

# Tender Notification for SUPPLY, ERECTION, TESTING & COMMISSIONING OF 7.2 MVAR 11KV 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK

NIT NO CMC/BY/19-20/RB/MD/30

Due Date for Submission: 04.07.2019, 14:30 HRS

BSES YAMUNA POWER LIMITED (BYPL) SHAKTI KIRAN BUILDING, KARKARDOOMA, DELHI-110032

CIN: U40109DL2001PLC111525

TEL: 011 3999 7111

WEBSITE: www.bsesdelhi.com GSTIN: 07AABCC8569N1Z0



# **SECTION – I: REQUEST FOR QUOTATION**

### 1.0 **Event Information**

1.01 BSES Yamuna Power Ltd (hereinafter referred to as "BYPL") invites sealed tenders in 2 envelopes for SUPPLY, ERECTION, TESTING & COMMISSIONING OF 7.2 MVAR 11KV 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK 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 — "SUPPLY, ERECTION, TESTING & COMMISSIONING OF 7.2 MVAR 11KV 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK" "NIT NO NIT NO CMC/BY/19-20/RB/MD/30, with due date of submission on 04.07.2019, 14:30 HRS".

Sl. No.	Item Description	Technical Specification	Estimated Cost	Cost of EMD	Qty.	Delivery at
1	SUPPLY, ERECTION, TESTING & COMMISSIONING OF 7.2 MVAR 11KV 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK	SP-ASCB-82-R2	11800000	236000	4 SETS	Delhi/New Delhi STORES/various SITES

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 26.06.2019, 17:00 HRS. The tender documents & detail terms and conditions can also be downloaded from the website "www.bsesdelhi.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 **04.07.2019**, **14:30 HRS** at the address given below. Part A of the Bid shall be opened on **04.07.2019**, **15:00 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 110092



- 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  $(\pm)$  50% at the time of placing purchase orders
- 1.05 Tender will be summarily rejected if:
  - (i) Earnest Money Deposit (EMD) of requisite value & validity.
  - (ii) 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.

(vi) 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 the capacitor bank of rating 11KV and above.
- b. The bidder should have supplied at least 30 no's of 11KV APFC Capacitor Bank to major utilities /Major SEB's/other reputed firm during last 5 years. It should be in successful operation at least for 2 years. Performance Certificate issued from 2 reputed Companies shall be furnished as a back-up to this.
- c. The bidder should have qualified technical & dedicated QA personnel at various stages of manufacture & testing.
- d. Bidder should have Annual Sales Turnover of Rs 100 Crores or more in last 3 years.
- e. The bidder must offer equipment Type Tested at CPRI/ERDA/Other reputed International Institutions.
- 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.

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 + 1 Soft copy of technical bid in Pen drive 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 110092

# PART A :: TECHNICAL BID comprising of following

- Technical bid submission check list
- FMC
- Non-refundable demand draft for Rs 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
- 1 soft copy of technical bid in Pen drive.

# 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	Bid Document	26.06.2019, 17:00 HRS
2	Last date of Queries, if any	All Queries related to RFQ	26.06.2019, 17:00 HRS
3	Last date of Receipt of Bid Documents	<ul> <li>bids in 2(two) parts and submitted in 1 original + 1 duplicate (PART A Technical Bid)</li> </ul>	04.07.2019, 14:30 HRS
4	Date & Time of Opening Of PART A Technical and Commercial Bid	<ul> <li>EMD of requisite amount</li> <li>Non-refundable DD for Rs 1180/- in case tender documents downloaded from website</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>Power of Attorney to sign the bid</li> </ul>	04.07.2019, 15:00 HRS
5	Date & Time of Opening Of PART B Financial Bid	<ul> <li>Price strictly in the Format enclosed(Section V) indicating Break up regarding basic price, taxes &amp; duties, Freight etc</li> </ul>	Successful bidders will be intimated 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.

<u>Part – A</u> :: 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 60:40 on L1 price.
- (iii) If the quantity is to be split among 3 bidders, it will be done in the ratio of 40:30:30 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  $(\pm)$  50% 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

	Technical	Commercial
Contact Mr Ashwani Agrwal		Mr Rakesh Bansal
Person	Copy to: Mr Rakesh Bansal	MI Kakesii Dalisai
	BSES Yamuna Power Ltd,	BSES Yamuna Power Ltd,
Address	3 <sup>rd</sup> Floor , B Block,	C&M Deptt. 3 <sup>rd</sup> Floor, A-Block,
Address	Shaktikiran Building, Karkardooma, Delhi	Shaktikiran Building,
	110092	Karkardooma, Delhi 110092
E-Mail ID	ashwani.aggarwal@relianceada.com	rakesh.bansal@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 a rising 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 - Section VII (g) EMD BG Format (h) Technical Specifications (TS) - Section -VIII (i) Vender code of conduct - 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** 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
- 6.04 Purchaser shall reserve the rights to following:
  - a) Extend due date of submission,
  - b) Modify tender document in part/whole,
  - c) Cancel the entire tender

6.05 Bidders are requested to vsit 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 VIII) 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 Fifty(150) 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 Clause12.01 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 GAURANTEE

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 24 months from the date of Commissioning or 30 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 Equipments:

- a) 90% of basic value with 100% taxes and duties shall be paid in 45 days from the date of receipt and acceptance of GOODS at STORE/SITE on presentation of following documents:
  - 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 24 months after commissioning or 30 months from the last date of despatch, whichever is earlier plus 3 months towards claim period



b) Balance 10% of basic value shall be paid in 30 days from the date of successful testing, commissioning and handing over of individual Capacitor bank duly certified by BYPL Engineer-in-Charge.

In case of receipt of material at store & not erected, tested & commissioned within six(06) month from the date of receipt of material at store, Balance 10% of basic value retained shall be released.

# 9.0 Price Validity

**9.01** All bids submitted shall remain valid, firm and subject to unconditional acceptance by BYPL Delhi for 60 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 24 months from the date of Commissioning or 30 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) & as per attached "Annexure-IV" 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 herby 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	<ul><li>a) Firm, FOR Delhi store basis. Prices shall be inclusive of all GST, freight upto Delhi stores/sites.</li><li>b) Unloading at stores/sites shall be in vendor's scope</li><li>c) Transit insurance in BYPL scope</li></ul>	
3	Payment terms	As per clause 8.0 of SECTION – III: TERMS AND CONDITIONS	
4	Delivery schedule	Completion within 2 months from the date of PO	
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 of undelivered units	
7	Performance Bank Guarantee	10% of total PO value valid for 24 months after commissioning or 30 months from the last date of despatch, whichever is earlier plus 3 months towards claim period	

# SECTION – IV: QUANTITY AND DELIVERY REQUIREMENT

SI. No.	Item Description	Specification	Total Qty.	Required Delivery Schedule	Destination
1	SUPPLY, ERECTION, TESTING & COMMISSIONING OF 7.2 MVAR 11KV 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK	SP-ASCB-82-R2	4 SETS	Completion within 2 months from the date of PO	BYPL Stores/site Delhi



# **SECTION – V: PRICE FORMAT**

ITEM DESCRIPTION	HSN	UoM	QTY	EX- WORKS RATE PER UNIT	UNIT GST(CGST,SGST,IGST)AS APPLICABLE			UNIT LANDED	TOTAL LANDED	
						CGST	SGST/UTGST	IGST	COST	COST
SUPPLY OF 7.2 MVAR 11KV 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK		Set	4							



### **SECTION VI**

### **BID FORM**

Tο

Head of Department Contracts & Material Deptt. BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110092

Sir,

- 1 We understand that BYPL is desirous of procuring....... for it's licensed distribution network area in Delhi
  2 Having examined the Ridding Documents for the above named works we the
- 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.
- 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.
- We agree to abide by this Bid for a period of 60 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 or 2019
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	e presents that	WE [name of	bank] at [Branch	Name and
address], having our registered	office at[address	of the registered	d office of the bank](	herein after
called the "Bank"),are bound	unto BSES Yam	una Power Ltd.,	with it's Corporate	Office at
Shaktikiran Building, Karkardoo	ma, Delhi -1100	92 ,(herein after	called —the "Purch	aser")in the
sum of Rs	(Rupees		only)	for which
payment well and truly to be r	nade to the said	Purchaser, the E	Bank binds itself, its	successors,
and assigns by these presents.				

Sealed with the Common Seal of the said Bank this\_\_\_\_\_ day of\_\_\_\_\_\_ 20\_\_\_\_.

