on UPMRC's website.

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SECTION 2

BRIEF SCOPE OF WORK

2.0 The scope of work includes" Outsourcing of manpower for O&M work for preventive and corrective maintenance of 25 KV OHE and power supply installations (ASSs & RSSs) (excluding SCADA) of Uttar Pradesh Metro Rail Corporation Ltd.".

The deputed manpower shall perform following maintenance activities as per schedule:

- a) Special Checks as per UPMRC ACTM as well as SMIs issued.
- b) FOCS & ROCS Maintenance.

Indicative guidelines regarding Contractor's Maintenance Organization

- A. Nights Maintenance/Breakdown Attending Gang
- i. Engineer 1
- ii. High skilled Fitters /fitters- 4
- iii. Helper 4

As preventive maintenance shall be done in the night during 'OHE off/Power block 'hrs. If any breakdown happens during these hours, same gang shall attend it.

- B. Daytime Maintenance/Breakdown Attending Gang
- i. supervisor 1
- ii. High skilled Fitters /fitters -4
- iii. Helpers 3

Note: more manpower may be deployed on instruction of UPMRC and the wages for the extra manpower will be paid at the same rate as mentioned in BOQ on the same terms and condition as agreed in LOA.

The quantity qualification and experience desired for the manpower is as follows,

S. No.	Designation	Qualification/Experience desired	Quantity
1.	Engineer	B. Tech/Minimum 06 months experience in Traction work (FOCS or ROCS and PSI works)	1
2.	Supervisor	Diploma/ 06 months experience in Traction work(FOCS or ROCS and PSI works)	1
3.	High skilled fitters /Technician	ITI with 1.5 year experience in Traction work (FOCS or ROCS and PSI works) or 10 th pass with 3 years' experience of in Traction work (FOCS or ROCS and PSI works)	3
4.	Fitters /Technician	ITI with 06 months experience in Traction work (FOCS and ROCS and PSI works) or 10 th pass with 2 years' experience of in Traction work FOCS or ROCS and PSI works)	5
5.	Helpers	10 th pass with 06 months Experience in Traction work (FOCS or ROCS and PSI works	7

In day time they will do maintenance of ASS/RSS/33 kV network/Depot OHE etc. They will also attend any breakdown of OHE/ASS/RSS/33 kV network etc. Additional manpower requirement may be accorded by contractor if required.

All staff shall report to the UPMRC's Representative for duty at the TPNR depot.

Whenever there is requirement of Tower wagon for normal maintenance schedules or for attending OHE breakdowns, the same to be provided by UPMRC with competent Driver and Fuel etc.

- 3. UPMRC to depute their Authorised Competent Supervisor to take Power Block from the TPC & issue PTW to the contractor's team in charge. Routine and Preventive OHE maintenance shall be carried out by contractor's team as per laid down schedules in the UPMRC's Maintenance Manual or as directed by their representatives.
- 4. In the event of any break down/accident, TPC or any other UPMRC staff shall inform the contractors's working engineer /supervisor, who is the gang in-charge about the nature of breakdown and guide them to proceed to the site with necessary Tools/tackles and OHE materials within 30 minutes along with UPMRC's representative by road vehicle or TW etc.
- 5. Main Tools, Tackles & Measuring instruments: The contractor shall provide the Tools/Tackles etc as attached, required for Preventive Maintenance & Breakdowns and Machinery required.

(list is attached)

LIST OF T&P TO BE PROVIDED BY CONTRACTOR

Sr. No.	Material Description	U.O.M.	Qty.
1	Tirfor with Rope 2.5 T/1.5 T , Model T - 13 , Tractel	No.	4
2	Tirfor with Rope 1.25 T/0.75 T , Model T - 7 , Tractel	No.	4
3	Tirfor with Rope 5T/3T , Model T - 35 , Tractel	No.	4
4	Pull Lift 1.6 Tonne , Tractel	No.	6
5	Pull Lift 0.8 Tonne , Tractel	No.	6
6	Hydraulic Crimpping Tool with die set	No.	2
7	Hand Operated Crimpping Tool with die set	No.	2
8	Torque Wrinch set of different size (As required for RIBE type cantilever)	No.	6
9	Come Along Clamp for Messenger Wire	No.	12
10	Come Along Clamp for Contact Wire	No.	12
11	Come Along Clamp for Conductor(RC)	No.	6
12	Come Along Clamp for ACSR Conductor	No.	6
13	Portable Electric Drill (1 - Phase) with drill bit (Bosch Make 1000 watt)	No.	2
14	Portable Electric Cutter	No.	2
15	Portable Electric Blower	No.	2
16	Contact Wire Cutter	No.	2
17	Dropper Wire Cutter	No.	2

