

Volume - I

Tender Notification for

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT
MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT
METERS**

NIT No.: CMC/BY/22-23/RS/SS/14

Date : 20.05.2022

Due Date for Submission of Bids : 10.06.2022

**BSES YAMUNA POWER LTD (BYPL)
CONTRACTS & MATERIALS DEPT.,
SHAKTI KIRAN BUILDING, KARKARDOOMA, DELHI-110032
CIN: U40109DL2001PLC111525
WEBSITE: www.bsesdelhi.com
GSTIN: 0711BCC8569N1Z0**

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SECTION - I

REQUEST FOR QUOTATION

2022-23

Tender Notification : CMC/BY/22-23/RS/SS/14

**Event : SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
4G/NBIOT MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS
AND DT METERS**

Date : 20.05.2022

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SECTION – I: REQUEST FOR QUOTATION

1.00 Event Information

1.01 BYPL invites Sealed tenders for SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT METERS from reputed manufacturers. The bidder must qualify the technical requirements as specified in clause 2.0 stated below. The sealed envelopes shall be duly superscribed as – **“BID FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT METERS, TENDER NOTICE CMC/BY/22-23/RS/SS/14. DUE FOR BID SUBMISSION ON DT: 10.06.2022.**

Sl. No.	Item Description	Specification	Requirement	Estimated Cost
			Total Qty.	
BYPL,DELHI				
1	Supply of 4G/NBIOT Modem	SECTION V	6000 Nos	Rs. 2.62 Crore
2	Installation, Testing, Commissioning of 4G / NBIOT Modem as per Scope of Work		6000 Nos	
3	Supply of Head End System (HES) Software		1 Lot	
4	Installation, Implementation, Integration & Training of HES Software		1 Lot	
5	Supply of License for HES Software:		1 Lot	
5a.	Option 1: for 10K End points			
5b.	Option 2: for 20K End points			
5c.	Option 3: for 50K End points			
6	Annual Maintenance Charge (AMC) for smooth operation of MDAS/HES, database management, trouble shooting and resolution of communication related issues after 12 months onsite support		1 Year	
7	Annual Maintenance Charge (AMC) for Hardware management, trouble shooting and resolution of communication and software related issues after 12 months onsite support.		Per modem per Year	

Note 1: BYPL reserves the right to vary the Quantity by +/- 30% of above mentioned quantity.

Note 2: Award of AMC shall be at the sole discretion of BYPL after successful completion of free support period of 12 months post deployment of Modems and HES

1.02 The schedule of specifications with detail terms & conditions can be obtained from address given below against Demand Draft of **Rs. 1180 per set-** drawn in favour of **BSES YAMUNA POWER LIMITED**, payable at Delhi. The tender documents can also be downloaded from the website **“www.bsesdelhi.com --> BSES Yamuna Power Ltd --> Tenders -->Open Tenders”**. However, it is advisable to inform BYPL about your interest in tender.

In case tender papers are downloaded from the above website, then the bidder has to enclose a Demand Draft covering the cost of bid documents as stated above in a separate envelope with suitable superscription –

“Cost of Bid Documents:Tender **Notice Ref: CMC/BY/22-23/RS/SS/14**. This envelope should accompany the Bid Documents.

1.03 Bids will be received upto **10.06.2022 , 15:00 Hrs** at the address given below:

**HEAD OF THE DEPARTMENT,
3rd FLOOR, ‘A’ BLOCK,
CONTRACTS & MATERIALS DEPARTMENT,
BSES YAMUNA POWER LTD,
SHAKTI KIRAN BUILDING,
KARKARDOOM, NEW DELHI-110032**

Part-I (Technical Bids) of the bids shall be opened on **10.06.2022 at 15:30 Hrs**. **Part-II (Financial Bids)** shall be opened only of the Techno-Commercially qualified bidders and the date and time of Opening will be intimated in due course. It is the sole responsibility of the bidder to ensure that the bid documents reach this office on or before the due date.

1.04 BYPL reserves the right to accept/reject any or all bids without assigning any reason thereof and alter the quantity of materials mentioned in the Tender documents at the time of placing purchase orders. **Bids will be summarily rejected if:**

- i. Non submission of Tender fee of Rs. 1180/-
- ii. Earnest Money Deposit (EMD) @ 2% (Two percent) of the Tender value i.e **Rs 5,24,000 /-** is not deposited in the form of Bank Guarantee in favour of BSES YAMUNA POWER LIMITED, payable at Delhi
- iii. The offer does not contain “FOR, NEW DELHI price indicating break-up towards all taxes & duties“.
- iv. Complete Technical details are not enclosed.
- v. Tender is received after due date and time of bid submission.

2.0 **Qualification Criteria:-**

The prospective bidder must qualify all of the following requirements to be eligible to participate in the bidding and management has the right to disqualify those bidders who do not meet these requirements.

Qualifying Criteria		
TECHNICAL		
SL	Criteria	Documents Required along with Bid
1	The Bidder shall be one of the following: a. An original equipment manufacturer (OEM) of modems and HES. b. OEM of meters and HES having technology partnership with OEM of modems.	1. Certificates of incorporation and registration 2. Details of manufacturing facilities and associated processes. 3.Copies of agreements for technology partnership in case of bidders meeting Criteria ‘b’
2	Bidder must have successfully supplied and installed 5000 modems and Head End Software for these modem in utilities/ state electricity boards in India during last 03 years ending on the date of tender submission.	1.Copies of Purchase Orders 2.Copies of Work Completion Certificates
3	Bidder shall have performance certificates from at-least 02 utility / electricity boards for satisfactory operation of modem and associated HES software installed during last 03 years ending on the date of tender submission. Each performance certificate should pertain to satisfactory operation of at least 1000 No modems along-with associated HES.	1.Copies of performance certificates.
4	Bidder shall comply with all the statutory compliance as per the applicable laws/rules before the start of the work.	1.Self undertaking
5	The bidder should have service centers for modems in India equipped with in-house testing facilities.	1.Details of support center and its capabilities.

6	Bidder/ OEM should have following quality certifications for its manufacturing and services function. a. ISO 9001:2015 or latest b. ISO 14001:2015 or latest c. ISO 27001:2013 or latest d. OHSAS 18001:2007 or latest	1.Valid Certificate copies.
COMMERCIAL:		
SL	Criteria	Documents Required
1	Bidder must have average annual turnover of Rs 1 Crore or more during last three Financial Years (2019-20, 20-21 & 21-22).	1. Audited balance sheets / Duly certified CA certificate with UDIN to be submitted
2	The Bidder shall submit an undertaking that “No Litigation” is pending with the BYPL or its Group/Associates Companies.	1. Self undertaking
3	The bidder has not been blacklisted/debarred by any central/state government institution/Electricity utilities	1. Self undertaking
4	The bidder must have valid PAN No., GST Registration Number, in addition to other statutory compliances. The bidder must submit the copy of registrations and submit an undertaking that the bidder shall comply all the statutory compliances as per the laws/rules etc. before the start of the supply/work.	1.Copies of Relevant Documents 2. Self-undertaking

The bidder should send the compliance of above mentioned parameters in technical offer and has to give an undertaking about **No Objection** to verify his manufacturing facility as a part of tendering process.

3.00 Bidding and Award Process

Bidders are requested to submit their offers strictly in line with Tender document and No Deviation is acceptable. BYPL will respond to the questions raised by various bidders and will be uploaded on BYPL website.

a. Time schedule of the bidding process

The bidders on this RFQ package should complete the following within the dates specified as under:

Sl. No.	Activity	Due Date & Time
1.	Last Date for sale of Bid Document	07.06.2022, 15:00 Hrs
2.	Last Date for receipt of Queries	01.06.2022, 15:00 Hrs
3.	Pre-Bid Meeting (Over zoom meeting)	03.06.2022, 11:00 Hrs
4.	Due Date and Time for Bid submission	10.06.2022, 15:00 Hrs
5.	Date and Time of Opening Technical bids	13.06.2022, 15:30 Hrs

This is a two part bid process. Bidders are to submit the bids in two parts a) PART-I Technical Bid, b) PART-II Financial Bid.

Both these parts should be furnished in separate sealed covers superscribing NIT No. , Due date for bid submission with particulars as **Part-I Technical Particulars & Commercial Terms & Conditions** and **Part-II “Financial bid”** and these sealed envelopes should again be placed in another sealed cover superscribing NIT No. Due date for bid submission which shall be submitted before the due date & time specified.

Bidders are requested to submit the Techno-Commercial bid in one Original plus one copy in duplicate (Soft copy in Pen drive).

Part – I Technical Bid should not contain any cost information whatsoever.

Part – II Financial: This envelope will be opened after techno commercial evaluation and only of the qualified bidders. The date and time of same shall be intimated in due course to the qualified bidders. Prices shall be in the format enclosed in **Annexure IV** indicating break up of basic prices, taxes duties, freight etc.

Reverse Auction Clause : Purchaser reserves the right to use the online reverse auction through SAP – SRM as an integral part of the entire tendering process. All the bidders who are techno-commercially qualified on the basis of tender requirements shall participate in reverse auction.

Notwithstanding anything stated above, the Purchaser reserves the right to assess bidder's capability to perform the contract, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final.

4.00 Award Decision

4.01 Purchaser intends to award the business on a lowest bid basis, so suppliers are encouraged to submit the bid competitively. The decision to place purchase order/LOI solely depends on purchaser on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Purchaser may deem relevant.

4.02 In the event of your bid being selected by purchaser (and / or its affiliates) and you subsequently DEFAULT on your bid; you will be required to pay purchaser (and / or its affiliates) an amount equal to the difference in your bid and the next lowest bid on the quantity declared in NIT.

4.03 In case any supplier is found unsatisfactory during the delivery process, the award shall be cancelled and BYPL reserves the right to award to other suppliers who are found fit.

4.04 Rate shall remain FIRM till the validity of Contract.

4.05 Quantity Variation: The purchaser reserves the rights to vary the quantity by (+/-) 30% of the tender quantity .

4.06 Quantity Splitting: The purchaser reserves the right to distribute the procurable quantity among one or more eligible bidders. If the quantity is to be split, quantity distribution shall be in the manner detailed below:

- a) If the quantity is to be split among 2 bidders, it will be done in the ratio of 70:30 on L1 price.
- b) If the quantity is to be split among 3 bidders, it will be done in the ratio of 50:30:20 on L1 price.

5.00 Market Integrity

We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms & Conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserve the right to exclude a bidder from participating in future tenders due to the bidder's violation of any of the rules or obligations contained in the Terms & Condition. Bidders who violate the marketplace rules or engage in behavior that disrupts the fair execution of the marketplace restricts a bidder to length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- a) Failure to honor prices submitted to the marketplace.
- b) Breach of the terms of the published in Request For Quotation.

6.00 Supplier Confidentiality

All information contained in this RFQ is confidential and may not be disclosed, published or advertised in any manner without written authorization from BYPL. This includes all bidding information submitted.

All RFQ documents shall remain the property of BYPL and all suppliers are required to return these documents to BYPL upon request.

Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

7.0 Contact Information

All communication as regards this RFQ shall be made (i) in English, (ii) in writing and (iii) sent by mail, facsimile to

Address	Name/ Designation	E-mail Address
Technical		
CES Dept. 3rd Floor, B-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032	Gaurav Sharma HOD-CES	Gaurav.a.sharma@relianceada.com
	Puneet Duggal GM (CES)	Puneet.Duggal@relianceada.com
	Ashish Kumar Joshi DGM (CES)	Ashish.K.Joshi@relianceada.com
Commercial		
C&M Dept. 3rd Floor, A-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032	Robin Sebastian HOD-C&M	robin.sebastian@relianceada.com
	Santosh Kumar Singh Head-Procurement	santosh.kum.singh@relianceada.com
	Sisir Kumar Sahu Buyer	sisir.sahu@relianceada.com

Note:- Those who are downloading tender notice from website, It is advisable to inform BYPL C&M Dept., so that they can be contacted in case of any amendment to tender.

SECTION – II

INSTRUCTION TO BIDDERS (ITB)

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT
MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT
METERS**

NIT No. CMC/BY/22-23/RS/SS/14

Dated : 20.05.2022

A. GENERAL

1.00 BSES YAMUNA POWER LIMITED, hereinafter referred to as the Purchaser “are desirous of implementing the various System Improvement/Repair & Maintenance works at their respective licensed area in Delhi. The Purchaser has now floated this tender for Supply, Installation, Testing and Commissioning Of 4G/NBIOT Modem along with HES Software for KCC CONSUMERS and DT Meters.

2.00 SCOPE OF WORK

In order to strengthen its metering System, BYPL desires to implement Automated Meter Reading System for distribution transformer meters and its high value customers. The Key highlights of the proposed system are mentioned herewith.

2.1 Automated Meter Reading System

Following are the main components of the system:

2.1.1 4G/ NBIOT Modem

Modem [4G/ NBIOT]: 4G/ NBIOT based modems will be installed on the existing solid state meters (single phase and three phases- DLMS and non DLMS). The 2 way communication modem will collect data from meter and send it to BYPL’s centralized server for further processing.

2.1.2. Head End System (HES)

This system will be installed in BYPL data center and will be responsible for data acquisition from the field devices. Other salient features of this system are as follow:

- a. Validation of data
- b. Repository for collected data.
- c. Change in programming of the meters over remote such as firmware upgrade, change in TOD resistors or any other change envisaged in meter.
- d. Web based user interface.
- e. Integration with SAP, Analytic and Energy Audit system.

3.0 DISCLAIMER

3.01 This Document includes statements, which reflect various assumptions, which may or may not be correct. Each Bidder/Bidding Consortium should conduct its own estimation and analysis and should check the accuracy, reliability and completeness of the information in this Document and obtain independent advice from appropriate sources in their own interest.

3.02 Neither Purchaser nor its employees will have any liability whatsoever to any Bidder or any other person under the law or contract, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage whatsoever which may arise from or be incurred or suffered in connection with anything contained in this Document, any matter deemed to form part of this Document, provision of Services and any other information supplied by or on behalf of Purchaser or its employees, or otherwise arising in any way from the selection process for the Supply.

3.03 Though adequate care has been taken while issuing the Bid document, the Bidder should satisfy itself that Documents are complete in all respects. Intimation of any discrepancy shall be given to this office immediately.

3.04 This Document and the information contained herein are Strictly Confidential and are for the use of only the person(s) to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient’s professional advisors).

4.0 COST OF BIDDING

The Bidder shall bear all cost associated with the preparation and submission of its Bid and Purchaser will in no case be responsible or liable for those costs.