TH E 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 Sixty (60) 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 IX**

### **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/ragout), 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 egress, 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



# 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 [] 2019
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
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 ####.. #2019 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 IDBa	nk Phone No
2.	. Where to Dispatched the BG -Local Address of	oank
3.	. Where to Dispatched the BG Head Office Addre	SS

### **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 Vikas Marg, New Delhi 110092

3. Branch Code: 055

4. Bank Account No: 911020005246567

5. IFSC Code: UTIB0000055



# INSTALLATION, TESTING & COMMISSIONING OF 3 PHASE OUTDOOR SWITCHED CAPACITOR BANK



## **BSES YAMUNA POWER LTD (BYPL)**

## **SCOPE OF WORK**

Assembly, Installation, Testing & Commissioning of 7.2 MVAR 11KV 3 Phase Outdoor Auto Switched Capacitor bank along with Civil Work

Sl. No.	Item Description	Qty.	Delivery at
1	Erection, testing, & commissioning including civil work of 7.2, 11KV 3 phase outdoor Auto Switched Capacitor Bank	4 SETS	Delhi/New Delhi STORES/various SITES

A Separate order will be placed for supply & ITC which inter-alia includes the Scope of Work as mentioned/required for satisfactory operation of the Scheme shall be in Bidder's scope. Bidder(s) must provide goods and services that conform to these specifications for the entire term of the agreement.



# GENERAL TERMS & CONDITIONS - ERECTION, TESTING, & COMISSIONING

### 1. DEFINITIONS and INTERPRETATION

The following terms shall have the following meanings:

- 1.1 "Company": means BSES Yamuna Power Ltd, a company incorporated under the Companies Act 1956 and having its office at BSES Yamuna Power Limited having its office at Shaktikiran Building, Karkardooma, Delhi -110032, which expression shall include its authorized representatives, agents, successors and assigns.
- 1.2 "Contractor": shall mean the successful Tenderer / vendor to whom the contract has been awarded
- 1.3 "Rate": The unit rates for the work to be carried out at site shall be as per finalized unit rates through tender. The finalized rates shall be firm for the entire duration of work to be carried out by the Contractor under the work order and are not subject to escalation for any reason whatsoever.
- 1.4. CONTRACT SPECIFICATION: The terms "CONTRACT Specification" shall mean the Technical specification of the work as agreed by you and description of work as detailed in Annexure-I enclosed herewith and all such particulars mentioned directly/referred to or implied as such in the contract.
- 1.5 SITE: The terms "Site" shall mean the working location in BYPL area. Under this tender, working location shall be as mentioned elsewhere.
- 1.6 ENGINEER IN CHARGE: "Engineer In-charge" means the Company's authorized representative for the purpose of carrying out the work.

### 2. EXAMINATION OF SITE AND LOCAL CONDITIONS:

The contractor is deemed to have visited the site of the work and ascertained therefore all site conditions and information pertaining to his work. The company shall not accept any claim whatsoever arising out of the difficult site/terrain/local conditions, if any.

### 3. LANGUAGE AND MEASUREMENT:

The CONTRACT issued to the contractor by the company and all correspondence and documents relating to the CONTRACT placed on the Contractor shall be written in English language.

Metric System shall be followed for all dimension, units etc.



### 4. SCOPE OF WORK:

The scope of work shall be "Installation, testing & commissioning of 7.2 MVAR 11KV, 3 phase outdoor auto switched capacitor bank along with civil work at following grids". The BOQ's and rate schedule for the scheme is to be executed by you shall be as per annexure.

- 1 East of Ioni
- 2 Dilshad Garden
- 3 Kondli
- 4 Sonia Vihar

Obtaining Electrical Inspector Clearance (EIC) shall be in the scope of BYPL, all the necessary documents like drawings, test reports and any other relevant documents shall be provided by the supplier.

Transportation of Capacitor Bank from Store to site (i.e., loading, Transportation & Unloading), if required.

All the labour, cranes, tool and tackles, and technical supervision etc. are including in your scope of work. Adequate number of engineers, supervisors and labours shall be posted at site and the list of the same along with certificate of Qualification of technical staff should be submitted by the Contractor to the Engineer In Charge for checking the adequacy immediately (with in seven days) after award of contract.

Erection, testing and commissioning of Auto Switched Capacitor Bank, Isolators, Surge Arrestors, APFC, Surge Capacitor Unit, Vacuum Contactors, RVT, Series Reactor, HT Fuses, Cu Bus Bar and accessories attached to it. Erection, commissioning of APFC unit alongwith Supply will be in vendors scope. Cabling related to this ACU unit should also be in vendors scope. Civil works i.e foundation of Capacitor Bank, RCC plinth 300mm above FGL, any other civil work related to complete the job. Laying, testing and commissioning of control cables required for operation and control of capacitor bank with proper ferruling and tagging along with glands and lugs. Equipment and body earthing with connection of the same with existing mesh. SCADA Integration of APFC. Disposal of debris including Loading / Unloading on own vehicle.

laying, testing and commissioning of control cables, power cables required for operation and control of capacitor bank with proper ferruling and tagging along with glands and lugs. Laying of control cables in Grid trench (if trench not available than digging of trench is in vender scope). 11KV power cables will be free issued by BYPL but transportation of material from store will be in vender scope. Angle Channel material and its installation in trench for Power and control cable support. Control cable tray and Power Cable tray for cable laying purpose. End terminations and its installation. Making of civil gummite around earth electrode and numbering of same. Writing of nomenclature on equipment.

All loading/unloading, of materials at work-site shall be your responsibility. Involvement of Crane/Hydra/Tractor/Trailer for this type of work shall be in your scope. Adequate weather protection shall be provided by the contractor to keep the materials safe from sun & rain by providing covered storage space as well as using tarpaulins.

### **4.1 ADDITIONAL SCOPE / WORK:**

Any additional work beyond the scope enumerated in the work order above shall be carried out as per the instructions of Engineer-In Charge. The company shall not entertain any claim or



increase in the Work Order value due to execution of such additional work if the same is not approved by Engineer in Charge.

Any scope which is not covered in this document but is necessary for the erection, testing and commissioning of Automatic Switched Capacitor Bank will be in Vender's scope.

### **5. RATES:**

The rates finalized for this order shall be firm for the entire duration of work carried out by the Contractor under the order and are not subject to any variation and escalation for any reason whatsoever.

The cost of insurance during loading/unloading of materials/ equipments during its storage and handling/erection at site for installation is included in the contractor's scope and value is included in the unit rates finalized.

### **6. TAXES AND DUTIES:**

Prices are inclusive of any cess and GST as applicable. However, IT as applicable will be deducted from your bills as Tax Deduction at Source (TDS). Hence WCT as applicable to the order.

The total order value shall remain FIRM and shall only be adjusted on account of any variations in Statutory Taxes, duties and Levies imposed by Competent Authorities by way of fresh notification(s) within the stipulated delivery period.

### 7. TERMS OF PAYMENT:

Payment shall be made as under (capacitor bank wise):

i) 100% payment shall be due after 30 days of submission of your bills, after installation of material at site, along with work completion certificate at our office. The work completion certificate shall be issued by Engineer-In-Charge by certifying that the work has been completed in full satisfaction.

The contractor shall submit the invoice along with the checklist. Duly filled in Invoice shall be processed and payment shall be made to contractor on certification of Engineer-In Charge for compliance to check point's given in check list.

### 8. DEFECT LIABILITY PERIOD:

Work executed shall be guaranteed against any defect or failure which may arise due to faulty materials, design or workmanship for a period of 12 months from the date of commissioning or handing over of entire installation whichever is earlier.

If during the Defect 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.

### 9. COMPLETION PERIOD:

The contract shall remain valid for the period of one year.

The rates of E/T/C shall be valid for the quantity ordered against this tender only.

The detailed schedule and milestone completion dates would be as per the contract schedules given from time to time by Engineer In-charge at site. You shall submit a weekly progress report



to Engineer In charge. The contractor is requested to submit the following within 7 days of the PO:

- a) Implementation Methodology
- b) Project Organization Chart for Representatives, Project Office & site office teams along with the functions.
- c) Bar Chart & Network Diagram (with critical path) for various activities to achieve scheduled completion.

### 10. CLEANLINESS:

All debris shall be removed and disposed of at assigned areas on daily basis. Surplus excavated earth shall be disposed of in an approved manner. In short, you shall be fully responsible for keeping the work site clean at all times. In case of non- compliance, company shall get the same done at Contractor's risk and costs.

### 11. COMMISSIONING & ACCEPTANCE TEST:

After completion of the work, the Contractor shall conduct trial run/ operation in the presence of Engineer In charge. During such trial run the system shall be operated under the supervision of the Contractor. If any rectification/modification required during this period the Contractor shall do all necessary measures.

On satisfactory completion of above, the system shall be deemed to have energized and placed in commercial operation. The Engineer In Charge will issue an acceptance certificate.

### 12. WORK COMPLETION CERTIFICATION, HANDING OVER:

The work carried out by the Contractor under this order has to be certified by Engineer In-charge for satisfactory completion of work allotted to the contractor with respect to specifications / Field Quality Procedures as per applicable standards. In case of modification/correction to be carried out, contractor shall carry out the said modifications/correction without additional cost. The Contractor shall remain in close contact with Engineer In-Charge at site to report the general findings of the fieldwork during the initial as well as later stage of the work at site.

