

**Tender Notification for  
Rate Contract for Supply of Group Metering System  
(IGMS) in BYPL**

**NIT NO. - CMC/BY/21-22/RS/KD/34**

**Date of Tender: 25.11.2021**

**Due Date for Submission: 16.12.2021, 15:00 HRS**

BSES YAMUNA POWER LIMITED (BYPL)  
SHAKTI KIRAN BUILDING, KARKARDOOMA,  
DELHI-110032  
CIN: U40109DL2001PLC111525  
TEL: 011 4124 9808  
WEBSITE: [www.bsedelhi.com](http://www.bsedelhi.com)  
GSTIN: 07AABCC8569N1Z0

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## SECTION – I: REQUEST FOR QUOTATION

### 1.00 Event Information

1.01 BSES Yamuna Power Ltd (hereinafter referred to as “BYPL”) invites sealed tenders in 2 envelopes for **Rate Contract for Supply of Group Metering System (IGMS)** from reputed manufacturers. The bidder must qualify the technical requirements as specified in clause 2.0 stated below. All envelopes shall be duly superscribed as – **“RATE CONTRACT FOR SUPPLY OF GROUP METERING SYSTEM IN BYPL” “NIT NO CMC/BY/21-22/RS/KD/34, with due date of submission on 16.12.2021, 15:00 HRS”**.

Sl. No.	Item Description	Technical Specification	Estimated Cost	Cost of EMD	Qty.	Delivery at
1	<b>RATE CONTRACT FOR SUPPLY OF GROUP METERING SYSTEM IN BYPL</b>	SP-GMS-95-R0	₹ 2.97 Crore	₹ 5.94 Lakhs	700 No's	BYPL Stores/site, Delhi

1.02 The schedule of specifications with detail terms & conditions can be obtained from address given below against submission of non-refundable demand draft of **Rs.1180/- (including GST)** drawn in favour of BSES Yamuna Power Ltd, payable at Delhi. The tender papers will be issued on all working days upto **16.12.2021, 15:00 HRS**. The tender documents & detail terms and conditions can also be downloaded from the website “[www.bsedelhi.com](http://www.bsedelhi.com)”.

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.

1.03 Offers will be received upto **16.12.2021, 15:00 HRS** at the address given below. Part A of the Bid shall be opened on **17.12.2021, 15:30 HRS**. Part B of the Bid will be opened in case of Techno-Commercially qualified Bidders and the date of opening of same shall 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 last date.

**Head of Department  
Contracts & Materials Deptt.  
BSES Yamuna Power Ltd  
3<sup>rd</sup> Floor, A Block  
Shaktikiran Building, Karkardooma  
Delhi 110032**

1.04 BYPL reserves the right to accept/reject any or all Tenders without assigning any reason thereof and alter the quantity of materials mentioned in the Tender documents by (±) 30% at the time of placing purchase orders

**1.05 Tender will be summarily rejected if:**

- (i) Earnest Money Deposit (EMD) of requisite value & validity is not deposited in shape of Bank Guarantee executed on favour of BSES YAMUNA POWER LIMITED.
- (ii) Not submitted Tender fee of requisite value.
- (iii) The offer does not contain "FOR NEW DELHI" prices indicating break-up towards all taxes & duties.
- (iv) Complete Technical details are not enclosed.
- (v) Tender is received after due date and time.

**Technical bid submission check list- Bidder has to submit the technical bid as per check list and mark the items in check list which are being submitted/ not applicable/ unavailable, otherwise bid will stand as cancel.**

**2.0 Qualification Criteria:-**

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

- a. The bidder must be a manufacturer of meter. Relevant documents in support must be furnished
- b. The bidder should have qualified technical & dedicated QA personnel at various stages of manufacture & testing.
- c. The bidder should have minimum annual turnover of **Rs.50 Crore** in at least three financial years out of last five years (i.e. 2016-17, 2017-18, 2018-19, 2019-20, 2020-21).
- d. The audited financial statements of accounts for the last three years submitted by bidder shall be evaluated and last year of audited accounts should show positive net worth.
- e. Offered Group meters should be in successful operation since at least last 2 years as on the date of opening of Bid. For this purchase order copies/Completion certificates to be provided by bidder pertaining to referred period.
- f. An undertaking (self Certificate) that the bidder has not been blacklisted/debarred by any central/state government institution including electricity boards. The bidder should also confirm and an undertaking (self certified) to be submitted that there is no pending litigation with government on account of executing similar order.
- g. Confirmation on Type test requirement as per technical specification clause no.10.4.

Notwithstanding anything stated above, BYPL reserves the right to assess the capability and installed capacity of the Bidder for carrying out the supplies.

**3.00 Bidding and Award Process**

Bidders are requested to submit their offer strictly in line with this tender document. **NO DEVIATION IS ACCEPTABLE.** BYPL shall response to the clarifications raised by various bidders and the same will be distributed to all participating bidders through website.

**3.01 BID SUBMISSION**

The bidders are required to submit the bids in 2(two) parts and submitted in 1 original + 1 duplicate to the following address

**Head of Department  
Contracts & Materials Deptt.  
BSES Yamuna Power Ltd  
3<sup>rd</sup> Floor, A Block  
Shaktikiran Building, Karkardooma  
Delhi 110032**

- PART A :: **TECHNICAL BID** comprising of following
- Technical bid submission check list
  - EMD
  - Non-refundable demand draft for ₹ 1180/- in case the forms are downloaded from website
  - Documentary evidence in support of qualifying criteria
  - Technical Literature/ GTP/Type test report etc
  - Qualified Manpower available
  - Testing Facilities
  - Original Tender documents duly stamped & signed on each page as token of acceptance
  - Acceptance to Commercial T & C viz. Delivery period, Payment terms, PBG, Warranty, Liquidated Damages etc
- PART B :: **FINANCIAL BID** comprising of
- Price strictly in the Format indicated later indicating Break up of basic price, taxes & duties, Freight etc

### 3.02 TIME SCHEDULE

The bidders should complete the following within the dates specified as under:

S. No.	Steps	Comprising of	Due date
1	Date of sale of Bid Document upto	<ul style="list-style-type: none"> <li>▪ Bid Document</li> </ul>	16.12.2021, 15:00 HRS
2	Last date of Queries, if any	<ul style="list-style-type: none"> <li>▪ All Queries related to RFQ</li> </ul>	16.12.2021, 15:00 HRS
3	Last date of Receipt of Bid Documents	<ul style="list-style-type: none"> <li>▪ bids in 2(two) parts and submitted in 1 original + 1 duplicate (PART A Technical Bid)+1 soft copy in pen drive</li> </ul>	16.12.2021, 15:00 HRS
4	<b>Date &amp; Time of Opening Of PART A Technical and Commercial Bid</b>	<ul style="list-style-type: none"> <li>▪ <b>EMD of requisite amount</b></li> <li>▪ <b>Non-refundable DD for Rs 1180/- in case tender documents downloaded from website</b></li> <li>▪ Documentary evidence in support of qualifying criteria(not reqd. for previously qualified bidder for similar item)</li> <li>▪ Technical Literature/GTP duly filled in/Type test report,</li> <li>▪ Qualified manpower available</li> <li>▪ Testing Facilities</li> <li>▪ Original Tender documents duly stamped &amp; signed on each page as token of acceptance</li> <li>▪ Acceptance to Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, PBG, Warranty etc</li> <li>▪ <b>Power of Attorney to sign the bid</b></li> </ul>	17.12.2021, 15:30 HRS
5	<b>Date &amp; Time of Opening Of PART B</b>	<ul style="list-style-type: none"> <li>• Price strictly in the Format enclosed(Section V) indicating Break up regarding basic price, taxes &amp; duties,</li> </ul>	Successful bidders will be intimated

S. No.	Steps	Comprising of	Due date
	<b>Financial Bid</b>	Freight etc	through website/E-Mail

NOTE: In case last date of submission of bids & date of opening of bids is declared as holiday in BYPL office, the last date of submission will be following working day at the same time.

This is a two part bid process. Bidders are to submit the bids in 2(two) parts

Both these parts should be furnished in separate sealed covers super scribing NIT no. DUE DATE OF SUBMISSION, with particulars as **PART-A TECHNICAL BID & COMMERCIAL TERMS & CONDITIONS** and **Part-B FINANCIAL BID** and these sealed envelopes should again be placed in another sealed cover which shall be submitted before the due date & time specified.

**Part – A** :: Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date.

**PART B** :: This envelope will be opened after techno-commercial evaluation and only of the qualified bidders. The date & time of same shall be intimated in due course to the qualified bidders

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.

**REVERSE AUCTION CLAUSE:** Purchaser reserves the right to use the online reverse Auction as optional tool 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.

Acceptance form for participation in reverse auction event is also attached as **annexure I**.

**BIDS RECEIVED AFTER DUE DATE AND TIME MAY BE LIABLE TO REJECTION**

**4.00 Award Decision**

4.01 The purchaser reserves all the rights to award the contract to one or more bidders so as to meet the delivery requirement or nullify the award decision without any reason.