B. BIDDING DOCUMENTS

5.0 BIDDING DOCUMENTS

5.01 The Scope of Work, Bidding Procedures and Contract Terms are described in the Bidding Documents. In addition to the covering letter accompanying Bidding Documents, the Bidding Documents include:

Volume - I

- a) Request for Quotation (RFQ) - Section – I
- b) Instructions to Bidders (ITB) - Section – II
- c) General conditions of Contract - Section – III
- d) Quantity and delivery requirement - Section – IV
- e) Technical Specifications (TS) - Section – V

Volume - II

- a) Bid Form - Annexure - I
- b) Reverse Auction Event - Annexure –II
- c) Format for EMD - Annexure –III
- d) Price Format - Annexure – IV
- e) Commercial Terms & Conditions - Annexure - V
- f) No Deviation Sheet - Annexure - VI
- g) Qualification Criterion - Annexure - VII

5.02 The Bidder is expected to examine the Bidding Documents, including all Instructions, Forms, Terms and Specifications. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect will may result in the rejection of the Bid.

6.0 AMENDMENT TO BIDDING DOCUMENTS

6.01 At any time prior to the deadline for submission of Bids, the Purchaser may for any reasons, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by Amendment.

6.02 The Amendment shall be part of the Bidding Documents, pursuant to Clause 5.01, and will be notified in web site www.bsedelhi.com, and will be binding on the bidders..

6.03 In order to afford prospective Bidders reasonable time to take the Amendment into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of Bids. The same shall be published as a corrigendum in website www.bsedelhi.com.

C. PREPARATION OF BIDS

7.0 LANGUAGE OF BID

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

8.0 DOCUMENTS COMPRISING THE BID

The Bid prepared and submitted by the Bidder shall comprise the following components:

- (a) Bid Form ,Price & other Schedules (STRICTLY AS PER FORMAT) and Technical Data Sheets completed in accordance with Clause 9.0, 10.0, 11.0 and Technical Specification ;
- (b) All the Bids must be accompanied with the required EMD as mentioned in the Section-I against each tender.
- (c) Power of Attorney indicating that the person(s) signing the Bid have the authority to sign the Bid and thus that the Bid is binding upon the Bidder during the full period of its validity, in accordance with clause 12.0.

9.0 BID FORM

9.01 The Bidder shall submit one "Original' and one " Soft Copy'of the un-priced Bid Form in Pen Drive and Other Schedules and Technical Data Sheets duly filled in.

9.02 EMD

Pursuant to Clause 8.0 (b) above,the bidder shall furnish, as part of its bid, a EMD amounting to 2% of the total bid value (FOR Destination) i.e **Rs 5,24,000/-**. The EMD is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture.

The EMD shall be denominated in the currency of the bid,and shall be in the following form :

- (a) A bank guarantee drawn in favour of "BSES YAMUNA POWER LIMITED, Payable at Delhi and issued by any scheduled bank strictly as per the prescribed format enclosed.
- (b) EMD shall be valid for a period of 120 days from the bid submission date.

The successful bidder's EMD will be returned upon furnishing the performance security.

The EMD shall be forfeited :

- (a) if the Bidder:
 - (i) withdraws its bid during the period of bid validity specified by the Bidder in the Bid Form ; or
 - (b) in the case of a successful Bidder, if the Bidder fails:
 - (i) to sign the Contract,or
 - (ii) to furnish the required Performance Guarantee.
 - (iii) The Bidder is found to have submitted false or forged any of the documents/ certificates/information.

10.0 BID PRICES

10.01 Bidders shall quote for the entire Scope of Supply/Work with a break-up of prices for individual items and Taxes & Duties. The total Bid Price shall also cover all the Supplier's obligations mentioned in or reasonably to be inferred from the Bidding Documents in respect of Design, Supply, Transportation to site, all in accordance with the requirement of Bidding Documents The Bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total Price with taxes, duties & freight upto destination.

10.02 The prices offered shall be inclusive of all costs as well as Duties,Taxes and Levies paid or payable during execution of the supply work and breakup of price constituents should be there.

Prices quoted by the Bidder shall be—Firm "and not subject to any price adjustment during the performance

of the Contract. A Bid submitted with an adjustable price /Price Variation clause will be treated as non-responsive and rejected.

11.0 BID CURRENCIES

Prices shall be quoted in **Indian Rupees Only**.

12.0 PERIOD OF VALIDITY OF BIDS

12.01 Bids shall remain valid for a period of 120 days post bid submission date.

12.02 Notwithstanding Clause 12.01 above, the Purchaser may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing by post/e-mail.

13.0 ALERNATIVE BIDS

13.01 Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions of Clause 22.03 & 22.04 regarding the rejection of Bids, which are not substantially responsive to the requirements of the Bidding Documents.

14.0 FORMAT AND SIGNING OF BID

14.01 The original Bid Form and accompanying documents (as specified in Clause 9.0, clearly marked "Original Bid", plus one soft copy of Un-priced Bid in Pen Drive must be received by the Purchaser at the date, time and place specified pursuant to Clauses 15.0 and 16.0. In the event of any discrepancy between the original and the copies, the original shall govern.

14.02 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. Such authorization shall be indicated by written Power-of-Attorney accompanying the Bid.

14.03 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.

D. SUBMISSION OF BIDS

15.0 SEALING AND MARKING OF BIDS

15.01 Bid submission: One original & one soft Copy of Un-Priced bid (in Pen Drive) of all the Bid Documents shall be sealed and submitted to the Purchaser before the closing time for submission of the bid.

15.02 The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be superscribed with **Part-I Technical & EMD**. Financial bid shall be inside another sealed envelope with superscription **Part-II Financial Bid**. Both these envelopes shall be sealed inside another big envelope superscribed with —"**Tender Notice No, Due date of submission, Tender opening date**". All the envelopes should bear the Name and Address of the Bidder and marking for the Original and Copy.

15.03 The Bidder shall submit the bid in person. Bids submitted by Telex/Telegram /Fax /E-mail will not be accepted. No request from any Bidder to the Purchaser to collect the proposals from Airlines/Cargo Agents etc shall be entertained by the Purchaser.

16.0 DEADLINE FOR SUBMISSION OF BIDS

16.01 The original Bid, together with the required documents, must be received by the Purchaser at the address specified not **later than 15:00 Hrs on 10.06.2022**.

16.02 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding

Documents in accordance with Clause 9.0, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended

. 17.0 ONE BID PER BIDDER

Each Bidder shall submit only one Bid either by itself, or as a partner in a Joint Venture. A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

18.0 LATE BIDS

Any Bid received by the Purchaser after the deadline for submission of Bids prescribed by the Purchaser, pursuant to Clause 16.0, will be declared rejected.

19.0 MODIFICATIONS AND WITHDRAWAL OF BIDS

19.01 The Bidder is not allowed to modify or withdraw its Bid after its submission.

E. EVALUATION OF BID

20.0 PROCESS TO BE CONFIDENTIAL

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the Purchaser's processing of Bids or award decisions may result in the rejection of the Bidder's Bid.

21.0 CLARIFICATION OF BIDS

To assist in the examination, evaluation and comparison of Bids, the Purchaser may, at its discretion, ask the bidder for a clarification of its Bid. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted.

22.0 PRELIMINARY EXAMINATION OF BIDS / RESPONSIVENESS

22.01 Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in order.

22.02 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

22.03 Prior to the detailed evaluation, Purchaser will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

22.04 Bid determined as not substantially responsive will be rejected by the Purchaser and/or the Purchaser and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

23.0 EVALUATION AND COMPARISON OF BIDS

23.01 The evaluation of Bids shall be done based on the delivered cost competitiveness basis.

23.02 The evaluation of the Bids shall be a stage-wise procedure. The following stages are identified for evaluation

purposes: In the first stage, the Bids would be subjected to a responsiveness check. The Technical Proposals and the Conditional ties of the Bidders would be evaluated.

Subsequently, the Financial Proposals along with Supplementary Financial Proposals, if any, of Bidders with Techno-commercially Acceptable Bids shall be considered for final evaluation .

23.03 The Purchaser's evaluation of a Bid will take into account, in addition to the Bid price, the following factors, in the manner and to the extent indicated in this Clause:

(a) Supply Schedule

(b) Deviations from Bidding Documents

Bidders shall base their Bid price on the terms and conditions specified in the Bidding Documents.

The cost of all quantifiable deviations and omissions from the specification , terms and conditions specified in Bidding Documents shall be evaluated. The Purchaser will make its own assessment of the cost of any deviation for the purpose of ensuring fair comparison of Bids.

23.04 Any adjustments in price, which result from the above procedures, shall be added for the purposes of comparative evaluation only to arrive at an "Evaluated Bid Price". Bid Prices quoted by Bidders shall remain unaltered.

F. AWARD OF CONTRACT

24.0 CONTACTING THE PURCHASER

24.01 From the time of Bid submission to the time of contract award, if any Bidder wishes to contact the Purchaser on any matter related to the Bid, it should do so in writing.

24.02 Any effort by a Bidder to influence the Purchaser and/or in the Purchaser's decisions in respect of Bid evaluation, Bid comparison or Contract Award, will result in the rejection of the Bidder's Bid.

25.0 THE PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

The Purchaser reserves the right to accept or reject any Bid and to annul the Bidding process and reject all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

26.0 AWARD OF CONTRACT

The Purchaser will award the Contract to the successful Bidder whose Bid has been Determined to be the lowest-evaluated responsive Bid, provided further that the Bidder has been determined to be qualified to satisfactorily perform the Contract. Purchaser reserves the right to award order to other bidders in the tender, provided it is required for progress of project & provided he agrees to come to the lowest rate.

27.0 THE PURCHASER'S RIGHT TO VARY QUANTITIES

The Purchaser reserves the right to vary the quantity i.e. increase or decrease the numbers/quantities without any change in terms and conditions during the execution of the Order.

28.0 LETTER OF INTENT/ NOTIFICATION OF AWARD

The letter of intent/ Notification of Award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the lowest (L1). The successful Bidder shall be required to furnish a letter of acceptance within 7 days of issue of the letter of intent /Notification of Award by Purchaser.

29.0 PERFORMANCE BANK GUARANTEE

The successful Bidder shall furnish the Performance Bank Guarantee for an amount of 10% (Ten percent) of the total Contract value in accordance with the format provided at the time of order. The Performance Bond shall be valid for a period of Sixty months (60) from the date of the commissioning or Sixty six months (66) from the date of receipt of material (last consignment) at site/stores which ever is earlier plus 3 months towards claim period. Upon submission of the performance security, the EMD shall be released.

30.0 CORRUPT OR FRADULENT PRACTICES

30.01 The Purchaser requires that the Bidders observe the highest standard of ethics during the procurement and execution of the Project. In pursuance of this policy, the Purchaser:

(a) Defines, for the purposes of this provision , the terms set forth below as follows:

(i) "Corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves and/or those close to them ,or induce others to do so,by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution;and

(ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders(prior to or after Bid submission) designed to establish Bid prices at artificial non -competitive levels and to deprive the Purchaser of the benefits of free and open competition .

(b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question ;

(c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for,or in executing, a contract.

30.02 Furthermore, Bidders shall be aware of the provision stated in the General Conditions of Contract.

SECTION – III

(GENERAL CONDITIONS OF CONTRACT)

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT
MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT
CONSUMERS METERS**

NIT No. CMC/BY/22-23/RS/SS/14

Dated : 20.05.2022

GENERAL TERMS AND CONDITION

1.0 General Instructions

- 1.01** All the Bids shall be prepared and submitted in accordance with these instructions.
- 1.02** Bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Purchaser will in no case shall be responsible or liable for these costs.
- 1.03** The Bid should be submitted by the Bidder in whose name the bid document has been issued and under no circumstances it shall be transferred/sold to the other party.
- 1.04** The Purchaser reserves the right to request for any additional information and also reserves the right to reject the proposal of any Bidder, if in the opinion of the Purchaser, the data in support of RFQ requirement is incomplete.
- 1.05** The Bidder is expected to examine all instructions, forms, terms & conditions and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a Bid not substantially responsive to the Bid Documents in every respect may result in rejection of the Bid. However, the Purchaser's decision in regard to the responsiveness and rejection of bids shall be final and binding without any obligation, financial or otherwise, on the Purchaser.

2.0 Definition of Terms

- 2.01** "Purchaser" shall mean BSES YAMUNA POWER LIMITED, on whose behalf this bid enquiry is issued by its authorized representative / officers.
- 2.02** "Bidder" shall mean the firm who quotes against this bid enquiry issued by the Purchaser. "Supplier" or "Supplier" shall mean the successful Bidder and/or Bidders whose bid has been accepted by the Purchaser and on whom the "Letter of Acceptance" is placed by the Purchaser and shall include his heirs, legal representatives, successors and permitted assigns wherever the context so admits.
- 2.03** "Supply" and " " shall mean the Scope of Contract as described.
- 2.04** "Specification" shall mean collectively all the terms and stipulations contained in those portions of this bid document known as RFQ, Commercial Terms & Condition, Instructions to Bidders, Technical Specifications and the Amendments, Revisions, Deletions or Additions, as may be made by the Purchaser from time to time.
- 2.05** "Letter of Acceptance" shall mean the official notice issued by the Purchaser notifying the Supplier that his proposal has been accepted and it shall include amendments thereto, if any, issued by the Purchaser. The "Letter of Acceptance" issued by the Purchaser shall be binding on the "Supplier" The date of Letter of Acceptance shall be taken as the effective date of the commencement of contract.
- 2.06** "Month" shall mean the calendar month and "Day" shall mean the calendar day.
- 2.07** "Codes and Standards" shall mean all the applicable codes and standards as indicated in the Specification.
- 2.08** "Offer Sheet" shall mean Bidder's firm offer submitted to BYPL in accordance with the specification.
- 2.09** "Contract" shall mean the "Letter of Acceptance" issued by the Purchaser.
- 2.10** "Contract Price" shall mean the price referred to in the "Letter of Acceptance".
- 2.11** "Contract Period" shall mean the period during which the "Contract" shall be executed as agreed between the Supplier and the Purchaser in the Contract inclusive of extended contract period for reason beyond the control of the Supplier and/or Purchaser due to force majeure.

2.12 "Acceptance" shall mean and deemed to include one or more of the following as will be stipulated in the specification:

- a) The written acceptance of material by the inspector at suppliers works to ship the materials.
- b) Acceptance of material at Purchaser site stores after its receipt and due inspection/ testing and release of material acceptance voucher.
- c) Where the scope of the contract includes supplying, acceptance shall mean issue of necessary equipment / material takeover receipt after installation & commissioning and final acceptance.

3.0 Contract Documents & Priority

3.01 Contract Documents: The terms and conditions of the contract shall consist solely of these RFQ conditions and the offer sheet.

3.02 Priority: Should there be any discrepancy between any term hereof and any term of the Offer Sheet, the terms of these RFQ shall prevail.

4.0 Scope of Supply -General

4.01 The "Scope of Supply" shall be on the basis of Bidder's responsibility, completely covering the obligations, responsibility and supplies provided in this Bid enquiry whether implicit or explicit.