The contractor shall be solely responsible for any shortage or damage of materials issued to them handling of and / or in storage and erection at site and cost of the same will be recovered from the contractor as certified by Engineer In-Charge. Contractor must submit a periodical material reconciliation statement in the approval format with every Running Bill raise by him or end of every month whichever is earlier. The contractor shall maintain an accurate and exhaustive record detailing out the list of all items received by him for the purpose of erection and keep such record open for the inspection of the company.

### 13. PENALTY AND LIQUIDATED DAMAGES:

- 14.1 Penalty: A penalty of 2.5% of bill amount shall be levied in each case of non-compliance of safety practices and site cleanliness.
- 14.2 Liquidated Damages: In the event of any delay in completion of the work beyond the stipulated time given by in order due to reasons solely attributable to the Contractor, the Contractor shall pay to the Company liquidated damages.

If the Contractor failed perform the services within the time period specified in the order, the Company shall, without prejudice to its other remedies under the contract, deduct liquidated damages a sum equivalent to 0.5 % of the order value for each week or part there of delay until



the actual date of completion up to a maximum deduction of 5% of order value. Once the maximum is reached to Company may consider termination of contract without any liabilities to Company.

Engineer In charge should specifically mention the amount of LD levied on the bill of contractor.

### 14. SAFETY CODE:

The Contractor shall ensure adequate safety precautions at site as required under the law of the land to facilitate safe working during the execution of work and shall be entirely responsible for the complete safety of their workmen as well as other workers at site and premises during execution of contract.

The contractor shall observe the safety requirements as laid down in the contract and in case of sub-contract (only after written approval of company), it shall be the responsibility of main contractor that all safety requirements are followed by the employees and staff of the sub-contractor.

The contractor employing two hundred employees or more, including contract workers, shall have a safety co-ordinator in order to ensure the implementation of safety requirements of the contract and a contractor with lesser number of employees, including contract workers, shall nominate one of his employees to act as safety co-ordinator who shall liaise with the safety officer on matters relating to safety and his name shall be displayed on the notice board at a prominent place at the work site.

The contractor shall be responsible for non-compliance of the safety measures, implications, injuries, fatalities and compensation arising out of such situations or incidents.

In case of any accident, the contractor shall immediately submit a statement of the same to the owner and the safety officer, containing the details of the accident, any injury or casualities, extent of properly damage and remedial action taken to prevent recurrence and in addition, the contractor shall submit a monthly statement of the accidents to the owner at the end of each month.

### 15. STATUTORY OBLIGATIONS:

The Contractor shall take all steps as may be necessary to comply with the various applicable laws/rules including the provisions of contract labour (Regulation & Abolition Act) 1970, minimum wages Act, 1984, Workman Compensation Act, ESI Act, PF Act, Bonus Act and all other applicable laws as amended and rules framed there under including any statutory approval required from the Central/State Govt. Ministry of Labour. Broadly, the compliance shall be as detailed below, but not limited to:

- a) An Electrical license issued by Govt.of Delhi.
- b) PF Code No. and all employees to have PF A/c No. under PF every Act, 1952.
- c) All employees to have a temporary or permanent ESI Card as per ESI Act.
- d) ESI Registration No.
- e) Sales Tax registration number, if applicable.
- f) PAN No.
- g) Work Contract Tax Registration Number/ VAT Registration.
- h) Labour License under Contract Labour Act (R & A) Act 1970.
- i) Delhi Building and other Construction Worker (Regulation of Employment and Conditions of Services) Rules, 2002(B.O.C.W.)



(Bidder responsible for execution of the job should obtain a copy of Labour License before start of the work by the contractor.)

The Contractor must follow:

- a) Third party Insurance Policy before start of work.
- b) To follow Minimum Wages A ct prevailing in the state.
- c) The Salary/wages to all deployed manpower is to be distributed through ECS only into the bank accounts of all individuals and not later than 7th of succeeding month. In case of unavoidable circumstances the payment may be made through crossed cheques in the name of the individual and information of all such cases need to be submitted to HR(CMC).
- d) To maintain Wage- cum Attendance Register.
- e) To maintain First Aid Box at Site.
- f) Latest P.F. and E.S.I. challans pertaining to the period in which work was undertaken along with a certificate mentioning that P.F. and E.S.I. applicable to all the employees has been deducted and deposited with the Authorities within the time limits specified under the respective Acts.
- g) Workman Compensation Policy. {If applicable}.
- h) Labour license before start of work. {If applicable}.

Before commencing the work it would be manadotry for the contractor to furnish the company the permanent PF code no and ESI of the employee.

The contractor should follow all statutory compliance and in event of non compliance of any of the statutory requirement under various labour laws as stipulated in this work order/contract by agency, the BYPL shall be entitled to terminate the contract without any further notice, if non compliance is not rectified with in 30 days and if the statutory authorities demanded from BYPL to pay any amount then the contractor is liable to reimburse such amount to BYPL along with damages of 20% which is genuine pre estimate of costs/damages incurred by BYPL on account of loss of reputation and business, the resources/costs spent in defending litigation, prosecution being the Principal Employer due to non compliance of statutory compliances by the contractor etc. within 10 days from the written communication from BYPL.

### 16. WORKMAN COMPENSATION:

The Contactor shall take insurance policy under the Workman Compensation Act to cover such workers who are not covered under ESI and PF by the Contractor however engaged to undertake the jobs covered under this order and a copy of this insurance policy will be given to Company for reference and records. This insurance policy shall be kept valid at all times. In case there are no worker involve other than those who are covered under ESI and PF by the Contractor, the Contractor shall certify for the same.

The contractor shall keep the company indemnified at all times, against all claims of compensation under the provision of Workmen Compensation Act 1923 and as amended from time to time or any compensation payable under any other law for the time being workman engaged by the contractor/sub-contractor/sub-agent in carrying out the job involved under this work order and against costs and expenses, if any, incurred by the company in connection therewith and without prejudice to make any recovery.

The company shall be entitled to deduct from any money due to or to become due to the Contractor, moneys paid or payable by way of compensation as aforesaid or cost or expenses in connection with any claims thereto and the Contractor shall abide by the decision of the Company as to the sum payable by the Contractor under the provisions of this clause.



### 17. STAFF AND WORKMAN:

- (I) It shall be responsibility of contractor:
  - (a) To obtain Contract Labour License from the concerned authorities and maintain proper liaison with them. Necessary Forms for obtaining Labour License would be issued by the company. However you will bear all expenses for obtaining Labour license and registration in PF Department for your scope of work. You will deposit PF of your staff/laborer each month and all related documents should be furnished to us.
  - (b) To obtain workman insurance cover against deployment of workers etc.
- (II) To maintain, proper records relating to workmen employed, in the form of various Registers, namely.
  - (a) Register of workmen.
  - (b) Register of muster roll.
  - (c) Register of overtime.
  - (d) Register of wages.
  - (e) Any other register as per latest amendment Labour Act.
- (III) To disburse monthly wages to your workers/ supervisors in time and in the presence of Company representatives or as directed by the Labour authorities.
- (IV) To maintain proper liaison with the Project authorities, local police and all other government and local bodies.
- (V) To pay your workmen at least not less than the minimum prescribed wages as per state/Central Labour laws as may be, applicable. The contractor shall, be responsible for compliance of all the provisions of minimum Wages Act, PF, ESIC Act workmen Compensation Act and Contract Labour Regulation & Abolition Act the rules made there under. In case of non-Compliance of the statutory requirements. The company would take necessary action at the risk and cost of the Contractor.
- (VI) To employ required number of skilled/semi-skilled and unskilled workmen as per site requirement to complete the entire project as per schedule. To provide safety shoes, safety helmets, safety belts, gloves etc. to your worker/staff as per requirement during erection work.
- (VII) To employ necessary engineering and supervisory staff for completion of the Project in time. While day-to-day management of the site and supervision of the works shall be the responsibility of your Engineer In charge, he will report to the our Engineer in charge to assist him to discharge the overall responsibility of the execution of the project.

### 18. THIRD PARTY INSURANCE:

Before commencing the execution of the work the Bidder shall take third party insurance policy to insure against any damage or loss or injury which may occur to any property / public property or to any person or any employee or representative of any outside Agency/ the company engaged or not engaged for the work of the company, by or arising out of the execution of the work or temporary work or in carrying out of this Agreement. For third party insurance policies, the Bidder shall be responsible for settlement of claims with the underwriters without any liability on the purchaser / owner and will arrange replacements / rectification expeditiously without a waiting settlement by insurance claim at Bidder's own cost.



### 19. INSURANCE POLICY FOR LIFE COVER:

Before commencing the execution of the work the CONTRACTOR shall take Life insurance policy for the staff engaged by him for this work to insure against any loss of life which may occur during the contract for the work of the COMPANY.

The policy shall have coverage of Rs. 10 Lacs (Table C- Death + Permanent Total Disability + Partial permanent Disability due to external accidents). The premium amount for such life cover policy shall be in contractor scope. The policy document shall be submitted before commencement of the work by the contractor.