4.02 Splitting of tendered quantity in two or more bidders: BSES reserves the right to split the tender quantity amongst techno-commercially qualified bidders on account of delivery requirement in tender, quantity under procurement etc.

Splitting of tender quantity amongst more than one bidder shall be governed by below mentioned guidelines:

- a) For the purpose of splitting, the offers of all the bidders whose "Post Reverse Auction prices" are within price consideration zone of 10% above "post reverse auction L-1 rate" shall be considered eligible.

- b) The tender quantity shall be split in following ratio:
- (i) In cases where no bidder falls within price consideration zone of 10% above post RA L-1 rate or none of the eligible bidders accept the post RA L-1 rate, 100% quantity shall be ordered on post RA L-1 bidder
  - (ii) If the quantity is to be split among 2 bidders, it will be done in the ratio of 70:30 on L1 price.
  - (iii) If the quantity is to be split among 3 bidders, it will be done in the ratio of 50:30:20 on L1 price.
  - (iv) Any deviation in regards to above will have deviation approval from management.

4.03 In the event of your bid being selected by purchaser (and / or its affiliates) and you subsequent 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/RFQ.

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

4.05 **QTY VARIATION:** The purchaser reserves the rights to vary the quantity by ( $\pm$ ) 30% of the tender quantity.

4.06 Bidders are requested to quote their lowest NO-REGRET prices since BYPL would prefer not to negotiate the prices further.

4.07 **Repeat Order:** BYPL reserves the right to place repeat order at the same rates & terms & conditions as per this tender against additional requirement subject to mutual agreement between BYPL & Supplier.

## **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 reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the Terms & Condition. A bidder who violates the marketplace rules or engages 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:

- Failure to honor prices submitted to the marketplace.
- Breach of the terms of the published in Request for Quotation/NIT.

## **6.00 Supplier Confidentiality**

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

All RFQ documents 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**

Technical clarification, if any, as regards this RFQ shall be sought in writing and sent by post/courier to following address. The same shall not be communicated through email/phone. Any corrigendum/addendum/modifications in the tender documents shall be uploaded in website

Address	Name/ Designation	E-mail Address
<b>Technical</b>		
CES Dept. 3rd Floor, B-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032	Gaurav Sharma Asst. VP (HOD-CES)	gaurav.a.sharma@relianceada.com
	Ashish Kumar Joshi DGM (CES)	Ashish.K.Joshi@relianceada.com
<b>Commercial</b>		
C&M Dept. 3rd Floor, A-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032	Robin Sebastian VP (HOD-C&M)	robin.sebastian@relianceada.com
	Rajesh Srivastava Addl. VP (Head-Procurement)	rajesh.r.srivastava@relianceada.com
	Khem Dewangan As.V.P. (C&M)	Khem.Dewangan@relianceada.com

However, in case, any bidder has already submitted his bid, he may submit modified bid in view of the changes/modifications/corrigendum in the tender document within the stipulated due date of submission. The modified bid envelope shall be duly marked as "MODIFIED/AMENDED BID" along with a declaration that all old bids as "NULL AND VOID". Other formalities shall remain same.

## **SECTION – II: INSTRUCTION TO BIDDERS**

### **A. GENERAL**

1.00 BSES Yamuna Power Ltd, hereinafter referred to as "The Purchaser" are desirous of implementing the various Systems Improvement/Repair & Maintenance works at their respective licensed area in Delhi The Purchaser has now floated this tender for procurement of material notified earlier in this bid document.

### **2.00 SCOPE OF WORK**

The scope shall include Design, Manufacture, Testing at stages at works conforming to the Technical Specifications/IS along with Packing, Forwarding, Transportation and Unloading and proper stacking at Purchaser's stores/site.

### **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 anyway 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 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**

- 5.01 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:

(a) Request for Quotation (RFQ)	- Section - I
(b) Instructions to Bidders (ITB)	- Section - II
(c) Terms & Conditions of Contract (T&C)	- Section -III
(d) Delivery schedule	- Section IV
(e) Price Format	- Section V
(f) Bid Form	- Section VI
(g) EMD BG Format	- Section VII
(h) Vender code of conduct	- Section – VIII
(i) Technical Specifications (TS)	- Section –IX

- 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 OF 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 it will be notified in web site [www.bsesdelhi.com](http://www.bsesdelhi.com) and the same will be binding on them.

- 6.03 In order to afford prospective Bidders reasonable time in which 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.bsesdelhi.com](http://www.bsesdelhi.com)

- 6.04 Purchaser shall reserve the rights to following:

- Extend due date of submission,
- Modify tender document in part/whole,



- c) Cancel the entire tender

6.05 Bidders are requested to visit website regularly for any modification/ clarification/ corrigendum/ addendum of the bid documents.

## 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 Technical Specification.
- (b) All the Bids must be accompanied with the required EMD as mentioned in the Section-VII against each tender.
- (c) Tender documents duly stamped and signed on each page by authorized signatory.

### 9.0 BID FORM

9.01 The Bidder shall submit one "Original" and one "Copy" of the Bid Form and the appropriate Price Schedules and Technical Data Sheets duly filled in as per attached specification (Section IX) enclosed with the Bidding Documents.

### 9.02 EMD

Pursuant to Clause 8.0(b) above, the bidder shall furnish, as part of its bid, a EMD amounting to as specified in the Section-VII. The EMD is required to protect the Purchaser against the risk of Bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form :

- (a) Bank Guarantee /FDR drawn in favour of BSES Yamuna Power Ltd, payable at Delhi.
- (b) Bank Guarantee valid for One Hundred twenty (120) days after due date of submission drawn in favour of BSES Yamuna Power Ltd**

The EMD may be forfeited in case of:

- (a) The Bidder withdraws its bid during the period of specified bid validity, or
- (b) the case of a successful Bidder, if the Bidder does not
  - (i) Accept the Purchase Order, or
  - (ii) Furnish the required performance security BG.

### 10.0 BID PRICES

10.01 Bidders shall quote for the entire Scope of Supply with a break-up of prices for individual items. 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.

- 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, 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 120 days from the due date of submission of the Bid.

- 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 and sent by post/courier

#### 13.0 **ALTERNATIVE BIDS**

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 regarding the rejection of Bids in the terms and conditions, 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 copy 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 Copy (hard copies) 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 —“Technical Bid & EMD”. The price bid shall be inside another sealed envelope with superscribed “Financial Bid”. Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original and Copy. The envelopes should be superscribed with —“Tender Notice No.& Due date of opening”.

15.03 The Bidder has the option of sending the Bids in person. Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to the Purchaser to collect the proposals from Courier/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 copies, must be received by the Purchaser at the address on or before the due date of submission.

**17.0 ONE BID PER BIDDER**

Each Bidder shall submit only one Bid by itself. No Joint Venture is acceptable. 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 "Late" and may be rejected

**19.0 MODIFICATIONS AND WITHDRAWAL OF BIDS**

19.01 The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission subject to any corrigendum/addendum/modifications in the tender documents uploaded in website.

**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. Purchaser may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.
- 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 & qualifying 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) Delivery Schedule
- (b) Conformance to Qualifying Criteria
- (c) 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 If any Bidder wishes to contact the Purchaser on any matter related to the Bid, from the time of Bid opening to the time of contract award, the same shall be done in writing only.

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 anytime 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 timely execution of project & provided he agrees to come to the lowest rate. Purchaser reserves the right to distribute the entire tender quantity at its own discretion without citing any reasons thereof.

**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 with in 7 days of issue of the letter of intent /Notification of Award by Purchaser.

**29.0 PERFORMANCE BANK GAURANTEEE**

Within 15 days of the receipt of Notification of Award/ Letter of Intent from the Purchaser, the successful Bidder shall furnish the Performance Bank Guarantee for an amount of 10% (Ten percent) of the Contract Price. The Performance Bond shall be valid for a period of 60 months from the date of Commissioning or 66 months from the date of last dispatch whichever is earlier plus 3 months 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 Terms and Conditions of Contract.

### **SECTION – III: TERMS AND CONDITIONS**

#### **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" 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/Purchase Order" issued by the Purchaser.
- 2.10** "Contract Price" shall mean the price referred to in the "Letter of Acceptance/Purchase Order".
- 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 supply, 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.