4.02 Bidder shall have to quote for the Bill of quantities as listed in Section – IV of this RFQ.

4.03 Quantity variation and additional requirement if any shall be communicated to successful bidder during project execution.

4.04 All relevant drawings, data and instruction manuals.

5.0 Quality Assurance and Inspection

5.01 Immediately on award of contract, the bidder shall prepare detailed quality assurance plan / test procedure identifying the various stages of manufacture, quality checks performed at each stage, raw material inspection and the Customer hold points. The document shall also furnish details of method of checking, inspection and acceptance standards / values and get the approval of Purchaser before proceeding with manufacturing. However, Purchaser shall have right to review the inspection reports, quality checks and results of suppliers in house inspection department which are not Customer hold points and the supplier shall comply with the remarks made by purchaser or his representative on such reviews with regards to further testing, rectification or rejection, etc.

5.02 Witness and Hold points are critical steps in manufacturing, inspection and testing where the supplier is obliged to notify the Purchaser in advance so that it may be witnessed by the Purchaser. Final inspection is a mandatory hold point. The supplier to proceed with the work past a hold point only after clearance by purchaser or a witness waiver letter from BYPL.

5.03 The performance of waiver of QA activity by Purchaser at any stage of manufacturing does not relieve the supplier of any obligation to perform in accordance with and meet all the requirements of the procurement documents and also all the codes & reference documents mentioned in the procurement document nor shall it preclude subsequent rejection by the purchaser.

5.04 On completion of manufacturing the items can be dispatched only after issue of MDCC (Material Dispatch Clearance Certificate) document by the Purchaser.

5.05 All testing and inspection shall be done with out any extra cost.

5.06 Purchaser reserve the right to send any material out of the supply to any recognized laboratory for testing and the cost of testing shall be borne by the Purchaser. In case the material is found not in order with the technical requirement / specification, the charges along with any other penalty which may be levied is to be borne by

the bidder. To avoid any complaint the supplier is advised to send his representative to the stores to see that the material sent for testing is being sealed in the presence of bidders representative.

5.07 Bidder has to sign quality agreement before supply of the material.

6.0 Packing, Packing List & Marking

6.01 Packing: Supplier shall pack or shall cause to be packed all Commodities in boxes and containers and otherwise in such a manner as shall be reasonably suitable for shipment by road or rail to BYPL without undue risk of damage in transit.

6.02 Packing List: The contents of each package shall be itemized on a detailed list showing the exact weight and the extreme outside dimensions (length, width and height) of each container or box. One copy of the packing list shall be enclosed in each package delivered. There shall also be enclosed in one package a master packing list identifying each individual package, which is part of the shipment. On any packaging where it is not feasible to place the packing list inside the container, all pertinent information shall be stenciled on the outside and will thus constitute a packing list.

7.01 Prices basis for supply of materials

Bidder to quote their prices on Landed Cost Basis and separate price for each items.

For Supply to BYPL Delhi the price shall be inclusive of packing, forwarding, Freight and Good & Service Tax (GST).

The above supply prices shall also **include unloading** at site stores.

Transit and storage insurance will be arranged by BYPL, however bidder to furnish required details in advance for arranging the same by BYPL.

8.0 Variation in taxes, duties & levies:

8.01 The total order value shall be adjusted on account of any variations in Statutory Levies imposed by Competent Authorities by way of fresh notification(s) within the stipulated delivery period only. However, in case of reduction in taxes, duties and levies, the benefits of the same shall be passed on to BUYER.

8.02 No other Taxes, Duties & Levies other than those specified above will be payable by BUYER except in case of new Levies, Taxes & Duties imposed by the Competent Authorities by way of fresh notification(s) subsequent to the issue of PURCHASE ORDER but within the stipulated delivery period.

8.03 Notwithstanding what is stated above, changes in Taxes, Duties & Levies shall apply only to that portion of PURCHASE ORDER not executed on the date of notification by Competent Authority. Further changes in Taxes, Duties & Levies after due date of Delivery shall not affect PURCHASE ORDER Terms and Value.

8.04 PURCHASE ORDER value shall not be subject to any variation on account of variation in Exchange rate(s).

9.0 Taxes & Duties on raw materials & bought out components:

9.01 Taxes & Duties on raw materials & bought out components are included in Order Value and are not subject to any escalation or variation for any reason whatsoever.

9.02 Taxes & Duties on raw materials & bought out components procured indigenously are included in Order Value and are not subject to any escalation or variation for any reason whatsoever.

10.0 Terms of payment and billing

10.01 For Supply, Software and Installation:

Sl. No.	Major Activities of AMR Project	Payment Milestone	Payment Terms -Supply	Payment Terms - Service
1	Deployment of HES at BYPL data center (Test Environment) as per BYPL's Nodal team (IT, Energy Audit & Key Consumer Cell) directives	1	90% payment against Supply of Lot 1 (10% Modem Quantity) and 70% Payment for HES after successful completion of UAT-1	90% payment against Installation, Testing, Commissioning of Lot 1 (10% Modem Quantity) and 70% Payment for Implementation, Integration & Training of Head End System (HES) Software after successful completion of UAT-1
2	Supply of 10% Modem			
3	Installation of pilot modem of at least 10% of total quantity at site & its integration with HES			
4	UAT-1 (post successful pilot deployment)			
5	Deployment of HES production environment at BYPL data center.			
6	Installation of balance modems at site & its integration	2	90% Payment against Supply of Lot 2 (90% Modem Quantity)	90% Payment against Installation, Testing, Commissioning of Lot 2 (90% Modem Quantity)
7	Final UAT-2 (post 100% installation of modem & HES)			
8	Go Live after incorporation of any finding and open points of UAT -2.			
9	Handing Over Taking Over (HO-TO) of complete system, including all necessary documentation.			
10	Free Support Period - 01 year from successful Handing Over Taking Over	3	Balance 10% payment against Supply of Modems and 30% of HES	Balance 10% payment for Installation, Testing, Commissioning of Modems and 30% for Implementation, Integration & Training of Head End System (HES) Software

Payment shall be released within 45 days subject to submission of following documents duly certified by BYPL project-in-charge:

- i. Consignee copy of LR
- ii. Detailed invoice showing commodity description, qty, unit & total price,
- iii. Original certificate issued by BYPL confirming receipt of material at site & acceptance
- iv. Dispatch clearance & inspection report issued by the inspection authority
- v. Packing List, Test Reports
- vi. Work Completion Certificate
- vii. Guarantee Certificate.
- viii. Bank Guarantee

10.02

Payment shall be made on quarterly basis after completion of each Quarter

11.0 Price Validity

11.01 All bids submitted shall remain valid, firm and subject to unconditional acceptance by BYPL Delhi for 120 days post bid submission date. For awarded suppliers, the prices shall remain valid and firm till contract completion.

12.0 Performance Guarantee

12.01 Bank guarantee shall be drawn in favour of BSES YAMUNA POWER LIMITED. The performance Bank guarantee shall be in the format as specified by BYPL.

12.02 Contract performance bank guarantee of total 10% of the contract price shall be submitted within 15 days of award of contract with the validity till completion of the contract period.

12.03 Contractor shall submit the performance bank guarantee equivalent to the 10% of the order value at the time of claiming the last payment as per clause no. 10.0 (Terms of payment and billing–SUPPLY/INSTALLATION/SOFTWARE), with the validity of the bank guarantee till Defect Liability Period plus 3 months.

13.0 Forfeiture

13.01 Each Performance Bond established under Clause 12.0 shall contain a statement that it shall be automatically and unconditionally forfeited without recourse and payable against the presentation by BYPL of this Performance Bond to the relevant bank together with a simple statement that supplier has failed to comply with any term or condition set forth in the Contract.

13.02 Each Performance Bond established under will be automatically and unconditionally forfeited without recourse if BYPL in its sole discretion determines that supplier has failed to comply with any term or condition set forth in the contract.

14.0 Release

All Performance Bonds will be released without interest within seven (7) days from the last date up to which the Performance Bond has to be kept valid (as defined in Clause 10.0) except for the case set forth in Clause 21.0.

15.0 Defects Liability Period

15.01 The bidder to guarantee the materials / items supplied against any defect of failure, which arise due to faulty materials, workmanship or design for the entire defects liability period. The Defect liability period shall be 60 months from supply or 66 months from Installation, whichever is earlier.

If during the defects liability period any materials / items are found to be defective, these shall be replaced or rectified by the bidder at his own cost within 30 days from the date of receipt of intimation.

The bidder shall able to depute their service personnel within 48 hours in case of emergency and shall ensure the availability of manpower/spares for the same during warranty period.

16.0 Return, Replacement or Substitution.

Purchaser shall give Supplier notice of any defective Commodity promptly after becoming aware thereof. Purchaser may in its discretion elect to return defective Commodities to Supplier for replacement, free of charge to BYPL, or may reject such Commodities and purchase the same or similar Commodities from any third party. In the latter case BYPL shall furnish proof to Supplier of the cost of such substitute purchase. In either case, all costs of any replacement, substitution, shipping, labour and other related expenses incurred in connection with the return and replacement or for the substitute purchase of a Commodity hereunder should be for the account of Supplier. BYPL may set off such costs against any amounts payable by BYPL to Supplier. Supplier shall reimburse BYPL for the amount, if any, by which the price of a substitute Commodity exceeds the price for such Commodity as quoted in the Bid.

17.0 Effective Date of Commencement of Contract:

17.01 The date of the issue of the Letter of Acceptance shall be treated as the effective date of the commencement of Contract.

18.0 Time – The Essence Of Contract

18.01 The time and the date of completion of the “Supply” as stipulated in the Letter Of Acceptance / Purchase order issued to the Supplier shall be deemed to be the essence of the “Contract”. The Supply has to be completed not later than the aforesaid Schedule and date of completion of supply .

19.0 The Laws and Jurisdiction of Contract:

19.01 The laws applicable to this Contract shall be the Laws in force in India.

19.02 All disputes arising in connection with the present Contract shall be settled amicably by mutual consultation failing which shall be finally settled as per the rules of Arbitration and Conciliation Act, 1996 at the discretion of Purchaser. The venue of arbitration shall be at Mumbai in India

20.0 Events of Default

20.01 Events of Default. Each of the following events or occurrences shall constitute an event of default ("Event of Default") under the Contract:

- (a) Supplier fails or refuses to pay any amounts due under the Contract;
- (b) Supplier fails or refuses to deliver Commodities conforming to this RFQ/ specifications, or fails to deliver Commodities within the period specified in P.O. or any extension thereof
- (c) Supplier becomes insolvent or unable to pay its debts when due, or commits any act of bankruptcy, such as filing any petition in any bankruptcy, winding-up or reorganization proceeding, or acknowledges in writing its insolvency or inability to pay its debts; or the Supplier's creditors file any petition relating to bankruptcy of Supplier;
- (d) Supplier otherwise fails or refuses to perform or observe any term or condition of the Contract and such failure is not remediable or, if remediable, continues for a period of 30 days after receipt by the Supplier of notice of such failure from BYPL.

21.0 Consequences of Default.

- (a) If an Event of Default shall occur and be continuing, BYPL may forthwith terminate the Contract by written notice.
- (b) In the event of an Event of Default, BYPL may, without prejudice to any other right granted to it by law, or the Contract, take any or all of the following actions;
 - (i) present for payment to the relevant bank the Performance Bond;
 - (ii) purchase the same or similar Commodities from any third party; and/or
 - (iii) recover any losses and/or additional expenses BYPL may incur as a result of Supplier's default.

22.0 Penalty for Delay

22.01 If supply of items / equipment's is delayed beyond the supply schedule as stipulated in purchase order then the Supplier shall be liable to pay to the Purchaser as penalty for delay, a sum of 1% (one percent) of the basic price (ex-work) for every week delay or part thereof for individual mile stone deliveries.

22.02 The total amount of penalty for delay under the contract will be subject to a maximum of ten percent (10%) of the basic price (ex-work).

22.03 The Purchaser may, without prejudice to any method of recovery, deduct the amount for such damages from any amount due or which may become due to the Supplier or from the Performance Bond or file a claim against the supplier.

23.0 Force Majeure

23.01 General

An "Event of Force Majeure" shall mean any event or circumstance not within the reasonable control directly or indirectly, of the Party affected, but only if and to the extent that:

- (i) Such event or circumstance materially and adversely affects the ability of the affected Party to perform its obligations under this Contract, and the affected Party has taken all reasonable precautions, due care and reasonable alternative measures in order to prevent or avoid the effect of such event on the affected party's ability to perform its obligations under this Contract and to mitigate the consequences thereof.
- (ii) For the avoidance of doubt, if such event or circumstance would not have materially and adversely affected the performance of the affected party had such affected party followed good industry practice, such event or circumstance shall not constitute force Majeure.
- (iii) Such event is not the direct or indirect result of the failure of such Party to perform any of its obligations under this Contract.
- (iv) Such Party has given the other Party prompt notice describing such events, the effect thereof and the actions being taken in order to comply with above clause.

23.02 Specific Events of Force Majeure subject to the provisions of above clause, Events of Force Majeure shall include only the following to the extent that they or their consequences satisfy the above requirements :

- (i) The following events and circumstances :
 - a) Effect of any natural element or other acts of God, including but not limited to storm, flood, earthquake, lightning, cyclone, landslides or other natural disasters.
 - b) Explosions or fires
- (ii) War declared by the Government of India, provided that the ports at Mumbai are declared as a war zone.
- (iii) Dangers of navigation, perils of the sea.

23.03 Notice of Events of Force Majeure If a force majeure event prevents a party from performing any obligations under the Contract in part or in full, that party shall:

- i) Immediately notify the other party in writing of the force majeure events within 7(seven) working days of the occurrence of the force majeure event
- ii) Be entitled to suspend performance of the obligation under the Contract which is affected by force majeure event for the duration of the force majeure event.
- iii) Use all reasonable efforts to resume full performance of the obligation as soon as practicable

- iv) Keep the other party informed of all such efforts to resume full performance of the obligation on a regular basis.
- v) Provide prompt notice of the resumption of full performance or obligation to the other party.

23.04 Mitigation of Events of Force Majeure Each Party shall:

- (i) Make all reasonable efforts to prevent and reduce to a minimum and mitigate the effect of any delay occasioned by an Event of Force Majeure including recourse to alternate methods of satisfying its obligations under the Contract;
- (ii) Use its best efforts to ensure resumption of normal performance after the termination of any Event of Force Majeure and shall perform its obligations to the maximum extent practicable as agreed between the Parties; and
- (iii) Keep the other Party informed at regular intervals of the circumstances concerning the event of Force Majeure, with best estimates as to its likely continuation and what measures or contingency planning it is taking to mitigate and or terminate the Event of Force Majeure.

23.05 Burden of Proof In the event that the Parties are unable in good faith to agree that a Force Majeure event has occurred to an affected party, the parties shall resolve their dispute in accordance with the provisions of this Agreement. The burden of proof as to whether or not a force majeure event has occurred shall be upon the party claiming that the force majeure event has occurred and that it is the affected party.

