

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

NOIDA METRO RAIL CORPORATION (NMRC) LIMITED

REQUEST FOR PROPOSAL (RFP)

E tender No. NMRC/PD/CSS/196/2022

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.

April 2022

Issued by:

**Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor,
Ganga Shopping Complex, Sector-29, Noida -201301,
District Gautam Budh Nagar, Uttar Pradesh, India**

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

Disclaimer

This Request for Proposal (RFP) Document (or “E-Tender” or “E-Bid”) for “**Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida**” contains brief information about the scope of work and selection process for the Bidder (“the Contractor” or “the Bidder”). The purpose of the Document is to provide the Bidders with information to assist the formulation of their Bidding Documents.

While all efforts have been made to ensure the accuracy of information contained in this RFP Document, this Document does not purport to contain all the information required by the Bidders. The Bidders should conduct their own independent assessment, investigations and analysis and should check the reliability, accuracy and completeness of the information at their end and obtain independent advice from relevant sources as required before submission of their Bid/s. Noida Metro Rail Corporation Ltd. (“NMRC” or “the Corporation” or “the Employer”) or any of its employees or advisors shall incur no liability under any law, statute, rules or regulations as to the accuracy or completeness of the RFP Document.

NMRC reserves the right to change any or all conditions/information set in this RFP Document by way of revision, deletion, updating or annulment through issuance of appropriate addendum as NMRC may deem fit without assigning any reason thereof.

NMRC reserves the right to accept or reject any or all Bids without giving any reasons thereof. NMRC will not entertain or be liable for any claim for costs and expenses in relation to the preparation of the Bid/s to be submitted in terms of this RFP Document.

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Glossary

- a) **“Addendum / Amendment”** means any written amendment / addendum /corrigendum to this RFP, from time to time issued by NMRC to the prospective bidders
- b) **“Agreement”** means the Contract Agreement to be executed between NMRC and the Selected Bidder
- c) **“Applicable Laws”** means all the laws including local, state, national or other laws, brought into force and effect by Govt. of India, State Governments, local bodies, statutory agencies and any other, and rules / regulations / notifications issued by them from time to time. It also includes judgments, decrees, injunctions, writs and orders of any court or judicial authority as may be in force and effected from time to time
- d) **“Bidder”** or **“Bidder”** means any entity which is a sole proprietorship firm, a partnership firm or a company, in title and assigns which is submitting its bid pursuant to RFP Documents
- e) **“Bid Due Date”** means Bid Submission end date and time given in the E-tender
- f) **“Earnest Money Deposit (EMD)”** means the refundable amount to be submitted by the Bidder along with RFP documents to NMRC
- g) **“NMRC”** means Noida Metro Rail Corporation Limited (or “Corporation” or “Employer”)
- h) **“Party”** means Contractor or Corporation (together they are called **“Parties”**)
- i) **“Performance Bank Guarantee/ Security Deposit”** means interest free amount to be deposited by the Contractor with NMRC as per terms and conditions of Contract Agreement as a security against the performance of the Contract agreement
- j) **“Permits”** shall mean and include all applicable statutory, environmental or regulatory Contracts, authorization, permits, consents, approvals, registrations and franchises from concerned authorities
- k) **“Re. or Rs. or INR”** means Indian Rupee
- l) **“Revenue Operations Date (ROD)”** means the date of operation of Metro
- m) **“Selected Bidder”** means the bidder who has been selected by NMRC, pursuant to the bidding process for award of Contract

The words and expressions beginning with capital letters and defined in this document shall, unless repugnant to the context, have the meaning ascribed thereto hereinabove.

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Data Sheet

1	Name of the Bid	Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.
2	Approximate Cost of Work	Rs.77,37,747.33 (Rupees Seventy-Seven Lakh Thirty Seven thousand Seven Hundred Forty Seven and Thirty Three Paise only) (including GST)
3	Time-period of contract	Four Months
4	Method of selection	Cost Based Selection (Lowest –L1)
5	Bid Processing Fee	INR 5900 (including GST) (Rupees Five Thousand Nine Hundred only) through RTGS/NEFT only payable in favour of Noida Metro Rail Corporation Limited
6	Ernest Money Deposit (EMD)	INR 1,54,755 /- (Rupees One Lakh Fifty Four Thousand Seven Hundred Fifty Five only)
7	Financial Bid to be submitted together with Technical Bid	Yes
8	Name of the Corporation's official for addressing queries and clarifications	DGM/RS, Ops & Elect. Noida Metro Rail Corporation Limited, Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida 201301 Email: avikdmrc@gmail.com , nmrcrsandel@gmail.com Website: www.nmrcnoida.com , http://etender.up.nic.in
9	Bid Validity Period	180 days
10	Bid Language	English
11	Bid Currency	INR
12	JV	Not allowed
12	Schedule of Bidding Process	
	Head	Key Dates
	Uploading of Bid	12/05/2022
	Pre-bid Meeting	19/05/2022 16:00 hrs (IST)
	Last date of issuing amendment, if any	26/05/2022
	Last Date of Bid Submission	06/06/2022, 18:00 hrs (IST)
	Date of Technical Bid Opening	07/06/2022, 11:00 hrs (IST)
13	Consortium to be allowed	Not allowed
14	Account details	For Bid Processing Fee & EMD State Bank of India (04077) – Sector 18, Noida Gautam Budh Nagar, Uttar Pradesh -201301 IFSC Code: SBIN0004077 A/c No. 37707840592 Noida Metro Rail Corporation Ltd.

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Note: (i)

Tender Cost and EMD is exempted for Micro & Small Enterprises (MSEs) registered with District Industries Centre or Khadi & Village Industries Commission or Khadi & Village Industries Board or Coir Board or National Small Industries Corporation or Dte. Of Handicraft & Handloom or any other bodies specified by Ministry of Micro, Small & Medium Enterprises for appropriate category and have valid registration certificate as , shall ensure their eligibility w.r.t above and submit registration certificate being MSEs, issued by the body and repair work on under which they are registered which clearly mentions category of registration i.e. **“Electrical work/ Transformer/ Compact Substation ” date of tender submission.**

The MSEs would not be eligible for exemption of tender security if:

- a. *Either they are not registered for appropriate category.*
- b. Or they do not have valid registration as on the date of tender submission.

The bidders seeking exemption from 'EMD'

In absence of any of the above requirements no exemption for 'EMD' will be allowed and bidders eligibility shall be dealt as if they are not registered with MSMEs.

No further clarification shall be sought on the above.

1. In case the bidder who has been exempted Tender Cost/Tender Security being Micro & Small Enterprise, and;

- (i) Withdraws his Tender during the period of Tender validity; or
- (ii) Becomes the successful bidder, but fails to commence the work (for whatsoever reasons) as per terms & conditions of Tender; or
- (iii) Refuses or neglects to execute the contract; or
- (iv) Fails to furnish the required Performance Security within the specified time,

The bidder shall be debarred from participating in future tenders for a period of 1 year from the date of discharge of tender/date of cancellation of NOA/annulment of award of contract as the case may be. Thereafter, on expiry of period of debarment, the bidder may be permitted to participate in the procurement process only on submission of required Tender Cost/ Tender Security. Further the Employer may advise the authority responsible for issuing the exemption certificate to take suitable actions against the bidder such as cancellation of enlistment certificate etc.

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1. Section 1: General Information

1.1. Background

- a. Noida and Greater Noida are being developed as the satellite towns to New Delhi and an increasing number of people from Delhi and other areas are shifting to these towns in search of fresh air, greenery and better infrastructure. There is a need of providing an efficient, reliable and comfortable transportation system for the population intending to settle in these towns and to the public coming to these areas for education, service and business.
- b. Noida Metro Rail Corporation is a Special Purpose Vehicle (SPV) formed by Noida and Greater Noida Authorities for planning and executing urban transport projects in Noida and Greater Noida regions. The Corporation desires to provide a world-class Public Transportation System with state-of-the-art technology. As such, the overarching criterion for setting up of the Corporation is to help create an efficient, safe, reliable, economical and affordable public transport system.
- c. NMRC invites E-Bids **Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.**
- d. In this regard, the Corporation now invites the interested Bidder/s to submit their proposals as per provisions of this RFP Document.
- e. NMRC will shortlist the Bidders based on evaluation criteria mentioned in this RFP Document. Based on the minimum evaluation criteria, qualified Bidders will be shortlisted, and Financial proposal of only qualified Bidders will be opened.

1.2. About Metro Locations

The metro corridor is 29.7 km long and is known as Noida Greater Noida Metro Rail Corridor. It comprises 21 metro stations starting from Sector 51 in Noida and ends up at Depot Station in Greater Noida. The map is in Appendix 1: Metro Alignment.

1.3. Communication

All communications should be addressed to -

DGM/RS, Ops & Elect.

Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29,
Noida -201301
District Gautam Budh Nagar, Uttar Pradesh
Email: avikdmrc@gmail.com, nmrcrsandel@gmail.com

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2. Section 2: Terms of Reference

2.1. Scope of Work

- a. The work covered in the tender is as per BOQ placed in section of this RFP.
- b. The technical specifications are set forth in technical specifications- Section 6 of this RFP.
- c. The bidder should inspect the work site after receiving NOA and obtain for himself at his own responsibility all the information which may be necessary for the purpose of the successful execution of the contract.
- d. The bidder shall also make himself conversant with all the local conditions, means of access to the site of work, nature, extent of transport facilities and character of the work and supply of materials, conditions affecting labour and other matters that may affect his tender.
- e. All the work in the BOQ must be done as per instructions of Engineer In charge and also take approval of Make of BOQ items before any purchase.
- f. The commissioning work of CSS shall be carried out with existing energized electrical panel.
- g. The bidder has to obtain scheme approval after the receipt of NOA.
- h. The bidder shall complete necessary Electrical/Civil works associated with the installation, testing and commissioning of Compact substation and other associated work like cable and laying on cable tray or underground etc. as per BOQ as required, foundation as required and mending good the damages and giving final finishing and to match with the existing surface.
- i. The platform for installing the CSS has to be made by the bidder.
- j. **The final approval shall be obtained from E/I. NOC must be submitted to this office from electrical inspectorate/electrical safety department and NO extra payment will be released from NMRC for this.**
- k. All statutory approval including, electrical inspectorate and regularization from concerned authorities should be carried out by the bidder and all applicable charges to be borne by the successful bidder. If the schematic drawings are requested by the electrical inspectorate or any statutory authority the bidder has to prepare the drawing and to take the approval from EI. The soft and hard copy of the said drawing is to be handed over to the tender inviting authority before releasing the final payment.
- l. The equipment including the accessories shall be covered under comprehensive warranty period/defect liability period. During this period the successful bidder shall replace all defective parts and attend to all repairs / breakdowns. The cost of spare parts for all replacements has to be borne by the successful bidder during the period of comprehensive warranty/DLP.

3. Section 3: Instructions to Bidders

3.1. General instructions

- a. A Bidder shall submit only one bid in the same tendering process, either individually as a Bidder. A Bidder who submits or participates in more than one bid will cause all the proposals in which the Bidder has participated to be disqualified. No Bidder can be a sub-contractor while submitting a bid individually or as a partner of a Consortium in the same bidding process. A Bidder, if acting in the capacity of subcontractor in any bid, may participate in more than one bid, but only in that capacity.
- b. The Bidder shall initiate, and actively pursue and involve itself in all investigations and enquiries, Corporation feedbacks, information, convening of and attendance at meetings, and in any other activities as are or may be necessary for producing high quality work as per the requirements.
- c. The Bidder shall carry out the services in compliance with the provisions of this Agreement. All changes necessary to ensure that the Bidder's documents conform to the intent and purpose set out in the Agreement, shall be made at the Bidder's own expense. The Bidder represents that it is a professional and experienced company, and hereby agrees to bear full responsibility for the correctness and technical merit of the services performed.
- d. Bidders shall be evaluated based on the Evaluation Criteria specified in this document. Bidders shall be deemed to have understood and agreed that no explanation or justification for any aspect of the Selection Process will be given and that NMRC's decisions are without any right of appeal whatsoever.
- e. Any entity which has been barred by the Central/State Government in India or by any entity controlled by them, from participating in any project, and the bar subsists as on the date of Bid, would not be eligible to submit an e - Bid.
- f. Bidders are encouraged to inform themselves fully about the assignment and the local conditions before submitting the e-Bid by paying a visit to the Corporation and/or by sending written queries to NMRC before the last date for receiving queries/clarifications.
- g. NMRC shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or because of any matter or thing arising out of or concerning or relating to e-Bid or the Selection Process, including any error or mistake therein or in any information or data given by NMRC.
- h. The currency for the Proposal shall be the Indian Rupee (INR).
- i. Bidders shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. Bidders shall be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - i. A Bidder has been engaged by the Employer to provide consulting services for the preparation related to procurement or implementation of the project;
 - ii. A Bidder is any associates/affiliates (inclusive of parent firms) mentioned in subparagraph above; or
 - iii. A Bidder lends, or temporarily seconds its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for an implementation of the project, if the personnel would be involved in any capacity on the same project.

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3.1.1. Cost of Bid Document / e-Tender processing Fee

- a. The Bidder shall bear all costs associated with the preparation and submission of its e-Bid and Noida Metro Rail Corporation Ltd. ("NMRC" or "the Corporation"), will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the e-Bid process.
- a. This tender document is available on the web site <http://etender.up.nic.in> or on NMRC website (www.nmrcnoida.com) to enable the Bidders to view, download the e-Bid document and submit e-Bids online up to the last date and time mentioned in e-Tender notice/e-tender document against this e-Tender. The Bidders shall have to pay cost of bid document/e-Tender processing fee of as mentioned in **Data Sheet** through RTGS/NEFT only payable in favour of Noida Metro Rail Corporation Limited in the A/c No. mentioned in **Data Sheet**. The scanned copy of RTGS/NEFT receipt with transaction Id certified by the same bank must be enclosed along with the e-Bid. This cost of bid document/e-Tender processing fee as mentioned in **Data Sheet** will be non-refundable. Tender without cost of bid document/e-Tender processing fee in the prescribed form, will not be accepted.

3.1.2. Acknowledgement by Bidder

It shall be deemed that by submitting the e-Bid, the Bidder has:

- a. made a complete and careful examination of the e-Bid;
- b. received all relevant information requested from NMRC;
- c. acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the e-Bid or furnished by or on behalf of NMRC;
- d. satisfied itself about all matters, things and information, necessary and required for submitting an informed Application and performance of all its obligations there under;
- e. acknowledged that it does not have a Conflict of Interest; and
- f. agreed to be bound by the undertaking provided by it under and in terms hereof.

3.1.3. Availability of Bid Document

This Bid document is available on the web site <http://etender.up.nic.in> or on Noida Metro website www.nmrcnoida.com to enable the Bidders to view, download the e-Bid document and submit e-Bids online up to the last date and time mentioned in e-Bidder notice/e-Bid document. The Bidders shall have to pay e-Bid document fee and EMD as mentioned in Data sheet through RTGS/NEFT on addresses given in data sheet. The scanned copy of RTGS/NEFT with transaction ID certified by the same bank must be enclosed along with the e-Bid. This e-Bid document fee will be non-refundable. Bid without Bid fee in the prescribe form will not be accepted.

3.1.4. Clarifications of e-Bid

- a. During evaluation of e-Bid, NMRC may, at its discretion, ask the Bidder for a clarification of his/her e-Bid. The request for clarification shall be in writing.
- b. Any queries or request for additional information concerning this RFP shall be submitted in writing or by fax and e-mail to the GM/Technical, NMRC **only before or during Pre-Bid Meeting** held at NMRC. The envelopes/ communication shall clearly bear the following identification/ title: **"Queries / Request for Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accesso-**

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- ries to be installed at NMRC station sector-51, Noida.” The responses will be posted to all such queries on the official website www.nmrcnoida.com. NMRC reserves the right not to respond to any questions or provide any clarifications, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring NMRC to respond to any question or to provide any clarification.
- c. A pre-submission meeting shall be called on the date mentioned in **Data Sheet** at NMRC Office. Any change corresponding to date, if any, shall be communicated to the Bidder vide NMRC/ e-Tendering website.
 - d. In case the Bidder seeks for any queries, he shall send letter or e-mail to the correspondence address given in Data Sheet.
 - e. However, NMRC shall not entertain any correspondence from the Bidders during the period of e-Bid opening to selection of the successful Bidder. Any wrong practice shall be dealt under Fraud and Corrupt Practices.
 - f. The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the Tender and entering into a contract for the proposed work. The costs of visiting the Site shall be borne by the Bidder. It shall be deemed that the Contractor has undertaken a visit to the Site of Works and is aware of the site conditions prior to the submission of the tender documents.
 - g. The Bidder and any of his personnel will be granted permission by the Employer to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the Bidder, and his personnel, will release and indemnify the Employer and his personnel from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.