### **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 only be dispatched after receipt of dispatch instructions issued by the Purchaser.
- 5.05** All in-house testing and inspection shall be done with out any extra cost. The in-house inspection shall be carried out in presence of BSES/BSES authorized third party inspection agency. Cost of Futile/abortive visit(s) shall be debited from the invoices
- 5.06** Purchaser reserves the right to send any material being supplied to any recognized laboratory for testing, wherever necessary and the cost of testing shall be borne by the Bidder. 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 bidder's representative.
- 6.0 Packing, Packing List & Marking**
- 6.01 Packing:** Supplier shall pack or shall cause to be packed all Commodities in crates/boxes/drums/containers/cartons and otherwise in such a manner as shall be reasonably suitable for shipment by road or rail to BYPL, Delhi/New Delhi stores/site 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, extreme outside dimensions (length, width & weight) of each container/box/drum/carton, Item SAP Code, PO No & date. One copy of the packing list shall be enclosed in each package delivered.
- 7.01 Price basis for supply of materials**



a) Bidder to quote their prices on Landed Cost Basis and separate price for each item for supply to BYPL Delhi/New Delhi stores inclusive of packing, forwarding, loading at manufacturer's premises, payment of Freight and GST, any other local charges. **Octroi is presently not applicable in Delhi and however if applicable shall be reimbursed at actuals.**

b) The above supply prices shall also include unloading at BYPL Delhi/New Delhi stores/site.

c) Transit insurance will be arranged by Purchaser; however bidder to furnish required details in advance for arranging the same by Purchaser

d) Purchaser shall issue Form 'C' wherever applicable and accordingly bidder to consider applicable taxes in the quoted price.

## **8.0 Terms of payment and billing**

### **8.01** For Supply of materials:

100% payment shall be made within 45 days from the date of receipt of material at store/ site.

### **8.02** Bidder to submit the following documents against dispatch of each consignment:

- 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. Guarantee Certificate.
- vii. Performance Bank Guarantee equivalent to 10% of total PO value valid for 60 months after commissioning or 66 months from the last date of dispatch, whichever is earlier plus 3 months towards claim period

## **9.0 Price Validity**

**9.01** All bids submitted shall remain valid, firm and subject to unconditional acceptance by BYPL Delhi for 120 days from the due date of submission. For awarded suppliers, the prices shall remain valid and firm till contract completion.

## **10.0 Performance Guarantee**

**10.01** To be submitted within fifteen (15) days from the date of issuance of the Letter of Award/PO, supplier shall establish a performance bond in favor of BYPL in an amount not less than ten percent (10%) of the total price of the Contract (the "Performance Bond"). The Performance Bond shall be valid for a period of 60 months from the date of Commissioning or 66 months from the date of last dispatch whichever is earlier plus 3 months claim period.

**10.02** Bank guarantee shall be drawn in favour of BSES Yamuna Power Ltd as applicable. The performance Bank guarantee shall be in the format as specified by BYPL.

## **11.0 Forfeiture**

**11.01** Each Performance Bond established under Clause 10.0 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 referred to

above, together with a simple statement that supplier has failed to comply with any term or condition set forth in the Contract.

**11.02** Each Performance BG 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.

**12.0 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.

**13.0 Warranty/Defects Liability Period**

**13.01** 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 the date of commissioning or 66 months from the date of delivery 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.

**14.0 Return, Replacement or Substitution.**

BYPL shall give Supplier notice of any defective Commodity promptly after becoming aware thereof. BYPL 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.

**15.0 Effective Date of Commencement of Contract:**

**15.01** The date of the issuance of the Letter of Acceptance/Purchase Order shall be treated as the effective date of the commencement of Contract.

**16.0 Time – The Essence of Contract**

**16.01** 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.

**17.0 The Laws and Jurisdiction of Contract:**

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

**17.02** 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 Delhi in India

## **18.0 Events of Default**

**18.01** 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.

## **19.0 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.

## **20.0 Penalty for Delay**

**20.01** If supply of items / equipments 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(ex-works) price for every week delay or part thereof for individual mile stone deliveries.

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

**20.03** 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.

## **21.0 Statutory variation in Taxes and Duties**

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, incase of reduction in taxes, duties and levies, the benefits of the same shall be passed on to BUYER .

## **22.0 Force Majeure**

### **22.01 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.

**22.02** 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.

**22.03** 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.

**22.04 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.

**22.05 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.

**22.06 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.

**22.07 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.

**22.08 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.

**22.09 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."

**23.0 Transfer and Sub-Letting**

**23.01** 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.

**24.0 Recoveries**

**24.01** 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.

**25.0 Waiver**

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

**26.0 Indemnification**

**26.01** 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.

**27. 0 ACCEPTANCE:**

**27.01** Vendor confirms to have gone through the Policy of BYPL on legal and ethical code required to be followed by vendors encapsulated in the #Vendor Code of Conduct# displayed on the official website of BYPL ([www.bsesdelhi.com](http://www.bsesdelhi.com)) & as per attached "Section-VIII" also, which shall be treated as a part of the contract/PO/WO.

Vendor undertakes that he shall adhere to the Vendor code of Conduct and also agrees that any violation of the Vendor Code of Conduct shall be treated as breach of the contract/PO/WO. In event of any such breach, irrespective of whether it causes any loss/damage, Purchaser (BYPL) shall have the right to recover loss/damage from Vendor.

The Contractor/Vendor hereby indemnifies and agrees to keep indemnified the Purchaser (BYPL) against any claim/litigation arising out of any violation of Vendor Code of Conduct by the Contractor/Vendor or its officers, agents & representatives etc.

Acceptance of the CONTRACT implies and includes acceptance of all terms and conditions enumerated in the CONTRACT in the technical specification and drawings made available to Contractor consisting of general conditions, detailed scope of work, detailed technical specification, detailed equipment drawing and complete scope of work.

Contractor and Company contractual obligation are strictly limited to the terms set out in the CONTRACT. No amendments to the concluded CONTRACT shall be binding unless agreed to in writing for such amendment by both the parties.

**SECTION – III: COMMERCIAL TERMS AND CONDITIONS**

SI No	Item Description	AS PER BYPL	BIDDER'S CONFIRMATION
1	Validity	120 days from the date of offer	
2	Price basis	a) Firm, FOR Delhi store basis. Prices shall be inclusive of all GST, freight upto Delhi stores/sites. b) Unloading at stores/sites shall be in vendor's scope c) Transit insurance in BYPL scope	
3	Payment terms	100% payment shall be made within 45 days from the date of receipt of material at store/site	
4	Delivery schedule	Completion within 2 months from the date of PO/LOI	
5	Defect Liability period	60 months after commissioning or 66 months from the last date of dispatch, 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 value (ex-work) of undelivered units	
7	Performance Bank Guarantee	10% of total PO value valid for 60 months after commissioning or 66 months from the last date of despatch, whichever is earlier plus 3 months towards claim period	

**SECTION – IV: QUANTITY AND DELIVERY REQUIREMENT**

<b>Sl. No.</b>	<b>Item Description</b>	<b>Specification</b>	<b>Total Qty.</b>	<b>Required Delivery Schedule</b>	<b>Destination</b>
1	Rate Contract for Supply of Group Metering System in BYPL	SP-GMS-95-RO	700 No's	Within 2 months from date of PO/LOI	BYPL Stores/site Delhi



**SECTION – V: PRICE FORMAT**

<b>FORMAT FOR PRICE BID</b>										
Tender No: CMC/BY/21-22/RS/KD/34										
Date of Tender: 25.11.2021										
Submission Date: 16.12.2021										
SN	Item Description	UoM	QTY Required	UNIT BASIC PRICE (₹)	FREIGHT	TOTAL UNIT BASIC PRICE (₹)	GST		UNIT LANDED COST	TOTAL LANDED COST (₹)
							% age	AMT		
1	Group metering system for 6 meters with Display unit/Modem / Data Concentrate Unit	Nos	700							
<b>Total</b>										
SIGNATURE & SEAL OF BIDDER						NAME OF BIDDER				
Bidder GST No:										
MANUFACTURING/INVOICE FROM ADDRESS:										

**SECTION VI**

**BID FORM**

To

Head of Department  
Contracts & Material Deptt.  
BSES Yamuna Power Ltd  
Shaktikiran Building, Karkardooma,  
Delhi 110032

Sir,

1 We understand that BYPL is desirous of procuring..... for its 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 Terms and Conditions and technical 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 under take to deliver the entire goods as) as per delivery schedule mentioned in Section IV 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 10% (Ten)percent of the total contract value for due performance of the Contract in accordance with the Terms and Conditions.

5 We agree to abide by this Bid for a period of 120 days from the due date of bid submission 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 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.

Dated this..... day of..... 2021

Signature..... In the capacity of .....

.....duly authorized to sign for and on behalf of

(IN BLOCK CAPITALS) .....

**SECTION VII**

**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*] (herein after called the "Bidder") has submitted its bid dated [*date of submission of bid*] for the supply of [*name and/or description of the goods*] (here after 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 Shaktikiran Building, Karkardooma, 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 condition(s), specifying the occurred condition or condition(s).