23.06 Termination for Certain Events of Force Majeure. If any obligation of any Party under the Contract is or is reasonably expected to be delayed or prevented by a Force Majeure event for a continuous period of more than 3 months, the Parties shall promptly discuss in good faith how to proceed with a view to reaching a solution on mutually agreed basis. If a solution on mutually agreed basis cannot be arrived at within a period of 30 days after the expiry of the period of three months, the Contract shall be terminated after the said period of 30 days and neither Party shall be liable to the other for any consequences arising on account of such termination.

23.07 Limitation of Force Majeure event. The Supplier shall not be relieved of any obligation under the Contract solely because cost of performance is increased, whether as a consequence of adverse economic consequences or otherwise.

23.08 Extension of Contract Period due to Force Majeure event The Contract period may be extended by mutual agreement of Parties by way of an adjustment on account of any period during which an obligation of either Party is suspended due to a Force Majeure event.

23.09 Effect of Events of Force Majeure. Except as otherwise provided herein or may further be agreed between the Parties, either Party shall be excused from performance and neither Party shall be construed to be in default in respect of any obligations hereunder, for so long as failure to perform such obligations shall be due to and event of Force Majeure."

24.0 Transfer And Sub-Letting

24.01 The Supplier shall not sublet, transfer, assign or otherwise part with the Contract or any part thereof, either directly or indirectly, without prior written permission of the Purchaser.

25.0 Recoveries

25.01 When ever under this contract any money is recoverable from and payable by the bidder, the purchaser shall be entitled to recover such sum by appropriating in part or in whole by detecting any sum due to which any time thereafter may become due from the supplier in this or any other contract. Should the sum be not sufficient to cover the full amount recoverable the bidder shall pay to the purchaser on demand the remaining balance.

26.0 Waiver

26.01 Failure to enforce any condition herein contained shall not operate as a waiver of the condition itself or any subsequent breach thereof.

27.0 Indemnification

27.01 Notwithstanding contrary to anything contained in this RFQ, Supplier shall at his costs and risks make good any loss or damage to the property of the Purchaser and/or the other Supplier engaged by the Purchaser and/or the employees of the Purchaser and/or employees of the other Supplier engaged by the Purchaser whatsoever arising out of the negligence of the Supplier while performing the obligations under this contract.

**SECTION IV
(QUANTITY AND DELIVERY SCHEDULE)**

SECTION – IV: QUANTITY AND DELIVERY SCHEDULE

Sl. No.	Item Description	Specification	Requirement		Location
			Total Qty.	Delivery Schedule	
1	Supply of 4G/NBIOT Modem	SECTION V	6000 Nos	Four (4)) Months from the date of LOA/PO. Detailed supply and installation schedule shall be discussed and communicated at the time of award/as per the requirement (Receipt at the BYPL Delhi Stores)	Stores BYPL Delhi
2	Installation, Testing, Commissioning of 4G / NBIOT Modem as per Scope of Work		6000 Nos		
3	Supply of Head End System (HES) Software		1 Lot		
4	Installation, Implementation, Integration & Training of Head End System (HES) Software		1 Lot		
5	Supply of License for HES Software:		1 Lot		
5a.	Option 1: for 10K End points				
5b.	Option 2: for 20K End points				
5c.	Option 3: for 50K End points				
6	Annual Maintenance Charge (AMC) for smooth operation of MDAS/HES, database management, trouble shooting and resolution of communication related issues after 12 months onsite support		1 Year		
7	Annual Maintenance Charge (AMC) for Hardware management, trouble shooting and resolution of communication and software related issues after 12 months onsite support.		Per modem per Year		

SECTION V

TECHNICAL SPECIFICATION (TS)

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT
MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT
METERS**

NIT No. CMC/BY/22-23/RS/SS/14


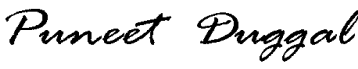

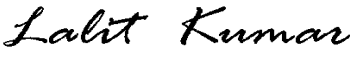

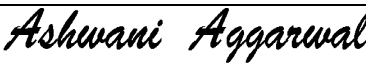
Date of Tender: 20.05.2022

Technical Bid Submission Check List

S. No.	Description	BYPL Requirement	Bidder's Compliance
1	Tender No.	Required	
2	Technical Specification reference number	Required	
3	Communication Details		
3.1	Name of the Bidder	Required	
3.2	Name of Authorized contact person	Required	
3.3	Contact No. of Authorized contact person	Required	
3.4	E-mail id of Authorized contact person	Required	
4	Document Submission Format		
4.1	Documents shall be submitted in Box file/spiral binding. Any other format is not acceptable	Required	
4.2	Index of documents with page numbers for each document	Required	
4.3	Separator with document description shall be provided before each document	Required	
5	Qualifying Requirement Compliance		
5.1	Summary of compliance of qualifying criteria in tabular form along with summary of documentary proof provided	Required	
5.2	Detailed Documents supporting compliance of qualifying criteria	Required	
6	Drawings/ Documents as per Technical Specification.		
6.1	Signed copy of technical specification	Required	
6.2	Type Test reports of offered model/ type/ rating	Required	
6.3	Guaranteed Technical particulars (GTP)	Required	
6.4	Deviation Sheet	Required	
6.5	Detailed Drawings	Required	
6.6	Manufacturer's quality assurance plan	Required	
6.7	Other drawing/ documents mentioned in technical specification	Required	
7	Soft copy of complete technical bid through E-mail/PEN Drive	Required	
<p>Note: Submission of Technical bid check list along with all items mentioned in the check list is mandatory. Order of documents shall be strictly as per the technical bid check list. Bids with incomplete/ wrong information are liable for rejection.</p>			

Introduction, Scope Of Supply and Work

Introduction, Scope of Supply & Work For Automated Meter Reading System

Prepared By	Ashish Joshi	CES	 28cf4d7d-6c91-4d53-be77-f490e198fb6b	Revision- 0
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Introduction, Scope Of Supply and Work

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1. Introduction

In order to strengthen its metering System, BYPL desires to implement Automated Meter Reading System for distribution transformer meters and its high value customers. The Key highlights of the proposed system are mentioned herewith.

1.1. Automated Meter Reading System

Following are the main components of the system:

1.1.1. 4G/ NBIOT Modem

Modem [4G/ NBIOT]: 4G/ NBIOT based modems will be installed on the existing solid state meters (single phase and three phases- DLMS and non DLMS). The 2 way communication modem will collect data from meter and send it to BYPL's centralized server for further processing.

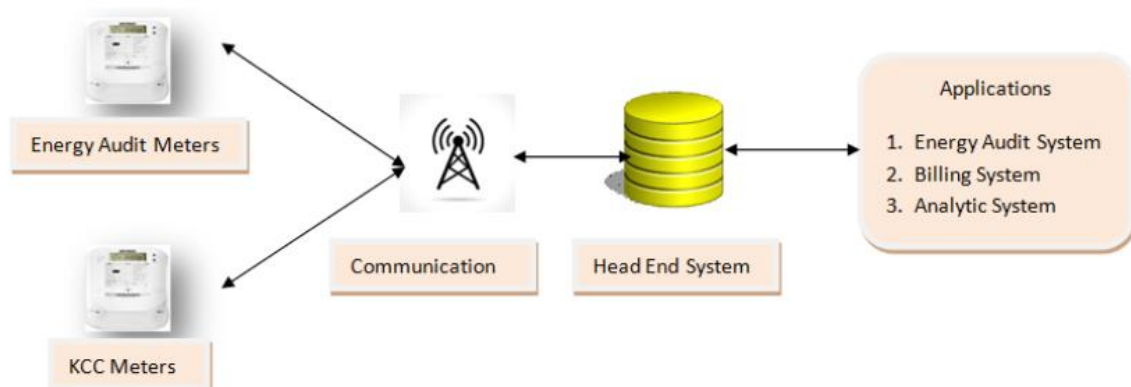
1.1.2. Head End System (HES)

This system will be installed in BYPL data center and will be responsible for data acquisition from the field devices. Other salient features of this system are as follow:

- a. Validation of data
- b. Repository for collected data.
- c. Change in programmability of the meters over remote such as firmware upgrade, change in TOD resistors or any other change envisaged in meter.
- d. Web based user interface.
- e. Integration with SAP, Analytic and Energy Audit system.

1.2. Proposed Architecture

Proposed architecture is given below. As it is a new system, appropriate changes to optimize system performance may be made in the architecture during the course of technical evaluation.



2. Scope of Supply- Modem

- 2.1. Design, manufacture, testing (at manufacturer's work) before dispatch, packing, delivery and submission of all documentation
- 2.2. Any accessories / hardware required for installation and operation for the Modem

3. Scope of Work- Modem Installation:

- 3.1. De-sealing of meter box and meter installed at site.
- 3.2. Removal of existing meter from meter box (in case of Whole Current meter) and installation in new box as per BYPL approved practice. In LTCT meter, Modem will be installed in existing box.
- 3.3. Installation of modem in box with all communication wires, power supply of the modem and other necessary hardware.
- 3.4. Configuration of modem.
- 3.5. Installation of SIM in modem. SIM shall be provided by BYPL.
- 3.6. Testing of modem for its operation and communication
- 3.7. Re-sealing of meter and meter box.
- 3.8. Photograph of site before and after installation.
- 3.9. Filling of MCR
- 3.10. User Training- As per Technical Specification
- 3.11. Installation & commissioning of modem will be treated as successful only after availability of complete meter data in the system through modem, duly certified by BYPL.
- 3.12. Bidder shall have valid electrical license for field work and shall submit a copy of the license at the time of the bid.
- 3.13. The bidder shall provide all equipments and testing kits required for field work.
- 3.14. The bidder will be entirely responsible for rules for safety and security. The successful bidder shall indemnify BYPL against any action like prosecution, fire, show cause notice etc for any breach by the successful bidder or its employees, alleged or otherwise of any of the provisions of the law of the government / judicial authorities.
- 3.15. The bidder shall publish daily / weekly 'Progress Report' in the format as prescribed by BYPL.
- 3.16. Bidder shall be responsible for sign off for each and every installation in the agreed format within 3 days of completion.

- 3.17. Project progress review meetings will be held fortnightly or monthly. However in case of deviations BYPL may call for meeting of senior management and bidder shall ensure their presence.
- 3.18. During the performance of the Contract, the buyer or seller may request for modification. Such changes shall be properly documented with necessity of change, impact, time to implement and approved by relevant personnel. BYPL reserves the right to approve or reject any change requests.
- 3.19. If modem already exists at desired location, bidder shall remove this existing modem along with accessories & return it in BYPL store.
- 3.20. Installation & commissioning of modem will be treated as successful only after availability of complete meter data in the system through modem & certified by BYPL project manager.
- 3.21. The bidder shall be responsible for deployment of modems at the locations/sites/meters given by BYPL.
- 3.22. Bidder shall share its field execution team details along with its Single Point of Contact (SPOC). BYPL shall issue a permission letter to the designated manpower of bidder for the deployment.
- 3.23. Bidder's execution team will coordinate with BYPL project manager for activities viz arrangement of keys for its substations, etc. The bidder may seek support of BYPL Project Manager in this regard and keep him informed of all the communications.
- 3.24. The bidder shall work as per the project schedule and shall not be relieved until the project is successfully completed and handed over.

4. Scope of Supply and Implementation of Head End System (HES):

- 4.1. Supply- HES shall be supplied as per technical specifications enclosed with this tender document.
- 4.2. Implementation- HES shall be deployed in BYPL data center. Hardware shall be provided by BYPL. Bidder need to specify requirement of hardware and storage including requirement of operating system.
- 4.3. The bidder shall publish daily / weekly 'Progress Report' in the format as prescribed by BYPL.
- 4.4. Testing- After successful deployment of the system user acceptance tests shall be carried based on technical specification.
- 4.5. Training- As per Technical Specification.

5. Free Support Period:

- 5.1. Bidder shall provide 12 month free support period after successful deployment (Period starting post successful 'User Acceptance Test (UAT)', duly signed by authorized BYPL representative).
- 5.2. After successful UAT, BYPL will issues a Certificate confirming completion of deployment and starting of free support period. In the absence of this certificate deployment shall not be deemed as completed.
- 5.3. Modem replacement at site, troubleshooting at site, software monitoring, software troubleshooting etc shall be done by bidder during free support period with any price implication to BYPL. It is sole responsibility of bidder to ensure SLA's during free support period.

6. Annual Maintenance Contract- Software System

- 6.1. Bidders shall provide annual maintenance contract (AMC) for operation and management of software system after *free support period*. Following are the key scope for this AMC
- 6.2. The Bidder shall act as the Single Point of Contact for all the issues relating to the Service Levels. Successful bidders maintain a helpdesk during AMC period.
- 6.3. The successful Bidder shall monitor the Application and its associated services on a continuous 24x7 basis to ensure application uptime as mentioned in clause no.8 (Service level Agreement (SLA))
- 6.4. In case problem is related to network then bidder will inform BYPL data center via email immediately.
- 6.5. System Maintenance – Bidder shall be responsible for ensuring all engineering standards and overall system design and its maintenance for the complete AMR solution including Modems.
- 6.6. Preventive Maintenance – Bidder shall perform monthly periodic routine checking as part of a preventive maintenance program which would include checking of functionality of Modems and HES.
- 6.7. Software Management – Bidder shall install, monitor, manage and upgrade HES with the latest version available.
- 6.8. Meter Data Availability – Bidder shall be responsible to get meter data from meter to HES. In case of unavailability of meter data due to any issue, Bidder shall collect meter data manually at predefined time intervals and upload into the system.

- 6.9. Communications Diagnosis and Resolution – Bidder shall ensure communication for devices including modems and HES, which collect data from a number of meters before sending the information upstream to a meter data collection point.
- 6.10. System Development and Integration – Bidder shall be responsible for integrating new meters, devices, applications and other system level development and escalations from time to time within agreed time.
- 6.11. Coordination – Bidder shall be responsible for coordination, issue resolution, and escalation with meter supplier, BYPL representatives and other stakeholders as defined by BYPL.
- 6.12. Performance and Service Level Agreement – Bidder shall be responsible for the entire performance and service levels agreed with BYPL.
- 6.13. Reports – Bidder shall provide BYPL with weekly, monthly and ad hoc reports detailing faulty devices, both outstanding and resolved issues and time taken for resolution etc.
- 6.14. Security – Bidder shall be responsible for the security and privacy of any BYPL data being transferred across the system.
- 6.15. Record Keeping – The Bidder shall prepare and maintain, all maintenance records, minutes of meeting, equipment breakdown reports, daily/weekly/monthly fault logs, defects list, preventive Maintenance reports, tools serviceability status report, monthly maintenance report.
- 6.16. Bidder should publish weekly report on application status containing downtime & network analysis to BYPL.
- 6.17. Successful bidder shall appoint project manager who will be a single-point of contact for all activities. Bidder shall deploy sufficient manpower with required skill set to carry out the AMC. The successful bidder shall ensure to replace staff in not more than 7 days whose performance is not found satisfactory by the buyer
- 6.18. The bidder shall record and report all the issues to the buyer along with the resolution.
- 6.19. Any post warranty hardware or software maintenance activity which involves replacement or new development shall be mutually agreed on timeline and cost. Bidder shall take prior written consent from BYPL providing detailed explanation and cost implication.