3.1.5. Amendment of e-Bid Document

- a. At any time prior to the deadline for submission of e-Bid, NMRC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the e-Bid document by amendments. Such amendments shall be uploaded on the e-procurement website <http://etender.up.nic.in> or NMRC’s website www.nmrcnoida.com. The relevant clauses of the e-Bid document shall be treated as amended accordingly.
- b. It shall be the sole responsibility of the prospective Bidder to check the web site <http://etender.up.nic.in> or NMRC’s website www.nmrcnoida.com from time to time for any amendment in the e-Bid documents. In case of failure to get the amendments, if any, NMRC shall not be responsible for it.
- c. In order to allow prospective e-Bids a reasonable time to take the amendment into account in preparing their e-Bids, NMRC, at the discretion, may extend the deadline for the submission of e-Bids. Such extensions shall be uploaded on the e-procurement website <http://etender.up.nic.in> or NMRC’s website www.nmrcnoida.com.

3.2. Preparation and submission of Bids

3.2.1. Language of e-Bid

The e-Bid prepared by the Bidder, as well as all correspondence and documents relating to the e-Bid exchanged by the Bidder and NMRC shall be written in English language. Only English numerals shall be

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used in the e-Bid. The correspondence and documents in any other language must be accompanied by transcripts verified by the Embassy of Home Country or equivalent.

3.2.2. Documents constituting the e-Bid

The e-Bid prepared by the Bidder shall comprise the following components:

a. Technical e-Bid- Technical e-Bid will comprise of -

- iv. **Fee details** - Details of Bid processing fee and prescribed EMD
- v. **Eligibility details** - Includes copies of required documents in PDF format justifying that the Bidder is qualified to perform the contract if his/her bid is accepted and the Bidder has financial & technical capability necessary to perform the contract and meets the criteria outlined in the Qualification requirement and technical specification and fulfil all the conditions of the contract.
- vi. **Technical evaluation** - Details of all documents needed for Technical evaluation as mentioned in this RFP

b. Financial e-Bid -

- i. **Price bid** – Bill of Quantities in XLS format to be filled in after downloading from the e-Procurement website for this e-tender. There shall be a single quote.

3.2.3. Documents establishing Bidder's Qualification

- a. The Bidder shall furnish, as part of its technical e-Bid, documents establishing the Bidder's qualification to perform the contract if its e-Bid is accepted. The documentary evidence should be submitted by the Bidder electronically in the PDF format.
- b. The documentary evidence of Bidder's qualification to perform the contract if its e-Bid is accepted shall be as per qualification requirements specified in e-Bid document.

3.2.4. E-Bid form

The Bidder shall complete the e-Bid form and the appropriate price schedule/BOQ furnished in the e-Bid document.

3.2.5. E-Bid Currency

Prices shall be quoted in Indian Rupees only.

3.2.6. Formats and Signing of e-Bid

- a. The Bidder shall prepare one electronic copy of the technical e-Bid and financial e-Bid separately.
- b. The e-Bid document shall be digitally signed, at the time of uploading, by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. The later authorization shall be indicated by a scanned copy of written power-of attorney accompanying the e-Bid. All the pages/documents of the e-Bid that are to be uploaded shall be digitally signed by the person authorized to sign the e-Bid.
- c. Bidders should provide all the information as per the RFP and in the specified formats. NMRC reserves the rights to reject any proposal that is not in the specified formats.
- d. In case the Bidders intends to provide additional information for which specified space in the given format is not sufficient, it can be furnished in duly stamped and signed PDFs.

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3.2.7. Deadline for submission of e-Bid

E-Bid (Technical and financial) must be submitted by the Bidder at e-procurement website <http://etender.up.nic.in> not later than the time specified on the prescribed date (as the server time displayed in the e-procurement website). NMRC may, at its discretion, extend this deadline for submission of e-Bid by amending the e-Bid document, in which case all rights and obligations of NMRC and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

3.2.8. Submission of e-Bid

- a. The bid submission module of e-procurement website <http://etender.up.nic.in> enables the Bidders to submit the e-Bid online in response to this e-Bid published by NMRC.
- b. Bid submission can be done only from the bid submission start date and time till the bid submission end date and time given in the e-Bid. Bidders should start the bid submission process well in advance so that they can submit their e-Bid in time.
- c. The Bidder should submit their e-Bid considering the server time displayed in the e-procurement website. This server time is the time by which the e-Bid submission activity will be allowed till the permissible time on the last/end date of submission indicated in the e-Bid schedule.
- d. Once the e-Bid submission date and time is over, the Bidders cannot submit their e-Bid. For delay in submission of e-Bid due to any reasons, the Bidders shall only be held responsible.

The Bidders have to follow the following instructions for submission of their e-Bid:

- a. For participating in e-Bid through the e-Bidding system it is necessary for the Bidders to be the registered users of the e-procurement website <http://etender.up.nic.in>. The Bidders must obtain a user login Id and password by registering themselves with U.P. Electronics Corporation Ltd., Lucknow if they have not done so previously for registration.
- b. In addition to the normal registration, the Bidder has to register with his/her digital signature certificate (DSC) in the e-Bidding system and subsequently he/she will be allowed to carry out his/her e-Bid submission activities. Registering the digital signature certificate (DSC) is a one-time activity. Before proceeding to register his/her DSC, the Bidder should first log on to the e-Bidding system using the user login option on the home page with the login Id and password with which he/she has registered.

For successful registration of DSC on e-procurement website <http://etender.up.nic.in> the Bidder must ensure that he/she should possess class-2/class-3 DSC issued by any certifying authorities approved by controller of certifying authorities, Government of India, as the e-procurement website <http://etender.up.nic.in> is presently accepting DSC issued by these authorities only. The Bidder can obtain user login Id and perform DSC registration exercise given above even before the e-Bid submission date starts. NMRC shall not be held responsible if the Bidder tries to submit his/her e-Bid at the moment before end date of submission but could not submit due to DSC registration problem.

- c. The Bidder can search for active Bids through "search active tenders" link, select a Bid in which he/she is interested in and then move it to 'My Tenders' folder using the options available in the e-Bid submission menu. After selecting and the Bid, for which the Bidder intends to e-Bid, from "My tenders" folder, the Bidder can place his/her e-Bid by clicking "pay offline" option available at the end of the view Bid details form. Before this, the Bidder should download the e-Bid document and price schedule/bill of quantity (BOQ) and study them carefully. The Bidder should keep all

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the documents ready as per the requirements of e-Bid document in the PDF format except the price schedule /bill of quantity (BOQ) which should be in the XLS format (excel sheet).

- d. After clicking the 'pay offline' option, the Bidder will be redirected to terms and conditions page. The Bidder should read the terms & conditions before proceeding to fill in the Bid fee and EMD offline payment details. After entering and saving the Bid fee and EMD details form so that "bid document preparation and submission" window appears to upload the documents as per technical (fee details, qualification details, e-Bid form and technical specification details) and financial (e-Bid form and price schedule/BOQ) schedules/packets given in the Bid details. The details of the RTGS/NEFT should tally with the details available in the scanned copy and the date entered during e-Bid submission time otherwise the e-Bid submitted will not be accepted.
- e. Next the Bidder should upload the technical e-Bid documents for fee details (e-Bid fee and EMD), Qualification details. Before uploading, the Bidder has to select the relevant digital signature certificate. He may be prompted to enter the digital signature certificate password, if necessary. For uploading, the Bidder should click "browse" button against each document label in technical and financial schedules/packets and then upload the relevant PDF/XLS files already prepared and stored in the Bidder's computer. The required documents for each document label of technical (fee details, qualification details, e-Bid form and technical specification details) and financial (e-Bid form and price schedule/BOQ) schedules/packets can be clubbed together to make single different files for each label.
- f. The Bidder should click "Encrypt" next for successfully encrypting and uploading of required documents. during the above process, the e-Bid documents are digitally signed using the DSC of the Bidder and then the documents are encrypted/locked electronically with the DSC's of the bid openers to ensure that the e-Bid documents are protected, stored and opened by concerned bid openers only.
- g. After successful submission of e-Bid document, a page giving the summary of e-Bid submission will be displayed confirming end of e-Bid submission process. The Bidder can take a printout of the bid summary using the "print" option available in the window as an acknowledgement for future reference.
- h. NMRC reserves the right to cancel any or all e-Bids without assigning any reason.

3.2.9. Late e-Bid

- a. Bids received by NMRC after the specified time on the Bid Due Date shall not be eligible for consideration and shall be summarily rejected.
- b. The server time indicated in the bid management window on the e-procurement website <http://etender.up.nic.in> will be the time by which the e-Bid submission activity will be allowed till the permissible date and time scheduled in the e-Bid.
- c. Once the e-Bid submission date and time is over, the Bidder cannot submit his/her e-Bid. Bidder has to start the bid submission well in advance so that the submission process passes off smoothly. The Bidder will only be held responsible if his/her e-Bid is not submitted in time due to any of his/her problems/faults, for whatsoever reason, during e-Bid submission process.

3.2.10. Withdrawal and resubmission of e-Bid

- a. At any point of time, a Bidder can withdraw his/her e-Bid submitted online before the bid submission end date and time. For withdrawing the Bidder should first log in using his/her login id and password and subsequently by his/her digital signature certificate on the e-procurement website

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<http://etender.up.nic.in>. The Bidder should then select "My bids" option in the bid submission menu. The page listing all the bids submitted by the Bidder will be displayed. Click "View" to see the details of the bid to be withdrawn. After selecting the "bid withdrawal" option the Bidder has to click "Yes" to the message "Do you want to withdraw this bid?" displayed in the bid information window for the selected bid. The Bidder also has to enter the bid withdrawing reasons and upload the letter giving the reasons for withdrawing before clicking the "Submit" button. The Bidder has to confirm again by pressing "OK" button before finally withdrawing his/her selected e-Bid.

- b. No e-Bid may be withdrawn in the interval between the deadline for submission of e-Bids and the expiration of period of e- bid validity. Withdrawal of an e-Bid during this interval may result in the forfeiting of Bidder's e-Bid security.
- c. The Bidder can re-submit his/her e-Bid as when required till the e-Bid submission end date and time. The e-Bid submitted earlier will be replaced by the new one. The payment made by the Bidder earlier will be used for revised e-Bid and the new e-Bid submission summary generated after the successful submission of the revised e-Bid will considered for evaluation purposes. For resubmission, the Bidder should first log in using his/her login Id and password and subsequently by his/her digital signature certificate on the e-procurement website <http://etender.up.nic.in>. The Bidder should then select "My bids" option in the bid submission menu. The page listing all the bids submitted by the Bidder will be displayed. Click "View" to see the detail of the e-Bid to be re-submitted. After selecting the "bid resubmission" option, click "Encrypt & upload" to upload the revised e-Bids documents.
- d. The Bidder can submit their revised e-Bids as many times as possible by uploading their e-Bid documents within the scheduled date & time for submission of e-Bids.
- e. No e-Bid can be resubmitted subsequently after the deadline for submission of e-Bids.

3.2.11. NMRC's right to accept any e-Bid and to reject any or all e-Bids.

- a. Notwithstanding anything contained in this e-Bid, NMRC reserves the right to accept or reject any Bid and to annul the Selection Process and reject all Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.
- b. NMRC reserves the right to reject any Bid if:
 - At any time, a material misrepresentation is made or uncovered, or
 - The Bidder does not provide, within the time specified by NMRC, the supplemental information sought by NMRC for evaluation of the e-Bid.
- c. Such misrepresentation/ improper response may lead to the disqualification of the Bidder. If such disqualification /rejection occurs after the e-Bid have been opened and the highest-ranking Bidder gets disqualified / rejected, then the NMRC reserves the right to consider the next best Bidder, or take any other measure as may be deemed fit in the sole discretion of NMRC, including annulment of the Selection Process.

3.2.12. Period of validity of e-Bid

- a. e-Bid shall remain valid for 180 days after the date of e-Bid opening prescribed by NMRC. An e-Bid valid for a shorter period shall be rejected by NMRC as non-responsive.
- b. In exceptional circumstances, NMRC may solicit the Bidder's consent to an extension of the period of e-Bid validity. The request and the response thereto shall be made in writing.

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3.2.13. Correspondence with the Bidder

- a. Save and except as provided in this e-Bid, NMRC shall not entertain any correspondence with any Bidder or its Technical Partners in relation to acceptance or rejection of any e-Bid.
- b. Subject to Clause 3.4.5 no Bidders or its Technical Partners shall contact NMRC on any matter relating to his e-Bid from the time of Bid opening to the time contract is awarded.
- c. Any effort by the Bidder or by its Technical Partners to influence NMRC in the Bid evaluation, Bid comparison or contract award decisions, may result in the rejection of his Bid.

3.3. Earnest Money Deposit

3.3.1. Earnest money deposit (EMD)

- a. The Bidder shall furnish, as part of its e-Bid, an e-Bid security/ EMD as stated in Data Sheet in form of RTGS/NEFT only in favour Noida Metro Rail Corporation Limited in the A/c No. mentioned in **Data Sheet**. The scanned copy of RTGS/NEFT receipt of Security/ EMD with transaction Id certified by the same bank must be enclosed along with the e-Bid. Tender without Earnest Money in the prescribed form, will not be accepted.
- b. Any e-Bid not secured in accordance with above shall be treated as non-responsive and rejected by NMRC.
- c. Unsuccessful Bidder's EMD will be returned within 45 days of opening of the Price Bid in case of Conclusion or discharge of the tender.
- d. No interest will be paid by the Employer on the Earnest Money Deposit.
- e. The successful Bidder's e-Bid EMD will be adjusted with Performance Bank Guarantee, if applicable, to be submitted by the Bidder upon signing the contract.
- f. The EMD may be forfeited:
 - i. If Bidder (a) withdraws its e-Bid during the period of e-Bid validity specified by the Bidder on the e- bid form: or (b) does not accept the correction of errors or (c) modifies its e-Bid price during the period of e-Bid validity specified by the Bidder on the form.
 - ii. In case of a successful Bidder, if the Bidder fails to sign the contract with the Corporation.

3.4. Opening and Evaluation of Bids

3.4.1. Opening of technical e-Bid by NMRC

- a. NMRC will open all technical e-Bids, in the presence of Bidder`s representatives who choose to attend on the prescribed date of opening at NMRC Office. The Bidder's representatives who are present shall submit the letter to NMRC on the letter head of the company stating that the representative (name) is authorized to attend the meeting (Please note – The representative is required to carry a copy during pre-bid and other related meetings as well). He / She shall sign a register evidencing their attendance at NMRC. In the event of the specified date e-Bid opening being declared a holiday for the Corporation, the e –bids shall be opened at the appointed time and place on the next working day.
- b. The Bidder who is participating in e-Bid should ensure that the RTGS/NEFT of Bid Processing Fee and EMD must be submitted in the prescribed account of NMRC within the duration (strictly within opening & closing date and time of individual e-Bid) of the work as mentioned in Bid notice, otherwise, in any case, e-Bid shall be rejected.

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- c. The Bidders names and the presence or absence of requisite e-Bid security and such other details as NMRC at its discretion may consider appropriate, will be announced at the opening.

3.4.2. Opening of financial e-Bid

- a. After evaluation of technical e-Bid, through the evaluation committee NMRC shall notify those Bidders whose technical e-Bids were considered non-responsive to the conditions of the contract and not meeting the technical specifications and qualification requirements indicating that their financial e-Bids will not be opened.
- b. NMRC will simultaneously notify the Bidders, whose technical e-Bids were considered acceptable to the Corporation. The notification may be sent by e-mail as provided by Bidder.
- c. The financial e-Bids of technically qualified Bidders shall be opened in the presence of technically qualified bidders who choose to attend. The date and time for opening of financial bids will be communicated to the technically qualified Bidders subsequently after completion of technical bids evaluation through e-mail provided by the Bidder.