This guarantee will remain in force up to and including one hundred fifty (150) 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

**Annexure -I**

**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.

## **SECTION VIII**

### **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.

- . Antidiscrimination - 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 overexposures. 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:

- . Company Commitment - Corporate social and environmental responsibility statements affirming Vendor's commitment to compliance and continual improvement.
- . Management Accountability and Responsibility - Clearly identified company representative[s] responsible for ensuring implementation and periodic review of the status of the management systems.
- . Legal and Customer Requirements - Identification, monitoring and understanding of applicable laws, regulations and customer requirements.
- . 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.
- . 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.
- . Training - Programs for training managers and workers to implement Vendor's policies, procedures and improvement objectives.
- . Communication - Process for communicating clear and accurate information about Vendor's performance, practices and expectations to workers, Vendors and customers.
- . 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.
- . 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.
- . Corrective Action Process - Process for timely correction of deficiencies identified by internal or external assessments, inspections, investigations and reviews.
- . 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



### QUALIFICATION CRITERIA

S.no	Qualification Criteria	Description by bidder with qualifying the fulfillment	Documentary Evidence attached page no. detail
1	The bidder must be a manufacturer of meter. Relevant documents in support must be furnished		
2	The bidder should have qualified technical & dedicated QA personnel at various stages of manufacture & testing.		
3	The bidder should have minimum annual turnover of Rs.50 Crore in at least three financial years out of last five years (i.e. 2016-17, 2017-18, 2018-19, 2019-20, 2020-21).		
4	The audited financial statements of accounts for the last three years submitted by bidder shall be evaluated and last year of audited accounts should show positive net worth.		
5	Offered Group meters should be in successful operation since at least last 2 years as on the date of opening of Bid. For this purchase order copies/Completion certificates to be provided by bidder pertaining to referred period.		
6	An undertaking (self Certificate) that the bidder has not been blacklisted/debarred by any central/state government institution including electricity boards. The bidder should also confirm and an undertaking (self certified) to be submitted that there is no pending litigation with government on account of executing similar order.		
7	Conformation on Type test requirement as per technical specification clause no.10.4.		

The manufacture 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 tender process.

**FORMAT OF WARRANTY/GUARANTEE CERTIFICATE**

BSES YAMUNA POWER LIMITED Shaktikiran Building, Karkardooma, Delhi -110032.

Ref. Purchase Order No. :

Dear Sir,

We hereby confirm that the.....dispatched to BSES YAMUNA POWER LTD vide invoice no..... DT.....is exactly of the same nature and description as per above mentioned Purchase Order.

We further confirm that we will replace/repair our.....free of cost If found any manufacturing defect during.....months from the date of dispatch of material or.....months from the data of commissioning whichever is earlier.

Vendors Name & Signature

**SCHEDULE OF DEVIATIONS**

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

**FORMAT OF PERFORMANCE BANK GUARANTEE**

(To be executed on a Non-Judicial Stamp Paper of appropriate value)

This Guarantee made at \_\_\_\_\_ this [\_\_\_\_] day of [\_\_\_\_] 2020

1. WHEREAS M/s BSES Yamuna Power Limited, a Company incorporated under the provisions of Companies Act, 1956 having its Registered Office at Shaktikiran Building, Karkardooma, Delhi 110032, India hereinafter referred to as the " Owner ", (which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns).

2. AND WHEREAS the Owner has entered into a contract for \_\_\_\_\_(Please specify the nature of contract here ) vide Contract No. \_\_\_\_\_dated \_\_\_\_\_(hereinafter referred to as the "Contract") with M/s.\_\_\_\_\_, (hereinafter referred to as "the Supplier", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include each of their respective successors and assigns) for providing services on the terms and conditions as more particularly detailed therein.

3. AND WHEREAS as per clause \_\_\_of conditions of Contract, the Suppliers are obliged to provide to the Owners an unconditional bank guarantee for an amount equivalent to ten percent (10%) of the total Contract Value for the timely completion and faithful and successful execution of the Contract from [\_\_\_\_\_] pl. specify the name of Bank) having its head/registered office at [\_\_\_\_\_] through its branch in \_\_\_\_\_(pl. specify the name of Branch through which B.G is issued) hereinafter referred to as "the Bank", (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns).

4. NOW THEREFORE, in consideration inter alia of the Owner granting the Suppliers the Contract, the Bank hereby unconditionally and irrevocably guarantees and undertakes, on a written demand, to immediately pay to the Owner any amount so demanded (by way of one or more claims) not exceeding in the aggregate [Rs. ].#####(in words) without any demur, reservation, contest or protest and/or without reference to the Supplier and without the Owner needing to provide or show to the Bank ,grounds or reasons or give any justification for such demand for the sum/s demanded.

5. The decision of the Owner to invoke this Guarantee and as to whether the Supplier has not performed its obligations under the Contract shall be binding on the Bank. The Bank acknowledges that any such demand by the Owner of the amounts payable by the Bank to the Owner shall be final, binding and conclusive evidence in respect of the amounts payable by the Supplier to the Owner. Any such demand made by the Owner on the Bank shall be conclusive and binding, notwithstanding any difference between the Owner and the Supplier or any dispute raised, invoked, threatened or pending before any court, tribunal, arbitrator or any other authority.

6. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor without proceeding against the Suppliers notwithstanding any other security or other guarantee that the Owner may have in relation to the Supplier's liabilities.

7. The Bank hereby waives the necessity for the Owner first demanding the aforesaid amounts or any part thereof from the Suppliers before making payment to the Owner and further also waives any right the Bank may have of first requiring the Owner to use its legal remedies against the Suppliers, before presenting any written demand to the Bank for payment under this Guarantee.

8. The Bank's obligations under this Guarantee shall not be reduced by reason of any partial performance of the Contract. The Bank's obligations shall not be reduced by any failure by the Owner to timely pay or perform any of its obligations under the Contract.

9. The Bank further unconditionally and unequivocally agrees with the Owner that the Owner shall be at liberty, without the Bank's consent and without affecting in any manner its rights and the Bank's obligation under this Guarantee, from time to time, to:

(i) vary and/or modify any of the terms and conditions of the Contract;

(ii) Forebear or enforce any of the rights exercisable by the Owner against the Suppliers under the terms and conditions of the Contract; or

(iii) Extend and/or postpone the time for performance of the obligations of the Suppliers under the Contract;

and the Bank shall not be relieved from its liability by reason of any such act or omission on the part of the Owner or any indulgence shown by the Owner to the Suppliers or any other reason whatsoever which under the law relating to sureties would, but for this provision, have the effect of relieving the Bank of its obligations under this Guarantee.

10. This Guarantee shall be a continuing bank guarantee and shall not be discharged by any change in the constitution or composition of the Suppliers, and this Guarantee shall not be affected or discharged by the liquidation, winding-up, bankruptcy, reorganisation, dissolution or insolvency of the Suppliers or any of them or any other circumstances whatsoever.

11. This Guarantee shall be in addition to and not in substitution or in derogation of any other security held by the Owner to secure the performance of the obligations of the Suppliers under the Contract.

12. NOTWITHSTANDING anything herein above contained, the liability of the BANK under this Guarantee shall be restricted to \_\_\_\_\_(insert an amount equal to ten percent (10%) of the Contract Value) and this Guarantee shall be valid and enforceable and expire on \_\_\_\_\_(pl. specify date) or unless a suit or action to enforce a claim under this Guarantee is filed against the Bank on or before the date of expiry.

13. On termination of this Guarantee, all rights under the said Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities hereunder.

14. The Bank undertakes not to revoke this Guarantee during its validity except with the prior written consent of the Owner and agrees that any change in the constitution of the Bank or the Suppliers shall not discharge our liability hereunder.

15. Owner may assign this Guarantee to any Person or body whether natural, incorporated or otherwise under intimation to the Bank. The Bank shall be discharged of its obligations hereunder by performance in accordance with the terms hereof to such assignee without verifying the validity / legality / enforceability of the assignment.

16. This Guarantee shall be governed by the laws of India. Any suit, action, or other proceeding arising out of, connected with, or related to this Guarantee or the subject matter hereof shall be subject to the exclusive jurisdiction of the courts of Delhi, India.

Dated this #### day of ####.. #2020 at #####.

(Signature)

.....

(Name)

.....

(Designation with Bank Stamp)

Attorney as per

Power of Attorney No.....

Date.....

Vendor has to fill this form & submit along with the PERFORMANCE BANK GUARANTEE

1. Bank Email ID-----Bank Phone No-----

2. Where to Dispatched the BG -Local Address of bank -----

3. Where to Dispatched the BG Head Office Address -----

**Beneficiary's 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<br>Vikas Marg, New Delhi 110032 |
| 3. Branch Code:                | 055  |
| 4. Bank Account No:            | 911020005246567  |
| 5. IFSC Code:                  | UTIB0000055  |

<b>Technical Bid Submission Check List</b>			
<b>S. No.</b>	<b>Description</b>	<b>BYPL Requirement</b>	<b>Bidder's Compliance</b>
<b>1</b>	<b>Tender No.</b>	Required	
<b>2</b>	<b>Technical Specification reference number</b>	Required	
<b>3</b>	<b>Communication Details</b>		
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	
<b>4</b>	<b>Document Submission Format</b>		
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	
<b>5</b>	<b>Qualifying Requirement Compliance</b>		
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	
<b>6</b>	<b>Drawings/ Documents as per Technical Specification.</b>		
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	
<b>7</b>	<b>Soft copy of complete technical bid in pen drive</b>	Required	
<b>8</b>	<b>Samples as per technical specification.</b>	Required	
<b>Note: Submission of Technical bid check list alongwith 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.</b>			

**SECTION IX**

**TECHNICAL SPECIFICATION**

**NIT NO CMC/BY/21-22/RS/KD/34**



**Specification for  
Group Metering System**  
Specification no – **SP-GMS-95-R0**

Prepared by	Ashish Joshi	 <small>28cf4d7d-6c91-4d53-be77-f490e198fb6b</small>	Revision	R1
Reviewed by	Puneet Duggal	 <small>404eb803-a91f-4234-850-0b2b5098ec32</small>	Date:	
Approved by	Gaurav Sharma	 <small>23dc2de2-95de-4472-99a7-dea873f472b6</small>		01/12/2021

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**Technical Specification For Group Metering System****1.0 Scope**

This specification covers the following for Group metering system.