7. Annual Maintenance Contract- Modem

- 7.1. Bidders shall provide annual maintenance contract (AMC) for management of modem and its accessories after *free support period*. Following are the key scope for this AMC
- 7.2. Bidder will deploy a field team for maintenance, replacement, removal and troubleshooting of Modems installed at site in purchaser's supply area.
- 7.3. In case of non communication of any modem, bidder will troubleshoot modem at site and resolve the non communication issue within 5 days.
- 7.4. In case the issue pertains to BYPL network or 'SIM', bidder shall inform the designated person from BYPL via email with-in 5 days.
- 7.5. Modem replacement, removal, Installation, SIM installation, installation of communication cable etc shall be in scope of bidder.
- 7.6. Coordination – Bidder shall be responsible for coordination, issue resolution, and escalation with meter supplier, BYPL representatives and other stakeholders as defined by BYPL.
- 7.7. Record Keeping – The Bidder shall prepare and maintain, all maintenance records, minutes of meeting, equipment breakdown reports, daily/weekly/monthly fault logs, defects list, preventive Maintenance reports, tools serviceability status report, monthly maintenance report.
- 7.8. Bidder shall retain a required quantity of spare modems and its accessories with them to replace the faulty modem within 5 days.
- 7.9. In case bidder is unable to resolve non communication issue at site, penalty shall be levied as following:

Issue Resolution Time (In days)	Penalty
0 to 5 days	Nil
More than 5 days	*25 Rs per modem per day
*' Minimum penalty cost subject Performance review revision.	

8. Service level Agreement (SLA):

- 8.1. SLA shall be valid for AMC period.
- 8.2. The successful bidder shall provide daily, weekly and monthly reports during the AMC period to BYPL.

8.3. Penalty shall be levied based on uptime, calculated at the end of each month as below. HES should have facility to calculate and display these SLA's.

8.3.1. Instant data 30 min interval and Event data within 24 hour of occurrence-

Data Availability	Penalty
>=99%	Nil
>= 95% but less than 99%	1% of monthly AMC charges
>= 90% but less than 95%	2% of monthly AMC charges
Below 90%	10% of monthly AMC charges

8.3.2. Billing data after 24 hours of occurrence of billing date:

Data Availability	Penalty
>=99%	Nil
>= 95% but less than 99%	1% of monthly AMC charges
>= 90% but less than 95%	2% of monthly AMC charges
Below 90%	10% of monthly AMC charges

8.3.3. Complete Meter data (At the end of each week)

Data Availability	Penalty
>=99%	Nil
>= 95% but less than 99%	1% of monthly AMC charges
>= 90% but less than 95%	2% of monthly AMC charges
Below 90%	10% of monthly AMC charges


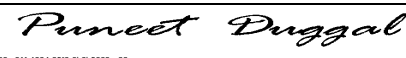
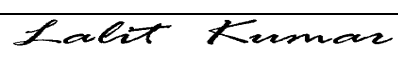

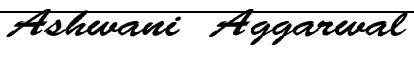
9. Major Bill OF Quantity:

S #	Description of Item	UoM	Quantity	Unit Rate	% Tax	Total Cost
1	Supply of 4G/ NBIOT Modem as per technical	Nos	4,000			
2	Installation, Testing, Commissioning of 4G / NBIOT Modem per Scope of Work	Nos	4,000			
3	Supply, Installation, Implementation & Training of HES (10k End Points)	Lot	01			
4	Supply, Installation, Implementation & Training of HES (20k End Points)	Lot	01			
5	AMC – HES	Annual	01			
6	AMC – Modems (In Warranty Period)	Annual	01			
7	AMC – Modems (Post Warranty Period)	Annual	01			

Technical Specification For Automated Meter Reading System

Specification for Automated Meter Reading System

Specification no – SP-AMR-205-R0

Prepared By	Ashish Joshi	CES	 <small>28c14d7d-c91-4d53-be77-4490e198f86b</small>	Revision- R0
Reviewed By	Puneet Duggal	CES	 <small>404db803-e91f-4234-85f0-0a2b5098ec32</small>	Date : 01/02/2022
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Approved By	Gaurav Sharma	CES	 <small>23dc2de2-95de-4472-99a7-dea8738472b6</small>	
	Ashwani Aggarwal	IT	 <small>9f0ce1de-7a97-4b55-9aaf-424b40034ade</small>	

Technical Specification For Automated Meter Reading System

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Technical Specification For Automated Meter Reading System

Record of Revision

Clause No.	Change in Specification	Approved By	Rev

Technical Specification For Automated Meter Reading System**1.0 Scope of Supply**

The scope includes design, manufacturing, testing and supply of Modems with power cable, communication cable, antenna, Head End System (HES) and other accessories. The broad scope is as follows:

- Supply of LTE based NB-IoT/ 4G modems with accessories
- Installation, Commissioning and configuration of Modems at field
- Supply, Installation, Testing, Commissioning & Implementation of Head End System (HES)
- Integration of existing & new meters with modem and HES integration with BYPL systems.
- SLA compliance and annual maintenance of the entire system

2.0 Codes & standards

Materials, equipment and methods used in the manufacturing of above mentioned equipment shall conform to the latest edition of following

S#	Standard Number	Title
2.1	Indian Electricity Act	IE Act 2003
2.2	CEA Regulations	With latest amendments
2.3	IEC61000-4-2 (Level-2)	Electrostatic Discharge
2.4	IEC61000-4-4	Fast Transient Burst
2.5	IEC61000-4-5	Surges Immunity
2.6	IEC61000-4-6	Radio Interface Measurement (CS)
2.7	IEC61000-3-2/CISPR22	Conducted Emission
2.8	CISPR 22 (Class B)	Radiated Emissions
2.9	IS13252	Safety standard
2.10	IEC61000-4-2 (Level-2)	Electrostatic Discharge
2.11	DLMS	DLMS specifications
2.12	IS 15959	Data Exchange Protocol (Indian Companion)

In the event of direct conflict between various order documents, the precedence of authority of documents shall be as follows-

- i. Guaranteed Technical Particulars (GTP)
- ii. Specification including applicable codes & standards
- iii. Approved Vendor Drawings
- iv. Other documents

Technical Specification For Automated Meter Reading System**3.0 Power System Data**

3.1	Supply Voltage	a. Low Voltage: 1 Phase 2 Wire (240 V) b. Low Voltage: 3 Phase 4 Wire (415 V)
3.2	Frequency	50 Hz \pm 5%,
3.3	System Neutral	Solidly Earthed

4.0 Modem

4.1	Modem should be compatible for communication with various types of DLMS and non DLMS meters like single phase meters, three phase meters, LTCT meters DT Meter, HT Meter, Net Meters & Solar Meters of multiple meter vendors.
4.2	Modem shall be plug and play type i.e. able to communicate with backend after power up.
4.3	The power supply of the offered modem shall be part of the modem and capable to operate on three phase supply from the incoming terminal of the meter.
4.4	Modem shall be capable to function correctly even if one phase is available.
4.5	The operating voltage range for the modem shall be 40V to 440V to enable modem can be used for HT or LT tri vector meters on network as per requirement. Operating Frequency shall be 50 Hz \pm 5%.
4.6	Maximum power consumption should be 8 VA during data transfer and 2 VA in idle condition.
4.7	The modem shall be suitably protected against voltage surge up to 6kV impulses.
4.8	Modem shall be capable to send outage information with date and time stamp (for both occurrence and restoration) and store data at the same time.
4.9	Product shall be EMI/EMC compliant as per IS-13779 and IEC: 61000-4.
4.10	Modem should be compact in size. Bidder shall submit details of size, weight and mounting arrangement of the modem.
4.11	Modem enclosure shall be made up of unbreakable, high grade Polycarbonate LEXAN 943 or equivalent. Enclosure shall be able to withstand shock and vibration.
4.12	Material shall be fire retardant reinforced insulating material of minimum thickness of 2mm made of virgin polycarbonate / engineering plastic enclosure.
4.13	The modem should comply with a minimum of IP65 degree of protection.

Technical Specification For Automated Meter Reading System

4.14	Enclosure shall be corrosion resistant and shall withstand any effect of chemical solvents like acids corrosive alkalis etc.
4.15	The modem shall have provision for a SIM card that is accessible without opening the modem enclosure. In addition to this, the SIM card holder should also have arrangement for sealing.
4.16	SIM Card connector shall have standard 3V/1.8V receptacle and shall support standard / micro / nano SIM cards.
4.17	Modem shall have a RS-232, DB9 port for serial communication. The modem shall be connected to meter using RJ11 / RJ45 and optical port (Meter Side).
4.18	Modem shall have LCD or multiple LED's to indicate communication status, power status, local or remote reading. In case of LED, minimum four no. of LED indicators for data transmission (Tx), data reception (Rx), cellular network signal strength and Power ON to indicate Power on position shall be provided.
4.19	Modem should have a SMA connector to fix high gain type antenna (3dBi/5.5dBi/6dBi) and shall come along with flexible co axial cable of at least 3 feet in length. The antenna shall be able to boost signal strength in areas where signal strength is weak. Receiver sensitivity shall be greater than -100dBm. The connector shall be corrosion less and shock proof.
4.20	The antenna shall function as desired and will not be affected by heat, radiation, or any higher frequencies of the surrounding. The antenna shall contain a magnet at the base for easy mounting.
4.21	Modem shall be able to store and send tamper/event and outage alerts on occurrence and restoration with date and time.
4.22	Modem shall have capability to auto switch network as per availability.
4.23	Modem shall support Short Messaging Service (SMS)/Data packet.
4.24	Modem shall be capable to store the meter data of minimum 45 days
4.25	Modem shall be able to collect and process 15 min meter data in a secured way
4.26	Modem shall support Point to Point transmission and Call Broadcast features
4.27	Modem shall be capable to transfer entire tri-vector meter data in less than 10 minutes without data loss after connection is made
4.28	Modem shall support narrowband band NB-IoT/ 4G bands for all telecom operators.
4.29	Modem should have mechanism (e.g. watchdog) to auto reset or reboot in case of any faults.

Technical Specification For Automated Meter Reading System

4.30	Modem shall synchronize time according to the Network time/Server Time
4.31	Modem should establish automatic connection with Head End System after successful installation of modem.
4.32	The modem should be able to respond on demand query and pre-defined schedule as per user requirement
4.33	Modem should be able to automatically push meter data at configured regular intervals
4.34	Modem should also have store and forward feature.
4.35	Modem should be compatible to NB-IoT/ 4G with fallback to 2G/3G/4G.
4.36	The speed to download / upload data shall be as per LTE CAT 1 speeds.
4.37	Modem shall have feature to reboot through SMS in single/group/bulk operation using SMS API gateway, however the feature shall be disabled till process is approved by BYPL.
4.38	Modem should automatically discover or have provision to configure required settings (APN, SIM no., IP address of SIM etc). In case of change of meter or SIM card the modem shall store data and forward the stored data after approval.
4.39	The communication module engine shall be from reputed company like Wavecom, Siemens, Sony Ericsson, Nokia and Cinterion, Motorola , Qualcomm, Gemalto or equivalent. The module shall not get affected under heat, electromagnetic/ electrostatic/magnetic fields, electromagnetic induction etc.
4.40	Phase reversal condition, if phase & neutral are interchange will not affect the modem functionality in any manner.
4.41	Modem shall have short circuit, over current & over voltage protection.
4.42	Modem shall have input supply fuse for protection & it shall be replaceable without opening cover.
4.43	Modem shall support device management like reset, configuration, firmware upgrade etc through local & OTA command.
4.44	Modem shall have persistent cellular network connectivity & shall be able to connect to cellular network automatically. It shall be connected to cellular network all the time. Modem shall operate 24*7 & shall recover from any deadlock situation immediately in the field.
4.45	Modem shall be able to store critical log stored during abnormal operations like meter data cable disconnect, low signal level, failure of data connect, etc.
4.46	Bidder should provide minimum 01 week training to BYPL officials on the following topics at BYPL Delhi Office.

Technical Specification For Automated Meter Reading System

	<ul style="list-style-type: none"> a. Installation testing commissioning of Modems. b. Operation, maintenance and troubleshooting of modem. c. Configuration of modem
--	--

5.0 Head End System (HES)

5.1	<ul style="list-style-type: none"> a. HES shall be web based and designed on modular approach. b. HES shall support Service Oriented Architecture. c. HES shall be installed in BYPL data center.
5.2	<ul style="list-style-type: none"> a. Offered Software along-with associated software's, plug-in etc shall have perpetual license for use i.e. there shall not be any limit on the basis of time, period, no of transactions, no of readouts, no of reports, generations etc. b. All the upgrades, patches etc shall be provided for at-least 15 years from the date of successful user acceptance test. c. Bidder shall provide offer of software licenses for 10k, 20k and 50k no of end points (Modems).
5.3	<ul style="list-style-type: none"> a. HES shall be developed based on open platform and distributed architecture for scalability without degradation of the performance. b. HES shall be able to cater at least 50k no end points without any need to any other changes after initial deployment.
5.4	HES shall have capability to collect, validate data and process data received from field devices.
5.5	<ul style="list-style-type: none"> a. HES shall also manage the modems installed on field. b. HES shall have user access rights management, dashboard for viewing data in graphical mode, analysis & reporting of data, Security features and audit trail.
5.6	HES system shall have user friendly GUI to monitor communication status, instantaneous parameters, tampers, parameters like voltages, current, active power, power factor, events, consumption etc.
5.7	HES system shall support TCP/IP, UDP, HTTP, FTP, SMTP etc; HES system should be compatible to RDBMS Oracle 12C/My SQL database.
5.8	HES shall have option to export CDF as per MIOS standard as well as user defined report generation in format of Excel, PDF, XML and CSV for further integration with other systems.
5.9	Alerts (for Alarms and Events) shall be displayed in HES for further action and shall be