3.4.3. Correction of Errors

- a. Financial Bids determined to be responsive will be checked by NMRC for any arithmetic errors. Where there is a discrepancy between the rate quoted in the Financial Bid, in figures and in words, the amount in words will prevail over the amounts in figures, to the extent of such discrepancy.
- b. The amount stated in the Financial Bid will be adjusted by NMRC in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected quoted rate of e-Bid, his e-Bid will be rejected, and his Bid Security shall be liable for forfeiture in accordance with Clause 3.3.1f

3.4.4. Examination of e-Bid document

- a. The NMRC will examine the e-Bid to determine if:
 - i. They are complete;
 - ii. They meet all the conditions of the contract;
 - iii. The required e-Bid Processing fee, EMD and other required documents have been furnished;
 - iv. The documents have been properly digitally signed; and
 - v. The e-Bids are in order.
- b. Any e-Bid or e-Bids not fulfilling these requirements shall be rejected.

3.4.5. Contacting NMRC

- a. No Bidder shall contact NMRC on any matter relating to his/her e-Bid, from the time of the e-Bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of NMRC, he/she can do so in writing.
- b. Any effort by a Bidder to influence NMRC in its decisions on e-Bid evaluation, e- bid comparison or contract award may result in rejection of the Bidder's e-Bid.
- c. In the event of any information furnished by the Bidder is found false or fabricated, the minimum punishment shall be debarring /blacklisting from Noida Metro works and legal proceeding can also be initiated. EMD of such bidders will be forfeited.

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3.4.6. Confidentiality

- a. Information relating to the examination, clarification, evaluation, and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising NMRC in relation to or matters arising out of or concerning the Bidding Process. Any effort by a Bidder to exert undue or unfair influence in the process of examination, clarification, evaluation and comparison of Proposal shall result in outright rejection of the offer, made by the said Bidder.
- b. NMRC shall treat all information, submitted as part of Bid, in confidence and shall require all those who have access to such material to treat the same in confidence. NMRC may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or NMRC or as may be required by law or in connection with any legal process.

3.5. Award of Contract

3.5.1. Award Criteria

- a. NMRC will award the contract as per evaluation criteria stated in the RFP Document.
- b. NMRC will award the contract to the successful Bidder whose bid has been determined to be responsive to all the conditions of the contract and meeting the eligibility requirement of the bidding document.

3.5.2. Notice of Award (NOA)

- a. Prior to the expiration of the period of e-Bid validity, NMRC will notify the successful Bidder in writing, by letter/e-mail/fax, that its e-Bid has been accepted.
- b. The acceptance of NOA will constitute the formation of the contract.

3.5.3. Signing of contract

At the same time as NMRC notifies the successful Bidder that its e-Bid has been accepted, the successful Bidder shall have to sign the contract agreement with relevant document as mentioned in the RFP. The agreement draft along with other related terms and conditions will be same as furnished in this e-Bid. Any refusal will not be allowed. The Bidder need not download and submit in hard copies of these documents.

3.5.4. NMRC's right to accept any e-Bid and to reject any or all e-Bids

NMRC reserves the right to accept or reject any e-Bid, and to annul the e-Bid process and reject all e-Bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or Bidders.

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4. Section 4: Qualification, Evaluation and Selection Process

4.1. Eligibility Criteria

The Bidder's competence and capability is proposed to be established by the following parameters. The Bidder should meet all the criteria given in this section.

- a. Sole proprietorship, registered partnership firm, public limited company, private limited company of any of the above can submit the Bidder. The firms and the companies should be registered in India.
- b. The Bidder should have a minimum experience of having satisfactorily completed similar works during last 7 (Seven) years period ending last day of month before the one in which the bids are invited should be either of the following:
 - i. One similar completed work costing not less than the amount equal to **Rs. 62.00 Lakh** (Rupees Sixty-Two Lacs only) or
 - ii. Two similar completed works each costing not less than the amount equal to **Rs. 38.69 Lakh** (Rupees Thirty-eight Lacs and sixty-nine Thousand only) or
 - iii. Three similar completed works each costing not less than the amount equal to **Rs. 30.95 Lakh** (Rupees Thirty Lacs and Ninety-Five Thousand only)

Similar work" for this contract shall be "Supply/ installation testing and commission of 33 KV and above Auxiliary Sub-station" in NMRC/ any other Metro Organization/ Central govt./ State govt./PSU's/ Private sector companies.of repute.

- c. The Bidder should have minimum **average annual turnover** of **Rs. 77.38 Lakh (Rupees Seventy seven Lacs and thirty eight thousand only)** in the last 3 (three) Financial Years (**2018-19, 2019-20, 2020-21**) preceding the Bid Due Date.
- d. T1 – Liquidity
NA
- e. T2 – Profitability:
Profit before Tax should be positive during immediately preceding, three audited financial years audited years.
- f. T3 – Net Worth:
NA
- g. The Bidder should not have been blacklisted/ banned/ declared ineligible for corrupt and fraudulent practices by the Government of India/ any State Government/ Government Agency and Supreme court and contracts have been terminated/ foreclosed by any company / department due to non- fulfilment of Contractual obligation in last 5 (five) financial years.

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The Bidder shall also furnish the following documentary proof (for all members in case of Consortium, as per eligibility criteria):

- a. For above criteria 4.1a
 - i. Statutory proof of existence as the legal entity.
 - ii. PAN certificate as per legal entity
 - iii. Valid Electrical Contractor License
 - iv. GST RC

- b. For above criteria 4.1b
 - i. Form 4: Work Experience with documentary evidence as mentioned in the Form

- c. For above criteria 4.1
 - i. Form 5: Financial Capability Details
 - ii. A copy of the Audited balance sheets and Profit and Loss Statements for the last 3 (Three) financial years
In case the Financial Statements for the latest financial year are not audited and therefore the Bidder cannot make it available, the Bidder shall give an undertaking to this effect and the statutory auditor/charted accountant shall certify the same. In such a case, the Bidder shall provide the Audited Financial Statements for 2 (two) years preceding the year for which the Audited Financial Statement is not being provided. Also, pertaining to latest financial year, the bidder shall submit an affidavit certifying that "The Annual Accounts have not been audited so far which is certified by CA also."
 - iii. Self-attested copy of ITR of last three audited financial years.

- d. For above criteria 4.1g
 - i. Form 7: Undertaking

4.2. Bid Capacity Criteria:

Bid Capacity: The Bidders will be qualified only if their available bid capacity is more than the approximate cost of work as per NIT. Available bid capacity will be calculated based on the following formula:

Bid capacity will be calculated based on the following formula:

$$\text{Available Bid Capacity} = 2 * A * N - B$$

Where,

A = Maximum of the value of work executed in any one year during the last three financial years (updated to the last day of the previous month of tender submission price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year).

N = No. of years prescribed for completion of the work

B = Value of existing commitments (as on the last day of the previous month of tender submission) for on-going works during period of 1 months w.e.f. from the first day of the month of tender submission.

Financial data for latest last three financial years has to be uploaded by the Bidder in Form-5 of Tender along with audited financial statements. The financial data in the prescribed format shall be certified by the Chartered Accountant with his stamp and signature in original.

Value of existing commitments for on-going works during period of 1 months w.e.f. from the first day of the month of tender submission has to be uploaded by the Bidder in Form-4 of Tender. These data shall be certified by the Chartered Accountant with his stamp and signature in original.

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4.3. Personnel

The Bidder shall submit - Form 11: Undertaking pertaining to Personnel a staffing schedule containing the names, qualifications, professional experience and corporate affiliation of all proposed management personnel (above the level of shift supervisor) and specialists for this work. The submission shall include a provisional management structure and organisation chart showing areas of responsibility, relative seniorities and lines of reporting.

RESOURCES PROPOSED FOR THE PROJECT – PERSONNEL

The figures indicated below are the minimum number of Project-Personnel required which are to be deployed as per the minimum level of supervision and qualification/experience of site staff is given as follows:

S. No.	Designation of Project Personnel	Minimum Requirement
1	Civil Engineer/Site Engineer	1
2	Electrical Engineer/Site Engineer having atleast 10 years of experience in power substation project or maintenance also worked on SCADA system.	1
3	Bill Engineer	1
4.	Project Supervisor atleast three years experience in similar work	2 (one from each department)

It is to be noted that:

- i. The contractor shall deploy resources as per the above-mentioned minimum requirement and also confirm to deploy manpower over and above the minimum numbers indicated above, if the work requires so.
- ii. These minimum resources are as per the requirements of the various activities at different stages of works. All resources need not to be mobilized simultaneously, resources as per the requirement of various stages of works shall be mobilized in accordance with the instructions of the Engineer. The decision of the Engineer shall be final and bonding.
- iii. The performance of project personal deployed will be evaluated periodically by Employer during the contract period. In case the performance of any of the personnel is not satisfactory, the contractor shall replace them with good personnel immediately as per the directions of the Engineer.
- iv. **If staff is absent or found missing from his duty, recovery @ ₹2000/- for supervisor and @ ₹3000/- for engineer per day shall be imposed on the contractor and to be recovered from the running bill of the contractor.**

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4.4. Compliance with Technical Specifications

The Bidders must comply with the stipulated technical specifications as mentioned in the tender documents

4.5. Information of the Technical and Financial Proposal

- a. The Bidder satisfying technical and financial eligibility criteria under Clause 4.1 shall be considered as technically and financially qualified.
- b. The financial proposal of only technically qualified Bidders shall be opened for evaluation.
- c. The Bidder with the lowest quoted price for the RFP for Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida in the financial quote (**L1 bidder**) shall be selected for the award of contract.

4.6. Selection of Bidder

After the above evaluation process, the Technically Qualified Bidder, who is declared as **L1 (lowest quoted price)** may be declared as the selected Bidder ("Selected Bidder") for the Project.

- a. In case, two or more technically qualified bidders quote the same rate in the Commercial Bid, and become Lowest (i.e. L-1), then the tender would be awarded to the bidder who has the highest / higher Average Annual Turnover from 'Similar Works' (as per Minimum Eligibility Criteria defined in Section 4 under "Definition of Similar Work") during the last 3 years ending on the last day of the month preceding the month in which the tender has been floated. Experience certificate / work completion certificate on client's letter head is mandatory to ascertain the nature, period and value of work which shall be required to be uploaded by the bidder by the last date of tender submission. Prior to the expiry of the period of bid validity, NMRC will notify the successful bidder in writing, either through Notice of Award (NOA), that his bid has been accepted.
- b. Prior to the expiry of the period of bid validity, NMRC will notify the successful bidder in writing, either through Notice of Award (NOA), that his bid has been accepted.
- c. The NOA would be sent in duplicate to the successful bidder, who will return one copy to NMRC duly acknowledged, signed and stamped by the authorized signatory of the bidder, as an unconditional acceptance of the NOA, within 10 (ten) days from the date of issue of NOA.
- d. No correspondence will be entertained by NMRC from the unsuccessful bidders.

4.7. Notice of Award and Execution of Contract Agreement

- a. NMRC will notify the Successful Bidder by a Notice of Award (NOA) that its bid has been accepted.
- b. The Selected Bidder shall, within 10 (ten) days of the receipt of the NOA, sign and return the duplicate copy of the NOA in acknowledgement thereof along with letter of acceptance of NOA. In the event, the duplicate copy of the NOA duly signed by the Selected Bidder and letter of acceptance of NOA is not received by the stipulated date, NMRC may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by NMRC because of failure of the Selected Bidder to acknowledge the NOA

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- c. The Successful Bidder shall execute the Contract Agreement within 15 (fifteen) days of the letter of acceptance of NOA or such extended period as may be decided by the Corporation.
- d. Failure of the Successful Bidder to comply with the requirement of acknowledgement of NOA shall constitute sufficient grounds for the annulment of the NOA, and forfeiture of the bid security.
- e. The Purchaser reserves the right to increase or decrease the quantity up to 25% of the quantity offered by the successful Bidder. The bidder is bound to accept the increase or decrease in the tendered quantity up to 25% under this clause without any change in unit price.

In case the variation in individual items or the group of items as stipulated above, is more than 25% on plus side, the rate for the varied quantity beyond 25% shall be negotiated between NMRC and the Contractor and mutually agreed rates arrived at before actual execution of the extra quantity. In case the contractor executes the extra quantity without written approval of the NMRC with specific instructions to execute pending the finalization of rates, the payment shall be made at contract rate only. In the event of disagreement, the Engineer shall fix such rates of price as are, in his opinion appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on account payments to the Contractor. Alternatively, in the event of disagreement, the Contractor shall have no claim to execute extra quantities/new items and the Engineer shall be free to get such additional quantities beyond 25% new items executed through any other agency. However, if the Engineer or the Employer so directs the Contractor shall be bound to carry out any such additional quantities beyond the limits stated above original quantities and or new items and the disagreement or the difference regarding rates to be paid for the same shall be settled in the manner laid down under the conditions for the settlement of dispute.

4.8. Performance Bank Guarantee / Security Deposit

- a. To fulfil the requirement of performance bank guarantee during the implementation period, the Successful Bidder (herein referred to as the "Contractor") shall deposit **10% of the Contract Price** in form of FDR/ DD or unconditional and irrevocable Bank Guarantee bond issued by a scheduled bank in favour of Noida Metro Rail Corporation Limited, which may be reduced for balance years on completion of each year, within 30 days from Notice of Award. EMD amount of successful bidder shall be adjusted in the performance bank guarantee, if applicable. For unsuccessful bidder, EMD shall be refunded without any interest. The Performance Guarantee should be valid for a period of three (3) months beyond the Defect Liability Period and will be released after successful completion of Defect Liability Period.
- b. It is to note that if contract value increases by more than 25% of the original contract value, the performance bank guarantee shall be increased accordingly.
- c. A Contract agreement will have to be signed by the Contractor at his cost on proper stamp paper. Without performance guarantee by Contractor, Contract agreement shall not be signed.
- d. NMRC reserves the right for deduction of NMRC dues from Contractor's Performance Bank Guarantee/ Security Deposit (interest free) for – Any penalty imposed by NMRC for violation of any terms and conditions of agreement committed by the Contractor.
- e. Any amount which NMRC becomes liable to the Government/Third party due to any default of the Contractor or any of his director/ employees/ representatives/ servant/ agent, etc.
- f. **The Bank Guarantee must be issued by a bank branch located in Delhi/NCR, Noida and Greater Noida region only. The Bank guarantee shall be extended and renewed in advance before expiry of existing bank guarantee.**

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- g. Any payment/ fine made under the order/judgment of any court/consumer forum or law enforcing Contractor or any person duly empowered in his behalf.
- h. Any outstanding payment/ claims of NMRC remained due after completion of relevant actions as per agreement.
- i. Once the amount under above Clause is debited, the Contractor shall replenish the Security Deposit/ Performance Bank Guarantee to the extent the amount is debited within 15 days period, failing which, it shall be treated as Contractor Event of Default and will entitle NMRC to deal with the matter as per the provisions of RFP and Contract Agreement.

4.9. Contract during Proposal Evaluation

- a. Proposals shall be deemed to be under consideration immediately after they are opened and until such time NMRC makes official intimation of award/ rejection to the Bidders. While the Proposals are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain from contacting by any means, NMRC and/ or their employees/ representatives on matters related to the Proposals under consideration till the time Contract is awarded.
- b. Any effort by a Bidder to influence NMRC in its decisions on e-Bid evaluation, e-Bid comparison or contract award may result in rejection of the Bidder's e-Bid.
- c. In the event of any information furnished by the Contractor is found false or fabricated the minimum punishment shall be debarred/ blacklisting and the legal proceeding may also be initiated.
- d. If the Bidder wishes to bring additional information to the notice of NMRC, he/she can do so in writing. All correspondence/ enquiry should be submitted to the following in writing by fax/ post/courier:

DGM (RS, Ops & Elect)
Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29,
Noida -201301
District Gautam Budh Nagar, Uttar Pradesh
Email: avikdmrc@gmail.com, nmrcrsandel@gmail.com
- e. No interpretation, revision, or other communication from NMRC regarding this solicitation is valid unless in writing and signed by the competent authority from NMRC.

4.10. Other Instruction

- a. Canvassing in connection with the tenders is strictly prohibited and the tenders, submitted by Bidder, who resort to canvassing, are liable to be rejected. EMD will be forfeited of those tenders who will be found non-serious and if it is felt by the tender committee that the Bidders submitted their tender only to influence the tendering process.
- b. On acceptance of the tender, the name of the accredited representative of the Contractor, who would be responsible for taking instructions from NMRC or the official deputed by NMRC, shall be communicated to NMRC or the official deputed by NMRC in writing.

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4.11. Project Financial Terms

4.11.1. Payment Terms

- a. The payment for items given in Bill of Quantity/Pricing Document shall be made based as per SCC clause S. No-23, **Sub-Clause 11.6.**
- b. The work executed against the BOQ items in would be paid on measurement basis.
- c. The Contractor may raise their 'On Account' payments on monthly basis as per the status of work on the last day of the respective month.