- A. Design, manufacture, testing at manufacturer works before dispatch, packing, delivery of Group Metering Unit.
- B. Supply of Software- HES, Web portal, CMRI/ PDS Software, BCS for downloading meters/ system.
- C. Integration with BSES billing system.
- D. Submission of all documentation as per this specification.

**2.0 Codes & standards**

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

<b>S No.</b>	<b>Standard Number</b>	<b>Title</b>
2.1	Indian Electricity Act	IE Act 2003
2.2	Indian Electricity Rules	With latest amendments
2.3	CEA Metering Regulations	With latest amendments
2.4	CBIP Manual (Pub no.-325)	Standardization of AC Static Electrical Energy Meters
2.5	IS- 13779	AC Static Watt-hour Meters, Class 1 and 2 – Specification
2.6	IS 15707	Testing, evaluation, installation and maintenance of ac electricity meters — Code of practice
2.7	IS- 11448	Application guide for AC Electricity meters
2.8	IS- 14772	General requirements for enclosures for accessories for household and similar fixed electrical installations - Specification
2.9	IEC- 62052-11	Electricity metering equipment (AC) - General requirements, tests and test conditions - Part 11: Metering equipment
2.10	IEC- 62053-21	Electricity metering equipment (A.C) - Particular requirements - Part 21: Static meters for active energy (classes 1 and 2)
2.11	IEC- 61053-52	Electricity metering equipment (AC) - Particular requirements - Part 52: Symbols
2.12	IEC 62053-61	Electricity metering equipment (A.C.) - Particular requirements - Part 61: Power consumption and voltage requirements
2.13	IEC 62056-21	Electricity metering - Data exchange for meter reading, tariff and load control - Part 21: Direct local data exchange
2.14	IEC 62058-11	Electricity metering equipment (AC) - Acceptance inspection - Part 11: General acceptance inspection methods
2.15	IEC 62058-31	Electricity metering equipment (AC) - Acceptance inspection - Part 31: Particular requirements for static meters for active energy (classes 0,2 S, 0,5 S, 1 and 2)
2.16	IEC 62053	Static meter for active Energy
2.17	IEC 60736	Testing Equipment for electrical Energy meter
2.18	IS 15959 (Part 1): 2011	Data Exchange for Electricity Meter - Reading Tariff and Load Control - Companion Specification

**Technical Specification For Group Metering System**

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

**3.0 System Data**

3.1	Supply	Three Phase AC, 4 wire
3.2	Voltage	240 V $\pm$ 6% (415V Phase to phase)
3.3	Frequency	50 Hz $\pm$ 5%
3.4	System Neutral	Solidly Earthed

**4.0 Configuration of Group Metering Unit**

SL	Item	Type A	Type B
4.1	Enclosure	01 No	01 No
4.2	Meters	06 No's	03 No's
4.3	Consumer Display unit (CDU)	06 No's	03 No's
4.4	Data Concentrator Unit (DCU)	01 No	01 No

**5.0 Enclosure**

5.1	Enclosure	Outdoor type Meter enclosure with pole mounting as well as wall mounting arrangement along with all required hardware.
5.2	Construction	a. Enclosure shall be constructed with minimum 2.0 mm thick galvanized MS sheet with 275 GSM powder coating. b. Load bearing members shall be minimum 2.5 mm thick. c. Enclosure shall be painted by polyurethane paint.
5.3	Limiting dimensions	Bidder shall provide size of the unit.
5.4	Incoming connection Cable	a. 01 no incoming cable termination arrangement suitable for 4CX50 Sqmm Cable. b. 3.0 mm MS gland plate shall be provided for cable entry. c. Suitable clamping arrangement shall be provided for incoming cable.
5.5	Outgoing connection cable	a. 06/03 no's outgoing cables (As per Type of Unit) entry suitable upto 2CX25 Sqmm Cable. b. 3.0 mm MS gland plate shall be provided for cable entry. c. Suitable clamping arrangement shall be provided for incoming cable
5.6	Ingress protection	IP55 for outdoor use.
5.7	Door	a. By lockable door hinged at minimum 2 no's points. b. Padlocking arrangement shall be provided.

**Technical Specification For Group Metering System**

		c. 02 no's sealing arrangement shall be provided.
5.8	Internal connections/ Bus Bar	a. 3 phase bus bar of continuous current rating 100 A @ 50 Deg C ambient shall be provided. b. Suitable termination arrangement shall be provided for incoming cable at bus bar. c. Internal connections of bus bar to meter incoming shall be provided by insulated cable of size 25 Sqmm. d. Bus bars shall be provided with 1.1 KV heat shrink coloured sleeves. e. All joints / bolted connections shall be protected by sleeves.
5.9	Insulators	All the bus bar/ live part shall separate by enclosure body by SMC/ DMC insulators of 1.1 KV rating.
5.10	Earthing	Earthing arrangement shall be provided for all incoming and outgoing cables. A earthing bus bar suitable for 10 KA for 1 sec shall be provided for this purpose. Box shall also have solid connectivity to the box enclosure at minimum 2 no's points. Hinges Cable doors shall also be provided jumper of suitable size for the earthing purpose.
5.11	Name Plate	Anodised aluminium name plate of minimum thickness 1.6 mm with following details: a. Purchaser's Insignia b. Purchaser's name c. Purchaser's PO no. and date d. Seller's name and address e. Group Metering Unit Serial No. f. No of incoming g. No of Outgoing h. Type of meter and its rating.
5.12	Louvers	a. Proper Louvers shall be provided for cooling of Group Meter unit. b. A mesh shall be provided at louvers to protect ingress of rodents and insets. c. A canopy shall be provided at louvers to protect unit from rain etc.
5.13	Door open Detection	A door open detection mechanism for real time alerts at HES shall be provided.

**6.0 Meters**

6.1.0	Electrical Requirement	Din rail type single phase two wire whole current meters mounted in the enclosure.
6.1.1	Connection	1 phase 2 Wire
6.1.2	Rated Voltage	240V (phase to neutral) with variation of +30% & -40%. However meter should withstand the maximum system voltage i.e 415V+ 6%.
6.1.3	Rated Current	Ib -10A and I <sub>max</sub> - 60 A

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6.1.4	Starting current	0.2 % of base current
6.1.5	Rated Frequency	50Hz +/- 5%
6.1.6	Power factor range	Zero Lag – unity – Zero lead
6.1.7	Accuracy Class	1.0 (IS13779 applies for accuracy requirements)
6.1.8	Power consumption in voltage circuit	Less than 1 watt & 8VA.
6.1.9	Power consumption in current circuit	Maximum 2VA.
6.1.10	Meter constant	Imp/ KWh (Bidder to specify meter constant)
6.1.11	Calibration	Meter shall be software calibrated at factory and modification in calibration shall not be possible at site by any means or external influence.
6.1.12	Influence of Heating & Self Heating	As per IS13779.
6.1.13	Electromagnetic compatibility	Meter shall remain immune to electrostatic discharge (upto and including 35KV), electromagnetic HF field and fast transient burst. The meter shall be designed in such a way that conducted or radiated electromagnetic disturbances as well as electrostatic discharge do not influence the meter. Meter shall be type tested for electromagnetic compatibility.
6.1.14	Limits of error due to influence quantities	Meter shall work within guaranteed accuracy as per IS 13779/ IEC62053-21/ CBIP304 (most stringent standard to be followed) under and after influence of following :- a. Current Variation b. Ambient Temperature variation c. Voltage variation d. Frequency variation e. 10% third harmonic in current f. Reversed phase sequence g. Voltage unbalance h. Harmonic components in current and voltage circuit i. DC and even harmonics in AC current circuit j. Odd harmonics in AC current circuit k. Sub harmonics in AC current circuit l. Continuous (DC) “stray” magnetic induction of 67mT+/-5%. m. Continuous (DC) “abnormal” magnetic induction of 0.27T+/-5%. n. Alternating (AC) “stray’ magnetic induction of 0.5mT+/-5% o. Alternating (AC) “abnormal’ magnetic induction of 10mT. p. Electromagnetic HF fields q. Radio frequency interference r. DC immunity test Note: BSES reserves the right to formulate any other test method to check magnetic immunity/ logging of meter. Meter with logging provision will be preferred.
6.2.0	Construction	As per IS 13779
6.2.1	Base Body	Material - Opaque and UV stabilized polycarbonate of grade LEXAN 142A/ 943AA or Equivalent.