Technical Specification For Automated Meter Reading System

	user configurable. Events and alarms should be configurable via SMS and Email.
5.10	HES shall have facility for On Demand acquisition of user selectable parameters and data profiles from meter periodically.
5.11	HES shall support data acquisition from different type and all makes of Energy Meters as per BYPL requirement.
5.12	HES shall provide facility to configure the modem remotely without site visit through user access rights. HES shall support upgrade of firmware in the meters/ modems over the air (OTA) in batch mode in bulk.
5.13	HES system shall be able to send tamper/event, outage alerts. It should also be integrated with BYPL systems (like IOMS and SAP) to process this information in real time.
5.14	HES system should have facility to upgrade the firmware for both meters and modems remotely in bulk operation.
5.15	HES System should be able to collect and process instant data in 15 min interval in a secured way.
5.16	HES system shall support both inbound and outbound communication. In outbound communication, the number of retries made by the software for failed meter readings shall be configurable. If the meter cannot be read even after the specified number of retries, the system shall raise an alarm.
5.17	a. HES shall provide communication status. b. In case of non communication HES shall be able to provide root cause of the communication failure.
5.18	a. HES system shall have provision for manual entry of meter data in exceptional cases subject to access rights and maintain audit trail for all such entries. b. A periodic report shall be generated for such activities. c. The input sources of meter data could be CMRIs (Common Meter Reading Instruments), substation log books etc.
5.19	HES system shall ensure that no data is lost and shall have provision to archive data automatically or on demand.
5.20	HES system shall have provision to group modems according to division, usage, category, etc to read them as per schedule.
5.21	HES system shall display phasor diagram, consumption/load profiles by configurable period (15/30 min, hour, day, month, year etc.) day type, tariff, customer type, or any user

Technical Specification For Automated Meter Reading System

	specified collection of meters.
5.22	HES system shall provide energy usage profile for a single meter or group of meters. The load profile shall illustrate energy consumption and peak demand in user defined intervals for a user-specified time period.
5.23	HES system shall have provision to keep on trying to read meters till all meters are read.
5.24	HES system shall be capable of storing minimum 2 years meter data in the database. It should be able to validate and process records in less than thirty minute. Requisite associated hardware sizing and storage calculation for storing 2 year of data shall be provided by the bidder.
5.25	System shall have the ability to recover from a hardware or application failure.
5.26	System shall have provision to monitor and optimize different application processes and services in-terms of CPU usage and memory.
5.27	System shall have capabilities for cloud based hosting or in house server.
5.28	System shall be able to interface with the standard mail system (Lotus Notes, MS exchange, MS Outlook and express etc) for alert and notification.
5.29	HES shall provide support for visually locating modems on maps and importing devices and associated information from SAP, GIS etc.
5.30	HES shall manage geographical, administrative, regional, and the network hierarchy of the utility. These hierarchies shall be imported from external source and / or shall be configurable in the system.
5.31	HES shall support different make of APIs for downloading the data, converting to common data format and storing in the database.
5.32	<ul style="list-style-type: none"> a. HES system shall have necessary security features as per existing and comply in future to cyber laws as mandated by NCIIPC, Certin, CEA and Government of India. b. HES shall have mechanism to identify fraud, data breach and manipulation of data. c. All configurations of User Management / Access Rights/ Policies shall be as per the requirements of BYPL. d. Communication between HES and meter should be encrypted with minimum AES-128 bit encryption e. Logging: Logs must be maintained for all attempts to log on (both successful and unsuccessful), any privilege change requests (both successful and unsuccessful), user actions affecting security (such as password changes), attempts to perform actions not

Technical Specification For Automated Meter Reading System

	authorized by the authorization controls, all configuration changes etc. Additionally, the access to such logs must be controlled in accordance to the least-privilege concept mentioned above, so that entries may not be deleted, accidentally or maliciously.
5.33	<p>System should be able to generate following reports with facility to export in excel, pdf, csv formats. Other reports may also be as per user requirement:</p> <ul style="list-style-type: none"> a. Daily/monthly energy and data collection reports, b. Accumulated reports of auto alarms and network failure c. Instant and cumulative Energy d. Detailed tamper reports e. Report for duration of power off and power on in a month and cumulatively till date f. Customized reports as per the User requirement for detailed analysis g. Report for overloading, under loading conditions with duration and other details h. Reports for Voltage imbalance, Max demand, Low power factor, etc i. Report for meter master, modem, SIM, division, installation date etc with other attributes j. Reports for installation, removal, time set report etc k. Exception reports for usage, threshold, validation failure, flags etc l. Geographic/ administrative/ regional hierarchy wise reporting facility m. Diagnostic reports for SLA calculations n. Meter/ Modem Change management. o. Audit Trail with time stamp for recording all the changes p. User right management to control roles & rights q. Modem communication status, r. Ageing of non communicating modems, s. Modem data and meter data availability duly validated, t. Central repository for all data with identification of active and inactive meters, u. Daily / Monthly Tamper reports including details of total power outage,
5.34	HES must have built-in redundancy & fail over architecture to ensure seamless system recovery.
5.35	Modem shall have near real time & historical information & shall have device management functionality for managing, monitoring & control of modems. HES shall support modem life cycle management like device registration, installation, provisioning, maintenance, decommissioning, etc.
5.36	Bidder should provide minimum 01 week training to BYPL officials on the following topics

Technical Specification For Automated Meter Reading System

	<p>at BYPL Delhi Office.</p> <ul style="list-style-type: none">a. Operation of software system.b. Troubleshooting in software system.c. Management and control of data and user rights.d. Data archive.e. Maintenance and all deployment activities required in case of any abnormality or server restart.f. Use of all the features of HES.g. Administration and user level training for operations
5.37	<ul style="list-style-type: none">a. Offered HES Solution should be with onsite warranty and supportb. During warranty or AMC support period HES must be covered with necessary minor or major upgrades (Software support and upgrade-Major i.e. Version and minor too).

Technical Specification For Automated Meter Reading System

6.0 General Conditions:

6.1	The bidder should provide mobile application for configuration, GPS location capturing, DT/Modem and Meter Master Update, troubleshooting, viewing data and status of modems. Modifications required in modem configuration utility, mobile application should be done by the bidder, free of cost.
6.2	Bidder to provide MRD download functionality (scheduled and on-demand), MRD storage and data archiving (auto or as per requirement)
6.3	Bidder shall ensure to either integrate the HES or directly route data collected by modem to Smartgrid / AMI system procured by BYPL in future. Vendor to provide undertaking to support the integration of modem data with future smart grid solution of BYPL
6.4	The bidder shall be responsible for secure data backup, archival and retrieval of data for the entire contract period.
6.5	HES software shall be deployed with functionalities and deliverables mentioned in this document, training to BYPL designated personnel and end to end testing within 45 days of award of purchase order. Payment shall be released subject to submission of deliverables as specified.
6.6	The bidder shall prepare a Project tracker listing down all the activities in detail
6.7	The bidder shall be responsible for transportation of modems from BYPL store to site, deploy, data availability at HES
6.8	The bidder shall ensure deployment of head-end system and integration with BYPL's applications before commencement of field deployment.

7.0 Warranty and Marking on Modem

7.1	Warranty	<p>a. The Modem device shall have warranty for a period of 60 months from the date of commissioning, 66 months from the date of supply, whichever is earlier.</p> <p>b. In case the Modem is being repaired for more than 2 times during the warranty period, the same shall be replaced with new Modem within 7 working days without any additional cost to BYPL.</p> <p>c. The warranty period of replaced new Modem shall be treated as remaining warranty period of existing Modem.</p> <p>d. Faulty modems under warranty shall be verified by bidder at site and submit root cause analysis report for each modem that is found</p>
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Technical Specification For Automated Meter Reading System

		faulty within 20 days from the issue reported / found.
7.2	Marking on Modem	<p>a. Modem shall have a nameplate clearly visible and effectively secured against damage, indelibly and distinctly marked with all essential particulars as per the relevant standards</p> <p>b. Following details shall be printed on name plate of Modem in addition to the standard:</p> <ul style="list-style-type: none"> i. Manufacture's name ii. Serial number, Model no., IMEI no. and bar code for serial number iii. Month and Year of manufacture iv. Property of BYPL v. Purchase Order No. & date

8.0 Quality Assurance, Inspection and Testing

8.1	Vendor Quality Plan (QP)	To be submitted for Purchaser's approval.
8.2	Sampling Method	Sampling Method for quality checks shall be as per relevant IS/ IEC/ IEEE and Purchaser's prior approval shall be taken for the same.
8.3	Inspection Hold- Points	To be mutually identified, agreed and approved in Quality Plan.
8.4	Type tests and Routine tests	<p>a. All routine, acceptance & type tests shall be carried out on the modem body in accordance with the relevant IS/IEC in presence of BYPL representative.</p> <p>b. The modem shall comply with latest regulation issued by DoT / WPC / TRAI Cert-In / NCIIPC etc. (including cyber security test/regulation) etc.</p> <p>c. Type tests for IP rating, Environmental testing and safety class shall be submitted as per relevant IS/ IEC.</p>
8.5	Acceptance tests and Inspection	<p>a. Acceptance tests shall be carried out as per relevant standards and mutually agreed points.</p> <p>b. Purchaser reserves the right to inspect /witness all tests on the modems at Seller's works at any time, prior to dispatch, to verify compliance with the specification/ standards.</p> <p>c. In-process and / or final inspection call intimation shall be given at</p>

Technical Specification For Automated Meter Reading System

		least 15 days in advance to purchaser.
8.6	Cyber Security Testing	Compliances to the guidelines/ framework issued by NCIIPC, Certin, CEA and Government of India shall be followed for testing of Cyber-Security at Design, Manufacturing and Dispatch level. Cyber security test reports to be provided from govt. designated laboratories for cyber security conformance testing.

9.0 Packing, Marking, Shipping, Handling and Storage

9.1	Packing	Every modem shall be properly sealed / packed in environmental friendly boxes/ cartons for protection against damage, vibration and ingress of dust and moisture.
9.2	Packing for accessories and spares	Robust non returnable packing case with all the above protection & identification Label.
9.3	Marking	On each packing case, following details are required : a. Individual serial number b. Purchaser's name c. PO number (along with SAP item code, if any) & date d. Equipment Tag no. (if any) e. Destination f. Manufacturer / Supplier's name g. Address of Manufacturer / Supplier / it's agent h. Type , rating and other description of equipment i. Country of origin j. Month & year of Manufacturing k. Case measurements l. Gross and net weights in kilograms m. All necessary slinging and stacking instructions
9.4	Shipping	The seller shall be responsible for all transit damage due to improper packing.
9.5	Handling and Storage	Manufacturer instruction shall be followed. Detail handling & storage instruction sheet /manual to be furnished before commencement of supply.

Technical Specification For Automated Meter Reading System

10.0 Deviations

10.1	Deviations	Deviations from this Specification shall be stated in writing with the tender by reference to the Specification clause/GTP/Drawing and a description of the alternative offer. In absence of such a statement, it will be assumed that the bidder complies fully with this specification.
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11.0 Document and Sample Submission:

Drawing submission shall be as per the matrix given below.

- i. All documents/ drawing shall be provided in soft copy only.
- ii. Language of the documents shall be English only.
- iii. Incomplete submission shall be liable for rejection.
- iv. Document 'Check-Sheet Compliance' shall be first sheet of the bid document.
- v. No submission is acceptable without 'Check List Compliance' sheet.

Order of document shall be strictly as per the check list.

S#	Detail of Document	Bid	Approval	Pre Dispatch
1	Technical Check List	Required		
2	Guaranteed Technical particulars (GTP)-As per this specification.	Required	Required	
3	Deviation Sheet, if any	Required	Required	
4	GA / cross sectional drawing of modem showing all the views / sections	Required	Required	
5	Work Instruction to install modem	Required	Required	Required
6	Work instructions for troubleshooting and diagnosis of modem and HES	Required	Required	Required
7	Samples of each type offered.	2 no's	4 no's	
8	Any software, accessories, tool required for installation/ operation of modem and HES	Required	Required	Required
9	Manufacturer's quality assurance plan and certification for quality standards	Required	Required	
10	Type Test report of offered model/ type/ rating	Required		
11	Complete product catalogue and user manual.	Required		
12	Customer Reference List	Required		

Technical Specification For Automated Meter Reading System

S#	Detail of Document	Bid	Approval	Pre Dispatch
13	Recommended list of spare and accessories	Required		
14	Program for production and testing (A)		Required	Required
15	As Built Drawing		Required	Required
16	O&M Instruction , Troubleshooting Charts / Manuals		Required	Required
17	Inspection and test reports, carried out in manufacturer's works			Required
18	Routine Test certificates			Required
19	Test certificates of all bought out items			Required
20	Additional features of HES from this specification.	Required	Required	
21	Architecture of AMR system (Modem and HES both) detailing all data formats, methods, protocols used, details of application files/ APIs, detail of databases, storages, security features etc.	Required	Required	
22	Demo login of HES on cloud	Required		
23	Server specification and hardware sizing including requirement of operating System and storage calculation for storing 2 year of data for 10k, 20k, 50k end points.	Required	Required	
24	Implementation plan (Both modem and HES)		Required	
25	User Acceptance Test Report of HES			Required
26	Trouble shooting instruction of HES			Required
27	Any other document required for monitoring, operation and implementation of HES and Modem as decided during technical bid evaluation or in the event of approval.	Required	Required	Required

Technical Specification For Automated Meter Reading System

12.0 Delivery

12.1	Delivery	Despatch of Material: Vendor shall despatch the material, only after the Routine Tests/Final Acceptance Tests (FAT) of the material witnessed/waived by the Purchaser, and after receiving written Material Despatch Clearance (MDC) from the Purchaser.
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Annexure - A- Guaranteed Technical Particulars (Data By Supplier)

- Bidder shall furnish the GTP format with all details against each clause of this specification.
- Bidder shall not change the format of GTP or clause description.
- Bidder to submit duly filled GTP in hard copy format with company seal.

Clause No.	Clause Description	Manufacturer's Reply
1		
2		
3		
4		

Bidder / Vendor seal / signature -----

Name of the bidder	
Address of the bidder	
Name of contact person	
Telephone number and email id	

Annexure - B- Recommended Accessories / Spares (Data By Supplier)

S#	Description of spare part	Unit	Quantity
1			
2			
3			
4			

Volume - II

FORMATS

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF 4G/NBIOT
MODEM ALONG WITH HES SOFTWARE FOR KCC CONSUMERS AND DT
METERS**

NIT No. CMC/BY/22-23/RS/SS/14

Dated : 20.05.2022

Annexure -I

BID FORM

To
Head of the Department
Contracts & Materials
BSES Yamuna Power Ltd
BSES Building, Karkardooma
New Delhi- 110032

Sir,

- 1 We understand that BYPL is desirous of procuring "Supply, Installation, Testing and Commissioning Of 4G/ NBIOT Modem along with HES Software for KCC CONSUMERS and DT Meters" in it's licensed distribution network area in Delhi.
- 2 Having examined the Bidding Documents for the above named works, we the undersigned, offer to deliver the goods in full conformity with the Drawings, Conditions of Contract and specifications for the sum of..... (figures.....) or such other sums as may be determined in accordance with the terms and conditions of the contract .The above Amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.
- 3 If our Bid is accepted, we undertake to deliver the entire goods as per delivery schedule given by you from the date of award of purchase order/letter of intent.
- 4 If our Bid is accepted, we will furnish a performance bank guarantee for an amount of 5% (Five) percent of the total contract value for due performance of the Contract in accordance with the General Conditions of Contract.
- 5 We agree to abide by this Bid for a period of 120 days from the date fixed for bid opening under clause 9.0 of GCC, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- 6 We declare that we have studied the provision of Indian Income Tax Law and other Indian Laws for supply of equipments/materials and the prices have been quoted accordingly.
- 7 Unless and until Letter of Intent is issued, this Bid, together with your written acceptance there of, shall constitute a binding contract between us.
- 8 We understand that you are not bound to accept the lowest, or any bid you may receive.
- 9 There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract, Clause 19 of GCC .