4.12. Contractor's Labour Camp

4.12.1. Employer not to provide Quarters for Contractor's Labour

The Employer will not provide living accommodation for the use of the Contractor or any of his staff or labour employed on the Works. Living accommodation shall not be established on any land provided to the contractor by the Employer.

4.12.2. Provision of Labour Camp

The Contractor, shall, at his own expense, make adequate arrangements for the housing, supply of drinking water and provision of bathrooms, latrines and urinals, with adequate water supply, for his staff and workmen directly or through sub-contractors employed on the Works at the location authorised by Engineer. No labour camp shall be allowed at work site or any unauthorised place. The Contractor at his own cost shall maintain all campsites in a clean and sanitary condition. The Contractor shall obey all health and sanitary rules and regulations and carry out at his cost all health and sanitary measures that may, from time to time, be prescribed by the Local/Medical Authorities and permit inspection of all health and sanitary arrangements at all times by the Employer, Engineer and the staff of the local municipality or other authorities concerned. Should the Contractor fail to provide adequate health and sanitary arrangements these shall be provided by the Employer and the cost recovered from the Contractor. The Contractor shall at his own cost, provide First Aid and Medical facilities at the Labour Camp and at work sites on the advice of the Medical Authority in relation to the strength of the Contractor's staff and workmen, employed directly or through sub-contractors. The Contractor shall at his own cost, provide the following minimum requirements for fire precautions:

- Portable Fire Extinguishers
- Manual Fire Alarms
- Water Supply for use by the Fire Service.

The Contractor at his own cost shall provide necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers. He should also ensure that electrical installations are done by Trained Electricians. These installations shall be maintained, and daily maintenance records must be made available for inspection of the Engineer.

4.12.3. Camp Discipline

The Contractor shall take requisite precautions and use his best endeavours to prevent any riotous or unlawful behaviour by or amongst his workmen, and others, employed directly or through sub-contractors. These precautions shall be for the preservation of the peace and protection of the inhabitants and security property in the neighbourhood of the Works. In the event of the Employer requiring the maintenance of a Special Police Force at or near the site, during the tenure of the work, the expenses

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thereof shall be borne by the Contractor and if paid by the Employer, shall be recoverable from the Contractor. The sale of alcoholic drinks or other intoxicating drugs or beverages upon the work, in any labour camp, or in any of the buildings, encampments or tenements owned or occupied by, or within the control of, the Contractor or any of his employees directly or through subcontractors employed on the work, shall be forbidden, and the Contractor shall exercise his influence and authority to secure strict compliance with this condition. The Contractor shall also ensure that no labour or employees are permitted to work at the site in an intoxicated state or under the influence of drugs. The Contractor shall remove from his camp such labour and their families, as refuse protective inoculation and vaccination when called upon to do so by the Engineer on the advice of the Medical Authority. Should Cholera, Plague or any other infectious disease break out, the Contractor shall at his own cost burn the huts, bedding, clothes and other belongings of or used by the infected parties. The Contractor shall promptly erect new huts on healthy sites as required by the Employer, within the time specified by the Employer, failing which the work may be done by the Employer and the cost recovered from the Contractor.

4.12.4. Labour Accommodation

The Contractor shall provide living accommodation that is equal to or exceeds the minimum criteria established in the following sub-sections, needed to house his staff, workers employed directly or through sub-contractors. The buildings shall be constructed to have a minimum life of not less than the length of the Contract.

- a. The roofs shall be watertight and laid with suitable non-flammable materials permissible for residential use under local regulations and for which the consent of the Engineer has been obtained.
- b. Each hut shall have suitable ventilation. All doors, windows, and ventilators shall be provided with security leaves and fasteners. Back-to-back units may be avoided.
- c. The minimum height of each unit shall be 2.10m and shall have separate cooking place.
- d. Suitable no. of common toilet/bath shall be provided.

4.12.5. Water Supply

The Contractor shall provide an adequate supply of water for the use of labourers in the Camp. The provision shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which be of metal or masonry shall be provided. The Contractor shall also at his expense plan for the provision and laying of water pipe lines from the existing mains wherever available and shall pay for all the fees and charges thereof.

4.12.6. Drainage

The Contractor shall provide efficient arrangements for draining away sewage water to keep the camp neat and tidy. Surface water shall be drained away from paths and roads and shall not be allowed to accumulate into ditches or ponds where mosquitoes can breed.

4.12.7. Sanitation

The Contractor shall arrange for conservancy and sanitation in the labour camps according to the rules and regulations of the Local Public Health and Medical Authorities. The Contractor shall provide a sewage system that is adequate for the number of residents in the camp, and which meets the requirements of the Municipality Authorities.

5. Section 5: Special Conditions of Contract (SCC)

SCC Clause	Reference to GCC Sub-Clause No.	Description
1	Sub-Clause 3.2	<p>Functions of Engineer</p> <p>In addition to the duties mentioned in Clause 3.2 of General Conditions of Contract:</p> <p>(i) Shall watch and inspect the Works, monitor and examine any material to be used and workmanship employed by the Contractor in connection with the Works;</p> <p>(ii) Shall carry out such duties and exercise such powers vested in the Engineer in accordance with the provisions of the Contract;</p> <p>(iii) Shall issue instructions which in his opinion are necessary for the execution of the Works; and</p> <p>(iv) May issue any other instruction which in his opinion is desirable in connection with the Works.</p> <p>In case The Engineer is employee of any agency hired by the Employer, the Engineer shall take the approval of the Employer for all technical and financial matters otherwise he shall be deemed to have taken the approval of the Employer.</p>
2	Sub Clause 4.2.1	<p>PERFORMANCE SECURITY</p> <p>This Clause is deleted in SCC & GCC Clause is applicable.</p>
3	Sub-Clause 4.4	<p>Coordination with other Contractors</p> <p>The contractor shall plan and execute work in coordination and in co-operation with other contractors working for adjacent.</p>
4	Sub-clause 4.5	<p>Sub-contractors</p> <p>The work should not be sublet.</p>
5	Sub-Clause 4.10	<p>Sufficiency of Tender</p> <p>The Bidder shall be entirely responsible for sufficiency of rates quoted by him in his tender.</p> <p>The Contractor (Successful Bidder) shall be paid for only at quoted/accepted rates for the items of works executed as per BOQ.</p>
6	Sub-Clause 4.11	<p>Access Route</p> <p>All operations for the execution of the Works shall be carried out so as not to interfere unnecessarily with the convenience of the public or the access to public or private roads or footpaths or properties owned by the Employer or by any other person.</p> <p>The Contractor shall select routes, choose and use vehicles so that movement of Contractor's Equipment, Plant and Materials from and to the Site is limited so that traffic is not delayed and damage to highways and bridges is prevented. If there is any delay or damage or injury, the cost of rectification or reconstruction of highways or bridges shall be borne by the Contractor. The Contractor shall indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters</p>
8	Sub-Clauses 4.16 and 6.7	<p>Safety Precautions</p> <p>The Contractor is required to make himself aware of all the requirements of the Employer's Safety, Health and Environmental Manual in this regard and comply with them. The Site Safety Plan shall include detailed policies, procedures and regulations which, when implemented, will ensure compliance with Sub-</p>

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SCC Clause	Reference to GCC Sub-Clause No.	Description
		<p>Clauses 4.16 and 6.7 of General Conditions of Contract.</p> <p>The Contractor shall, from time to time and as necessary or required by the Engineer, produce supplements to the Site Safety Plan such that it is at all times a detailed, comprehensive and contemporaneous statement by the Contractor of his site safety and industrial health obligations, responsibilities, policies and procedures (under the laws of India) or as stated in the Contract or elsewhere relating to work on Site. If at any time the Site Safety Plan is, in the opinion of the Engineer, insufficient or requires revision or modification to ensure the security of the Works and the safety of all workmen upon, and visitors to the Site, the Engineer may instruct the Contractor to revise the Site Safety Plan. The Contractor shall, within 14 days, submit the revised plan to the Engineer for review.</p>
9	Sub-Clause 4.17	<p>Protection of the Environment</p> <p>The Contractor shall maintain ecological balance by preventing deforestation, water pollution and defacing of natural landscape. The Contractor shall, so conduct his cleaning operations, as to prevent any avoidable destruction, scarring or defacing of natural surroundings in the vicinity of work. In respect of ecological balance, the Contractor shall observe the following instructions</p> <p>(a) Where destruction, scarring, damage or defacing may occur as a result of operations relating to construction and maintenance activities, the same shall be repaired, replanted or otherwise corrected at Contractor's expense. All work areas shall be smoothed and graded in a manner to confirm to natural appearance of the landscape as directed by the Engineer.</p> <p>(b) All trees and shrubbery, which are not specifically required to be cleared or removed for cleaning purposes, shall be preserved and shall be protected from any damage that may be caused by Contractor's cleaning operations and equipment. The removal of trees or shrubs will be permitted only after prior approval by the Engineer. Trees shall not be used for anchorage. The Contractor shall be responsible for injuries to trees and shrubs caused by his operations. The term "injury" shall include, without limitation, bruising, scarring, tearing and breaking of roots, trunks or branches. All injured trees and shrubs shall be restored as nearly as practicable, without delay, to their original condition at Contractor's expenses.</p> <p>(c) The Contractor shall provide all necessary access, assistance and facilities to enable the Engineer and the Employer to monitor and conduct tests to verify that the Site Environmental Plan is being properly and fully implemented</p>
10	Sub-Clause 4.18	<p>Electricity and Water</p> <p>Electricity and water shall be arranged by the contractor on his own and at his cost.</p> <p>If available, the Employer may provide Water supply and Electricity on chargeable basis. The contractor shall make his own arrangements to tap the Electricity from the nominated and existing sockets/ points. The contractor shall tap the Electricity as per IE Rules & IE Act (Latest) duly complying all safety pre-</p>

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SCC Clause	Reference to GCC Sub-Clause No.	Description
		<p>cautions and under following conditions:</p> <p>(a) The contractor shall submit full scheme for the requirement of Electricity & water. If scheme mentions Electricity requirement which is beyond the capacity of the Employer, in that case the contractor shall make his own arrangements/ alternative arrangements.</p> <p>(b) The Contractor should make his own arrangements to draw the water from the available water point to the working place without affecting the premises</p>
11	Sub-Clause 4.19	<p>Employer Supplied Machinery and Materials The <i>Employer will not provide</i> any machinery or materials under the Contract.</p>
12	Sub Clause 4.27	<p>Security of the Site The Contractor shall take all measures necessary to ensure such security, including exercising control over all persons and vehicles which are employed or engaged on the Site or in connection with the Works or the other works comprising the Project and with the security arrangements applicable to any other site within the Project.</p> <p>The Contractor shall arrange the issue of passes for the admission of all persons and vehicles to the Site or to any part thereof and may refuse admission to or remove from the Site any person or vehicle failing to show an appropriate pass on demand to any duly authorised person.</p> <p>If required by the Engineer, the Contractor shall submit a list identifying all persons to whom passes have been issued together with two photographs of each person and all entities to which a pass has been issued in respect of any vehicle and shall satisfy the Engineer of the bonafides of any such person or entity.</p> <p>The Contractor shall not, without the written permission of the Engineer or otherwise in accordance with the Contract, allow access to the Site to any person unless the presence on Site of such person is necessary in connection with the execution of the Works or with the discharge of the duties of any relevant authority.</p> <p>For the purposes of this Clause only, "Site" shall include off-Site places of manufacture or storage and the Contractor's Work Areas and shall include, areas provided to the Contractor by others.</p>
13	Sub-Clause 5.3	<p>Submission of Documents The Contractor shall submit scheme of work, drawings and documents, as required by the Contract, to the Engineer in accordance with any submittal schedule agreed with the Engineer. This submittal shall be made sufficiently before the Works are to be carried out to give the Engineer and the Employer reasonable time to examine the drawings or other documents, to prepare comments and for any changes to be accommodated by the Contractor.</p> <p>Where the consent of the Engineer is required, the Engineer shall notify the Contractor in writing of his decision either within such period as may expressly</p>

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SCC Clause	Reference to GCC Sub-Clause No.	Description
		<p>be stipulated in the Contract or otherwise within a reasonable time. The Operation and Maintenance Manuals and drawings submitted by the Contractor shall, if required, be updated by him during the Defects Liability Period and re-submitted for review by the Employer's Representative.</p>
15	Sub-Clause 6.4	<p>Labour Laws The Contractor shall, if required by the Employer, deliver to the Engineer or to his office; a return in detail, in such form and at such intervals as the Employer may prescribe, showing the number of labours employed in different categories by the Contractor for the entire work.</p> <p>The contractor must ensure compliance of all the labour laws including obtaining labour licence and registration of workers with BOCW Board.</p>
16	Sub-Clause 6.6	<p>Housing Facilities The Contractor shall have to make his own arrangements for housing facilities for his staff.</p>
17	Sub-Clause 6.7	<p>Health and Safety Contractors are required to take care of his labour/site staff working at site if any mishappening occurred.</p>
18	Sub Clause 7.0	<p>Quality Control The Contractor shall appoint a suitably qualified and experienced person, not otherwise engaged in the performance of the Contract, to act as manager of the quality assurance system and shall provide such other personnel and resources as required to ensure effective operation of the quality assurance system. The said manager shall carry out audits of the application of the quality assurance system and ensure effective quality control and delivery of quality assurance.</p> <p>The Contractor shall provide all necessary access, assistance and facilities to enable the Engineer to carry out surveillance visits both on and off the Site to verify that the quality assurance system is being properly and fully implemented. No extra payment shall be made in this regard and the cost of the Work under this element shall be deemed to be included in the Contract Price.</p>
19	Sub Clause 10.1	<p>Defect liability period The Defect liability period (DLP) shall be 24 months from the date of issue of the latest Taking over Certificate for the whole of the works.</p> <p>Work by persons other than the Contractor. If by reason of any accident or failure or other event occurring to, in, or in connection with the Works any remedial or other work shall, in the opinion of the Engineer, be urgently necessary and the Contractor is unable or unwilling at once to do such remedial or other work, the Engineer may authorise the carrying out of such remedial or other work by a person other than the Contractor. If the remedial or other work so authorised by the Engineer is work, which, in the Engineer's opinion, the Contractor was liable to do under the defect liability period Contract, all expenses properly incurred in carrying out the same shall be recoverable by the Employer from the Contractor, provided that the Engineer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Contractor thereof in writing.</p>

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SCC Clause	Reference to GCC Sub-Clause No.	Description
20	<p>Sub-Clause 11.1</p> <p>Sub-Clause 11.1.1</p> <p>Sub-Clause 11.1.4</p>	<p>Contract Price & Payment</p> <p>In respect of All-Inclusive Contract The Contract Price, subject to any adjustment thereto in accordance with the contract conditions, shall be all inclusive (including all taxes, duties, royalties etc.)</p> <p>Change in Taxes Duty (a) "Change in Taxes/Duties/Levies" means the occurrence or coming into force of the following, at any time after the date of submission of tender. (i) Any new tax which is imposed on Composite Works Contractors applicable on Metro Project. (ii) Change in the rate of GST on Composite Works Contractors applicable on Metro Project as Per GST Act.</p> <p>(b) The Contract Price shall be adjusted due to any of the above two conditions. Adjustment in contract price will be applicable up to the stipulated date of completion of work including the extended period of completion where such extension has been granted under sub clause 8.4.1 of GCC or it is specifically mentioned that extension is with adjustment for changes as stated above.</p> <p>(c) If the extension of contract period is on account of contractor's fault under Sub-clause 8.4.3 of GCC, no compensation shall be made towards upward revision towards "change in Taxes/Duty (taking place during the said extended contract period)" as mentioned at Sl. No. (a) (i) & (ii) above, during the original contract period or extended contract period shall be on employer's account.</p> <p>(d) Any other changes (except on account of clause (a) (i) & (ii) above) in existing taxes/new taxes on supply of materials/services/works etc. will not be considered and its impact shall be considered covered in the price variation clause provided in the Contract and in Contract where Price Variation clause is not provided, the impact on any other change (except on account of clause (a) (i) & (ii) above) in existing taxes/new taxes on supply of materials/services/works etc. will be deemed to be included in the quoted contract price.</p> <p>(e) Also, the contract price shall not be adjusted on account of fluctuations in the rates of exchange between the foreign currencies of the contract and Indian rupees from the last date of submission of tender.</p>
21	Sub clause 11.1.3	<p>Price Variation This is a fixed price contract and no Price Variation is admissible in this contract.</p>
22	Sub-Clause 11.2	<p>Advance No Advance is admissible in this contract.</p>
23	Sub-Clause 11.6	<p>Payment For the purpose of On-account payment, the contractor shall submit detailed activities carried out as per BOQ recorded in Measurement sheets, Abstract</p>