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6.2.2	Top Cover	Material - Transparent and UV stabilized polycarbonate of grade LEXAN 142A/ 943AA or Equivalent.
6.2.3	Terminal Block	a. Material - Flame retardant glass filled polycarbonate of grade 500 R or equivalent. b. Terminal block shall be capable of passing the tests as per ISO-75 for a temperature of 135C and pressure of 1.8MPa. The terminals shall be designed so as to ensure adequate and durable contact such that there is no risk of loosening or undue heating.
6.2.4	Terminal cover	a. Material - UV stabilized transparent polycarbonate cover b. Diagram of external connections should be embossed on terminal cover. Sticker is not acceptable.
6.2.5	Terminals	a. Suitable upto 25 Sqmm conductor. b. Material of terminals, screws and washers should be brass or tinned copper. Two screws of appropriate size should be provided per terminal. c. Terminals shall be cage clamp type. d. Terminals shall be tested for continuous current of 150 % I <sub>max</sub> . e. Terminals shall be clearly marked for phase / neutral / outgoing etc.
6.2.6	Ingress Protection	IP 51 or better, but without suction in the meter.
6.2.7	Output device	Meter should have flashing LED visible from the front to represent energy recording. Resolution shall be such that satisfactory accuracy test can be conducted at the lowest load in less than 5 minutes and starting current test in less than 10 minutes.
6.2.8	RTC	The meter shall have internal real time clock to set date and time. Uncertainty of setting initial time shall not be less than +/- 30 seconds from Indian standard Time as maintained by NPL New Delhi. The maximum drift permissible in the real time clock shall be +/-7 min/ year
6.2.9	Battery	Lithium ion battery with guaranteed shelf life of 10 years and capacity life of 15 years. In case battery removal or total discharge same should not affect the working & memory of the meter even in case of single wire power condition.
6.2.10	Memory	Non volatile memory independent of battery backup, memory should be retained for 10 years without any auxiliary power.
6.2.11	Self Diagnostic feature	Meter shall have self diagnostic for the following a. Date and RTC. b. Battery. c. Non volatile memory. d. Display
6.2.12	Meter Sealing Arrangement	Sealing should be in accordance with IS and CEA metering regulations with latest amendments. Approval shall be taken from purchaser for location of seals.
6.2.13	Seal record	Record of all seals shall be forwarded to purchaser with each lot.



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6.2.14	Name Plate and marking	Meter should have clearly visible, indelible and distinctly marked name plate in accordance with IS & clause no. 10.0 of this specification.												
6.2.15	Environmental Condition	Meter shall be suitable for environmental conditions as mentioned below												
6.2.16	Temperature Range	Operation range: -10 Deg C to 55 Deg C Limit range of operation: -25 to 60 Deg C Limit range of storage / transport : -25 to 70 Deg C												
6.2.17	Relative Humidity	0 to 96 %												
6.2.18	Resistance against heat and fire	The terminal block and Meter case shall have safety against the spread of fire. They shall not be ignited by thermal overload of live parts in contact with them as per IS 13779.												
6.3.0	Functional requirement													
6.3.1	Billing Parameters	<ul style="list-style-type: none"> <li>a. Meter serial number</li> <li>b. Date and time</li> <li>c. Cumulative kWh</li> <li>d. Cumulative TOD energy values</li> <li>e. Cumulative Power off data</li> <li>f. Monthly power on/ off data should also be provided.</li> <li>g. MD in kW with occurrence details</li> <li>h. Last tamper occurrence and restoration details</li> <li>i. History of last 6 months for kWh consumption, TOD energy values, MD (with occurrence details) and power OFF hrs on monthly basis..</li> <li>j. All the above parameters (except instantaneous values) should be stored in NVM of meter.</li> </ul> <p>Meter firmware version should be available in meter memory and the same should be downloadable.</p>												
6.3.2	MD Registration	Meter shall store and display MD upto two decimal in every 30 min. period along with date & time. At the end of every 30 min, new MD shall be computed & compared with previous MD and store whichever is higher and the same shall be displayed. It is preferred that MD is computed using separate counter rather than by difference of initial and final energy counter.												
6.3.3	Auto Reset of MD	Auto resetting shall be 1st of every month at 00:00hrs. Date and Time of MD reset should be programmable through CMRI and remote in field.												
6.3.4	TOD metering	<p>Meter shall be capable doing TOD metering for following with 6 time zones, 3 tariff registers and 3 seasonal profiles:</p> <ul style="list-style-type: none"> <li>a. kWh and MD in kW for kWh meter.</li> </ul> <p>Default meter configuration should be as follows:</p> <table border="1" data-bbox="647 1899 1485 2036"> <thead> <tr> <th>Tariff</th> <th>Timings</th> <th>1<sup>st</sup> Jan- 31<sup>st</sup> th Dec</th> <th>Registers</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>00:00 to 01:00</td> <td>Tp</td> <td>R2</td> </tr> <tr> <td>2</td> <td>01:00 to 04:00</td> <td>Tn</td> <td>R1</td> </tr> </tbody> </table>	Tariff	Timings	1 <sup>st</sup> Jan- 31 <sup>st</sup> th Dec	Registers	1	00:00 to 01:00	Tp	R2	2	01:00 to 04:00	Tn	R1
Tariff	Timings	1 <sup>st</sup> Jan- 31 <sup>st</sup> th Dec	Registers											
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2	01:00 to 04:00	Tn	R1											

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		<table border="1"> <tr> <td>3</td> <td>04:00 to 10:00</td> <td>Tnp</td> <td>R3</td> </tr> <tr> <td>4</td> <td>10:00 to 14:00</td> <td>Tn</td> <td>R1</td> </tr> <tr> <td>5</td> <td>14:00 to 17:00</td> <td>Tp</td> <td>R2</td> </tr> <tr> <td>6</td> <td>17:00 to 22:00</td> <td>Tn</td> <td>R1</td> </tr> <tr> <td>7</td> <td>22:00 to 24:00</td> <td>Tp</td> <td>R2</td> </tr> </table> <p>Tnp – Tariff register for non –peak  Tn – Tariff register for normal  Tp – Tariff register for peak  All the tariff registers should be downloadable from meter memory. Programmability of time zones and seasonal profile shall be provided in accordance with CBIP publication no. 325.</p>	3	04:00 to 10:00	Tnp	R3	4	10:00 to 14:00	Tn	R1	5	14:00 to 17:00	Tp	R2	6	17:00 to 22:00	Tn	R1	7	22:00 to 24:00	Tp	R2
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7	22:00 to 24:00	Tp	R2																			
6.3.5	Load survey	30 minute integration period with load profile of following parameters for a period of 35 days: a. kW, voltage, current																				
6.3.6	Time Synchronization	Meter should have capability to synchronise RTC through MRI as well remote.																				
6.3.7	Security	Only RTC synchronization, programming of TOD zones and MD reset date/time should be possible in field with proper security. Programming of any other feature should not be possible in field by any means. Every transaction for change shall be logged in non volatile memory of the meter with date and time stamps along with details of changes made.																				
6.3.8	Tamper alerts	The meter should have capability to store the tamper status in the memory in the form of status word. For any change in the status word, the meter should generate the interrupt to initiate the communication with the AMR module through RS232 port if module is connected.																				
6.4.0	Tamper and Event Detection																					
6.4.1	Low Voltage Logging	Event shall be logged in memory along with Occurrence and restoration event data. Threshold should be below 180 Volts.																				
6.4.2	Protection against HV spark	Meter shall continue to record energy or log the event, in case it is disturbed externally using a spark gun/ ignition coil. Upto 35 KV meter should remain immune. Communication port shall also be immune upto 35KV.																				
6.4.3	Neutral disturbance	Meter shall log all events when AC/DC/ Pulsating voltage is injected in neutral circuit especially when same can disturb the recording of energy. Manufacturer should specify the method of testing of Neutral disturbance.																				
6.4.4	External Magnetic Interference	a. Meter should either be immune or should log the events of attempt of tampering by external magnetic field as per IS13779/ CBIP 325 with latest amendments. b. If the working of meter gets affected under the influence of external magnetic field, meter should record energy at I <sub>max</sub> , V <sub>ref</sub> and UPF. Meter should not compute MD during this period. The meter shall record energy as per actual load once the magnetic field is removed.																				