### 20. QUALITY:

Contractor shall ensure that strict quality is maintained and execution of works under this Work Order and Works are executed in conformity with the Specification. All tools, tackles, instruments and other equipments used in the execution of the Works shall be duly calibrated as required and Contractor shall maintain proper records of such tools, tackles, instruments and / or equipment. "Engineer In Charge shall inform to Quality department at the time of start of every scheme/O&M Work for quality verification. Quality department report is to be attached with certified bills of the agency"

### 21. ENVIRONMENTAL, HEALTH & SAFETY PLAN:

Contractor will make ensure that the Environment, Health & Safety (EHS) requirements are clearly understood and faithfully implemented at all levels at site as per instruction of Company. Contractors must comply with these requirements:

- a) Comply with all of the elements of the EHS Plan and any regulations applicable to the work.
- b) Comply with the procedures provided in the interests of Environment, Health and Safety.
- c) Ensure that all of their employees designated to work are properly trained and competent.
- d) Ensure that all plant and equipment they bring on to site has been inspected and serviced in accordance with legal requirement and manufacturer's or suppliers' instructions.
- e) Make arrangements to ensure that all employees designated to work on or visit the site present themselves for site induction prior to commencement of work.
- f) Provide details of any hazardous substances to be brought onsite.
- g) Ensure that a responsible person accompanies any of their visitors to site.

All contractor's staff are accountable for the following:

- 1. Use the correct tools and equipment for the job and use safety equipment and protective clothing supplied, e.g. helmets, goggles, ear protection, etc. as instructed.
- 2. Keep tools in good condition.
- 3. Report to the Supervisor any unsafe or unhealthy condition or any defects in plant or equipment.
- 4. Develop a concern for safety for themselves and for others.
- 5. Prohibit horseplay.
- 6. Not to operate any item of plant unless they have been specifically trained and are authorized to do so.

### 22. TEST CERTIFICATE & OUALITY ASSURANCE:



The Contractor shall procure all equipment from genuine sources as approved by the Company and as per Company specifications. The Contractor shall submit all the test certificates and joint inspection reports related to major equipment wherever applicable. The contractor shall ensure for the strict compliance to the specifications and Field Quality Procedures issued by company / Engineer in-charge.

### 23. SUB-CONTRACTING / SUBLETTING:

CONTRACTOR shall not assign or transfer the whole or any part of this Work Order or any other benefits accruing there from nor shall it subcontract / sublet the whole or any part of the Works without the prior written consent of COMPANY.

In the event the contractor assigns this work order, contractor's assignees shall be bound by the terms and conditions of this work order and shall , if deemed necessary by COMPANY at the time of such assignment, undertake in writing to be so bound by this Work Order.

Notwithstanding the subletting / subcontracting of any portion of the works, contractor shall remain wholly responsible for the carrying out, completion and satisfactory execution of Works in all respects in accordance with this Work Order, specification, approved drawings and data sheets.

### 24. INDEMNITY:

Contractor shall indemnify and save harmless COMPANY against and from any and all liabilities, claims, damages, losses or expenses arising due to or resulting from:

- a) Any breach non-observance or non-performance by contractor or its employees or agents of any of the provisions of this Work Order.
- b) Any act or omission of contractor or its employees or agents.
- c) Any negligence or breach of duty on the part of contractor, its employees or agents including any wrongful use by it or them of any property or goods belonging to or by COMPANY.

Contractor shall at all times indemnify COMPANY against all liabilities to other persons, including he employees or agents of COMPANY or contractor for bodily injury, damage to property or other loss which may arise out of or in consequence of the execution or completion of Works and against all costs charges and expenses that may be occasioned to COMPANY by the claims of such person.

### 25. EVENTS OF DEFAULTS:

COMPANY may, without prejudice to any of its other rights or remedies under the Work Order or in law, terminate the whole or any part of this Work Order by giving written notice to the Contractor, if in the opinion of COMPANY, contractor has neglected to proceed with the works with due diligence or commits a breach of any of the provisions of this work order including but not limited to any of the following cases.

- a) Failing to complete execution of work within the terms specified in this work order.
- b) Failing to complete works in accordance with the approved schedule of works.
- c) Failing to meet requirements of specifications, drawings, and designs as approved by COMPANY.



- d) Failing to comply with any reasonable instructions or orders issued by COMPANY in connection with the works.
- e) Failing to comply with any of the terms or conditions of this work order.

In the event COMPANY terminates this work order, in whole or in part, on the occurrence of any event of default, COMPANY reserves the right to engage any other subcontractor or agency to complete the work or any part thereof, and in addition to any other right COMPANY may have under this work order or in law including without limitation the right to penalize for delay under clause 15.0 of this work order, the contractor shall be liable to COMPANY for any additional costs that may be incurred by COMPANY for the execution of the Work.

### **26. RISK & COST:**

If the Contractor fails to execute the work as per specification / as per the direction of Engineer's In-charge within the scheduled period and even after the extended period, the contract shall got cancel and company reserves the right to get the work executed from any other source at the Risk & Cost of the Contractor. The Extra Expenditure so incurred shall be debited to the Contractor.

### 27. ARBITRATION:

To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with this LOA. If the same remain unresolved within thirty (30) days of the matter being raised by either party, either party may refer the dispute for settlement by arbitration. The arbitration to be undertaken by two arbitrators, one each to be appointed by either party. The arbitrators appointed by both the parties shall mutually nominate a person to act as presiding arbitrator before entering upon the reference in the event of a difference between the two arbitrators and the award of the said presiding arbitrator in such a contingency shall be conducted in accordance with this provisions of the Indian Arbitration & Conciliation Act, 1996 and the venue of such arbitration shall be in the city of New Delhi only.

### 28. FORCE MAJEURE:

### 28.1 General:

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

- (i) Such event or circumstance, despite the exercise of reasonable diligence, could not have been prevented, avoided or reasonably foreseen by such Party;
- (ii) 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 parties ability to perform its obligations under this Contract and to mitigate the consequences thereof. 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; and



- (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
- 28.2 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: The following events and circumstances:

- (i) 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, and
- (ii) Explosions or fires
- (iii) Declaration of the Site as war zone

Any order, regulation, directive, requirement from any Governmental, legislative, executive or judicial authority.

28.3 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 2 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.
- 28.4 Mitigation of events of force majeure:

The Contractor 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 applying other ways in which to perform 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 Company 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.



### 28.5 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 Contract. 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.

### 28.6 Terminations 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 1 (one) month during the Term of the Contract the Contract shall be terminated at the discretion of the Company and neither Party shall be liable to the other for any consequences arising on account of such termination.

### 29. <u>SECRECY CLAUSE</u>:

The technical information, drawing and other related documents forming part of work order and the information obtained during the course of investigation under this work order shall be the Company's executive property and shall not be used for any other purpose except for the execution of the work order. The technical information drawing, records and other document shall not be copied, transferred, or divulged and/ or disclosed to third party in full/part, not misused in any form whatsoever except to the extent for the execution of this work order.

This technical information, drawing and other related documents shall be returned to the Company with all approved copies and duplicates including drawing/plans as are prepared by the Bidder during the executions of this work order, if any, immediately after they have been used for agreed purpose.

In the event of any breach of this provision, the Bidder shall indemnify the Company against any loss, cost or damage or claim by any party in respect of such breach.

### **30. TERMINATION:**

During the course of the execution, if at any time BSES observe and form an opinion that the work under the order is not being performed in accordance with the terms of this Agreement, BSES reserves its right to cancel this Agreement giving 15 days notice mentioning the reason for the termination of the agreement and BSES will recover all damages including losses occurred due to loss of time from Contractor.



## 31.0 PRICE FORMAT – (E/T/C)

DESCRIPTION OF GOODS	SAC CODE QTY	QTY	TY UoM	UNIT RATE	UNIT GST (CGST, SGST, IGST) as applicable			UNIT LANDED COST	TOTAL LANDED
00023	CODE			TOTTE	CGST	SGST/ UTGST	IGST	(₹)	COST (₹)
Erection, testing, & commissioning including civil work of 7.2, 11KV 3 phase outdoor Auto Switched Capacitor Bank		4	Set						

NOTE: Cost of all tests as per technical specification is included.

In the Un-priced bid should be marked as "Quoted".