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SCC Clause	Reference to GCC Sub-Clause No.	Description
		<p>sheets along with recorded bill for the item actually executed for checking and payment. Payment will be affected based on unit rates as approved in the Bill of Quantities.</p> <p>Payment Instalments and ratio:</p> <p>a) Scheme approval and delivery of CSS: 60% of the cost may be released after successful delivery for CSS on site on foundation.</p> <p>b) Installation and testing and commissioning: 90% of the charges may be released after installation including earthing, electrical cabling & approvals and 30% of the cost offered for CSS.</p> <p>c) Final approval and commissioning: 10% of the remaining charges may be released after</p> <ul style="list-style-type: none"> a) Three sets of completion drawings comprising the following shall be submitted by the contractor while handing over the installation. <ul style="list-style-type: none"> ▪ Equipments layout drawing(s) giving complete details of the entire equipments. Electrical drawings for the entire electrical equipments showing cable sizes, equipment capacities, switch-gear's ratings, control components, control wiring etc. b) No Objection Certificate from UP Electrical safety department. c) Training of operation and maintenance staff of the NMRC to be provided by contractor. d) At the time of final completion, the contractor shall arrange for inspection and testing of the installation. Test results obtained shall be recorded. The installation shall not be accepted until it complies with the requirement of these Specifications. The Sub Station installation shall be got inspected by the contractor from local licensee and/or Electrical Inspector and their clearance taken before energizing the Sub Station. All the observations/ deficiencies pointed out by the inspecting authorities shall be complied with by the contractor on priority. The department shall not render any help and shall not pay any fee for NOC or local licensee.
24	Sub-Clause 15.0	<p>Insurance</p> <ul style="list-style-type: none"> (a) All the contractor's employees drawing monthly wages up to ₹21,000/- or as applicable as per the enhanced limit, shall have to be covered under ESI. The Contractor shall take insurance policy as specified in the Employee's Compensation Act only for those employees who are not covered by ESI. (b) The contractor shall insure against liability to third parties in the joint name of the Employer and the contractor for any loss, damage, death or injury which may occur to any physical property (except things insured

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SCC Clause	Reference to GCC Sub-Clause No.	Description
		<p>otherwise) or any person (except person insured by employer, staff of other contractor working in the premises, contractor's staff under sub clause above which may arise out of the performance of the contract. The insurance shall be at least for the amount of INR 7,50,000/- for each incident.</p> <p>(c) Insurance cover for Contractor's All Risk shall be full value of Contract price.</p>
25	Sub-Clause 18.1	<p>Notices and Instructions</p> <p>The Contractor shall furnish to the Employer/Engineer the postal address of his office at Delhi NCR. Any notice or instructions to be given to the Contractor under the terms of the contract shall be deemed to have been served on him if it has been delivered to his authorized agent or representative at site or if it has been sent by registered post to the office, or to the address of the firm last furnished by the Contractor.</p> <p>The Contractor shall establish an office in the Delhi NCR in consultation with the in charge for planning, co-ordination and monitoring the progress of the Work and intimate the same in writing to in charge. In addition, the Contractor may set up field offices at convenient and approved locations for co-ordination and for monitoring the progress of fieldwork at his own cost.</p>
	Additional	<p>GENERAL CONDITIONS OF CONTRACT</p> <p>a. This contract will be governed by NMRC's General Conditions of Contract and Special Conditions of Contract. The later will have priority over the earlier one in case of any ambiguity in any of the clause.</p> <p>b. All conditions mentioned in the General Conditions of Contract (GCC) will be applicable in addition to above.</p>

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6. Section 6: Technical Specifications

TECHNICAL SPECIFICATION OF 1000KVA, 33KV/415V Compact Substation

1. INTENT OF SPECIFICATION

This specification is intended to cover the design, manufacture, assembly, testing at manufacturer's works, supply & delivery, properly packed for transport of the Packaged Substation (PSS)/Compact Substation (CSS), 33kV Ring Main Unit (RMU) and supervision of erection & commissioning as specified herein under, complete with all accessories, fittings and auxiliary equipment as required for efficient & trouble-free operation.

2. CODES & STANDARDS:

All equipments and material shall be designed manufactured and tested in accordance with the latest applicable IEC standards. The 33KV package substation Design must be as per IEC 61330.

All equipment and material shall be designed manufactured and tested in accordance with the latest applicable IEC standards.

The Package Sub-station offered shall in general comply with the latest issues including amendments of the following standards.

Title	Standards
High Voltage Low Voltage Pre-Fabricated Substation	IEC:61330/62271-202
High Voltage Switches	IEC 60265
Metal Enclosed High Voltage Switchgear	IEC 60298/62271-200
High Voltage Switchgear	IEC 60694/62271-100
Low Voltage Switchgear and Control gear	IEC 60439/60947
Transformers	IEC 60076
Servostablizer	IS 9815, 2026

3. SCOPE & SPECIFIC REQUIREMENTS

Supply of 1 nos. 1000kVA, 33kV, Package Substation with following equipment details part of each Package substation.

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S. No	Description
i)	<p>33kV RMU: Quantity:1 no.</p> <ul style="list-style-type: none"> • One way 33KV Non-Extensible Ring Main Unit Compact switchgear consisting of 630A SF6 insulated fixed manual fault making / Load break Switches & 630A one number of Fixed manual SF6 insulated Vacuum circuit breaker. SF6 insulated Vacuum circuit breakers with self- powered relay having Transformer protection, over current and earth fault protection. • Interconnection between RMU and transformer shall be by using suitable Copper unarmoured 33KV (UE) 1CX1RX95 or Aluminium armoured 33KV (UE) 1CX1RX120 sq.mm per phase cable. • Mechanical ON/OFF indicator, trip coil, Manual Close & Trip PB, live cable indicator, mechanical interlocks, padlocking facility, SF6 gas manometer, cable boots, 3 nos. CTs.
	<p>Cable Box:</p> <p>The VCB shall be provided with suitable and identical cable boxes in front for connection 1 runs of suitable cable size as per electrical safety cable from vertically below. The cable boxes shall be so located at convenient height to facilitate easy cable jointing work. The height available for Cable termination should be minimum 500 mm. the Cable termination shall be done by Heat shrinkable termination method so adequate clearances shall be maintained between phases for Termination.</p>
	<p>LV Section</p> <p>Air Circuit Breaker 1600Amps 415V 4P 50Hz 50KA Fixed Manual (MF) Type Air Circuit Breaker (ACB) with Microprocessor based release for overcurrent, short circuit & earth Fault release</p> <p>Digital Multifunction Meter A, V, KW, KWH, PF, TOD, MDI</p> <p>Indicating Lamps R, Y, B, ON, OFF, TRIP LED</p> <p>Control MCB, 6A, As required</p> <p>Thermal protection relay Winding Temperature Indicator with 1 alarm and trip contact</p>

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	<p>suitable heater arrangement Aluminium PVC sleeved Bus bar from transformer Secondary to LT Section (100% for phase & 100% for N, Current density - 1A/ sq. mm)</p>
iii	<p>Outgoing ACBs of LT Switchgear should be suitable for termination of as per standard aluminum XLPE armoured Cable.</p>
	<p>TRANSFORMER SECTION 1000KVA , 33/0.415KV DYn11 Cast resin dry type transformer with Off circuit tap link and rest as per technical data sheet.</p>
iv	<p>Enclosure: Quantity:1 No. Outdoor type enclosure having modular construction of Galvanized Sheet Steel. The degree of protection for HT & LT switchgear compartment shall be IP55 & degree of protection of transformer compartment of the enclosure shall be minimum IP23. Painting of the enclosure exterior shall be suitable for Delhi NCR region. Each compartment will be provided with the door and pad locking arrangement. The Compartment illumination lamp with door-operated switch shall be provided for each compartment. Structure of the substation shall be able to withstand the gross weight of all equipment. It should be possible to transport the equipment along with transformer, RMU & LT Panel from one site to another. As per IEC 62271-202 & K10 Class</p>
v	<p>Interconnection between HT switchgear & Transformer using XLPE cable & Interconnection between Transformer & LT switchgear using high conductivity Aluminium busbars(E91E) . Internal earthing connections by GI strips.</p>
vi	<p>DC supply for PSS shall be through in built 24V power pack. Separate DC supply shall not be provided for auxiliary power requirement purpose.</p>
	<p>CSS must be SCADA compatible</p>
	<p>EARTHING ARRANGEMENT Busbar Aluminium size 50 x 6 sq. mm</p>

1. Design Criteria

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The prefabricated-package substation shall be designed for

- a) Compactness,
- b) fast installation,
- c) maintenance free operation,
- d) safety for worker/operator & public.

The Switchgear and component thereof shall be capable of withstanding the mechanical and thermal stresses of short circuit listed in ratings and requirements clause without any damage or deterioration of the materials.

For continuous operation at specified ratings temperature rise of the various switchgear components shall be limited to permissible values stipulated in the relevant standard and / or this specification.

Service Conditions:

The Package substation shall be suitable for continuous operation under the basic service conditions indicated below

Ambient Temperature: 50 Deg C Relative

Humidity: upto 95%

Altitude of Installation upto 200m

The Enclosure of High Voltage switchgear-control gear, Low Voltage switchgear-control gear & Transformer of the package substation shall be designed for use at Delhi NCR region. The enclosure should take minimum space for the installation including the space required for approaching various doors & equipment inside.

2. DESIGN REQUIREMENT OF 33kV CSS & 33kV RMU

The main components of a prefabricated package substation are Transformer, High-voltage switchgear-control gear, Low-voltage switchgear-control gear and corresponding interconnections (cable, flexible bus bars) & auxiliary equipment and 33kV RMU. The components shall be enclosed, by either common enclosure or by an assembly of enclosure. All the components shall comply with their relevant IEC standards.

OUTDOOR ENCLOSURE:

The enclosure shall be made of 2.0mm thickness galvanized Sheet Steel tropicalized to local weather conditions including all partition sheets and doors. The outdoor enclosure wall of the CSS is designed in a corrugated wall type design for robust construction and heat dissipation. The base of enclosure shall be 4mm thick Hot dip Galvanized sheet steel.

The metal base shall ensure rigidity for easy transport & installation.

The protection degree of the Enclosure shall be IP55 for LT & HT switchgear compartment & IP23 for Transformer compartment. Proper / adequate ventilation aperture shall be provided for natural ventilation by way of Louvers etc.

IP 55 for 33kV RMU.

The doors shall be provided with proper interlocking arrangement for safety of operator.

The H.V. & L.V. outgoing of the transformer are to be connected to Vacuum Circuit Breaker of 1-way 33kV RMU & incomer of the Low Voltage Switchgear by means of Cables /Busbars & LT side (Busbar).

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Internal Fault: Failure within the package substation & 33kV RMU due either to a defect, an exceptional service condition or mal-operation may initiate an internal arc. Such an event may lead to the risk of injury, if persons are present. It is desirable that the highest practicable degree of protection to persons shall be provided. The Design for Internal arc fault shall be tested as per IEC 61330/62271-200.

Covers & Doors: Covers & doors are part of the enclosure. When they are closed, they shall provide the degree of protection specified for the enclosure. Ventilation openings shall be so arranged or shielded that same degree of protection as specified for enclosure is obtained. Additional wire mesh may be used with proper Danger board for safety of the operator. All covers, doors or roof shall be provided with locking facility or it shall not be possible to open or remove them before doors used for normal operation have been opened. The doors shall open outward at an angle of at least 90° & be equipped with a device able to maintain them in an open position.

Earthing: All metallic components shall be earthed to a common earthing point. It shall be terminated by an adequate terminal intended for connection to the earth system of the installation, by way of flexible jumpers/strips & Lug arrangement. The continuity of the earth system shall be ensured taking into account the thermal & mechanical stresses caused by the current it may have to carry. The components to be connected to the earth system shall include:

- a) The enclosure of Package substation,
- b) The enclosure of High voltage switchgear & control gear from the terminal provided for the purpose,
- c) The metal screen & the high voltage cable earth conductor,
- d) The transformer tank or metal frame of transformer,
- e) The frame &/or enclosure of low voltage switchgear,

There shall be an arrangement for internal lighting activated by associated switch for HV, Transformer & LV compartments separately.

Labels: Labels for warning, manufacturer's operating instructions etc. shall be durable & clearly legible.

Cleaning & Painting:

The paints shall be carefully selected to withstand sea shore conditions. The paint shall not scale off or crinkle or be removed by abrasion due to normal handling.

General Finish: Totally enclosed, metal clad, vermin and dust proof suitable for tropical climate use as detailed in the specification.

Ratings: The busbars shall have continuous rating with relevant IEC standard.

Breaking & Making Capacity: Circuit Breaker shall be capable of having rupturing capacity of 50kA symmetrical at 33KV.

Busbars: Switchgear shall be complete with all connections, busbars etc. The continuous rating of copper busbars shall be fully encapsulated by SF6 gas inside the steel tank. Busbar should be rated to withstand dynamic and thermal stresses for full length of switchgear.

Cable switch: It should be switch-disconnector and earthing switch using SF6/VCB gas as on arc-quenching medium. The switch position is closed-open-earthed. In open position switch satisfies the disconnector requirement.

Earth Switch: Earth switch should be rated equal to switchgear rating. Earth switch should be quick make type capable of making rated fault current. Earth switch should be operated from front of the cubicle.

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The Mechanism: All the mechanism should be situated in the mechanism compartment behind the front covers outside SF6 tank. Mechanism for switch and earth switch is operating both the switches via one common shaft.

Front covers: Front covers contains the mimic diagram of the main circuit with the position indicator for the switching devices. The voltage indicator should be situated in front covers. Access to the cable bushing in the lower part of each module.

Position Indicator: Position indicator are visible through the front covers and are directly linked the operating shafts of switch devices.

Voltage indicator: Voltage indicator situated in front covers, one of each module and indicate the voltage condition of each incoming cable. Identification of phase is achieved through labels L1, L2, and L3 on the front of the voltage indicator. Voltage indicator should comply requirement of IEC61243.

Cable Compartment: It should be possible terminate the cables as specified in the specification. The access to the compartment shall be possible by removing the cable cover and bolted to the main frame. Removable steel covers close the cable compartment. Arc proof cable covers should be available. Each module should have separate compartment that is segregated from each other by means of partition wall. A partition wall should be fitted to divide the cable compartment from the rear side of the switchgear. In case arc inside the tank, followed by opening of pressure relief device the partition wall prevents the hot gases flowing out from the pressure relief to enter the cable compartment.

Power Connection: The cable is installed in the dedicated compartment below the mimic front cover. In each compartment the earthing bar should be fitted with 4 screws M10.

Fault passage Indicator: Each RMU should be equipped with display phase current of feeder circuit. Each RMU should be provided with fault passage indicator to on isolator to indicate earth fault. This facilitate quick detection of fault section of line the unit shall be self contained requiring no auxiliary power and shall be integral part of RMU to avoid thefts. The fault shall be displayed by LED/flag indication with three options for reset. (Manual/on restoration of supply/Settable time

Switchgear:

The SF6 RMU shall be sealed for life, the enclosure shall meet the "sealed pressure system" criteria in accordance with IEC: 298. There shall be no requirement to 'top up' the SF6 gas. It shall provide full insulation, making the switchgear insensitive to the environment. Thus assembled, the active parts of the switchgear unit shall be maintenance free.

The switchgear & switchboard shall be designed so that the position of different devices is visible to the operator on the front of the switchboard & operations are visible as well. The switchboard shall be designed so as to prevent access to all live parts during operation without the use of tools.

RMU should be tested for internal arc fault test.

Isolator (Load Break Switch):

The Isolators offered shall conform to IS: 4710/9920 as amended to date. The isolator shall be ON Load type, triple pole, spring assisted, hand/motorized operated, non-automatic type with quick break contacts and fault indication. The operating handle shall have three positions 'ON', 'OFF' and 'EARTH' which shall be clearly marked with suitable arrangement to padlock in any position. A safety arrangement for locking shall be provided which shall prevent from the isolator operation 'ON' position to 'EARTH' position or vice versa.

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Vacuum Circuit Breaker:

The Unit shall consist 630A Tee-off spring assisted three positions, three pole circuit breaker, with integral fault making / dead breaking earth switch. The function shall be naturally inter-locked to prevent the main & earth switch from being switched 'ON' at the same time & the CB not allowed to trip in 'Earth On' position. The selection of the main/earth switch lever on the panel, which is allowed to move only if the main or earth switches in the off position. The lever shall be able to pad locked in either the main or earth position.