Dated this..... day of..... 20

Signature..... In the capacity of

.....duly authorized to sign for and on behalf of
(IN BLOCK CAPITALS)

BIDDER DETAIL FORM

Offer No.:

Date:

To,

Head (Contracts and Material)
BSES YAMUNA POWER LIMITED
3rd Floor "A" Block, Shakti Kiran Building,
Delhi-110032 (INDIA).

Dear Sir,

In response to your Tender No. CMC/BY/22-23/RS/SS/14 dated 20.05.2022 for Supply, Installation, Testing and Commissioning Of 4G/NB-IOT Modem along with HES Software for KCC CONSUMERS and DT Meters for BSES YAMUNA POWER LTD, Delhi-32. We hereby submit our offer herewith.

1. Bidder Name :
2. Website Address :
3. Email Address :
4. Address for Communication :
.....
.....
5. Telephone Number :
6. Fax/Telefax Number :
7. Authorized Person -
 - a. Name :
 - b. Designation :
 - c. Mobile No. :
 - d. Email-ID :
8. Alternate Person -
 - a. Name :
 - b. Designation :
 - c. Mobile No. :
 - d. Email-ID :

9. PAN Number :
10. CIN Number :
11. GST No. :

12. Particulars of EMD

- a. Amount : Rs.....
- b. Mode of Payment (BG) :
- c. BG No. :
- d. Date :
- e. Name of the Bank :
- f. Address of the Bank :
- g. Validity of BG :

13. Particulars of Tender Fee

- a. Amount : Rs.....
- b. DD No. :
- c. Date :
- d. Name of the Bank :
- e. Address of the Bank :

14. Turnover of the Bidder in last 3 years (Please submit copy of Annual Report)

Year	Turnover (Rs Crores)
2019-2020	
2020-2021	
2021-2022	
Average Turnover	

15. Details of similar work / order executed during last 2 years (Please submit copy of Purchase Order / Completion certificate from the client).

Description of the Work/ Order Executed	Value of Work/Order Executed	Name of the Client	Start Date	Finish Date	Doc. Evidence at Page No.

16. Following Documents are submitted to substantiate other eligibility criteria.

- i)
- ii)
- iii)

DECLARATION

- 1) We have read and understood the terms & conditions of the above mentioned tender and comply with all Terms & Conditions of your Tender.(In case of any deviation the Bidder must attach a separate sheet clearly mentioning the Clause No. of the Tender and Deviation thereto)
- 2) We certify that the information mentioned above are true and correct to best of our Knowledge.
- 3) In case of receipt of order we confirm that payment shall be received through e-Banking / Electronics Transfer.
- 4) This offer contains No. of pages including all Annexure and enclosures.

Place:

Signature of Authorized Signatory

Date:

Name:

Designation:

Seal:

Annexure -II

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, BYPL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as techno commercial qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. BYPL shall provide the user id and password to the authorized representative of the bidder. (Authorization letter in lieu of the same be submitted along with the signed and stamped acceptance form)
2. BYPL will make every effort to make the bid process transparent. However, the award decision by BYPL would be final and binding on the supplier.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of BYPL, bid process, bid technology, bid documentation and bid details.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of BYPL.
6. In case of intranet medium, BYPL shall provide the infrastructure to bidders, further, BYPL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by BYPL.
8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at BYPL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder. No further communication will be there.
11. No requests for time extension of the auction event shall be considered by BYPL.
12. The original price bids of the bidders shall be reduced on pro-data basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at contract amount.

Signature & seal of the Bidder

Annexure -III

FORMAT FOR EMD BANK GUARANTEE

(To be issued in a Non Judicial Stamp Paper of Rs.50/-purchased in the name of the bank)

Whereas [name of the Bidder](hereinafter called the Bidder“) has submitted its bid dated [date of submission of bid] for the supply of [name and/or description of the goods] (hereafter called “the Bid”).

KNOW ALL PEOPLE by these presents that WE [name of bank]at[Branch Name and address],having our registered office at[address of the registered office of the bank](herein after called —the Bank“),are bound unto BSES Yamuna Power Ltd., with it’s Corporate Office at BSES Shakti Kiran Building Karkardooma, New Delhi -110032 , (herein after called —the Purchaser“)in the sum of Rs.(Rupees.....only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents.

Sealed with the Common Seal of the said Bank this _____ day of _____ 20____.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form ;or

2. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:

(a) Fails or refuses to execute the Contract Form , if required; or

(b) Fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/Terms and conditions;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that is its demand the purchaser will note that amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including One Twenty (120) days after the due date of submission bid, and any demand in respect thereof should reach the Bank not later than the above date.

(Stamp & signature of the bank)

Signature of the witness

Beneficiary Bank detail with IFSC Code:

1. Name of the Bank: Axis Bank Limited
2. Branch Name & Full Address: C-58, Basement & Ground Floor, Preet Vihar, Main Vikas Marg, New Delhi 110032
3. Branch Code: 055
4. Bank Account No: 911020005246567
5. IFSC Code: UTIB0000055

Annexure –IV

PRICE FORMAT

Tender No: CMC/BY/22-23/RS/SS/14

S.N.	ITEM DESCRIPTION	QTY	UOM	EX-WORKS PRICE/PC (INR)	GST %	GST Amount (INR)	UNIT LANDED COST/PC(INR)	TOTAL LANDED COST IN (INR)
1	Supply of 4G/NBIOT Modem	6000	Nos					
2	Installation, Testing, Commissioning of 4G / NBIOT Modem per Scope of Work	6000	Nos					
3	Supply of Head End System (HES) Software	01	Lot					
4	Installation, Implementation, Integration & Training of Head End System (HES) Software	01	Lot					
5	Supply of License for HES Software:	01	Lot					
5a.	Option 1: for 10K End points							
5b.	Option 2: for 20K End points							
5c.	Option 3: for 50K End points							
Grand Total in Rs (1+2+3+4+5)								
6	Annual Maintenance Charge (AMC) for smooth operation of MDAS/HES, database management, trouble shooting and resolution of communication related issues after 12 months onsite support	1 st	Year					
		2 nd	Year					
		3 rd	Year					
		4 th	Year					
		5 th	Year					
7	Annual Maintenance Charge (AMC) for Hardware management, trouble shooting and resolution of communication and software related issues after 12 months onsite support.	Per modem per year						

Please attach the covering letter head along with the price format.

Award of AMC shall be at the sole discretion of BYPL after successful completion of free support period of 12 months post deployment of Modems and HES

Note :

- a) The delivery shall be as per the requirement and as per the written instructions issued by C&M dept., BYPL.
- b) The quantity shown is indicative only for tentative and can vary. PO(s) will be released as per the actual requirement. However, supplier has to deliver the material within the delivery schedule provided.
- c) BYPL reserves the right to split the quantity to any extent.
- d) The prices quoted are inclusive of training of BYPL officials and 01 Year free support period post deployment of Modems and HES (as per spec).
- e) The bidder shall, at its own, handle all imported equipment's and handle all formalities for custom clearances, port charges, etc. if any.
- f) All Tools & Tackles, Consumables and Commissioning Spares required to complete the work shall be included in the quoted rates
- g) Any other item not mentioned above but are required for successful completion of the works shall be deemed to be included in the above quoted rate.
- h) Integration of Modem data with future Smart Grid/AMI solution of BYPL

- i) Provide training to users and support with documentation like operation manual, DWI, Architecture and Design document, configuration and troubleshooting guidelines.
- j) AMC scope attached in Technical Annexure. Award of AMC shall be at the sole discretion of BYPL after successful completion of free support period of 12 months post deployment of Modems and HES
- k) SIM card to be provided by BYPL.
 - * Installation can be done by BYPL also, if required.

Note: Award of work (for line items mentioned above) shall be done on BYPL discretion only. Bidder must depute skilled & efficient manpower for carrying out above mentioned work at Pole mounted transformers, Plinth mounted transformers, Package transformers and HVDS/Feeder installations

NAME OF BIDDER WITH STAMP

Annexure-V

COMMERCIAL TERMS AND CONDITIONS

Tender No: CMC/BY/22-23/RS/SS/14

S/NO	ITEM DESCRIPTION	AS PER BYPL	CONFIRMATION OF BIDDER/BIDDER terms		
1	Validity of prices	120 days from the due date of submission or amended due date of submission			
2	Price basis	a) Firm, FOR Delhi store basis. Prices shall be inclusive of GST, freight upto Delhi stores. b) Unloading at stores shall be in vendor's scope c) Transit insurance in BYPL scope			
3	Payment Terms				
	Sl. No.	Major Activities of AMR Project	Payment Milestone	Payment Terms -Supply	Payment Terms - Service
	A.	Deployment of HES at BYPL data center (Test Environment) as per BYPL's Nodal team (IT, EA & KCC) directives	1	90% payment against Supply of Lot 1 (10% Modem Quantity) and 70% Payment for HES after successful completion of UAT-1	90% payment against Installation, Testing, Commissioning of Lot 1 (10% Modem Quantity) and 70% Payment for Implementation, Integration & Training of Head End System (HES) Software after successful completion of UAT-1
	B.	Supply of 10% Modem			
	C.	Installation of pilot modem of atleast 10% of total quantity at site & its integration with HES			
	D	UAT-1 (post successful pilot deployment)			
	E	Deployment of HES production environment at BYPL data center.			
	F	Installation of balance modems at site & its integration	2	90% Payment against Supply of Lot 2 (90% Modem Quantity)	90% Payment against Installation, Testing, Commissioning of Lot 2 (90% Modem Quantity)
	G	Final UAT-2 (post 100% installation of modem & HES)			
	H	Go Live after incorporation of any finding and open points of UAT -2.			
	I	Handing Over Taking Over (HO-TO) of complete system, including all necessary documentation.			
	J	Free Support Period - 01 year from successful Handing Over Taking Over	3	Balance 10% payment against Supply of Modems and 30% of HES	Balance 10% payment for Installation, Testing, Commissioning of Modems and 30% for Implementation, Integration & Training of Head End System (HES) Software

Payment shall be released within 45 days subject to submission of following documents duly certified by BYPL project-in-charge:

- i. Consignee copy of LR
- ii. Detailed invoice showing commodity description, qty, unit & total price,
- iii. Original certificate issued by BYPL confirming receipt of material at site & acceptance
- iv. Dispatch clearance & inspection report issued by the inspection authority
- v. Packing List, Test Reports
- vi. Work Completion Certificate
- vii. Guarantee Certificate.
- Viii. Bank Guarantee

AMC: AMC Payment shall be done on quarterly basis after completion of each quarter.

4	Completion time	120 days from date of LOI/ PO	
5	Defect Liability period	The Defect liability period shall be 60 months from supply or 66 months from Installation, whichever is earlier.	
6	Penalty for delay	1% per week of delay of undelivered units or part thereof subject to maximum of 10% of total PO (ex-work) value of undelivered units	
7	Performance Bank Guarantee	Supplier shall submit the performance bank guarantee equivalent to the 10% of the order value at the time of claiming the last payment as per clause no. 10.0 (Terms of payment and billing), with the validity of the bank guarantee till Defect Liability Period plus 3 months.	
8	Contract Performance Bank Guarantee	Contract performance bank guarantee of total 10% of the contract price shall be submitted within 15 days of award of contract with the validity till completion of the contract period.	
9	Reverse Auction Event	In a bid to make our entire procurement process more fair and transparent, BYPL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as techno commercial qualified based on the tender requirements shall be eligible to participate in the reverse auction event.	

ANNEXURE VI

SCHEDULE OF DEVIATIONS

Tender No: CMC/BY/22-23/RS/SS/14

Vendor shall refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this tender shall be set out by the Bidder, Clause by Clause in this schedule and submit the same as a part of the Technical Bid.

Unless **specifically** mentioned in this schedule, the tender shall be deemed to confirm the BYPL's specifications:

SL NO	Clause No.	Details of deviation with justifications

Bidder should also furnish the below details for future communication:-

GENERAL INFORMATION

NAME OF COMPANY

POSTAL ADDRESS

FOR TECHNICAL QUERY:

CONTACT PERSON NAME

DESIGNATION

E-MAIL

MOBILE NO

TELEPHONE NO

FOR COMMERCIAL QUERY:

CONTACT PERSON NAME

DESIGNATION

E-MAIL

MOBILE NO

TELEPHONE NO

Annexure - VII

QUALIFICATION CRITERIA

Tender No: CMC/BY/22-23/RS/SS/14

TECHNICAL:-

Qualifying Criteria			
SL	Criteria	Documents Required along with Bid	Documentary Evidence attached page no. detail
1	The bidder shall be one of the following: a. An Original Equipment Manufacturer (OEM) of modems and HES. b. OEM of meters and HES having technology partnership with OEM of modems.	1. Certificate of Incorporation and Registration . 2. Details of manufacturing facilities and associated processes 3. Copies of agreements for technology partnership in case of bidders meeting Criteria 'b'	
2	Bidder must have successfully supplied and installed 5000 modems and Head End Software for these modem in utilities/ state electricity boards in India during last 03 years ending on the date of tender submission.	1. Copies of Purchase Orders 2. Copies of Work Completion Certificates	
3	Bidder shall have performance certificates from at-least 02 utility / electricity boards for satisfactory operation of modem and associated HES software installed during last 03 years ending on the date of tender submission. Each performance certificate should pertain to satisfactory operation of at least 1000 No modems along-with associated HES.	1. Copies of performance certificates.	
4	Bidder shall comply with all the statutory compliance as per the applicable laws/rules before the start of the work.	1. Self undertaking	
5	The bidder should have service centers in India equipped with in-house testing facilities.	Bidder confirmation required	
6	Bidder/ OEM should have following quality certifications for its manufacturing and services function. a. ISO 9001:2015 or latest b. ISO 14001:2015 or latest c. ISO 27001:2013 or latest d. OHSAS 18001:2007 or latest	1.Valid Certificate copies.	