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## **COMMERCIAL TERMS AND CONDITIONS-E/T/C**

SI No	Item Description	AS PER BYPL	BIDDER'S CONFIRMATION
1	Validity	120 days from the due date of submission	
2	Price basis	a. Firm, basis. Prices shall be inclusive of all taxes & duties. b.GST shall be paid extra at actual	
3	Payment terms	100% payment will be due after 30 days of submission of bills along with work completion certificate.	
4	Validity of Contract/Schedule of completion	Valid for one year. Work shall be completed within 30 days from the date of issue or order / intimation (capacitor bank wise)	
5	Defect Liability period	12 months from the date of commissioning or handing over of entire installation whichever is earlier	
6	Penalty for delay	0.5% per week of delay of undelivered units or part thereof subject to maximum of 5% of total PO value of undelivered units	



## **SUMMARY OF PRICES – (AS PER GST RATES)**

DESCRIPTION	QTY (A)	UNIT PRICE FOR SUPPLY F.O.R SITE INCL ALL DUTIES TAXES (B)	UNIT PRICE FOR INSTALLATION , TESTING & COMM ETC (C)	TOTAL SITC (D=B+C)	TOTAL VALUE (A*D)
SITC of 3 PHASE OUTDOOR AUTO SWITCHED CAPACITOR BANK	4 Set				



	Technical Bid Subm			
S. No.	Description	BYPL	Bidder's Compliance	
_		Requirement		
1	Tender No.	Required		
2	Technical Specification reference number	Required		
3	Communication Details			
3.1	Name of the Bidder	Required		
3.2	Name of Authorized contact person	Required		
3.3	Contact No. of Authorized contact person	Required		
3.4	E-mail id of Authorized contact person	Required		
4	Document Submission Format			
	Documents shall be submitted in Box			
4.1	file/spiral binding. Any other format is not	Required		
	acceptable			
4.2	Index of documents with page numbers for	Deguined		
4.2	each document	Required		
4.2	Separator with document description shall	Dogwinad		
4.3	be provided before each document	Required		
5	Qualifying Requirement Compliance			
	Summary of compliance of qualifying criteria			
5.1	in tabular form along with summary of	Required		
	documentary proof provided			
гэ	Deatiled Documents supporting compliance	Dogwinad		
5.2	of qualifying criteria	Required		
c	Drawings/ Documents as per Technical			
6	Specification.			
6.1	Signed copy of technical specification	Required		
6.2	Type Test reports of offered model/ type/	Doguisad		
6.2	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			
6.7	technical specification	Required		
_	Soft copy of complete technical bid in pen			
7	drive	Required		
8	Samples as per technical specification.	Required		
		•		

Note: Submission of Technical bid check list along with all items mentioned in the check list is mandatory. Order of documents shall be strictly as per the technical bid check list. Bids with incomplete/ wrong information are liable for rejection.



TECHNICAL SPECIFICATION FOR 11 KV AUTO SWITCHED CAPACITOR BANK

## **TECHNICAL SPECIFICATION**

## **FOR**

# 11KV AUTO SWITCHED CAPACITOR BANK

Prepared by	Reviewed by App	roved by Rev	02
AH	GS	AA Date	01 <sup>st</sup> Aug 2018



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### 1.0 RECORD OF REVISION

S. No	Item/ Clause No	Change/ Addition	Reason of Change/Addition
1	5.13	Peek Hole in Enclosure doors	To see the status of Capacitor bank fuse
2	5.14	Exhaust Fan with Air filter And Canopy	For heat suppression in capacitor bank compartment
3	5.21	Cutout space for Power Cable Entry	For ease of Power Cable Entry
4	6.10	Inclusion of External Fuse	For Ease of O&M
5	7.1	Addition of Shreem make vacuum contactor	Vacuum contactor of Shreem complies the specification of BSES Yamuna Power Limited
6	8.10	Class of Insulation	For more clarity on Series Reactor Data
7	9.0	Updation of RVT data	For More clarity on RVT Data
8	10.4	Communication Protocol as Modbus	For Communication with SCADA
9	10.7	Supply of APFC has been changed to 48-220 VDC to 220 VAC	No vendor provides APFC with Auxilliary voltage 48-220 VDC
10	14.6	Inclusion of Warranty period, and Customer care Number in Name Plate rating	For ease of O&M
11	15.0	Approved Make Table	For Quality Products
12	17.0	Typical SLD	Upgradation of SLD due to stepped Capacitor Bank
13	20.0	Inclusion of Drawing and Data Submission Matrix	To streamline drawing/document submission



### TECHNICAL SPECIFICATION FOR 11 KV AUTO SWITCHED CAPACITOR BANK

### 2.0 SCOPE OF SUPPLY

- a. This specification covers the design, manufacturing, testing, supply, erection & commissioning of 7.2 MVAR (One fixed step of 1.8 MVAR and three steps of 1.8 MVAR), 12.65 KV three phase outdoor Auto Switched Capacitor Bank with bus bar arrangement at site in an enclosure including but not limited to 0.2% series reactors, capacitor switch/contactor, Isolator cum earth switch, HT fuses, RVT, APFC Panel and all necessary equipment for auto switching. No Equipment should lie outside the enclosure apart from APFC panel which shall be the part of VCB panel. Necessary space will be provided for APFC panel in switchboard. Fitting and wiring of this panel shall be in vendor's scope. (Although in case of unavailability of space in switchboard, separate wall mounted panel shall be provided by the vendor). Isolator, Earth Switch etc should be incorporated in enclosure only.NDR will not be the part of vendor's scope but wiring for NDR shall be in vendor's scope.
- b. This specification shall be used in conjunction with all specifications, data sheets, single line diagrams, and other drawings attached to the tender.

#### 3.0 CODES & STANDARDS

Indian Electricity Rules	
Indian electricity act	
CBIP manual	
IS 13925 part 1,2 & 3	Shunt capacitors above rated voltage 1000v
IS 11298 part 3	Plastic films for capacitors
IS 9921-1985	Isolator
IS 5553	Series reactor
IS 2099	Bushings for voltages above 1000v
IS 12672	Internal fuses & disconnector for shunt capacitors
IS 2705	Current transformers
IS 13067	Imp regnant for power capacitors
IS5	Color of mixed paints
IS 3156	RVT
IS 15086	Surge arrestor
IS 3070 (Pt 3)	Surge arrestor
IS 2629	Recommended practice for Hot dip galvanizing of steel
IS 4759	Hot dip Zinc coating on Steel structures and other allied
10 47 00	products
IEC 60871	Shunt capacitors for AC power Systems
IEC 61000	Automatic Power Factor Controller
IS 9920-2002	Vacuum Contactors/Capacitor Switch

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### TECHNICAL SPECIFICATION FOR 11 KV AUTO SWITCHED CAPACITOR BANK

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

### **4.0 SERVICE CONDITIONS**

4.1	Max Ambient Temperature	50 deg C
4.2	Max Daily average ambient temp	40 deg C
4.3	Min Ambient Temp	0 deg C
4.4	Maximum Humidity	95%
4.5	Minimum Humidity	10%
4.6	Maximum annual rainfall	750 mm
4.7	Average no of rainy days per annum	60
4.8	Rainy months	June to Oct
4.9	Altitude above MSL	300 M
4.10	Seismic Zone	IV

### **5.0 GENERAL**

5.1	Capacitor Scheme	3 Phase, 7.2 MVAR @ 12.65KV,Single Star with RVT protection.
5.2	Switching	Auto switched in three steps of 1.8 MVAR with one fixed step of 1.8 MVAR. Auto switching will be controlled by APFC.
5.3	Service location	Suitable for outdoor use
5.4	Connection	Single star for individual steps
5.5	HT capacitor bank assembly	<ul> <li>a. Individual single phase capacitor units mounted on steel stand / rack &amp; connected externally by sleeved flexible copper connectors</li> <li>b. Sleeves to be Red, Yellow, Blue, &amp; Black in colour.</li> </ul>
5.6	Interchangeability	Between various single phase capacitor units without disturbing other units
5.7	Capacitor bank enclosure	For enclosing complete capacitor bank including capacitor units, Reactors, flexible copper connectors, RVT & terminal bus bar. Enclosure's door shall be provided with limit switch having interlock with Isolator and Circuit breaker.
5.8	Enclosure size	Max 6m X 1.5m
5.9	Enclosure mounting	Panel mounted
5.10	Degree of Ingress Protection for Bank Enclosure	IP55

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5.11	Enclosure side walls	CRCA metal may be used for enclosure with thickness of loaded parts-2mm and unloaded parts-1.5mm
5.12	Enclosure doors of width 1500mm	Hinged, center opening, double leaf type, two doors provided on adjacent side walls with bolting as well as padlocking and interlocking facility.
5.13	Peek hole	Peek hole shall be provided in each door to see the status of fuse of Capacitor Bank
5.14	Exhaust Fan with Air filter And Canopy	Exhaust fan shall be provided in each step for heat suppression in compartment. Exhaust fan must operate of that step when capacitor bank is in ON condition.
5.15	Enclosure top cover	CRCA sheet metal 2mm thick with stiffeners
5.16	Door Interlock	Doors shall be provided with solenoid type lock to avoid door opening (after tripping of breaker) for a minimum of 10 minutes.
5.17	Earth Connection	All wire CRCA Sheet metal side walls/, doors & top cover shall be connected to each other by metallic jumper links, two earth studs with hole size for M10 bolt to be provided on enclosure frame bottom
5.18	Bus bar for HV cable termination	One for each phase mounted on porcelain or epoxy insulators
5.19	Bus bar material	Tinned copper, sized for 150% of rated current and rated fault duty
5.20	Bus bar arrangement	Suitable for outdoor termination of HT cable size up to 2 x 3C x 300sqmm for each phase
5.21	Cutout space for Power Cable Entry	Suitable for outdoor termination of HT cable size up to 2 x 3C x 300sqmm for each phase. (Preferebly-400x400 $\text{mm}^2$ )
5.22	External hardware for HT capacitor bank enclosure (nuts/bolts/handles)	Stainless steel
5.23	GA drawing	Manufacturer shall submit the G.A. Drawings for Capacitor Bank with mounting of series reactor inside the bank.
5.24	Power Frequency Withstand Voltage	28kVrms
5.25	Impulse Withstand Voltage	75kVp