The manual operation of the circuit breaker shall not have an effect on the trip spring. This should only be discharged under a fault (electrical) trip condition; the following manual reset operation should recharge the trip spring & reset the CB mechanism in 'main off' position.

Air Circuit Breaker:

The Unit shall consist 1600A Tee-off spring assisted three positions, three pole circuit breaker, with integral fault making / dead breaking earth switch. The function shall be naturally inter-locked to prevent the main & earth switch from being switched 'ON' at the same time & the CB not allowed to trip in 'Earth On' position. The selection of the main/earth switch lever on the panel, which is allowed to move only if the main or earth switches in the off position. The lever shall be able to pad locked in either the main or earth position.

The manual operation of the circuit breaker shall not have an effect on the trip spring. This should only be discharged under a fault (electrical) trip condition; the following manual reset operation should recharge the trip spring & reset the CB mechanism in 'main off' position.

Protection Relay:

The CB shall be fitted with self-powered relay inside the front cover to avoid any tampering. The relay should be 3 Over Current + 1 Earth Fault, fed by protection CTs mounted in the cable box.

Locking Arrangement:

- Suitable padlocking arrangements shall be provided as stated below.
- CB manual operating handle in the "OFF" position.
- Each feeder Panel operating handle in 'Closed' 'Open" or 'Earth' position.
- Locking arrangement of CSS cubical as per direction of E/I.

1. General Requirements:

Compact Sub-Station & RMU shall be outdoor plinth mounted type.

However, Supervision of erection, testing and commissioning is in the scope of Bidder. Further, the Vendor shall furnish the foundation details & foundation bolts & accessories.

Package sub-station & RMU will be complete with the internal interconnections & earthing (GI) and extending of earth bar of Neutral and body terminals to the frame of the CSS for connecting to the earth pits. External earthing from CSS frame to earth pit.

Vendor shall assemble the Compact substation & RMU at factory and no assembly of the same shall be allowed at site.

Required technical data sheet of the transformer, HV/ MV switchgear, relay etc. should be furnished with the offer.

Colour of paint to be mentioned in the offer and to be decided mutually. Tentative paint shade shall be RAL-7032.

The CSS & RMU shall be should be SCADA compatible.

Vendor shall supply suitable & required no. of HT & LT Cable termination kits along with CSS for HT & LT Cable terminations.

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2. Pre-Dispatch Inspection:

Vendor shall offer for pre-dispatch inspection at vendor’s works. Only after the equipment’s are cleared by NMRC in writing, the vendor can dispatch the equipment. Routine tests to be conducted and original test certificates to be submitted.

3. Training

- Atleast Two NMRC persons shall be trained at vendor’s principles in the area of design, maintenance, and operation of Compact Substation.
- Atleast 4 persons shall be trained at NMRC site for a period of two working days.

DATA SHEET

DISTRIBUTION TRANSFORMER:

33KV/415V,1000 KVA Cast Resin Dry Type Transformer

Transformer should be type tested and the report should not be more than 5 years old. Transformer shall also comply with standards in force when the transformer is manufactured, particularly IEC 60076, Latest version, IS 2026; Latest version and IS 11171/1985.

Sr. No.	Description	Unit	Particulars	To be confirmed by Bidder
1	Manufacturer's Name And Country Of Manufacture			
2	Applicable Standards & Quantity		As Per Specifications & As Per BOQ	
3	Capacity	KVA	1000	
4	Secondary voltage, off-load line voltage at 33 kV primaries	V	415	
5	Primary line voltage (across phases):	kV	33	
6	Method of Connection HV Winding /LV Winding or Coupling:		delta-star, separate neutral (Dyn11)	
7	Rated Frequency	Hz	50	
8	Type Of Winding / Material		Two Winding / Copper	
9	3 Phase / Single Phase Unit		3 Ph Unit	
10	Secondary voltage at full load and power factor 0.8	V	400	

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11	Voltage Rating	kV/ kV	33 / 0.415	
12	Cooling		Natural	
14	Vector Group		Dyn11	
15	Winding Insulation (HV & LV)		Uniformly Insulated, Class F	
16	Short Circuit Current	kA	50kA	
17	Maximum Duration of Fault	Sec.	1 or3 Sec	
18	Insulation Withstand Voltage	kV	36	
19	Rated lightning impulse withstand voltage for primary winding	KV	170	
20	Rated short duration power frequency withstand voltage for primary winding	KV	70	
	Short circuit impedance	%	6	
21	Weight			
a	Transformer weight	Kg	Bidder To Furnish	
22	Current Density		Bidder To Furnish	
a	HV	A/Cm ²		
b	LV	A/Cm ²		
23	Noise level	dBA	74	
24	Guaranteed Total Losses At 100% Rated Voltage And Frequency (Without Is Positive Tolerance)	kW	Bidder To Furnish	
25	Guaranteed No-Load Current: A. When Excited From LV Side At 100% Rated Voltage B When Excited From LV Side At 110% Rated Voltage	A	Bidder To Furnish	
26	Guaranteed Efficiency i) At 75 °c ii) At Unity P.F iii) At Full Load		Bidder To Furnish	
27	Core:			
a	Material of Core Lamination		CRGO	
b	Insulation of Core Lamination		Bidder To Furnish	
c	Core loss in watt:	Watt	Bidder To Furnish	

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	a) Normal voltage b) Maximum voltage			
d	Maximum temperature rise of core by thermometer		Bidder To Furnish	
e	Center to center distance of the core	Mm	Bidder To Furnish	
f	Magnetizing (No load) current at a) Normal Voltage b) Maximum Voltage		Bidder To Furnish	
28	Winding			
a	Class of Insulation		Class F	
b	Material		Copper	
c	Maximum temperature rise of Windings by resistance method		Bidder To Furnish	
29	Tapping			
a	Tapping On Winding	HV/LV	HV	
b	Whether Off-Circuit		Off Load	
c	Tapping Range	%	-5% to +5%	
d	Tapping Step	%	2.5%	
30	Parallel Operation		No	
31	Terminal Bushings		HV / LV	
a	Rated Voltage Class –	KV	33/ 0.415	
b	Rated Current Class –	A	Bidder To Specify	
32	All The Accessories, Protections, Equipments - Compliance With Specification, SLD & Data Sheet Requirements.		Yes/ No	
33	Total weight of 33kV CSS	Kg	Bidder To Furnish	
34	Dimensions of CSS (LxWxH)	Mm	Bidder To Furnish	
35	Total weight of 33kV RMU	Kg	Bidder To Furnish	
36	Dimensions of RMU (LxWxH)	Mm	Bidder To Furnish	
	Climatic conditions:		Outdoor operation	
	Operation:		continuous	

- The magnetic circuit shall be in low-loss oriented-grain silicon steel sheet.
- The primary and the secondary windings shall be capable of withstanding a symmetrical three-phase short-circuit regardless of the tapping selected.

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- HV Connections of Transformer shall be connected through insulated cables

Accessories

- Lifting rings
- Nameplate
- Grounding terminal.
- Frame Channels

The cable connection with different terminals of transformer shall be through C – Type or suitable connector for clearances from transformer windings. HV terminals shall have suitable arrangement to provide sufficient clearance to 33 kV cables from the transformer windings.

Secondary neutral of transformers shall be solidly earthed.

Temperature Protection

- Transformers shall be fitted with a temperature protection system that allows winding temperatures to be monitored.
- This shall consist of two sensors placed on each low-voltage winding: one alarm sensor and one trip-out sensor. So, three alarm sensors (one per low-voltage winding) and three trip-out sensors (one per low-voltage winding) shall be provided.
- An indicator shall be installed in CSS to indicate continuously the winding temperature.

Transformer Values

Following characteristics should be confirmed for power transformer:

- Short-circuit voltage,
- No-load losses,
- Full-load copper losses
- Minimum efficiency at different load conditions

i.e, from ¼ load to full load and at minimum 0.8 power factor = 98.20%

Cables and terminations

Supply & laying of 33 kV grade as per BOQ XLPE insulated PVC sheathed cable and termination of above cable at GIS end and transformer end. GTP of MV suitable for above CSS and as per E/I instruction cable shall be as be submitted before ordering.

Statutory approval

All necessary statutory approvals shall be taken by the contractor. The employer shall facilitate only.

Description	TYPE OF TEST			
	Type	Routine	On Site	Special
Temperature rise*	√			
Lighting impulse withstand voltage test*	√			
Separate-source voltage withstand test		√	√	
Measurement of winding resistance test		√		
Measurement of voltage ratio and check of phase displacement		√		
Measurement of no load loss and current		√		
Visual inspection		√	√	
Short circuit withstand test				√

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LT PANEL AND SWITCHGEAR

GENERAL

- 6.1.1. Metro stations are provided with Electrical Panels for receiving and distribution of power supply to various usages as defined in various clauses at voltage level of 415 V/50 Hz. The usages are generally lighting, air conditioning system, ECS system, PD area and all other type E&M work which come under stations coverage.
- 6.1.2. The manufacturing, testing, installation and commissioning of complete 415 V, 3 phase, 4 wire and 50 Hz low voltage main switchboard is as defined in IEC/EN 61439-1, built up from compartments to house bus bars, terminal blocks, internal and control wiring, instrumentation, relays, interlock and padlocking facility, emergency push buttons, equipment for BMS/ SCADA /RS 485/ Mod bus connectivity of communicable ACB/MCCB interface, indication lamps, control and auxiliary switches, contacts, control power supply, air circuit breaker, MCCB, MCB, CTs and PTs and any other items considered necessary to deliver the functions of incoming and outgoing power supply as detailed in BOQ and drawing.
- 6.1.3. The bidder shall submit the General arrangement drawing, control wiring drawing of augmented Main distribution board (MDB). Manufacturing clearance shall be granted after approval of engineer in charge.

Indicating lamps

- 6.1.4. Indicating lamps shall be multiple LED type. All indicating lamps shall be suitably rated so that the indication is clearly visible from the side and front at a distance of not less than 3 m in a room.
- 6.1.5. The colours of indicating lamps for red, yellow, blue phases, ACB on, off and trip shall be red, yellow, blue, red, green and amber respectively.
- 6.1.6. Documentation

6.1.7. INSPECTION & TESTS

All equipment shall be completely assembled, wired, adjusted and tested at the factory as per the relevant IS/IEC standards. The following tests shall however be carried out as a minimum. All the tests being conducted shall clearly be brought out in the Quality Assurance Plan (QAP) by Bidder. The category of test i.e whether it is a routine test or type test or both, must also be brought out clearly in the QAP with specific mention of relevant standard Number against each test.

a)	BOM verification	100 % Witness
b)	Dimensional check, Painting thickness, finish quality & workman ship	100 % Witness
c)	One Set of Manufacturer's Test certificates for major bought out equipment shall be made available during inspection	100 % Review
d)	All Routine & acceptance tests including Load test for 33kV CSS & RMU set as per relevant standards shall be conducted.	100 % Witness

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e)	All type tests shall be as per the relevant IS/IEC standard .	100 % Review
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Test certificates

Test certificates for the type tests (as per Latest & relevant standards) of not older than 5years (as on date of enquiry) issued by any recognized laboratory for the similar rating 33kV CSS & 33kV RMU set shall be furnished for NMRC’s review along with technical data sheets. If Type test certificates are not available same shall be conducted by vendor at his own cost in any recognized laboratory.

Units shall be type tested in accordance with the IEC standards. Following type test certificates shall be provided

- Short time and peak withstand current test
- Temperature rise test
- Dielectric test
- Test of apparatus (CB & ES)
- Arc fault test
- Measurement of resistance of main ckt.
- Mechanical endurance test
- Duty cycle test.
- Internal arc test for HT chamber
- Degree of protection.

Type reports of Transformer and LT switchgear shall be furnished as per relevant IEC/IS standards.

Shop Tests

All equipment and material shall be subjected to manufacturer's standard shop tests. Tests shall be carried out at the manufacturer's works during and after completion of manufacture of different component parts in accordance with the requirements of relevant codes, and wherever not specified in the said codes/regulations, the tests shall be carried out in accordance with the standards approved by the Purchaser.

DRAWINGS, DATA AND MANUALS

To be submitted for Approval and Distribution

Sl.no	Document to be submitted for Approval	Approval/ Infor- mation
i.	Electrical single line diagram showing rating of all equip- ment.	Approval

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ii.	GA / OGA Drawing and BOM of CSS	Approval
lii	Data Sheets of PSS,HT breaker, Transformer & LT breakers	Approval
Iv	Foundation Plan & Loading Details of PSS	Information
V	PSS area Layout and Cross Section considering acoustic enclosure, exhaust piping, cable trenches, cable trays, fuel trenches etc.	Approval
Vi	Any other relevant drawings, documents or data necessary for satisfactory installation, operation and maintenance	Information
Vii	Type test certificates	Information
viii	O&M, Storage & Erection instruction manual	Information
Ix	As built & Commissioned / final document	Information

Note:

- The manuals shall clearly indicate method of installation, check-ups and tests to be carried out before commissioning of the equipment.
- The Vendor may note that the drawings, data and manuals listed herein are minimum requirements only.
- The Vendor shall ensure that all other necessary write-ups, curves, calculations and information required to fully describe the equipment offered are submitted with his bid.

Make of components:

S.NO	ITEM	RECOMMENDED ELECTRICAL VENDOR
1	H.T Breaker	Siemens/Schnieder/ABB/L&T/Crompton/Alstom or eq.
2	Dry Type Transformer	Raychem/Volt Amp/ Siemens/Schnieder/ABB/L&T/Crompton/Alstom or eq.
3	LT Breaker	L&T/ABB/GEC/Siemens/Schnieder or eq.
4	Auxiliary Relays	ABB, Jyoti, Areva or eq,
5	Bi-metal Relays	ABB, BCH Electric, C&S Electric, Larsen & Toubro Ltd., SchneiderElectric, Siemens, GE or eq.
6	Contactors	ABB, BCH Electric, C&S Electric, GE India, Larsen & Toubro, SchneiderElectric, Siemens or eq.

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7	Control switches (Breaker)	Areva T&D India Ltd, Reliable Electronic Components, Switron Devices, Alstom, Kaycee or eq.
8	Control switches/Selector switches	Areva T&D, Hotline Switchgear & Controls, Kaycee Industries Ltd.,Larsen & Toubro, Reliable Electronic Components Pvt. Ltd., Siemens Limited, Switron Devices. or eq.
9	Earth Leakage Circuit Breaker	Datar Switchgear, Indo Asian Fusegear , Legrand, Havell's, ABB,Siemens, Schneider/ or eq.
10	Fuses	GE India Industrial, Indo Asian Fusegear., Larsen & Toubro, Siemens,Cooper Bussman or eq.
11	Heavy duty switches	C&S Electric, Indo Asian Fusegear, Larsen & Toubro, Siemens or eq.
12	MCBs	Datar Switchgear, Havell's, Indiana Current Control, Indo Asian Fusegear, Legrand, Standard Electricals, Schneider, ABB, Siemens or eq.
13	MCCBs	GE India, Siemens, Larsen & Toubro, Schneider Electric, ABB or eq.
14	Meters	Automatic Electric, MECO Instruments, Nippen Electrical Instruments Co., Rishabh Instruments. or eq.
15	Protection Relays (Conventional & Numerical)	ABB, Areva, Easun Reyrolle, Larsen & Toubro (P&B), Schneider Electric, Siemens, Schweitzer Engg. or eq.
16	Push buttons & Indicating lamps	BCH Electric, C& S Electric, Hotline Switchgear & Controls, Larsen &Toubro, Precifine Products, Schneider Electric India, Shri Tulsi Switchgears., Siemens, Teknic Controls, Essen Deinki or eq.
17	Fuse-switch combination	ABB, C&S Electric, Havell's, Indo Asian Fusegear, Larsen & Toubro, Schneider Electric India, Siemens, Standard Electricals, GE or eq.

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

18	Timers	BCH Electric., Electronic Automation Pvt. Ltd., Larsen & Toubro Ltd., Siemens Limited or eq.
19	CT & PTs (MV)	Gilbert & Maxwell Electricals Kalpa Elektrikal., Kappa Electricals, Narayan Powertech, Pragati Electricals Precise Electricals, Silkaans Electricals. or eq.