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40	"D"Chaokle Die 25	N-	1 0
18	``D``Shackle Dia 25mm	No.	8
19	``D``shackle Dia 19mm	No.	8
20	``D``shackle Dia 16mm	No.	8
21	"D"shackle Dia 12mm	No.	8
21	Ø16mm x1.5 m Flexible Wire rope	No.	8
23	Ø16mm x1 m Flexible Wire rope	No.	8
24	Ø19mm x1 m Flexible Wire rope	No.	8
25	Ø12mm x1.5 m Flexible Wire rope	No.	8
26	Ø12mm x1 m Flexible Wire rope	No.	8
27	Single Sleeve Pulley Block 6" x 1" Groove Steel	No.	4
28	Double sleeve pulley	No.	2
29	Contact Wire Splice Positioning Device	No.	2
30	Device for Removing Contact Wire Irregularities	No.	4
31	Hammer/Mallet	No.	4
32	Micrometre 0 - 25 mm (Digimatic Type)	No.	2
33	Metric Tape Cotton Wooven 30 Meter	No.	2
34	Binocular (Make- NIKON/CELESTRON/OLYAMPUS, Optical Zoom 10x min., Lens type- ED Lens, Field of view- 250 feet at 1000 yards, Prism material- BAK4, Magnification- 10 min)	No.	1
35	Vernier Calliper (Digital Type)	No.	2
36	Digital Multimeter	No.	2
37	Crow Bar , Heavy Duty	No.	2
38	Mercury Thermometer 0 - 100 Degree Celsius	No.	2
39	Manila Rope 1/2" Dia.	Meter	15 (04 sets)
40	Manila Rope 1" Dia.	Meter	15 (04 sets)
41	Safety belt (ISI Marked)	No.	8
42	Stagger gauge	No.	4
43	Tommy bar	No.	2
44	33 KV hand gloves	No.	4 set
45	Twist remover	No.	3
46	Search light	No.	2
47	Gripper bull dog clamp	No.	4
48	Laser height gauge	No.	1
49	Tree branches cutter (electric)	No.	2
50	Dynamometer for T&P and load testing 3T	No.	1
51	Dynamometer for T&P and load testing 5T	No.	1
52	Earth resistance tester	No.	1
53	D spanner set (13 No. of various size)	5-6,6-7,8-9,10-11,12-13,14- 15,16-17,18-19,20-22,21- 23,25-28,24-27,30-32	8 sets
54	Ring spanner(13 No. of various size)	5-6,6-7,8-9,10-11,12-13,14- 15,16-17,18-19,20-22,21- 23,25-28,24-27,30-32	8 sets
55	Hexagonal spanner tubular spanner (9 no. of various sizes)	5-6,6-7,8-9,10-11,12-13,14- 15,16-17,18-19,20-22	8 sets
56	Screw wrench	12"	6 sets
57	Measuring tape	10m	3 sets

58	Allen key	Set	6 sets
59	Combination plier(standard ,nose and long)	6"	6 sets
60	Round nose plier	1	6 sets
61	Hammer	200*800gm	6 sets
62	Hacksaw frame	1/2"×1	6 sets
63	Screw driver set big	-	6 sets
64	Screw driver set small (for control wiring)	-	6 sets
65	Long screw driver	12"& 15"	6 sets
66	Round file	6"	6 sets
67	Flat file	6" & 12"	6 sets
68	Chisel	6"	6 sets
69	Centre punch	6"	6 sets
70	Pipe wrench	12"	6 sets
71	Tester		6 sets
72	Tool box 5 tray		8 sets

Whenever contract agreement period is completed all the T&P should be surrendered to UPMRCL

2.1 Traction maintenance Works

- 2.1.1 All maintenance activities to be carried out as per ACTM & SMIs issued and as per the Schedule of work given in 'Bill of Quantity', 'Special conditions of contracts' and "Technical Specification & Scope of Work (Traction(OHE & PSI) installation Maintenance)" of tender documents at Depots as well as Main Line(CCS airport to Munshipulia) as per requirement.
- 2.1.2 Traction Installation Maintenance consists of the following activities:

Outsourcing of Maintenance work for 25kv UPMRC Over Head Equipment and Power supply installation (220 Kv/132Kv/33 Kv/25 Kv) for a period of 36 months in Uttar Pradesh Metro Rail Corporation Limited. The work requires high degree of planning and execution.