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6.4.5	Earth Tamper	Meter should detect and log earth tamper when phase and neutral current differ by a specified threshold. Continuous indication through LED flag or icon on display shall be provided for this tamper.
6.4.6	Top cover open	Meter shall have top cover open detection and same shall be logged. Detection and logging mechanism shall work even when the meter is de-energized. Logic shall be defined.
6.4.7	Power Off	<p>a. Meter should detect power off when the voltage falls below the threshold value.</p> <p>b. Meter should log the power off event with occurrence and restoration date/time if meter remains in power off mode for 10 min.</p> <p>c. Cumulative Power off data should be recorded in separate register in the DD:HH:MM format with reading resolution of 01 min, i.e. if power is off for one min the register should increment.</p> <p>d. In case meter records power off for entire integration period, the load survey of all parameters should be void. Also, MD should not be calculated during power off.</p>
6.4.8	Connection Related Tamper Conditions	The meter shall not get affected by any remote control device & shall continue recording energy under any one or combinations of the following conditions:
6.4.8.1	Single wire power	Meter should log this tamper when incoming and outgoing neutral/ phase are disconnected and load connected to earth. Meter should record energy as per load, Vref and UPF. This event should also be regarded as the power off.
6.4.8.2	I/C & O/G Interchanged	Meter should record forward energy within limits of accuracy class 1.0.
6.4.8.3	Phase & Neutral Interchanged	Meter should record forward energy within limits of accuracy class 1.0.
6.4.8.4	I/C (Phase & Neutral) Interchanged, Load Connected To Earth.	Meter should record forward energy within limits of accuracy class 1.0
6.4.8.5	I/C Neutral Disconnected, O/G Neutral & Load Connected To Earth.	Meter should record forward energy
6.4.8.6	I/C Neutral Disconnected, O/G Neutral Connected To Earth Through Resistor & Load Connected To Earth.	Meter should record forward energy
6.4.8.7	I/C Neutral connected, O/G Neutral Connected	Meter should record forward energy

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	To Earth Through Resistor & Load Connected To Earth.																																		
6.5.0	Tamper Logging	Last 100 nos. tamper events shall be recorded in meter memory on FIFO basis except top cover open. First top cover open event should be non rollover and non resettable.																																	
6.5.1	Parameter Snapshot	Snapshot of date, time, voltage, phase current, neutral current, power factor, active power, apparent power, cumulative kWh, cumulative kVAh etc should be recorded for each tamper event																																	
6.5.2	Tamper Indication	Appropriate Indications/Icons for all tampers should appear on the meter display either continuously or in auto display mode.																																	
6.5.3	Tamper Logics	A logic sheet for tamper/ event detection and logging shall be submitted for purchaser's approval. Following details should be provided for each tamper in tabular form a. Detailed Tamper logic b. Threshold values c. Persistence times d. Restoration time																																	
6.6.0	Meter Display																																		
6.6.1	LCD Type	STN Liquid crystal, industrial grade with extended temperature range min 70 Deg C with backlit																																	
6.6.2	Viewing angle	Minimum 120 DEG. The display visibility should be sufficient to read the Meter mounted at height of 0.5 m as well as at the height of 2 m.																																	
6.6.3	Size of LCD	Minimum 10X5 mm																																	
6.6.4	LCD Digits	Total 6 digits																																	
6.6.5	LCD language	English																																	
6.6.6	Display mode	<p>Following parameters should be displayed in Auto scroll with programmable interval</p> <table border="1"> <thead> <tr> <th>order</th> <th>Parameter</th> <th>Display time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>LCD Test</td> <td>5 Sec</td> </tr> <tr> <td>2</td> <td>Meter Sr. No.(8 digits)</td> <td>5 Sec</td> </tr> <tr> <td>3</td> <td>Date</td> <td>5 Sec</td> </tr> <tr> <td>4</td> <td>Time</td> <td>5 Sec</td> </tr> <tr> <td>5</td> <td>Cumulative kWh</td> <td>30 Sec</td> </tr> <tr> <td>6</td> <td>Current month MD</td> <td>5 Sec</td> </tr> <tr> <td></td> <td>MD date and time</td> <td>5 Sec</td> </tr> <tr> <td>7</td> <td>Instantaneous Voltage</td> <td>5 Sec</td> </tr> <tr> <td>8</td> <td>Instantaneous Current</td> <td>5 Sec</td> </tr> <tr> <td>9</td> <td>Instantaneous Load KW</td> <td>10 Sec</td> </tr> </tbody> </table> <p>Meter with push button for manual display shall not be acceptable.</p>	order	Parameter	Display time	1	LCD Test	5 Sec	2	Meter Sr. No.(8 digits)	5 Sec	3	Date	5 Sec	4	Time	5 Sec	5	Cumulative kWh	30 Sec	6	Current month MD	5 Sec		MD date and time	5 Sec	7	Instantaneous Voltage	5 Sec	8	Instantaneous Current	5 Sec	9	Instantaneous Load KW	10 Sec
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6.6.7	TOD Tariff Display	Appropriate indication for Current tariff.																																	

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6.6.8	Display indications	Appropriate indications/flags for all tampers and self diagnostic features should be provided.
6.7	Meter Name Plate	<ul style="list-style-type: none"> <li>a. Manufacturer's name</li> <li>b. Meter Serial No. With bar code</li> <li>c. Meter constant</li> <li>d. Accuracy class</li> <li>e. Voltage and current rating</li> <li>f. Frequency</li> <li>g. BIS registration mark and reference</li> <li>h. Reference of IS</li> <li>i. Purchaser's name</li> <li>j. Purchaser's PO no.</li> <li>k. Year of Manufacturing</li> <li>l. Warranty period</li> </ul>
6.8.0	Component Specification	
6.8.1	Shunt Element	Shunt beam should be braze or E-beam welded. Reputed make duly approved by purchaser.
6.8.2	Measurement or computing chips	Analog Devices, Cyrus Logic, Atmel, Phillips, Texas Instruments, SAMES, NEC
6.8.3	Memory chips	USA: Atmel, National Semiconductors, Texas Instruments, Phillips, ST, Microchip Japan: Hitachi or Oki
6.8.4	Display modules	Japan: Hitachi, Sony Holland / Korea: Phillips Truly Semiconductor Tianma/Hijing Electronics
6.8.5	Communication modules	USA: National Semiconductors, HP, Optonica, ST Holland / Korea: Phillips Japan: Hitachi Germany: Siemens
6.8.6	Optical port	USA: National Semiconductors, HP Holland / Korea: Phillips Japan: Hitachi, Truly Semiconductor, Agilent, OSRAM, Everlight
6.8.7	Power supply unit	SMPS Type, reputed make
6.8.8	Active & passive components	USA: National Semiconductors, Atmel, Phillips, Texas Instruments, ST, Onsemi, Japan: Hitachi, Oki, AVX or Ricoh, Samsung, Everlight, Agilent
6.8.9	Battery	Varta, Texcell, SAFT
6.8.10	RTC	USA: Philips, Dallas Atmel, Motorola, Microchip, NEC or Oki
6.8.11	Note	<ul style="list-style-type: none"> <li>a. Manufacturer shall intimate deviation if any from make of components. Any deviation is subject to approval of BSES based on supporting documents and performance feedback of the components.</li> <li>b. Manufacturer should have complete tracking of material used in meter. BSES reserve the right to carry out audit of inventory/ manufacturing process at manufacturer's works</li> </ul>

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		and sub vendor's work.
6.9	Meter exchange communication protocol	data and DLM S( IS 15959),

**7.0 Data Concentrator Unit**

7.1	Location	Data concentrator Unit shall be mounted inside the enclosure with suitable arrangement.
7.2	IP Rating	IP rating of DCU shall be IP65 minimum.
7.3	Design	DCU shall be designed in such a way that internal PCB of DCU shall not expose while connecting power supply, connecting wires , antenna etc.
7.4	SIM slot	Push type SIM slot shall be provided. Tray type arrangement is not acceptable.
7.5	Power Supply	a. 3 Phase 4 wire AC through input bus bar in the enclosure. b. However, it shall also be operational by any of two wires supply (Phase to Neutral or Phase to Phase supply is available)
7.6	Communication Modules	Communication modules shall be provided in the DCU.
7.7	Meter to DCU	wired/ PLC/ RF etc.
7.8	DCU to HES	a. Inbuilt modem of 4G- LTE with fallback to 2G. b. However DCU can be configured for communication parameters such as server IP, port etc on IP network/ SMS as well.
7.9	DCU to Meter display unit	Wired/ PLC/ RF etc.
7.10	DCU to CMRI	RF
7.11	Hardwired port	A DB9 serial connector shall be provided on DCU for downloading and configuration through CMRI as well as PC
7.12	Data downloading	DCU shall be able to poll all data stored in meters as per various configurations in the required time interval and able to send the data to HES/ central server.
7.13	Alerts	DCU shall be able to immediately detect and send the following alerts to HES/ Central server. a. Low Voltage b. Meter not responding c. Phase down- Any of R, Y, B d. Remote data downloading. e. Memory failure diagnostic. f. Power On/ Off. g. Cover opening of meter box.