Note:

- Vendor shall strictly follow the list of makes for equipment's as specified above.
- For components other than the above, vendor shall submit past track record for the proposed sub-vendors and obtain written approval from NMRC before placing order

7. Section 7: Draft Contract Agreement

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

THIS AGREEMENT made on the day of 2022 at Noida, District Gautam Budh Nagar, Uttar Pradesh Between **Noida Metro Rail Corporation Limited** (Hereafter referred to as "NMRC"), a company incorporated under Companies Act 2013, vide corporate identification Number: U60231UP2014SGC066849 and having its registered office at **Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida -201301, District Gautam Budh Nagar, Uttar Pradesh, India** represented by of the company, by virtue of his designation and authorization by, **Managing Director, NMRC** (hereinafter called as the "Employer"), which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns) of the one part,

AND

..... having its registered office at, represented by (herein after called the "**Contractor**", which expression shall unless excluded by or repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns) of the other part. WHEREAS the Employer desires that the Works known as the "....." should be executed by the Contractor and has accepted a contract by the Contractor for the execution and completion of these Works.

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement -

Reference:

- (i) Tender No. Dated
- (ii) Bid Documents duly accepted and submitted by dated
- (iii) The Bidding Documents which include all the Sections specified below:
 - a. Section 1: General Information
 - b. Section 2: Terms of Reference
 - c. Section 3: Instructions to Bidders
 - d. Section 4: Qualification, Evaluation and Selection Process
 - e. Section 5: Special Conditions of Contract
 - f. Section 6: Technical Specifications
 - g. Section 7: Draft Contract Agreement
 - h. Section 8: Appendix and Forms
 - i. General Conditions of Contract (GCC)
 - j. Safety, Health and Environment Management (SHE)
 - k. Amendment/ Modification, if any
- (iv) Notice of Award (.....) issued by NMRC
- (v) Letter of Acceptance of NOA (.....) given by to NMRC
- (vi) Any other admitted correspondence documents between NMRC and the Bidder.

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

3. Duration of Contract

The Corporation intends to appoint a Contractor to NMRC for a period of Four Months.

4. Price Schedule

NMRC shall consider the following Total Contract Price, as quoted by the Contractor as part of financial bid.

5. The courts at District Gautam Budh Nagar, Uttar Pradesh shall have the exclusive jurisdiction to try all disputes arising out of this agreement between the parties.

6. In consideration of the payments to be made by the Employer to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract and Notice of Award issued. **"Any conditions, deviation, assumption, exclusion, suggestion of alternative clauses, request of amendments in conditions & specifications of work submitted by bidders along with his Technical Bid or Financial bid, which is different from the Tender Document, Corrigendum, Addendum uploaded by NMRC on the E-Tender Portal (<http://etender.up.nic.in>) or www.nmrcnoida.com and any other correspondence in this regard, shall not be treated as a part of the contract Agreement & shall not be binding upon NMRC in anyway whatsoever at any stage of work during execution or thereafter."**

7. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract and NOA.

IN WITNESS where of the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year specified above.

For and on behalf of the Contractor
Signature of the authorized official

For and on behalf of the Employer
Signature of the authorized official

Name of the official

Name of the official

Stamp/Seal of the contractor

Stamp/Seal of the Employer

In the presence of:

In the presence of:

Sign of Witness 1 _____

Sign of Witness 1 _____

Name _____

Name _____

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

Address _____

Address _____

Sign of Witness 2 _____

Name _____

Address _____

Sign of Witness 2 _____

Name _____

Address _____

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8. Section 8: Appendix and Forms of Tender

8.1. Appendix 1: Metro Alignment



Fig: The Upcoming Metro Line

Please Note: The map shown above is indicative (not to scale)

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.2. Appendix 2: Quality Assurance

The Contractor shall implement a Project Quality Management Plan in accordance with ISO9001 "Quality System - Model for Quality Assurance in Design/Development, Production, Installation and Servicing" to ensure that all materials, workmanship, plant and equipment supplied, and work done under the contract meets the requirements of the contract. This plan shall apply to all activities related to the quality of items, including designing, purchasing, inspecting, handling, assembling, testing, storing, and shipping of materials and equipment and different elements of maintenance work and installations of system components.

The Quality Plan to be prepared by the Contractor and submitted to the Engineer shall follow the requirements of ISO 9000 and address each element therein.

Registration of the Contractor's organisation, or subcontractors or sub-consultants is not required for this Project, but the Project Quality Management Plan as submitted shall meet the intent of the ISO 9000 requirement in that there is a comprehensive and documented approach to achieving the project quality requirements.

Quality Assurance Management Plan

The Project Quality Management Plan (PQMP) shall as a minimum address the quality system elements as required by ISO 9001, generally noting the applicability to the Contractor's Works Programme for the Project. Procedures or Quality Plans to be prepared by others (Suppliers, Subcontractors, and Sub-consultants) and their incorporation in the overall PQMP shall be identified.

The Contractor shall provide and maintain a Quality Assurance Plan (QA) to regulate methods, procedures, and processes to ensure compliance with the Contract requirements. The QA Plan, including QA written procedures, shall be submitted to the Engineer for his review.

Adequate records shall be maintained in a readily retrievable manner to provide documented evidence of quality monitoring and accountability. These records shall be available to Employer at all times during the term of the Contract and during the Defects Liability Period and for a five-year period thereafter.

The Plan shall identify:

- a. Design Process: that control, check and verify the accuracy, completeness and integration of the design shall be performed by certified personnel and in accordance with documented procedure that have the written consent of the Engineer.
- b. Special Processes: that control or verify quality shall be performed by certified personnel and in accordance with documented procedures that have the written consent of the Engineer;
- c. Inspection and Test: Inspection and testing instructions shall provide for reporting non conformances or questionable conditions to the Engineer; Inspection shall occur at appropriate points in the installation sequence to ensure compliance with drawings, test specifications, process specifications, and quality standards. The Engineer shall designate, if necessary, inspection hold points into installation or inspection planning procedures;
- d. Receiving Inspection: These procedures shall be used to preclude the use of nonconforming materials and to ensure that only correct and accepted items are used and installed;

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

- e. Identification and Inspection Status: a system for identifying the progressive inspection status of equipment, materials, components, subassemblies, and assemblies as to their acceptance, rejection, or non-inspection shall be maintained;
- f. Identification and Control of Items: an item identification and traceability control shall be provided;
- g. Handling, Storage, and Delivery: provide for adequate work, surveillance and inspection instructions.
- h. The Plan shall ensure that conditions adverse to quality such as failures, malfunctions, deficiencies, deviations, and defects in materials and equipment shall be promptly identified and corrected.
- i. The Plan shall provide for establishing and maintaining an effective and positive system for controlling non-conforming material including procedures for the identification, segregation, and disposal of all non-conforming material. Dispositions for the use or repair of nonconforming materials shall require the Engineers consent.

Plan Implementation and Verification

The Plan shall clearly define the QA Organisation. Management responsibility for the QA shall be set forth on the Contractor's policy and organisation chart. The Plan shall define the requirements for QA personnel, their skills and training. Records of personnel certifications shall be maintained and monitored by the QA personnel. These records shall be made available to the Engineer for review, upon request.

The QA operations shall be subject to the Engineers, Employer or Employer's authorised representative's verification at any time, including: surveillance of the operations to determine that practices, methods and procedures of the plan are being properly applied; inspection to measure quality of items to be offered for acceptance; and audits to ensure compliance with the Contract documents.

The contractor's Quality Audit Schedule shall be submitted to the Engineer for consent weekly or more frequently as required.

The results of Quality Audits shall be summarized in the Contractor's weekly reports.

The Contractor shall provide all necessary access, assistance and facilities to enable the Engineer to carry out on-site and off-site surveillance of Quality Assurance Audits to verify that the quality system which has the consent of the Engineer is being implemented fully and properly.

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.3. Form 1: Letter of Proposal Submission

[Location, Date]

To

DGM (RS, Ops & Elect.)
Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29,
Noida - 201301
District Gautam Budh Nagar, Uttar Pradesh

Subject: RFP for design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.

Dear Sir,

We, the undersigned, offer to **design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida** in accordance with your RFP Document dated and our Proposal. We are hereby submitting our Technical and Financial Proposal, in a sealed envelope. We confirm that we have read the RFP Document in totality and abide by the terms and conditions stated in the document.

We acknowledge that we have

- Studied and analysed and satisfied ourselves about all the requirement of the tender including but not limited to market and market conditions
- Carefully assessed the commerciality of Project and that we will be fully responsible for all its assessment in this regard.
- Seen / visited / assessed the potential locations and fully understand and comprehend the technical, financial, commercial and investment requirements.

We have filled the complete information correctly in **Form 19**.

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification. Our Proposal is binding upon us.

We understand you are not bound to accept any Bid you receive.

Yours Sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name and address of Firm:

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.4. Form 2: Firm Details

1.	Title and name of the Project: Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.
2.	State the structure of the Bidder's organization (Bidders to complete/delete as appropriate) Sole Bidder/Consortium
3.	For Bidders who are individual companies or firms, state the following: Name of Company or firm: Legal status: (e.g., incorporated private company, proprietorship, etc.) Registered address: Year of incorporation..... Principal place of business: Contact person: Contact person's title: Address, telephone, facsimile number and e-mail ID of contact person:
4.	JV & consortium not allowed.
5.	Employees Provident Fund No. (attach documentary proof) -
6.	Employees State Insurance Acts in India No. (attach documentary proof) -
7.	GST Registration No. (attach documentary proof) -
8.	PAN (attach documentary proof) -

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.5. Form 3: Capability Statement

It is Compulsory for the bidder to fill this statement and the bidder must upload those document that support this statement

Tender Reference No : _____

Name of Work: _____

Name of Bidder: _____

S.No.	ELIGIBILITY CRITERIA	(To be filled by the Bidder)
1	Sole proprietorship, registered partnership firm, public limited company, private limited company can submit the Bid. The firms and the companies should be registered in India.	Yes/ No
2	<p>b. The Bidder should have a minimum experience of having satisfactorily completed similar works during last 7 (Seven) years period ending last day of month before the one in which the bids are invited should be either of the following:</p> <ul style="list-style-type: none"> i. One similar completed work costing not less than the amount equal to Rs. 62.00 Lakh (Rupees Sixty-Two Lacs only) or ii. Two similar completed works each costing not less than the amount equal to Rs. 38.69 Lakh (Rupees Thirty-eight Lacs and sixty-nine Thousand only) or iii. Three similar completed works each costing not less than the amount equal to Rs. 30.95 Lakh (Rupees Thirty Lacs Ninety-Five Thousand only) 	7 Years

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

S.No.	<u>ELIGIBILITY CRITERIA</u>	(To be filled by the Bidder)										
3	<p>The Bidder should have minimum average annual turnover of Rs. 77.38 Lakh (Rupees Seventy-Seven Lacs and Thirty Eight Thousand only) in the last 3 (three) Financial Years (2018-19, 2019-20, 2020-21) preceding the Bid Due Date.</p> <table border="1" data-bbox="730 376 1155 730"> <tr> <td data-bbox="730 376 965 443">FY 18-19</td> <td data-bbox="965 376 1155 443"></td> </tr> <tr> <td data-bbox="730 443 965 510">FY 19-20</td> <td data-bbox="965 443 1155 510"></td> </tr> <tr> <td data-bbox="730 510 965 577">FY 20-21</td> <td data-bbox="965 510 1155 577"></td> </tr> <tr> <td data-bbox="730 577 965 645">Total Turnover</td> <td data-bbox="965 577 1155 645"></td> </tr> <tr> <td data-bbox="730 645 965 730"><u>Average Turn-over</u></td> <td data-bbox="965 645 1155 730"></td> </tr> </table>	FY 18-19		FY 19-20		FY 20-21		Total Turnover		<u>Average Turn-over</u>		
FY 18-19												
FY 19-20												
FY 20-21												
Total Turnover												
<u>Average Turn-over</u>												
4	The Bidder should have Positive Profit before Tax in at least 3 (three) years, Financial Years (2018-19, 2019-20, 2020-21)											
5	The Bidder must have either the Registered Office or the functional Branch Office located in Delhi NCR, Noida, and Greater Noida.											
6	The Bidder should be registered with the Goods and Services Tax Authorities.											
7	The Bidder should not have been blacklisted/ banned/ declared ineligible for corrupt and fraudulent practices by the Government of India/ any State Government/ Government Agency and Supreme court and contracts have been terminated/ foreclosed by any company / department due to non-fulfillment of Contractual obligation in last 5 (five) financial years.											

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.6. Form 4: Work Experience

The following format shall be used for statement of experience of Bidder:

SN	Similar Contract description	Contract Identification Number	Award date & Completion date	Employer's Name, address, telephone number, e-mail etc	Role in contract		If in Consortium then % participation	Completion cost	Value of similar work in completed work
					Individual	Consortium			
1									
2									
3									
4									
Add required number of rows									

Authorized signatory

Name:

Date:

Name of the Bidder with seal

NOTE:

1. Only the value of contract as executed by the applicant/member in his own name should be indicated. Where a work is undertaken by a group, only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence
2. The Bidder shall upload details of work executed by them in the prescribed format for the works to be considered for qualification of work experience criteria. Documentary proof such as completion certificates from the client clearly indicating the nature/scope of work, actual completion cost and actual date of completion for such work should be uploaded. In case work is executed for private client documentary proof such as copy of work order, Bill of quantities, Bill wise details of payment received certified by CA, TDS certificates for all the payments received, copy of final/ last bill paid by the client should be uploaded. The offers submitted without this documentary proof will not be evaluated.
3. Value of successfully completed portion of any ongoing work up to the last day of the previous month of tender submission will also be considered for qualification of work experience criteria.
4. For completed works, value of work done shall be updated to the last day of the previous month of tender submission price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year. The exchange rate of foreign currency shall be applicable 28 days before the submission date of tender.
5. If the above work(s) comprise(s) other works also, then client's certificate clearly indicating the amount of work done in respect of the "similar work" shall be furnished by the Bidder in support of work experience along-with their tender submissions.

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.7. Form 5: Financial Capability Details

Bidder should submit their financial details as per the following:

This is to certify that the details of M/s

 having registered office at
, as applicable, is as below:

A.

S.No.	Financial year	Name of the Bidder	Turnover from Similar Work
1.	FY 18-19		
2.	FY 19-20		
3.	FY 20-21		
	Average Annual Turn-over		

B.

S.No.	Financial year	Name of the Bidder	Profitability
1.	FY 18-19		
2.	FY 19-20		
3.	FY 20-21		
	Average Annual Turn-over		

Certificate of the Chartered Accountants/Statutory Auditors

Based on Audited Accounts and other relevant documents of _____ (Name of Bidder), we M/s _____, Chartered Accountants/ Statutory Auditors, certify that the above information pertaining to **(2018-19, 2019-20, 2020-21)** is correct.

Signature and Seal of
 Chartered Accountants/Statutory Auditors
 (with membership no. & UIDN No.)

Authorised Signatory

(Name & Designation of Authorised Signatory)

In case the Financial Statements for the latest financial year are not audited and therefore the Bidder cannot make it available, the Bidder shall give an undertaking to this effect and the statutory auditor/charted accountant shall certify the same. In such a case, the Bidder shall provide the Audited Financial Statements for 2 (two) years preceding the year for which the Audited Financial Statement is not being provided. Also, pertaining to latest financial year, the bidder shall submit an affidavit certifying that "The Annual Accounts have not been audited so far which is certified by CA also."

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

NOTE:

1. All such documents reflect the financial data of the bidder and not that of sister or parent company.
2. The financial data in above prescribed format shall be certified by CA/ Company Auditor under his signature and stamp in original along with membership no and UDIN.
3. The Bidder shall provide the audited annual financial statements as required.

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.8. Form 6: Memorandum

Name of Work: Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.

I/We agree to keep the quoted rate open for acceptance for 180 days from the due date of submission thereof and not make any modification in its terms and conditions.

I/We hereby declare that I/We shall treat the quotation documents, drawings and other records connected with the works as secret/ confidential documents and shall not communicate information derived there from to any person other than the information in any manner prejudicial to the safety of NMRC.

Signature of the bidder with seal
Dated:

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.9. Form 7: Undertaking

I confirm that We (Bidder, including any member in case of Consortium), _____

- a. Have not been banned /declared ineligible for corrupt and fraudulent practices by any government/government-undertaking/ semi-government/ govt.-controlled institutions, any court of law having jurisdiction in India for the past 5 (five) years.
- b. Do not have any pending litigation & non-performing contracts during last 5 (five) years. Further, has not been barred by any government/government-undertaking/ semi-government/ govt.-controlled institutions
- c. Have not abandoned any work in last 5 (five) years.
- d. Have not delayed in similar work completion during orders executed in last 5 (five) years.
- e. Do not ever been terminated due to poor performance.
- f. Have not suffered Bankruptcy/ insolvency in last 5 (five) years.
- g. Have not been blacklisted/debarred by any organization.
- h. Have not been be involved in any illegal activity and/or has not been charge sheeted for any criminal act during the last 5 (five) years.
- i. Have not submitted any misleading information in the Bid.
- j. Are financially sound to perform the work.