### **6.0 SINGLE PHASE CAPACITOR UNIT**

6.1	Single phase capacitor unit	Totally enclosed, leak proof, dust proof suitable for outdoor application, comprising individual capacitor elements connected in series & parallel groups. Continuous operating current shall be minimum 1.43 times to max. 1.65 times as per clause 6.2 of IS 13925.	
6.2	Capacitor unit size	Preferred size is 200kVAR, however higher unit sizes may be considered if the space availability at site is scarce	
6.3	Capacitor element	Developed from alternate layers of conducting metal foil & dielectric film	
6.4	Conducting layer material	Aluminum foil	
6.5	Dielectric material	Hazy Poly Propylene (APP), Double layer minimum	
6.6	Cooling	Natural air	
6.7	Impregnating liquid	Non PCB(Poly chlorinated Biphenyl), less toxic, with low bio-accumulation and bio-degradable liquid filled under vacuum	
6.8	Capacitor unit enclosure	Fabricated from sheet metal CRCA steel of thickness 2mm minimum, hermetically sealed & hydraulically tested	
6.9	Discharge device	For each single phase capacitor unit	
6.10	Fuse	External HRC Fuse	
6.11	Surge arrestor	Gap less metal oxide type	
6.12	Rated voltage	9kV	
6.13	Maximum continuous operating voltage	7.65kV	
6.14	Discharge current	10 kA	
6.15	Spare capacitor unit	One capacitor unit for each bank	

### 7.0 VACUUM CONTACTOR FOR AUTO SWITCHING

7.1	Rated Voltages	12 KV	
7.2	Rated Continuous Current	200% of full load current (minimum) of unit being switched	
7.3	Rated Capacitor Switching Current	150% of full load current (minimum) of unit being switched	
7.4	Frequency	50 Hz	
7.5	Control supply	230 V Single phase AC supply	
7.6	Type	Vacuum	
7.7	Installation	Inside Enclosure	
7.8	Mechanical Endurance	10000 operations (minimum)	
7.9	Electrical Endurance	10000 electrical operations at rated capacitive switching current (minimum)	
7.10	Indicator	To show number of operations	

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TECHNICAL S	SPECIFICATION FOR	11 KV	<b>AUTO SWITCHED</b>	CAPACITOR BANK

7.11	Trip lever	For emergency tripping operation
7.12	Closing lever	For capacitor bank discharging
7.13	Make	ABB/EPCOS/SHREEM

## 8.0 SERIES REACTOR

8.1	Series Reactor	<ul> <li>Shall be provided fulfilling following requirement,</li> <li>a. Parallel switching of one bank with another two bank in service</li> <li>b. Suitable design calculation shall be submitted at the time of drawing approval</li> <li>c. Reactors shall be suitably designed to limit inrush current with proper calculation to be submitted to BYPL.</li> <li>d. The series reactor shall be designed to suit the final capacity of Capacitor Bank</li> <li>e. The manufacturer shall submit the G.A. Drawings for Capacitor Bank with mounting of series reactor inside the bank</li> </ul>	
8.2	Series reactor continuous rating	0.2% of capacitor bank rating	
8.3	Series reactor rated voltage	Same as capacitor bank rated voltage	
8.4	Series reactor rated frequency	50Hz	
8.5	Series reactor single phase unit connections	Connected between single phase capacitor units and neutral star point	
8.6	Series reactor type	Dry type with air natural cooling	
8.7	Series reactor power frequency withstand voltage	28 KV	
8.8	Series reactor lightening impulse withstand voltage	75 KV	
8.9	Series reactor short time withstand current rating for 3 seconds	16 times capacitor rated current at 130% rated voltage	
8.10	Class of Insulation	F	

## 9.0 RVT

9.1	Туре	Resin cast suitable for Panel Mounting	
9.2	Application	Indoor inside the outdoor panel	
	0 "	Star/Star-Open delta winding(11KV/Sqrt 3:110	
9.3 Connection	V/Sqrt 3: 190 V )		
9.4 Winding		Three winding Star/Star –Open Delta. Secondary	
		winding in Star shall be for Metering and	

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		secondary winding for open delta shall be for
		Residual/ Unbalance voltage Protection.
9.5	Protection	One RVT for All banks' protection. NDR (Neutral Displacement Relay) will not be in vendor's scope. Although its wiring shall be in vendor's scope.
9.6	Accuracy Class	0.5/ 3 PR
9.7	Nominal System Voltage	11 KV
9.8	Highest System Voltage	12 KV
9.9	Power frequency withstand voltage	28 kVrms(As per IS 13925 Part 1 Table 3A)
9.10	Lightning impulse withstand voltage	75 kV Peak(As per IS 13925 Part 1 Table 3A)

### 10.0 APFC

10.1	Installation	Indoor Type. To be fitted in VCB panel.
10.2	Power Factor Setting Range	0.7 Inductive to 0.7 Capacitive
10.3	DIs and DOs	DIs and DOs shall be as per control scheme suitable for auto switching of 3 phase, 7.2MVAR capacitor bank in three stages i.e steps of 1.8MVAR (0.6MVAR per phase). Automatic control has to be achieved by switching of vacuum contactors/switches provided in the capacitor bank to achieve the set power factor.Atleast 4 Dis and 4 Dos shall be spare for future use
10.4	Interface	Scada Compatible with RS-485 communication port and Modbus protocol. In case of any other port, suitable convertor shall be provided by the vendor). Integration of APFC with RTU and Capacitor bank shall be in bidder's scope.
10.5	Operation	Both Automatic and Manual Mode. Shall switch ON and OFF the bank through vaccum contactor/switch as per the desired power factor value. Over riding provision shall also be made for electrical switching ON and OFF of the capacitor contactor/switch by operator from APFC panel. The switching ON operation should take place after period of 10 minutes. The switching OFF operation of relevant step shall be instantaneous.
10.6	Ingress Protection(Except for Terminals)	IP 42
10.7	Auxiliary Supply	220 VAC
10.8	Current Measuring	0 - 5A, suitable for CT x/1A and x/5A

10.9	Display	Power, Energy, Voltage, Current, Average PF, Missing Reactive Power, Supplied Reactive Power, Total no of switching of each vaccum contactor/isolator, ON and OFF indication of Vaccum contactor/switch, THD measurement with odd harmonics coefficient
10.10	Size	Maximum 150x150 mm <sup>2</sup>
10.11	Logging	Recording of Electrical Data upto last 2 months in the form of Hourly Records, Fault Records and Daily Records
10.12	Protection	Over/Under Load, Over/Under Frequency, Load Unbalance, Over Current, Over Temperature
10.13	NDR Relay	Not Required
10.14	LED Required on APFC For ON and OFF Status of Each step	8

### 11.0 ISOLATOR

11.1	Installation	Outdoor
11.2	Rated Voltage	11 KV
11.3	Туре	Single throw double break off, off load type, triple pole horizontal gang operated with earth switch. Mechanical interlock should be provided between isolator and Earth Switch.
11.4	Operation Type	Manual

### 12.0 LIGHTNING ARRESTOR

12.1	Voltage Rating	9 kV
12.2	Туре	Gapless ZnO type
12.3	Discharge Class	III
12.4	Nominal Discharge Current	10 kA

### 13.0 PERFORMANCE

13.1	Over voltage operation	as per IS 13925 part1
13.2	Over current operation	as per IS 13925 part1
13.3	Operating temperature category	+5/C as per IS 13925 part1
13.4	Discharge characteristic as per IS 13925 part1	a. Each capacitor single phase unit residual voltage after disconnection from mains supply

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		shall be 50V (maximum) within 10 minutes b. Capacitor bank residual voltage after disconnection from mains supply shall be 50V (maximum) within 10 minutes
13.5	Power loss and tangent of	To be specified by manufacturer as per IS 13925
13.3	Loss angle (tan δ)	part1