- i. Preventive/breakdown Maintenance of 25 KV AC Traction Overhead Equipment including ROCS and PSI equipment (220 Kv/132Kv/33 Kv/25 Kv) in main line, RSS,ASS, Depot and siding for the configuration given below:
 - i. Regulated Overhead Equipment of type conventional/tram way with 65 sq. mm Cadmium-Copper Catenary and 150 sq. mm. grooved hard drawn bare Copper Contact wire
 - ii. ROCS equipment (Rigid overhead catenary system) used in Underground sections stands for Overhead Catenary system in the following sections:

Main line/Depot/Location	Length of Electrified Track in TKM
i. TPNR Depot (TKM: 14 KM) ii. FOCS Main line (TKM:38 KM) iii. ROCS Main Line (TKM:8 TKM	60 TKM

iii. Special Checks & Preventive maintenance of the 25 kV AC Traction Overhead Equipment including feeders & PSI equipment under Power Block activities but strictly under the supervision of competent representatives of Uttar Pradesh Metro Rail Corporation and with their time to time instructions only,

- in accordance with the Standard Annual Maintenance Schedules as stipulated in AC Traction Manual and Standard Maintenance Instructions issued by UPMRC.
- iv. Immediate attention for any breakdown in the 25 KV A.C. Traction Overhead & PSI Equipment and quick restoration.
- v . 25KV OHE & PSI Installations (25 /33/132/220 KV)maintenance schedules. **Maintenance of FOCS**

S.No	Activity	Total Assets	Frequency
1	SI Maintenance(LWSI)	30	Quarterly
2	SI Maintenance(Depot)	41	Six Monthly
3	Spring ATD	98	Six Monthly
4	Counterweight ATD	38	Yearly
5	Turnout(Main Line)	26	Yearly
6	Turnout(Depot)	35	Yearly
7	Crossover	12	Yearly
8	Checking and compilation of hotspot of OHE using thermo vision camera	52.5 Km	Quarterly
9	Checking and maintenance of OHE conductors	52.5 Km	Yearly
10	Overlaps	44	Biannually
11	Isolator	29	Yearly
12	Cantilever (Main Line)	1948	Two Yearly
13	Cleaning of ST,BT insulator	1948	Half Yearly
14	Contact wire diameter (FOCS+ROCS)	130	Yearly
15	Tree Trimming	40	Seasonal
16	Neutral Section	01	Monthly
17	Earthing & Bonding Connection	60	Yearly

Maintenance of ROCS:

S.No	Activity	Total Assets	Frequency
1	Turnout(Main Line)	4	Yearly
2	Crossover	2	Yearly
3	Overlaps	20	Six Monthly
4	ROCS Supports	763	Two Yearly
5	Earthing & Bonding Connection	7.6 km	Yearly
6	Checking and maintenance of	7.6 km	Two yearly
	ROCS rail and conductors		

- **2.1.3** Supervisor/Engineer in charge & Trained Electrical Maintenance Staff to be deployed as specified in the tender documents (**Annexure 2 and 3 of ITT**). All the staff to be deployed only after given the safety training and police verification.
- 2.2 Deleted

2.3 Monitoring Performance of Contractor:

a) Performance of contractor will be judged on the overall quality of work ,punctuality of staffs and safety measures taken while working. as per Daily inspection of work to be done by UPMRC and in case of any dispute joint inspection of bad quality to be done by UPMRC with Contractor.

2.4 Deleted

2.5 Time Schedule

The contract period for execution of the above mentioned works is for 03 years which may be extended to another 02 year with 5% increase each year of 3rd year rate on the basis of satisfactory performance of contractor.

- 2.5.1 The Maintenance works are to be carried out as per International norms/ standards (ISO- 14001 & OHSAS 18001) and in such a manner that all premises always look Neat & Clean. Similarly, the waste disposal is also carried out in totally sealed manner without affecting the Environment.
- 2.5.2 UPMRC is looking for an Efficient and cost effective maintenance activity.
- 2.5.3 The agency must ensure timely payment of salary, PF, ESI etc. and prompt medical facility to sick/injured to all staff. In case of injury or death of staff on duty, the responsibility lies with the contractor, there is no responsibility of UPMRC in such cases.