Authorized signatory

Name:

Date:

Name of the Bidder with seal

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.10. Form 8: Power of Attorney

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We(name and address of the registered office of the Bidding Company) do hereby constitute, appoint and authorize Mr./Ms.....(name and residential address) who is presently employed with us and holding the position of _____, as our Attorney to do in our name and our behalf all or any of the acts, deeds or things necessary or incidental to submission of our Bid for **Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida** in response to the RFP Document dated

issued by Noida Metro Rail Corporation Ltd. ("NMRC" or "the Corporation"), including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the Corporation may require us to submit. The aforesaid Attorney is further authorized for making representations to the NMRC or any other authority, and providing information / responses to the NMRC, representing us in all matters before the NMRC, and generally dealing with the Corporation in all matters in connection with our Bid till the completion of the bidding process as per the terms of the RFP Document and further till the Contract is entered into with the NMRC and thereafter till the expiry of the Contract.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP Document.

Signed by the within named
.....[Insert the name of the executant company]

through the hand of

Mr.

duly authorized by the Board to issue such Power of Attorney Dated this
..... day of

Accepted

.....

Signature of Attorney

(Name, designation and address of the Attorney)

Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

Attested

.....

(Signature of the executant)

(Name, designation and address of the executant)

.....

Signature and stamp of Notary of the place of execution

Common seal of.....has been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1.

(Signature)

Name

.....

Designation.....

2.

(Signature)

Name

.....

Designation.....

Notes:

- 1.The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same should be under common seal of the executants affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.
- 2.In the event, power of attorney has been executed outside India, the same needs to be duly notarized by a notary public of the jurisdiction where it is executed.
- 3.Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.11. Form 9: Saleable Form for Tender Document

Job No.

The required fee of tender form has been deposited in _____ Bank A/c No. _____ RTGS/NEFT and the scanned copy of UTR receipt with Transaction Id is being enclosed with E-tender documents. If the copy of UTR receipt is not uploaded with the E-tender the tender shall be rejected.

DETAILS OF EARNEST MONEY ATTACHED

The required amount of Earnest money has been deposited in _____ Bank A/c No. _____ RTGS/NEFT and the scanned copy of UTR receipt with transaction Id is being enclosed with E-tender documents. If the copy of UTR receipt is not uploaded with the E-tender the tender shall be rejected.

Signature of BIDDER

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.12. Form 10: Declaration of Refund of Earnest Money

**Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor,
Ganga Shopping Complex, Sector-29, Noida -201301,
District Gautam Budh Nagar, Uttar Pradesh, India**

1	Bidder Name	
2	Bidder Address	
3	Bank Name	
4	Bank Branch	
5	A/c No	
6	IFSC Code	
7	PAN No.	
8	Tin/TAN No.	
9	GST No.	
10	Phone No.	
11	Mobile No.	
12	Email-Id	
13	Type of Account	
For Office Use Only		
14	Party Unique Id	

The above provided information is true to the best of my knowledge.

Date:

Signature with Stamp/Seal

Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida

8.13. Form 11: Undertaking pertaining to Personnel

- We confirm to deploy Project Personnel required to achieve progress of work as per approved construction of work program and conditions mentioned in the tender document.
- We confirm to deploy man power requirement of SHE Organization as required under Conditions of contract on Safety and Health for electrical works and confirm to deploy man power over and above the minimum numbers, if the work requires.
- The contractor shall deploy resources as per the mentioned minimum requirement in the tender and confirm to deploy manpower over and above the minimum numbers indicated above, if the work requires so.
- These minimum resources are as per the requirements of the various activities at different stages of works. All resources need not to be mobilised simultaneously, resources as per the requirement of various stages of works shall be mobilised in accordance with the instructions of the Engineer. The decision of the Engineer shall be final and bonding.
- The performance of project personal deployed will be evaluated periodically by Employer during the contract period. In case the performance of any of the personnel is not satisfactory, the contractor shall replace them with good personnel immediately as per the directions of the Engineer.

Date:

Signature with Stamp/Seal

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8.14. Form 12: Resources proposed for the O&M - Plant & Equipment

1. We hereby confirm to deploy the minimum resources as per mentioned minimum requirement in the tender document.
2. We confirm to deploy resources as per the requirement and also confirm to deploy plants & equipments over and above the minimum numbers, if the work requires so.
3. Hiring of Cranes shall be as per approved by Engineer-in-Charge. Third party certification of cranes, competency certification of the operators etc. would be required before grant of approval.

Date:

Signature with Stamp/Seal

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8.15. Form 13: Bid Capacity Information

Name and brief particulars of contract (Clearly indicate the part of the work assigned to the applicants)	Name of client with telephone number and fax number	Contract Value In Rupees Equivalent (Give only the value of work assigned to the applicant(s))	Value of balance work yet to be done in Rupee equivalent as on last day of the previous month of tender submission	Date of Completion as per Contract Agreement	Expected Completion Date	Delay if any, with reason	Value of work to be done during next 4 months with effect from the first day of the month of tender submission
Total							

Bid Capacity (Bidder shall calculate, mention his bid capacity and enclose the supporting calculation)

A = Rs.

N = years

B = Rs.

Assessed available bid capacity = $2 * A * N - B$

S.No.	Financial year	Total Value of Works done as per audited financial statements
1	FY 2020-21	
2	FY 2019-20	
3	FY 2018-19	

Certificate of the Chartered Accountants / Company Auditor

We, M/s _____, Chartered Accountants/ Company Auditors, certify that the above information is correct.

Name of Chartered Accountants / Company Auditor

Signature and Seal of Chartered Accountants/ Company Auditor

Membership Number & UDIN No. of Chartered Accountants/ Company Auditor

Authorised Signatory

(Name & Designation of Authorised Signatory)

NOTE:

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The financial data in above prescribed format shall be certified by Chartered Accountant/ Company Auditor in original under his signature & stamp along with audited financial statements

Value of existing commitments for on-going works during period of 4 months w.e.f. from the first day of the month of tender submission has to be uploaded by the tenderer in Form. These data shall be certified by the Chartered Accountant with his stamp and signature in original with membership number.

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8.16. Form 14: Proposed Personnel



NAME :

EMPLOYEE ID. :

FATHER'S NAME :

DATE OF BIRTH :

PERMANENT ADDRESS :

RESIDENTIAL ADDRESS :

MARITAL STATUS :

EDUCATIONAL QUALIFICATION :

TECHNICAL QUALIFICATION :

EXPERIENCE :

LANGUAGE KNOWN :

NATIONALITY :

CATEGORY :

DATE:

PLACE:



SIGNATURE

(To be filled by contractor)

Attested by authorised person:

Note: A staffing schedule containing the names, qualifications, professional experience and corporate affiliation of all proposed management personnel (above the level of shift supervisor) and specialists for this work. The submission shall include a provisional management structure and organisation chart showing areas of responsibility, relative seniorities and lines of reporting. The proposed staffing plan shall be in conformity with the "Clause 4.3 – Personnel" of tender document

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8.17. Form 15: Obligation/ Compliance to be ensured by Contractor

Sl. No.	Items	Compliance of Contractor (To be filled by contractor)	
		Yes	No
1	License for employing contract labour		
2	Compliance of minimum wages Act by payment of wage on 7th of every month through Bank or in the presence of nominated representative of employer (NMRC Supervisor/manager)		
3 (a)	Compliance of provision of ESI & EPF Act		
3 (b)	Ensure treatment in ESI hospital in case of accident/injuries suffered in performance of work and compensation under ESI Act.		
4	Send Accident report to Regional Labour Commissioner (RLC) & ESI authorities.		
5	Observance of working hours, weekly rest and overtime payments as per minimum wages Act-1948.		

Note: - A Non- filling or "No" by contractor will lead to non-eligibility for contractor in further tendering process.

S.N	Description	Reference Clause	Requirement
I	Latest "date for commencement" of the Works	Clause 8.1 of the GCC	Date given in NOA or Employer's Notice to Proceed
ii	Liquidated Damages	Clause 8.5 of the GCC	(i) 0.015% of contract price per day of delay in completion of whole work. (ii) Total maximum limit of LD including sums payable by the employer to designated contractors is 15% as mentioned in GCC.
iii	Insurance for workers/ employees	Clause 15.4 of the GCC	All the contractor's employees shall have to be covered under ESI and ECA as per Special conditions of contract.
iv	Insurance cover for Contractor's All Risk and other requirements as specified in the GCC	Clause 15 of the GCC	100% of the Total Contract Price.
v	Amount of Third-Party Insurance	Clause 15.3 of the GCC	INR 0.75 Million for any one incident, with no. of incidents unlimited.
vi	Period in which all insurances have to be effected	Clause 15.5 of the GCC	Within 1 week from the "date of commencement"

Signature of authorized signatory of Bidder

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8.18. Form 16: Performa for Clarifications / Amendments on the RFP

Sl. No.	Document	Clause No. and Existing Provision	Clarification re-quired	Suggested Text for the Amend-ment	Rationale for the Clarification or Amendment

Authorized signatory

Name:

Date:

Name of the Bidder with seal

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8.19. Form 17: Bid Offer/ BOQ (Format)

To

DGM (RS, Ops & Elect)
 Noida Metro Rail Corporation (NMRC) Limited
 Block-III, 3rd Floor, Ganga Shopping Complex
 Noida -201301,
 District Gautam Budh Nagar, Uttar Pradesh

THIS FORM IS NOT TO BE FILLED. THE BIDDERS ARE REQUIRED TO FILL THE FINANCIAL PROPOSAL IN XLS FORMAT AFTER DOWNLOADING THE FORM FROM THE E-PROCUREMENT WEBSITE FOR THIS TENDER DOCUMENT

Sub: Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.

Dear Sir,

I/we have read and examined the RFP document, general terms and conditions.

I/we hereby quote for the Total Price for Design, engineering, manufacture, supply, Installation, testing and commissioning of, 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida.

S. No.	Description	Total Amount in Rs.	Amount in Words
1	Estimated value of work	77,37,747.32	(Rupees Seventy Seven Lacs Thirty Seven Thousands Seven Hundred forty Seven and thirty two paise only)

S.N.	Quoted amount (Rs.)	
1	In words	
	In figures	
2	Rebate in % (percentage) if any	
	In words	
	In figures	

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Price Schedule

(It is to be noted that BOQ corresponds to Section-6 Technical Specifications of Tender Document)

(This BOQ template must not be modified/ replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

S. N.	Description of Items	Unit	Qty.	Rate	Amount
	COMPACT SUBSTATION:				
1	Design, engineering, manufacture, testing and supply of Outdoor, Plinth Mounted, Compact Substation of 33KV/415 Volts, equipped with dry type 1000 KVA Cast Resin Transformer 33 KV Ring Main Unit consisting of 1 Nos. 33 KV SF6 Insulated Vacuum Circuit Breaker & with LT Air Circuit Breaker as secondary side complete as per as per standard & technical data sheet.	SET.	1		
2	Cabling				
A	Supply of 1Cx120 Sq mm AL, XLPE power LSZH cable of 33 KV grade cable.	Rmt.	500		
B	Laying of one number XLPE power cable of 33 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 120 sq. mm	Rmt.	350		
C	Laying of one number XLPE power cable of 33 KV grade of following size in the existing masonry open duct as required. Upto 120 sq. mm	Rmt.	150		
2	Earthing:				

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A	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Sets	1		
B	Supply and burring of Safe Earthing Electrode T-39 (Hot-Dip Galvanized), Length up to 3000mm, outer pipe 76mm inner Dia 38mm terminal Dia 12 mm ,outer GI pipe of 16 SWG and inner GI pipe of 12 SWG with Hot Dip Galvanization up to 100 micron filled with crystalline conductive mixture (CCM) having anti corrosive & conductive property with 50 kgs activated soil (BFC) capable of reducing the soil resistivity with good mixture of retaining capacity along with 30cm square C.I. frame with hinged cover & masonry housing. (From electrode terminal to switch board, cost of 25 X 3 GI. Strip will be extra) Make: As approved in U.P. P.W.D., & C.P.R.I. Certified.	Sets	3		
C	Providing and fixing 25 mm x 5 mm GI strip on surface or in recess for connection etc. as required.	Meters	50		
D	Providing and fixing 50 mm x 5 mm GI strip on surface or in recess for connection etc. as required.	Meters	50		
4	Cable Tray				

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A	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 225 mm width X 50 mm depth X 1.6 mm thickness	Meters	50		
B	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray " bends " (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 225 mm width X 50 mm depth X 1.6 mm	Each	4		
3	Cable Termination				
A	Supply and installation of GIS termination kit suitable for single core 120 Sq mm AL, XLPE power LSZH cable of 33 KV grade. Make(Raychem, 3M or eq.)	Nos.	3		
B	Supply and installation of gland for single core 120 Sq mm AL, XLPE power LSZH cable of 33 KV grade.	Nos.	3		
C	Supply and installation of lugs ring type for single core 120 Sq mm AL, XLPE power LSZH cable of 33 KV grade.	Nos.	3		
	Total Electrical Work				
4	Civil Work				

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A	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.	sqm	25		
B	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
C	1:3:6 (1 Cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size)	cum	6.5		
D	Centering and shuttering including strutting, propping etc. and removal of form for				
E	Foundations, footings, bases of columns, etc. for mass concrete	sqm	10		
F	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.				
G	All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum	cum	2.5		
H	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				

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I	Thermo-Mechanically Treated bars of grade Fe-500D or more.	kg	200		
	Total civil work				
	Total amount of electrical and civil				

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Please Note:

1. The Bidder with the lowest quoted cost for Design, engineering, manufacture, supply, Installation, testing and commissioning of , 1000KVA, 33KV/415V Compact Substation, Cabling and other accessories to be installed at NMRC station sector-51, Noida in the financial quote (L1 bidder) shall be selected for the award of contract.
2. The Bidder shall be required to quote the percentage in the BOQ.
3. It will be deemed to include all Taxes including GST, Duties, Octroi, Royalty etc., cost of all plants, labour, supervision, materials, transport, all temporary works, erection, maintenance, utility identification, contractor's profit and establishment/ overheads, together with preparation of design and drawings, all general risks, insurance liabilities, compliance of labour laws and obligations set out or implied in the contracts.
4. The work executed against the BOQ items in would be paid on measurement basis.
5. The Financial Bid submitted is unconditional and fulfils all the requirements of the TOR Document.
6. We have completely read and understood the Bid Document. The Financial Tender submitted is unconditional and fulfils all the requirements of the Tender Document.
7. Our Financial Proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal. We understand you are not bound to accept any Proposal you receive.

Signature and Name of the Authorized Person

NAME OF THE BIDDER AND SEAL

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8.20. Form 18: Bid Details

The following list is intended to help the Bidders in submitting offer which are complete. An incomplete offer is liable to be rejected. Bidders are advised to go through the list carefully and take necessary action.

S. No.	Particulars	Attached Yes / No / Not Applicable	Page no. (Mandatory)
1	Bid Processing Fees		
2	Earnest Money Deposit		
3	Form 1: Letter of Proposal Submission		
4	Form 2: Firm Details		
5	Form 3: Capability Statement		
6	Form 4: Work Experience		
7	Form 5: Financial Capability Details		
8	Form 6: Memorandum		
9	Form 7: Undertaking		
	Form 7: Undertaking of Attorney		
10	Form 9: Saleable Form for Tender Document		
11	Form 10: Declaration of Refund of Earnest Money		
12	Form 11: Undertaking pertaining to Personnel		
13	Form 12: Resources proposed for the O&M - Plant & Equipment		
14	Form 13: Bid Capacity Information		
15	Form 14: Proposed Personnel		
16	Form 15: Obligation/ Compliance to be ensured by Contractor		
17	Form 16: Performa for Clarifications / Amendments on the RFP		
18	Statutory proof of existence as the legal entity		
19	PAN certificate as per legal entity		
20	A copy of the Audited balance sheets and Profit and Loss Statements for the last 3 (three) financial years		
21	Self-attested copy of ITR		
22	Copy of GST registration certificate, EPF, ESI		
23	Any other document asked by the Employer if submitted, specify the documents Or Any other document which the Bidder considers relevant		