### 14.0 LABELS & FINISH

14.1	Rating plate for HT Capacitor bank	
14.2	Material	Anodized aluminum 16SWG
14.3	Background	Satin silver
14.4	Letters, diagram & border	Black
14.5	Process	etching
14.6	Bank Name plate details	Mfg name, Mfg Sr. No., Month & year of Mfg, equipment type, total output rating, Bank Capacitance in μF, Bank watt losses, Owner name & order number, Temp. category, connection diagram, Warranty period, Customer care Number
14.7	Rating plate for each single phase capacitor unit	Anodized aluminum with white character on black background and details as per clause no 10.1 of IS 13925
14.8	Unit Name plate details	Mfg name, Mfg Sr. No., Month & year of Mfg, equipment type, total output rating, unit Capacitance in $\mu F$ , unit watt losses, Temp. category, Discharge device rating, connection diagram, Owner name & order number, Guarantee period, unit wt. in kG,
14.9	Danger plate on front & rear side of wired mesh enclosure	Anodized aluminum with white letters on red background
14.10	Painting - Capacitor single phase unit	
14.11	Surface preparation	Shot blasting or chemical 7 tank process
14.12	External finish	Powder coated pure-polyester base Mat finish, shade— Siemens Gray RAL 7032, uniform thickness 50 microns minimum
14.13	Painting–frame enclosure	<ul> <li>a. Chemical 7 tank process for surface</li> <li>b. Hot dipped Galvanized with uniform thickness</li> <li>65 microns minimum as per IS 2629 and</li> <li>4759.</li> </ul>
14.14	SLD	SLD of Approved drawing must be engraved in inside the enclosure door



### 15.0 APPROVED MAKES OF COMPONENTS

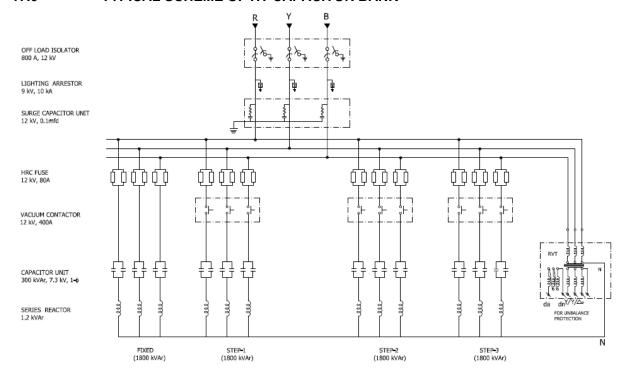
15.1	APFC	Beluk/ABB/EPCOS/Shreem
15.2	Vacuum Contactor	ABB/ EPCOS/Shreem
15.3	RVT	Pragati/Kappa
15.4	Electromechanical Relays	Alstom/Schneider/Siemens/ABB/ER
15.5	Miniature Relays	ABB/Jyoti/Omran
15.6	Contactors	ABB/Siemens/Telemechanique
15.7	Instrument transformers	ECS/ Pragati/ Gemini/Schneider/CGL/Kappa/Narayan power tech
15.8	MCBs	Siemens/Schneider/Legrand/ABB
15.9	Control switches	Switron/Kaycee
15.10	Test terminal blocks	IMP/Schneider/Alstom
15.11	Terminal blocks	Elmex/Connectwell
15.12	Indicating lamps	Siemens/ Teknic/ Binay
15.13	Surge Suppressors	Oblum/Tyco
15.14	Meters	Rishabh/Conzerv

### 16.0 INSPECTION & TESTING

16.1	Type test	Equipment of type tested quality only, type test certificate to be submitted along with offer.
16.2	Routine test	As per relevant Indian standard
16.3	Acceptance test as per IS	To be performed in presence of Owner at manufacturer works, as per relevant Indian standard along with BOM.

### **TECHNICAL SPECIFICATION FOR 11 KV AUTO SWITCHED CAPACITOR BANK**

### 17.0 TYPICAL SCHEME OF HT CAPACITOR BANK



### 18.0 MANDATORY SPARES

Following spares have to be provided for each capacitor bank set of 7.2 MVAR

- a. Capacitor Units 2 nos
- b. Series Reactors 2 nos
- c. Vacuum Switch/ Contactor 2 nos

### 19.0 DRAWING AND DATA SUBMISSION MATRIX

Drawing submission shall be as per the matrix given below. All documents/ drawing shall be provided on A3/A4 sheet in box file with separators for each section. PDF shall also be provided of all documents via USB. Language of the documents shall be English only. Deficient/ improper document/ drawing submission may liable for rejection.

S. No	Head	Bid	Drawing Approval	Pre Dispatch	Pre Closure
19.1	Contact Person Name, Email ID and Mobile Number	Required			
19.2	Consolidated Deviation Sheet	Required	Required		
19.3	GTP	Required	Required		

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19.4	Relevant Type Test as per IS/IEC	Required		
19.5	Power Cable and control cable Philosophy and Schedule		Required	
19.6	Manufacturer's quality assurance plan and certification for quality standards		Required	
19.7	Sizing Calculation of Associated Equipment		Required	
19.8	Recommended Spares Apart from spares stated in Spec(for five years of operation)		Required	
19.9	11 kV Auto Switched Capacitor Bank			
19.9.1	General Arrangement	Required	Required	
19.9.2	Sectional Layout		Required	
19.9.3	Door Layout		Required	
19.9.4	SLD	Required	Required	
19.9.5	Schematic Circuit diagram and Scheme		Required	
19.9.6	Bus Bar Arrangement		Required	
19.9.7	QAP		Required	
19.9.8	BOQ		Required	
19.9.9	Logic Operation Diagram		Required	
19.9.10	Plan		Required	
19.9.11	Interlock Diagram		Required	
19.9.12	Foundation Diagram		Required	
19.9.13	DI sheet		Required	
19.9.14	DO Sheet		Required	
19.9.15	TB Details		Required	
19.9.16	Make of all Component as per specification		Required	



19.9.17	Drawing of Outdoor yard providing Position of Capacitor Bank	Required		
19.10	Installation, erection and commissioning manual for Bank	Required		
19.11	Inspection Reports		Required	
19.12	As manufacturing Drawings		Required	
19.13	Operation and Maintenance Manual		Required	Required
19.14	Trouble shooting manual		Required	Required
19.15	As built Drawings			Required
19.16	Test Report			Required
19.17	Weekly progress report			Required

### 20.0 GUARANTEED TECHNICAL PARTICULARS

S. No	Description	Specification Requirement	Bidder's Data
20.1	General		
20.1.1	Reference Standard	IS-13925,Part 1,2012	
20.1.2	Capacitor Scheme	3 Phase, 7.2 MVAR @ 12.65KV,Single Star with RVT protection.	
20.1.3	Switching	Auto switched in three steps of 1.8 MVAR with one fixed step of 1.8 MVAR	
20.1.4	Service location	Outdoor	
20.1.5	Connection	Single star for individual steps	
20.1.6	HT capacitor bank assembly	<ul> <li>a. Individual single phase capacitor units mounted on steel stand / rack &amp; connected externally by sleeved flexible copper connectors</li> <li>b. Sleeves to be Red, Yellow, Blue, &amp; Black in colour.</li> </ul>	
20.1.7	Capacitor bank enclosure	No component shall be outside the enclosure	
20.1.8	Enclosure size	Max 6m X 1.5m	
20.1.9	Enclosure mounting	Panel mounted	
20.1.10	Degree of Ingress Protection for Bank Enclosure	IP55	
20.1.11	Enclosure side walls	CRCA metal with thickness of loaded parts-2mm and unloaded	

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		Hinged center opening double loof	
20.1.12	Enclosure doors	Hinged, center opening, double leaf type, two doors provided on adjacent side walls with bolting as well as padlocking and interlocking facility.	
20.1.13	Peek hole	Peek hole shall be provided in each door to see the status of fuse of Capacitor Bank	
20.1.14	Exhaust Fan with Air filter And Canopy	Exhaust fan must ON when that particular bank is in ON condition	
20.1.15	Enclosure top cover	CRCA sheet metal 2mm thick with stiffeners	
20.1.16	Door Interlock	Solenoid type lock to avoid door opening (after tripping of breaker) for a minimum of 10 minutes.	
20.1.17	Earth Connection	All wire CRCA Sheet metal side walls/, doors & top cover shall be connected to each other by metallic jumper links, two earth studs with hole size for M10 bolt to be provided on enclosure frame bottom	
20.1.18	Bus bar for HV cable termination	One for each phase mounted on porcelain or epoxy insulators	
20.1.19	Bus bar material	Tinned copper, sized for 425 A rated current and Fault Current 26.3 kA for 3 Sec	
20.1.20	Bus bar arrangement	Suitable for outdoor termination of HT cable size up to 2 x 3C x 300sqmm for each phase	
20.1.21	Cutout space for Power Cable Entry	400x400 mm <sup>2</sup>	
20.1.22	External hardware for HT capacitor bank enclosure (nuts/bolts/handles)	Stainless steel	
20.1.23	Power Frequency Withstand Voltage	28kVrms	
20.1.24	Impulse Withstand Voltage	75kVp	
20.2	Capacitor Unit		
20.2.1	Make		
	Continuous operating	Continuous operating current shall be minimum 1.43 times to max. 1.65	
20.2.2	current	times as per clause 6.2 of IS 13925.	
20.2.2			
	current	times as per clause 6.2 of IS 13925.  Preferred size is 200kVAR, however higher unit sizes may be considered if	