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7.14	Diagnostic features	<p>Mechanism shall be provided to diagnose following:</p> <ol style="list-style-type: none"> <li>Network Signal strength</li> <li>Network connection with server.</li> <li>SIM registration</li> <li>SIM present or not.</li> </ol>
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**8.0 Consumer Display Unit**

8.1	General	Consumer display unit shall be provided (01 for each meter) to extend its display at consumer premises.
8.2	Supply	240 V single Phase.
8.3	Display parameters	Same as meter display

**9.0 HES/ Software**

9.1	HES/Central Server	<ol style="list-style-type: none"> <li>The bidder shall provide Meter data acquisition licensee free software for remote data acquisition; web portal/Central Server for viewing of data.</li> <li>Complete integration with BSES billing system.</li> <li>The HES must be installed &amp; available at BSES data center.</li> </ol>
9.2	Alerts display	<p>Server will maintain various alerts for tampers &amp; malfunctioning and pop-up these for operator concentration as :</p> <p>Meter not responding RTC corrupt in DCU and in Meters</p>
9.3	Base software computer	<ol style="list-style-type: none"> <li>Licensed Software with the following features should be supplied for free.</li> <li>BCS should be compatible for Windows XP, Vista, 7 and 8.</li> <li>System shall be password protected where user can login only if login ID is provided by administrator. BCS shall have rights management system so that access rights can be provided as per requirement to maintain security.</li> <li>BCS shall be capable of accessing complete data stored in memory locally through CMRI/ serial port of PC and remotely through modem (RF/ GSM/ PSTN etc.) for connectivity to AMR. BCS should have polling feature with option of selecting parameters to be downloaded.</li> <li>BCS shall maintain master database according to desired area, location, and region etc.</li> </ol>

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9.4	CMRI	<p>a. 01 no RF module for CMRI on 50 no's group metering units shall be provided along with CMRI software</p> <p>b. The manufacturer has to provide software capable of downloading all the data stored in meter memory through CMRI.</p> <p>c. Meter reading protocols shall be shared with BSES.</p> <p>d. In the event of order, bidder shall work with BSES IT team to develop CMRI software for meter downloading and further uploading on computer. CMRI software should have option for selection of parameters to be downloaded from meter. Monthly billing data should be downloadable using CMRI in less than 1 minute. Presently data is downloaded using PDS. Vendor has to extend support to ensure data downloading using PDS.</p>
9.5	Training	Manufacture shall impart training to BSES personnel for usage of HES/ BCS.

**10.0 Quality Assurance, Inspection and Testing**

10.1	Vendor's Plan (QP)	Quality	To be submitted for Purchaser's approval.
10.2	Sampling Method		Sampling Method for quality checks shall be as per relevant IS/ IEC/ CBIP guidelines and Purchaser's prior approval shall be taken for the same.
10.3	Inspection Points	Hold-	To be mutually identified, agreed and approved in Quality Plan.
10.4	Type Tests		<p>a. The meter shall be of type tested quality as per relevant IS/IEC/CBIP. Type test conducted at CPRI/ ERDA/ ERTL labs will be treated as valid.</p> <p>b. Type test certificate should be submitted along with offer for scrutiny.</p> <p>c. Any other component supplied in addition to meter shall also be type tested as per IS /IEC if applicable.</p>
10.5	Routine tests		<p>a. Enclosure: As per IS 14772</p> <p>b. Meters: All test marked "R" as per table 20 of IS</p>



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10.6	Acceptance Tests	<ul style="list-style-type: none"> <li>a. Enclosure: As per IS 14772</li> <li>b. All tests marked "A" as per table 20 of IS.</li> <li>c. All the routine and acceptance tests shall be carried out as per relevant standards.</li> <li>d. Following tests in addition to IS shall be conducted during lot inspection.               <ul style="list-style-type: none"> <li>i. Dimensional and drawing verification.</li> <li>ii. Display parameters/ sequence.</li> <li>iii. Data Downloading from CMRI and PC.</li> <li>iv. Tamper/ fraud detection/logging features as per approved documents. Tamper conditions will be simulated at varying load up to I<sub>max</sub>. Accuracy will also be checked during tamper simulation.</li> <li>v. Burn in chamber test.</li> <li>vi. Component verifications.</li> </ul> </li> <li>e. Purchaser reserves the right to formulate any other test method to verify guaranteed parameters of Meter.</li> </ul>
10.7	Inspection	<ul style="list-style-type: none"> <li>a. Purchaser reserves the right to inspect /witness all tests on the meters at Seller's works at any time, prior to dispatch, to verify compliance with the specification/ standards.</li> <li>b. Manufacturer should have all the facilities/ equipments to conduct all the acceptance tests as per clause 14.3 relevant standards and tampers logics as per approved GTP. All the equipments including tamper logs kits/ jigs should be calibrated.</li> <li>c. In-process and / or final inspection call intimation shall be given in advance to purchaser.</li> </ul>

**11.0 Packing, Marking, Shipping, Handling and Storage**

11.1	Packing	Every metes shall be properly sealed / packed in environmental friendly boxes/ cartons for protection against damage, vibration and ingress of dust and moisture.
11.2	Packing for accessories and spares	Robust wooden non returnable packing case with all the above protection & identification Label.
11.3	Marking	<p>On each packing case, following details are required :</p> <ul style="list-style-type: none"> <li>a. Individual serial number</li> <li>b. Purchaser's name</li> <li>c. PO number (along with SAP item code, if any) &amp; date</li> <li>d. Equipment Tag no. (if any)</li> <li>e. Destination</li> <li>f. Manufacturer / Supplier's name</li> <li>g. Address of Manufacturer / Supplier / it's agent</li> <li>h. Type , rating and other description of equipment</li> <li>i. Country of origin</li> <li>j. Month &amp; year of Manufacturing</li> <li>k. Case measurements</li> <li>l. Gross and net weights in kilograms</li> <li>m. All necessary slinging and stacking instructions</li> </ul>

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11.4	Test reports	Routine test report to be provided with each meter
11.5	Shipping	The seller shall be responsible for all transit damage due to improper packing.
11.6	Handling and Storage	Manufacturer instruction shall be followed. Detail handling & storage instruction sheet /manual to be furnished before commencement of supply.

**12.0 Deviations**

12.1	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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**13.0 Drawing Submission**

13.1	The seller has to submit following: along with bid
13.1.1	GTP (duly filled-in) (as per Annexure — A)
13.1.2	Deviation sheet, if any.
13.1.3	GA / cross sectional drawing of equipment showing all the views / sections
13.1.4	01 no's samples along with all software and accessories.
13.1.5	Tamper logic sheet.
13.1.6	Detailed reference list of customers using the offered product during the last 5 years with similar design and rating
13.1.7	Manufacturer's quality assurance plan and certification for quality standards
13.1.8	Type test reports for the same type, size & rating of Meter offered
13.1.9	Complete product catalogue and Manual.
13.1.10	Recommended accessories / software or any other hardware for five years of operation.
13.2	Seller has to submit following drawings for buyer's Approval (A) / Reference (R) After award of contract -
13.2.1	Program for production and testing (A)
13.2.3	01 no's samples along with software and accessories.
13.2.4	Guaranteed Technical Particulars (A)
13.2.5	GA drawing
13.2.6	Tamper logic sheet.
13.2.7	Makes of components
13.2.8	Terminal arrangement with dimensions
13.2.9	Detailed installation and commissioning instructions
13.2.10	Quality plan and field quality plan.
13.3	Submittals required prior to dispatch
13.3.1	Inspection and test reports, carried out in manufacturer's works
13.3.2	Test certificates of all bought out items
13.3.3	Operation and maintenance Instruction as well as trouble shooting charts/ manuals
13.3.4	Drawing and document sizes Standard size paper A3, A4

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13.3.5	Number of Documents required at different stages shall be per Annexure- A
13.3.6	Duly signed & stamped copies of the drawings / documentation are required to be submitted to BSES for approval.

**14.0 Delivery**

14.1	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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**15.0 Technical Bid Submission**

Technical Bid submission shall be as per the matrix given below. All documents/ drawing shall be provided on A4 sheet in soft copy with separators for each section. Language of the documents shall be English only. Deficient/ improper document/ drawing submission may liable for rejection

SL	Detail of Document	Bid	Approval	Pre Dispatch
1	Guaranteed Technical particulars (GTP)	Required	Required	
2	Deviation Sheet, if any	Required	Required	
3	Tamper Sheet	Required	Required	
4	Display Parameters	Required	Required	
5	GA / cross sectional drawing of Meter showing all the views / sections	Required	Required	
6	Samples of each type and rating offered.	1 no's	1 no's	
8	Any software and accessories required for installation/ operation of meter	Required	Required	
9	Manufacturer's quality assurance plan and certification for quality standards	Required	Required	
10	Type Test reports of offered model/ type/ rating	Required		
11	BIS certificate	Required		
12	Complete product catalogue and user manual.	Required		
13	Customer Reference List	Required		
14	Recommended list of spare and accessories	Required		
15	Specification documents containing all parameters, Services, Methods in addition to companion specification of IS 15959 (part 2).		Required	
16	Program for production and testing (A)		Required	Required
18	Detailed installation and commissioning instructions		Required	Required
19	As Built Drawing		Required	Required
20	Operation and maintenance Instruction as well as trouble shooting charts/ manuals		Required	Required
21	Inspection and test reports, carried out in manufacturer's works			Required
22	Routine Test certificates			Required



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23	Test certificates of all bought out items			Required
24	Meter Seal data			Required

**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		
5		

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)**

SL	Description of spare part	Unit	Quantity
1		No	
2		No	
3			