COMMERCIAL:-

Qualifying Criteria			
SL	Criteria	Documents Required	Documentary Evidence attached page no. detail
1	Bidder must have average annual turnover of Rs 1 crore or more in last three (3) Financial years (2019-20, 20-21 and 21-22).	1. Audited balance sheets / Duly certified CA certificate with UDIN to be submitted	
2	The bidder shall submit an undertaking that "NO LITIGATION" is pending with BYPL or its Group/Associates Companies	1. Self Undertaking	
3	The bidder has not been blacklisted/debarred by any central/state government institution/Electricity Utilities.	1. Self Undertaking	
4	The bidder must have valid PAN No., GST registration Number, in addition to other statutory compliances. The bidder must submit the copy of registrations and submit an undertaking that the bidder shall comply all the statutory compliance as per the applicable laws/rules etc. Before the start of the supply/work	1. Copies of Relevant Documents 2. Self-undertaking	

The bidder should send the compliance of above mentioned parameters in technical offer and has to give an under about **No Objection** to verify his manufacturing facility as a part of tendering process.

SELF DECLARATION FORM

Tender No: CMC/BY/22-23/RS/SS/14

To,

The HOD
Contract & Material Dept
BSES Yamuna Power LTD
Karkardooma Delhi-110032

Subject: Declaration for Not blacklisted

Sir,

1. I / We, the undersigned do hereby declare that, I / We have never ever been blacklisted and / or there were no debarring actions against us for any default in supply of material/ Services or in the performance of the contract entrusted to us in any of the State Government, Central Government or any other public sector undertaking or a corporation or Electricity Utilities of India.
2. In the event of any such information pertaining to the aforesaid matter found at any given point of time either during the course of the contract or at the bidding stage, my bid/ contract shall be liable for truncation/ cancellation/ termination without any notice at the sole discretion of the purchaser.

Yours faithfully

Place:
Date:

Signature of the bidder with seal

(This form shall be duly signed by the bidder & submitted along with the original copy of the bid.)

VENDOR CODE OF CONDUCT

Purchaser is committed to conducting its business in an ethical, legal and socially responsible manner. To encourage compliance with all legal requirements and ethical business practices, Purchaser has established this Vendor Code of Conduct (the "Code") for Purchaser's Vendors. For the purposes of this document, "Vendor" means any company, corporation or other entity that sells, or seeks to sell goods or services, to Purchaser, including the Vendor's employees, agents and other representatives.

Fundamental to adopting the Code is the understanding that a business, in all of its activities, must operate in full compliance with the laws, rules and regulations of the countries in which it operates. This Code encourages Vendors to go beyond legal compliance, drawing upon internationally recognized standards, in order to advance social and environmental responsibility.

I. Labour and Human Rights

Vendors must uphold the human rights of workers, and treat them with dignity and respect as understood by the international community.

Fair Treatment - Vendors must be committed to a workplace free of harassment. Vendors shall not threaten workers with or subject them to harsh or inhumane treatment, including sexual harassment, sexual abuse, corporal punishment, mental coercion, physical coercion, verbal abuse or unreasonable restrictions on entering or exiting company provided facilities.

Anti discrimination - Vendors shall not discriminate against any worker based on race, colour, age, gender, sexual orientation, ethnicity, disability, religion, political affiliation, union membership, national origin, or marital status in hiring and employment practices such as applications for employment, promotions, rewards, access to training, job assignments, wages, benefits, discipline, and termination. Vendors shall not require a pregnancy test or discriminate against pregnant workers except where required by applicable laws or regulations or prudent for workplace safety. In addition, Vendors shall not require workers or potential workers to undergo medical tests that could be used in a discriminatory way except where required by applicable law or regulation or prudent for workplace safety.

Freely Chosen Employment - Forced, bonded or indentured labour or involuntary prison labour is not to be used. All work will be voluntary, and workers should be free to leave upon reasonable notice. Workers shall not be required to hand over government-issued identification, passports or work permits as a condition of employment.

Prevention of Under Age Labor - Child labor is strictly prohibited. Vendors shall not employ children. The minimum age for employment or work shall be 15 years of age, the minimum age for employment in that country, or the age for completing compulsory education in that country, whichever is higher. This Code does not prohibit participation in legitimate workplace apprenticeship programs that are consistent with Article 6 of ILO Minimum Age Convention No. 138 or light work consistent with Article 7 of ILO Minimum Age Convention No. 138.

Juvenile Labor - Vendors may employ juveniles who are older than the applicable legal minimum age for employment but are younger than 18 years of age, provided they do not perform work likely to jeopardize their health, safety, or morals, consistent with ILO Minimum Age Convention No. 138.

Minimum Wages - Compensation paid to workers shall comply with all applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits. Any Disciplinary wage deductions are to conform to local law. The basis on which workers are being paid is to be clearly conveyed to them in a timely manner.

Working Hours - Studies of good manufacturing practices clearly link worker strain to reduced productivity, increased turnover and increased injury and illness. Work weeks are not to exceed maximum set by local law. Further, a work week should not be more than 60 hours per week, including overtime, except in emergency or unusual situations. Workers should be allowed at least one day off per seven-day week.

Freedom of Association - Open communication and direct engagement between workers and management are the most effective ways to resolve workplace and compensation issues. Vendors are to respect the rights of workers to associate

freely and to communicate openly with management regarding working conditions without fear of reprisal, intimidation or harassment. Workers' rights to join labour unions seek representation and or join worker's councils in accordance with local laws should be acknowledged.

II. Health and Safety

Vendors must recognize that in addition to minimizing the incidence of work-related injury and illness, a safe and healthy work environment enhances the quality of products and services, consistency of production and worker retention and morale. Vendors must also recognize that ongoing worker input and education is essential to identifying and solving health and safety issues in the workplace.

The health and safety standards are:

Occupational Injury and Illness - Procedures and systems are to be in place to prevent, manage, track and report occupational injury and illness, including provisions to: a) encourage worker reporting; b) classify and record injury and illness cases; c) provide necessary medical treatment; d) investigate cases and implement corrective actions to eliminate their causes; and e) facilitate return of workers to work.

Emergency Preparedness - Emergency situations and events are to be identified and assessed, and their impact minimized by implementing emergency plans and response procedures, including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.

Occupational Safety - Worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, vehicles, and fall hazards) are to be controlled through proper design engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tagout), and ongoing safety training. Where hazards cannot be adequately controlled by these means, workers are to be provided with appropriate, well-maintained, personal protective equipment. Workers shall not be disciplined for raising safety concerns.

Machine Safeguarding - Production and other machinery is to be evaluated for safety hazards. Physical guards, interlocks and barriers are to be provided and properly maintained where machinery presents an injury hazard to workers.

Industrial Hygiene - Worker exposure to chemical, biological and physical agents is to be identified, evaluated, and controlled. Engineering or administrative controls must be used to control over exposures. When hazards cannot be adequately controlled by such means, worker health is to be protected by appropriate personal protective equipment programs.

Sanitation, Food, and Housing - Workers are to be provided with ready access to clean toilet, facilities potable water and sanitary food preparation, storage, and eating facilities. Worker dormitories provided by the Participant or a labour agent are to be maintained clean and safe, and provided by the Participant or a labour agent, hot water for bathing and showering, and adequate heat and ventilation and reasonable personal space along with reasonable entry and exit privileges.

Physically Demanding Work - Worker exposure to the hazards of physically demanding tasks, including manual material handling and heavy or repetitive lifting, prolonged standing and highly repetitive or forceful assembly tasks is to be identified, evaluated and controlled.

III. Environmental

Vendors should recognize that environmental responsibility is integral to producing world class products In manufacturing operations, adverse effects on the environment and natural resources are to be minimized while safeguarding the health and safety of the public.

The environmental standards are:

Product Content Restrictions - Vendors are to adhere to applicable laws and regulations regarding prohibition or restriction of specific substances including labeling laws and regulations for recycling and disposal. In addition, Vendors are to adhere to all environmental requirements specified by Purchaser.

Chemical and Hazardous Materials -Chemical and other materials posing a hazard if released to the environment are to be identified and managed to ensure their safe handling, movement storage, recycling or reuse and disposal.

Air Emissions - Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations are to be characterized, monitored, controlled and treated as required prior to discharge.

Pollution Prevention and Resource Reduction -Waste of all types, including water and energy, are to reduced or eliminated at the source or by practices such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-using materials.

Wastewater and Solid Waste - Wastewater and solid waste generated from operations industrial processes and sanitation facilities are to be monitored, controlled and treated as required prior to discharge or disposal.

Environmental Permits and Reporting - All required environmental permits (e.g. discharge monitoring) and registrations are to be obtained, maintained and kept current and their operational and reporting requirements are to be followed.

IV. Ethics

Vendors must be committed to the highest standards of ethical conduct when dealing with workers, Vendors, and customers.

Corruption, Extortion, or Embezzlement - Corruption, extortion, and embezzlement, in any form, are strictly prohibited. Vendors shall not engage in corruption, extortion or embezzlement in any form and violations of this prohibition may result in immediate termination as an Vendor and in legal action.

Disclosure of Information - Vendors must disclose information regarding its business activities, structure financial situation, and performance in accordance with applicable laws and regulations and prevailing industry practices.

No Improper Advantage - Vendors shall not offer or accept bribes or other means of obtaining undue or improper advantage.

Fair Business, Advertising, and Competition - Vendors must uphold fair business standards in advertising, sales, and competition.

Business Integrity - The highest standards of integrity are to be expected in all business interactions. Participants shall prohibit any and all forms of corruption, extortion and embezzlement. Monitoring and enforcement procedures shall be implemented to ensure conformance.

Community Engagement - Vendors are encouraged to engage the community to help foster social and economic development and to contribute to the sustainability of the communities in which they operate.

Protection of Intellectual Property - Vendors must respect intellectual property rights; safeguard customer information; and transfer of technology and know-how must be done in a manner that protects intellectual property rights.

V. Management System

Vendors shall adopt or establish a management system whose scope is related to the content of this Code. The management system shall be designed to ensure (a) compliance with applicable laws, regulations and customer requirements related to the Vendors' operations and products; (b) conformance with this Code; and (c) identification and mitigation of operational risks related to this Code. It should also facilitate continual improvement.

The management system should contain the following elements:

- i. Company Commitment - Corporate social and environmental responsibility statements affirming Vendor's commitment to compliance and continual improvement.
- ii. Management Accountability and Responsibility - Clearly identified company representative[s]responsible for ensuring implementation and periodic review of the status of the management systems.
- iii. Legal and Customer Requirements - Identification, monitoring and understanding of applicable laws, regulations and customer requirements.

- iv. Risk Assessment and Risk Management - Process to identify the environmental, health and safety and labour practice risks associated with Vendor's operations. Determination of the relative significance for each risk and implementation of appropriate procedural and physical controls to ensure regulatory compliance to control the identified risks.
- v. Performance Objectives with Implementation Plan and Measures - Areas to be included in a risk assessment for health and safety are warehouse and storage facilities, plant/facilities support equipment, laboratories and test areas, sanitation facilities (bathrooms), kitchen/cafeteria and worker housing /dormitories. Written standards, performance objectives, and targets an implementation plans including a periodic assessment of Vendor's performance against those objectives.
- vi. Training - Programs for training managers and workers to implement Vendor's policies, procedures and improvement objectives.
- vii. Communication - Process for communicating clear and accurate information about Vendor's performance, practices and expectations to workers, Vendors and customers.
- viii. Worker Feedback and Participation - Ongoing processes to assess employees' understanding of and obtain feedback on practices and conditions covered by this Code and to foster continuous improvement.
- ix. Audits and Assessments - Periodic self-evaluations to ensure conformity to legal and regulatory requirements, the content of the Code and customer contractual requirements related to social and environmental responsibility.
- x. Corrective Action Process - Process for timely correction of deficiencies identified by internal or external assessments, inspections, investigations and reviews.
- xi. Documentation and Records - Creation of documents and records to ensure regulatory compliance and conformity to company requirements along with appropriate confidentiality to protect privacy.

The Code is modeled on and contains language from the Recognized standards such as International Labour Organization Standards (ILO), Universal Declaration of Human Rights (UDHR), United Nations Convention against Corruption, and the Ethical Trading Initiative (ETI) were used as references in preparing this Code and may be useful sources of additional information

The Contractor must submit the following to Engineer-In-Charge before commencement of work:

- a) An Electrical license. (If required)
- b) PF Code No. and all employees to have PF A/c No. under PF every Act, 1952.
- c) All employees to have a temporary or permanent ESI Card as per ESI Act.
- d) ESI Registration No.
- e) PAN No.
- f) Work Contract Tax/VAT Registration Number.
- g) Labor License under Contract Labor Act (R & A) Act 1970(All Engineer-in-charge responsible for execution of the job should obtain a copy of Labor License as per guidelines of HR department before start of the work by the contractor.)
- h) GST No.

The Contractor must follow:

- a) Third party Insurance Policy before start of work.
- b) To follow Minimum Wages Act prevailing in the state.
- c) Salary/ Wages to be distributed in presence of Company's representative not later than 7th of each month.
- d) To maintain Wage- cum - Attendance Register.
- e) To maintain First Aid Box at Site.
- f) Latest P.F. and E.S.I. Challans pertaining to the period in which work was undertaken along with a certificate mentioning that P.F. and E.S.I. applicable to all the employees has been deducted and deposited with the Authorities within the time limits specified under the respective Acts.
- g) Workman Compensation Policy. (If applicable)
- h) Labor license before start of work. (If applicable)

LITIGATION HISTORY

Year	Name of client	Details of contract & date	Cause of Litigation/ arbitration and dispute	Disputed amount

CURRENT CONTRACT COMMITMENTS/ WORK IN PROGRESS

Year	Name of client	Details of contract & date	Value of outstanding work	Estimated completion date

VENDOR DATA FORM

1. Name of the company: _____

2. Address of the company: _____

3. During the time the tender enquiry is received and the tender is submitted by us to your office, we authorize following person/ persons whose signatures are attested below to deal with BYPL on our behalf for any clarifications:

S.No	Name & Designation	Contact Telephone & fax	E-mail Address	Specimen Signature
1				
2				
3				

Yours faithfully

Place:

Date:

Signature of the bidder with seal

CHECK LIST

Sl. No.	Item Description	Yes/No
1	INDEX	Yes/no
2	COVERING LETTER	Yes/No
3	BID FORM (UNPRICED) DULY SIGNED	Yes/no
4	Bill of Material (UNPRICED)	Yes/No
5	TECHNICAL BID	Yes/no
6	ACCEPTANCE TO COMMERCIAL TERMS AND CONDITIONS	Yes/No
7	FINANCIAL BID (IN SEALED ENVELOPE)	Yes/no
8	EMD IN PRESCRIBED FORMAT	Yes/No
9	DEMAND DRAFT OF Rs. 1180/- DRAWN IN FAVOUR OF BSES YAMUNA POWER LTD.	Yes/No
10	POWER OF ATTORNEY/AUTHORISATION LETTER FOR SIGNING THE BID	Yes/No