20.2.6	Dielectric material	Hazy Poly Propylene (APP), Double layer minimum	
20.2.7	Cooling	Natural air	
20.2.8	Impregnating liquid	Non PCB(Poly chlorinated Biphenyl), less toxic, with low bio-accumulation and bio-degradable liquid filled under vacuum	
20.2.9	Capacitor unit enclosure	CRCA steel of thickness 2mm minimum, hermetically sealed & hydraulically tested	
20.2.10	Discharge device	For each single phase capacitor unit	
20.2.11	Fuse	External HRC Fuse	
20.2.12	Surge arrestor	Gap less metal oxide type	
20.2.13	Rated voltage	9kV	
20.2.14	Maximum continuous operating voltage	7.65kV	
20.2.15	Discharge current	10 kA	
20.2.16	Losses	≤0.2 Watts/kVAR	
20.2.17	Power Frequency Withstand Voltage	28 kVrms(As per IS 13925 Part 1 Table 3A)	
20.2.18	Impulse Withstand Voltage	75 kV Peak(As per IS 13925 Part 1 Table 3A)	
20.2.19	Discharging Values	Less than 50 V in 10 Minutes	
20.3	VACUUM CONTACTOR		
20.3.1	Make	ABB/EPCOS/SHREEM	
20.3.2	Reference Standard	IEC 62271-103/IS 9920 (Part IV)	
20.3.3	Rated Voltages	12 KV	
20.3.4	Rated Continuous Current	≥164 A	
20.3.5	Rated Capacitor Switching Current	≥124 A	
20.3.6	Short Time withstand current for 1 sec		
20.3.7	Power Frequency Withstand Voltage	28 kVrms(As per IS 13925 Part 1 Table 3A)	
20.3.8	Impulse Withstand Voltage	75 kV Peak(As per IS 13925 Part 1 Table 3A)	
20.3.9	Opening Time(lower and Upper limit)	35/60 ms	
20.3.10	Closing Time(lower and Upper limit)	60/90 ms	
20.3.11	Frequency	50 Hz	
20.3.12	Control supply	230 V Single phase AC supply	
20.3.13	Туре	Vacuum	
20.3.14	Installation	Inside Enclosure	
20.3.15	Mechanical Endurance	10000 operations (minimum)	
20.3.16	Electrical Endurance	10000 electrical operations at rated capacitive switching current (minimum)	

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20.3.17	Indicator	To show number of operations	
20.3.18	Trip lever	For emergency tripping operation	
20.3.19	Closing lever	For capacitor bank discharging	
20.4	Series Reactor		
20.4.1	Make		
20.4.2	Reference Standard	IS:5553 (Part 3)	
20.4.3	Series Reactor	Submission of Suitable design Calculation	
20.4.4	Series reactor continuous rating	1.2 kVAR	
20.4.5	Series reactor rated voltage	Same as capacitor bank rated voltage	
20.4.6	Series reactor rated frequency	50Hz	
20.4.7	Series reactor single phase unit connections	Connected between single phase capacitor units and neutral star point	
20.4.8	Series reactor type	Dry type with air natural cooling	
20.4.9	Series reactor power frequency withstand voltage	28 kVrms(As per IS 13925 Part 1 Table 3A)	
20.4.10	Series reactor lightening impulse withstand voltage	75 kV Peak(As per IS 13925 Part 1 Table 3A)	
20.4.11	Rated Current	82.15A	
20.4.12	Series reactor short time withstand current rating for 3 seconds	16 times capacitor rated current at 130% rated voltage	
20.4.13	Class of Insulation	F	
20.5	RVT		
20.5.1	Make		
20.5.2	Reference Standard	IS 3156	
20.5.3	Application	Indoor inside the outdoor panel	
20.5.4	Туре	Resin cast suitable for Panel Mounting	
20.5.5	Connection	Star/Star-Open delta winding(11KV/Sqrt 3:110 V/Sqrt 3: 190 V)	
20.5.6	Accuracy Class	0.5/ 3 PR	
20.5.7	Nominal System Voltage	11 kV	
20.5.8	Highest System Voltage	12 kV	
20.5.9	Power frequency withstand voltage	28 kVrms(As per IS 13925 Part 1 Table 3A)	
20.5.10	Lightning impulse withstand voltage	75 kV Peak(As per IS 13925 Part 1 Table 3A)	
20.5.11	Winding	Three winding Star/Star –Open Delta. Secondary winding in Star shall be for Metering and secondary winding for open delta	

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		shall be for Residual/ Unbalance voltage Protection.	
20.5.12	Protection	One RVT for All banks' protection	
20.6	APFC	·	
20.6.1	Make	Beluk/ABB/EPCOS/Shreem	
20.6.2	Reference Standard		
20.6.3	Installation	Indoor Type and To be fitted on VCB Panel	
20.6.4	Power Factor Setting Range	0.7 Inductive to 0.7 Capacitive	
20.6.5	DIs and Dos	4 Dis and 4 Dos shall be spare for future use	
20.6.6	Interface	Scada Compatible with RS-485 communication port and Modbus protocol. In case of any other port, suitable convertor shall be provided by the vendor). Integration of APFC with RTU and Capacitor bank shall be in bidder's scope.	
20.6.7	Operation	Both Automatic and Manual Mode	
20.6.8	Ingress Protection	IP 54	
20.6.9	Auxilliary Supply	48-250 VDC	
20.6.10	Current Measuring	0 - 5A, suitable for CT x/1A and x/5A	
20.6.11	Display	Power, Energy, Voltage, Current, Average PF, Missing Reactive Power, Supplied Reactive Power, Total no of switching of each vaccum contactor/isolator, ON and OFF indication of Vaccum contactor/switch, THD measurement with odd harmonics coefficient	
20.6.12	Size	Maximum 150x150 mm2	
20.6.13	Logging	Recording of Electrical Data upto last 2 months in the form of Hourly Records, Fault Records anmd Daily Records	_
20.6.14	Protection	Over/Under Load, Over/Under Frequency, Load Unbalance, Over Current, Over Temperature	
20.6.15	Space Required in Switchgear Panel for APFC		
20.6.16	NDR Relay offered	No	
20.6.17	Number of LED required on APFC for Cap bank ON and OFF status of	8	

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	each stage		
20.7	ISOLATOR		
20.7.1	Make		
20.7.2	Reference Standard		
20.7.3	Installation	Outdoor	
20.7.4	Rated Voltage	11 KV	
20.7.5	Туре	Single throw double break off, off load type ,triple pole horizontal gang operated with earth switch. Mechanical Interlock should be provided between isolator and Earth Switch	
20.7.6	Operation Type	Manual	
20.8	Lightning Arrestor		
20.8.1	Reference Standard	IS 3070-1993(Part-3)	
20.8.2	Voltage Rating	9 kV	
20.8.3	Type	Gapless ZnO type	
20.8.4	Discharge Class	III	
20.8.5	Nominal Discharge Current	10 kA	
20.8.6	Power frequency withstand voltage	28 kVrms(As per IS 13925 Part 1 Table 3A)	
20.8.7	Lightning impulse withstand voltage	75 kV Peak(As per IS 13925 Part 1 Table 3A)	
20.9	Labels and Finish		
20.9.1	Rating plate for HT Capacitor bank		
20.9.2	Material	Anodized aluminum 16SWG	
20.9.3	Background	Satin silver	
20.9.4	Letters, diagram & border	Black	
20.9.5	Process	etching	
20.9.6	Bank Name plate details	Mfg name, Mfg Sr. No., Month & year of Mfg, equipment type, total output rating, Bank Capacitance in μF, Bank watt losses, Owner name & order number, Temp. category, connection diagram, Warranty period, Customer care Number	
20.9.7	Rating plate for each single phase capacitor unit	Anodized aluminum with white character on black background and details as per clause no 10.1 of IS 13925	
20.9.8	Unit Name plate details	Mfg name, Mfg Sr. No., Month & year of Mfg, equipment type, total output rating, unit Capacitance in μF, unit watt losses, Temp. category, Discharge device rating, connection	

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		diagram, Owner name & order number, Guarantee period, unit wt. in kG,	
20.9.9	Danger plate on front & rear side of wired mesh enclosure	Anodized aluminum with white letters on red background	
20.9.10	Painting - Capacitor single phase unit		
20.9.11	Surface preparation	Shot blasting or chemical 7 tank process	
20.9.12	External finish	Powder coated pure-polyester base Mat finish, shade– Siemens Gray RAL 7032, uniform thickness 50 microns minimum	
		a. Chemical 7 tank process for surface	
20.9.13	Painting–frame enclosure	b. Hot dipped Galvanized with uniform thickness 65 microns minimum as per IS 2629 and 4759.	
20.9.14	SLD	SLD of Approved drawing must be engraved in inside the enclosure door	